Circular Economy at Frequentis

Our contribution to sustainability

Why circular economy?

Frequentis understands a circular economy as the environmentally responsible extraction of raw materials and the resource-efficient, low-waste production of goods from these materials. After their useful life, goods should be returned to the product cycle as effectively as possible to preserve their value for as long as possible.

Legal Framework

For the introduction and continuous implementation of a sustainable circular economy within the ESG requirements at Frequentis AG, several relevant legal foundations have been taken into account, in particular:

- Commission Delegated Regulation (EU) 2023/2486
- Austrian Circular Economy Strategy by the Federal Ministry for Climate Action
- European Commission's "Circular Economy" Action Plan
- United Nations Sustainable Development Goals (SDGs)
- ESG reporting in accordance with CSRD (Corporate Sustainability Reporting Directive)

CSRD-Reporting under ESRS E5

Due to Frequentis AG's stock market listing, relevant securities market regulations for the circular economy must be observed and implemented, including reporting requirements under the European Sustainability Reporting Standards (ESRS).

The standard "Resource Use and Circular Economy" (E5) is one of five environmental ESRS standards that Frequentis must apply from the 2024 financial year onwards. It specifies which disclosures must be made regarding resource use and circular economy.
For details, please see consolidated non-financial statement 2024.

Strategic approach

Frequentis is committed to the circular economy, setting a clear example of sustainable business and climate protection. The goal is efficient resource use, waste minimisation, and long-term utilisation of Frequentis solutions worldwide. With suitable business models and products, the Frequentis Group is a reliable partner for its customers and actively contributes to environmental protection.

Based on the Austrian Circular Economy Strategy, the following strategic objectives are derived:

- Comprehensive reduction of resource consumption and resource use (resource conservation)
- Waste prevention (Zero Waste)
- Prevention of environmental pollution by harmful substances (Zero Pollution)
- Reduction of greenhouse gas emissions (climate protection)

Circular Economy and Resource Use at Frequentis

The Frequentis Group focuses on sustainable resource use along the entire value chain. In the company's production processes, sustainability and environmental awareness are prioritised.

Our aim is to design products and systems that are durable, repairable, and resource-efficient – for a minimal ecological footprint. This is documented and reviewed in regular HSE (Health, Safety & Environment) reports as part of management reviews.

Our Core Principles

Frequentis products and systems operate in sectors with high circular potential. Essential elements have already been implemented and have long been valid:

- **Durability**: Frequentis systems are designed for decades of use.
- **Freedom from harmful substances**: We use environmentally friendly materials.
- **Repairability & Upgradability**: Products can be easily maintained and modernised.
- **Service orientation**: Focus on service, maintenance, and life cycle management.
- **Energy efficiency at headquarters**: Careful use of energy resources.
- **Waste prevention and reduction**: Comprehensive waste management along the value chain.

Key starting points on the path to a functioning circular economy and thus to the intelligent use of products and infrastructure are (according to the Austrian Federal Ministry of Agriculture, Forestry, Climate and Environment).

1. **Refuse**: Eliminate unnecessary products; deliver product benefits differently.
2. **Rethink**: Redesign and use products more intensively, e.g., through sharing.
3. **Reduce**: Increase efficiency in production or use by reducing consumption of natural resources and materials.
4. **Reuse**: Reuse functional products.
5. **Repair**: Maintain and extend product life through repair.
6. **Refurbish**: Upgrade old products to current standards.
7. **Remanufacture**: Use parts from defective products for new products with the same functions.
8. **Repurpose**: Reuse parts for different purposes.
9. **Recycle**: Process materials to maintain high quality and return them to the material cycle.
10. **Recover**: Thermal recovery with energy generation.

The overarching principle is comprehensive circular design of systems, business models, services, and products from the outset (“circular by design”) to avoid or reduce resource consumption.

Refuse, Rethink, Reduce (1–3) generally require significant changes in production and consumption patterns.

Reuse, Repair, Refurbish, Remanufacture, Repurpose (4–8) aim to extend the useful life at the highest possible value level.

Recycle and Recover (9–10) ensure materials are returned to the cycle as secondary raw materials or used for energy production.

Frequentis continuously evaluates measures to maintain and improve circularity, considering upstream and downstream value chains.

Value Chain Consideration

The value chain includes all activities, resources, and relationships linked to the company's business model and external environment.

Frequentis focuses on direct upstream and downstream relationships to enhance understanding of impacts, risks, and opportunities in sustainability reporting.

Continuous Development

Activities for an effective circular economy are continuously expanded, including:

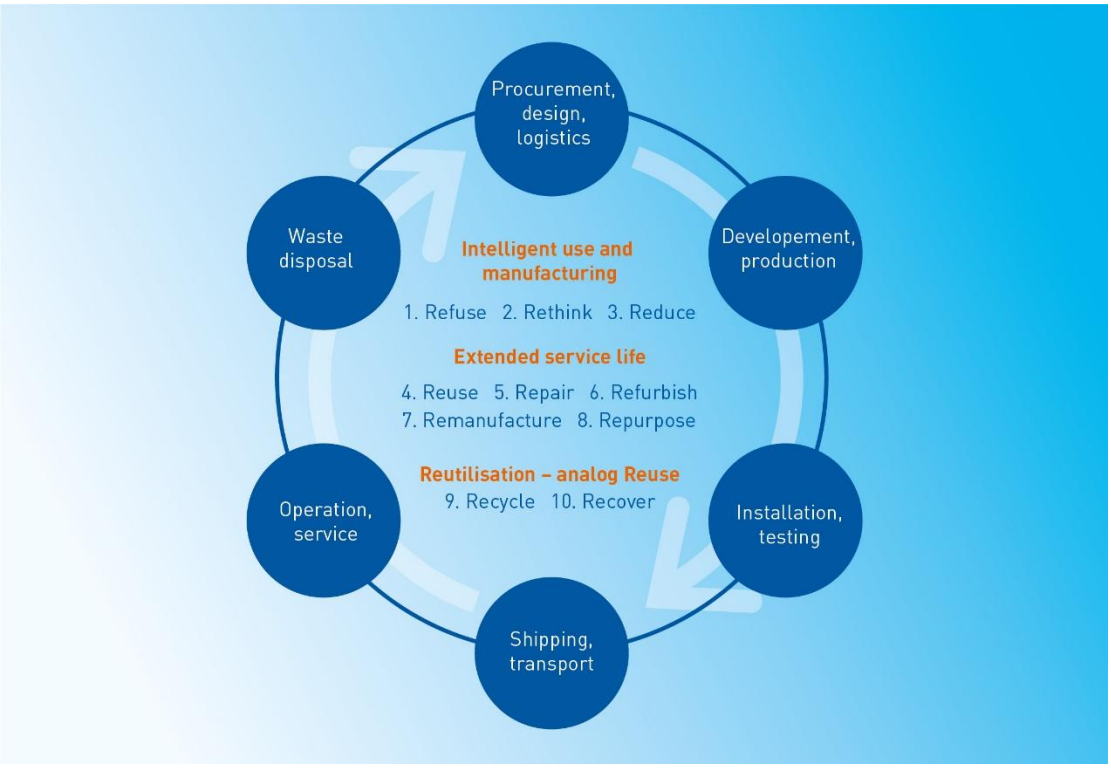
- Integration of circular economy into corporate strategy
- Broader integration into Frequentis processes
- Ongoing evaluation of further optimisations
- Development of a training plan for employees to ensure group-wide qualifications
- Evaluation of improvements to support customers throughout the lifecycle
- Continuous assessment of requirements and impacts regarding circular economy across different system configurations

Value Chain Analysis

For targeted expansion of implemented circular economy measures, six thematic areas have been defined:

1. Procurement, design, logistics
2. Development, production
3. Installation. testing
4. Shipping, transport
5. Operation, service
6. Waste disposal

Points 1-5 cover the description of resource inflows and outflows, while point 6 focuses on waste management.



1. Procurement, design, logistics

- Modular design for long service life.
- Reuse of software components.
- Short supply chains, preferably European suppliers.

2. Development, production
    - Minimisation of defective production.
    - Use of waste heat for building heating.
    - Recycling of production waste.
3. Installation, testing
    - Multiple use of tools.
    - Energy-efficient default settings for delivered systems.
4. Shipping, transport
    - Reusable transport crates.
    - Reuse of packaging materials.
    - Sustainable trade fair presence through local sourcing.
5. Operation, service
    - Buy-back and refurbishment of hardware.
    - Extensive service and maintenance programmes.
    - Global customer service availability.
6. Waste disposal
    - Consistent waste separation and recycling.
    - Donation of IT hardware instead of disposal.
    - Hazardous waste share < 5%.

Outlook

Frequentis continuously develops its circular economy through integration into corporate strategy, employee training, and ongoing optimisation. This ensures customers benefit from sustainable solutions covering the entire lifecycle.

Current initiatives in circular economy are presented in the consolidated non-financial statement, audited and published as part of the Frequentis annual report.