



STRATEGIC PLAN FOR THE CIRCULAR ECONOMY

2024

MUT MECCANICA TOVO



MISSION

The Management of MUT Meccanica Tovo has decided to produce this document to formalise its commitment to the circular economy and sustainability. In a world in which resources are limited and environmental challenges are increasingly urgent, we believe it is our duty as a company to contribute to a better society and a cleaner planet.

Our goal is not only to improve production processes, reduce costs and increase competitiveness, but also to do our part for sustainable development. This means creating value not only for profit, but also for people and the planet. We want to build a future in which innovation and economic growth go hand in hand with respect for the environment, ensuring lasting well-being for all.

The circular economy is one of the paths that will lead us towards this goal, reducing waste, enhancing resources and promoting a growth model that takes into account not only the present, but also future generations.

BENEFITS OF THE CIRCULAR ECONOMY



What are we talking about?

The circular economy is an economic model that stands against the traditional, linear "produce-use-dispose" system.

This paradigm focuses on keeping products, materials, and resources in use for as long as possible, minimising waste and promoting reuse, repair, recycling and regeneration.

Conceptually, the term was developed in the 1970s, but became effective following the research of the **Ellen MacArthur Foundation** and European policies on sustainability, culminating in **the European Commission's Circular Economy Action Plan**.

Benefits for the economic system

The circular economy implies an **ethical approach** to resource management, fostering a **sustainable transition** that reduces environmental and social pressure.

Companies embracing this model not only reduce their environmental impacts but also respond to consumers' growing **demands for transparency and sustainability**, improving their **reputation and trust** in the market.

The **benefits** for those who adopt this strategy include:

- **Reducing operating costs** through resource efficiency.
- New **business opportunities** linked to the sale of refurbished products or repair services.

- Increasing **resilience in supply chains**, reducing dependence on virgin resources.
- Access to **new markets** and **tax incentives** related to sustainability.

Good practices and expected improvements

Good practices for the circular economy include using recycled materials, design for the long life and reuse of products, optimising production waste and implementing business models based on service rather than product sales.

Adopting these practices can lead to:

- Improved **efficiency** in production processes.
- Reduced overall **environmental impacts**.
- Increased **business competitiveness**, thanks to innovation and the adoption of sustainable practices.
- Creation of **shared value**, engaging suppliers and customers in a circular economy model.

Circularity in the engineering sector

For an engineering SME based in the North-Eastern Italy, the integration of circularity in the company strategy could therefore bring significant benefits:

1. **Market competitiveness:** the adoption of circular models could allow the company to differentiate itself from competitors, offering products with low environmental impacts and improving its reputation as an innovative and sustainable company.
2. **Reduction of operating expenses:** thanks to the use of recycled materials, the reduction of waste and the improvement of energy efficiency, the company will be able to reduce production costs and minimise waste treatment costs.
3. **Access to new markets and financing:** companies that adopt circular strategies can obtain environmental certifications and access public and private funds for sustainable innovation, as well as meet the requirements for green public procurement.
4. **Supply Chain Improvement:** reducing transport, optimising production processes and insourcing activities such as hot moulding will lead to a more sustainable supply chain management, reducing costs and operational risks.
5. **Sustainable development:** by integrating sustainability into its business model, MUT Meccanica Tovo can contribute to the creation of shared value, promoting local economic growth and reducing the overall environmental impact.
6. **Extending product life:** creating a maintenance and reconditioning service can extend the life of metal products (valves), allowing customers to repair or upgrade products rather than replace them, generating new income and building customer loyalty.
7. **Modular design:** designing products with modular, easily replaceable or upgradeable components reduces the need to create new products from scratch and promotes an economy based on reuse.

8. **Reverse logistics for material recovery:** implementing a reverse logistics system for the recovery and recycling of metal waste and packaging would reduce the need to purchase new raw materials and improve the environmental impacts of transport.
9. **Cross-sector collaborations:** cooperating with local companies for the exchange of production waste could transform the company's waste into raw materials for other industries, contributing to a zero-waste economy.
10. **Internal and external training and awareness:** organising internal training programmes to engage employees in the adoption of circularity can improve process efficiency. At the same time, developing awareness campaigns for customers on the importance of sustainability in their purchasing decision-making processes can improve brand reputation.

CORPORATE CIRCULAR POLICY



The MUT Meccanica Tovo circular policy represents **our vision** and **goals** for sustainable growth, balancing the needs of economic efficiency with the commitment to the environment and society.

Through the adoption of circular practices, we aim to strengthen our **competitive position**, reducing **environmental impacts** and generating **value for our stakeholders**.

Implementing sustainable strategies will not only help improve our economic performance, but also reflects our **ethical commitment** to building a more responsible future.

These goals are the **foundation** of our transition to a more efficient, fair and planet-friendly business model.

Summary of goals for 2026



Constant commitment to the **circular economy**



Efficiency of **resources, materials and energy** consumption



Circular business development



Reduction of **production costs**



Brand reputation

STRATEGIC ACTIONS



To achieve the corporate objectives of the circular policy and promote sustainable development, MUT Meccanica Tovo will adopt a series of targeted **strategic actions**.

These actions have been designed to promote the transition to the circular economy, contributing to the creation of economic, social and environmental value:

"If we can build an economy that uses things without wasting them, we can build the future."

Ellen McArthur

1. Plant retro-fitting:

- **Goal:** to reduce energy consumption and optimise the use of resources.
- **Action:** upgrade existing machinery to increase efficiency and reduce waste, improving overall environmental impact and reducing operating costs.

2. Insourcing of production activities (e.g. hot moulding):

- **Goal:** to reduce emissions and logistics costs.
- **Action:** consolidate in-house hot moulding, eliminating the need for external transport, reducing emissions and increasing production efficiency.

3. **Eco-sustainable design with Life Cycle Assessment (LCA):**

- **Goal:** create products with a low environmental impact throughout their life cycle.
- **Action:** use the Solidworks Sustainability tool to optimise product life cycles, reducing the use of resources, facilitating recycling and extending the useful life of components.

4. **Use of recycled materials:**

- **Goal:** to reduce dependence on virgin raw materials.
- **Action:** increase the use of recycled plastic and metal waste in production, reducing environmental impacts and procurement costs.

5. **Extension of the useful life of the products:**

- **Goal:** to promote the durability of products.
- **Action:** offer maintenance services, helping customers extend product life while reducing waste and the costs associated with the production of new goods.

Strategic actions (goals) are carefully planned in the planning processes of the Integrated Quality, Environment and Safety Management System.

MONITORING AND REPORTING



Performance measuring and monitoring

To ensure that strategic actions bring the expected results, MUT Meccanica Tovo will establish a set of **KPIs** that will be constantly monitored.

These indicators will allow us to assess the effectiveness of our initiatives and adapt the strategies to the results obtained.

Some of the assessed indicators linked to the monitoring of the integrated management system are:

Reduction of energy consumption:

- **KPI:** percentage of energy saved compared to previous years, thanks to investments in retrofitting and the use of renewable sources.

Reduction of production waste:

- **KPI:** amount of waste reduced, expressed in kilos, through the optimisation of processes and the use of recycled materials.

Reduction of CO₂ emissions:

- **KPI:** tonnes of CO₂ saved thanks to reduced transport and insourcing of hot moulding.

Use of recycled raw materials:

- **KPI:** percentage of recycled materials used in production processes.

Stakeholder satisfaction:

- **KPI:** measuring the engagement and satisfaction of internal and external stakeholders, through periodic surveys and feedback analysis.

The indicators defined to monitor the goals are carefully planned in the Integrated Quality, Environment and Safety Management System monitoring processes.

Stakeholder engagement

The commitment to sustainability and the circular economy requires the active participation of all stakeholders.

MUT Meccanica Tovo will continue to engage stakeholders, promoting transparent and collaborative dialogue:

- **Internal stakeholders:**
 - employees will be trained on issues related to circularity, continuous improvement of processes and reduction of environmental impacts;
 - the team responsible for the Integrated Management System and design will continue to monitor and guide sustainability initiatives.
- **External stakeholders:**
 - suppliers and customers will be involved in circular actions, such as the use of recycled raw materials and product recovery;
 - partnerships will be developed to create synergies between companies in the supply chain that share the same sustainability principles.
- **Local partners:**
 - MUT Meccanica Tovo will cooperate with local companies and institutions to create a circular industrial ecosystem, where waste from one production can become resources for another.

Communication and reporting

Transparency is a pillar of our sustainability strategy. MUT Meccanica Tovo is committed to communicating progress towards the circular economy and reporting its performance in a clear and measurable manner.

- **Review of the integrated quality, environment and safety management system:** the internal reporting required by the requirements of ISO 9001, ISO 14001 and ISO 45001, allows the company to assess the implementation status of the circular strategy and to define new objectives and goals related to circularity from time to time.
- **Sustainability Report:** publication of the first Sustainability Report dedicated to stakeholders by 2026, which will document the results achieved, the challenges faced and future plans for the further integration of circularity and sustainability into our business. This document will be prepared in accordance with the **GRI or European standards**, ensuring the detailed reporting of our progress.
- **Internal and external communication:** we will use our website, newsletters and press releases to inform both employees and external stakeholders of new sustainability initiatives and the results achieved. Communication will be regular and transparent, aiming to promote awareness and commitment to sustainable development.
- **Participation in sustainability forums and networks:** MUT Meccanica Tovo will take part in local, national and international events and forums related to sustainability and the circular economy, to share its experiences and learn from the best practices of other companies and sectors.

