



# 2025 Sustainability Report

ESRS E5

# Resource Use and Circular Economy (ESRS E5)

## Material Impacts, Risks and Opportunities Related to Resource Use and Circular Economy

AUMOVIO has assessed the potential and actual negative and positive impacts as well as risks and opportunities related to sustainability in accordance with the regulatory requirements and as described in the [General Disclosures \(ESRS 2\)](#) sub-chapter. The general disclosures include an overview of the assessment of all identified impacts, risks and opportunities (IROs), including the time horizons considered.

In this IRO assessment, the following material potential and actual negative and positive impacts, risks and opportunities related to resource use and circular economy were identified. They have been grouped into IRO clusters for easier understanding and reading. The descriptions of the potential negative impacts and risks are presented from a gross perspective, which, on the basis of the applied methodology, does not take into account mitigation through the management approaches of AUMOVIO as described in the respective IRO cluster. This perspective is used to determine where appropriate management approaches are relevant and corresponding reporting is required. As actual impacts, potential positive impacts and opportunities are reinforced by AUMOVIO’s management approaches, the descriptions take into account the results of the measures currently in place.

The descriptions of the IROs are each to be considered separately, which can result in repetitions.

## IROs and Management Approaches for Resource Use and Circular Economy

In the area of resource use and circular economy, AUMOVIO has developed management approaches to circularity and waste in own operations to manage the described impacts, risks and opportunities.

### Circularity

Circularity	Description	Type of IRO	Value Chain	Time Horizon
	E5.1 AUMOVIO sources raw materials and components from primary and non-renewable sources (including fossil-based materials and materials from mining), which could potentially lead to the depletion of natural resources in the value chain.	Potential negative impact	Entire value chain	•
	E5.2 AUMOVIO operates in industries in which the resource and product cycles are not entirely closed. Considering the amount of material used and the end-of-life treatment of products, AUMOVIO’s products therefore contribute to waste generation.	Potential negative impact	Downstream	••
	E5.3 AUMOVIO’s direct and indirect suppliers along the supply chain generate waste for landfill or incineration, leading to a negative impact on the circular economy and the overall environment.	Actual negative impact	Upstream	•
	E5.4 Considering AUMOVIO’s global supplier base in combination with the high material demand in the automotive industry, supply chain interruptions or material shortages could occur due to insufficient resources, especially secondary and renewable resources.	Risk	Upstream	••
	E5.5 AUMOVIO’s direct and indirect suppliers operate in industries and markets that might be subject to major transformation and new or stricter regulatory requirements related to circular economy (especially considering the increased use of renewable and secondary resources). This could lead to significantly higher costs for materials, components and/or services.	Risk	Upstream	••
	E5.6 AUMOVIO’s business is exposed to regulations, requirements and market trends targeting a circular economy. If its portfolio is not sufficiently transformable or resilient, or is cost-intensive to adapt, AUMOVIO may face a loss in sales in the respective businesses.	Risk	Downstream	•••

• short-term; •• medium-term; ••• long-term

Our management approach to circularity aims to steer our own operations to support AUMOVIO’s Strategic Sustainability Focus Areas, enabling innovative closed resource and product cycles through a circular economy.

The management approach encompasses the upstream and downstream value chain as well as AUMOVIO’s own operations and also includes switching from the use of primary to secondary resources and materials, as outlined in the processes described below.

The procurement of renewable and recycled (secondary) materials is a key element here.

The management approach applies to AUMOVIO as a whole and its product portfolio, and covers resource inflows and outflows.

AUMOVIO's business areas bear responsibility for the management and adaptation of the respective product portfolio. Oversight of the effectiveness of portfolio management is exercised by the Executive Board of AUMOVIO. Key processes are handled by the respective central functions within the company, such as research and development (R&D), product development, supply chain and purchasing. These are supported by the sustainability functions.

The management approach includes specific processes regarding resource inflows and outflows, considering technological and product cycles. For resource inflows, the related key actions regarding purchased resources are mainly managed in purchasing, product design, development and R&D processes.

The process of material approval, managed by R&D, serves among other purposes to identify recycled and renewable materials to be introduced in production processes. The process of material approval usually consists of testing and processing evaluation before a material is released.

The sourcing of renewable and recycled materials is managed by the procurement department, as well as the sourcing of materials within traceability mechanisms like the usage of IMDS.

In addition, AUMOVIO engages with selected suppliers in strategic supplier meetings to intensify activities regarding circular economy such as through respective adaptation in product design and material composition.

For resource outflows, the management approach comprises actions with regard to the circularity of products that are mainly managed within product design as well as R&D processes, with a focus on improved reusability, repairability, recyclability, durability and overall circularity.

AUMOVIO's Strategic Sustainability Focus Areas set the overarching framework for the definition and implementation of measures.

For the traceability of dedicated materials, AUMOVIO's suppliers are asked to declare the information on the recycled share in the IMDS according to their standards.

The management approach and the related actions take into consideration in particular the requirements of customers and requests of investors. For resource inflows, direct suppliers as part of the upstream value chain are directly involved. For resource outflows, the perspectives of stakeholders relevant to end-of-life treatment are also taken into account.

AUMOVIO communicates its approach to managing circularity externally through the publication of the annual report and by means of trade fairs and press releases, as well as internally using various channels such as conferences on sustainability and products, working groups and the company-wide intranet.

## Waste in own operations

Waste in own operations	Description	Type of IRO	Value Chain	Time Horizon
	E5.7 AUMOVIO generates waste for landfill or incineration in own operations, leading to a negative impact on the circular economy and the overall environment.	Actual negative impact	Own operations	●

● short-term; ●● medium-term; ●●● long-term

To minimize the negative impact of landfilling or incineration of waste from own operations, AUMOVIO has developed a management approach for waste that is integrated into general environmental management. A defined waste hierarchy has been introduced at the locations for this purpose. It prioritizes actions to reduce waste generation, followed by reusing materials, recycling and recovering energy from waste. The least preferred option is disposal, such as landfill. By following this hierarchy, we can reduce our environmental impact and promote the sustainable use of resources. AUMOVIO strives to gradually reduce the amount of waste and the generation of waste at its locations step by step and year by year.

The management approach to waste in own operations covers AUMOVIO as a whole.

AUMOVIO's environmental strategy is steered and approved by the Executive Board.

Waste management is embedded in AUMOVIO's environmental management systems.

Waste-related processes are monitored and continuously improved as part of general environmental management reviews.

AUMOVIO's environmental management system was developed in accordance with ISO 14001, an internationally recognized standard for environmental management systems issued by the International Organization for Standardization (ISO).

The management approach reflects the interests of various stakeholders by using the widely accepted waste hierarchy and adhering to ISO 14001. Direct interaction with stakeholders in relation to waste takes place in particular with the responsible authorities.

AUMOVIO communicates its management approach to waste management through various channels to ensure a comprehensive understanding and engagement across the entire company. This includes information on the intranet, which makes the approach and specific internal rules accessible to all employees.

## Targets Related to Resource Use and Circular Economy

As part of its Strategic Sustainability Focus Areas, AUMOVIO has set for itself the target related to circularity of achieving a 95 % waste recovery quota by 2040. An additional target will apply from 2026, according to which a 25 % share of renewable and recycled materials is to be used in new products by 2030.

These objectives are linked to the circular economy management approaches described in this section. The corresponding processes are crucial, as they are aimed at reducing resource outflows and thus achieving a higher recycling rate. This, in turn, promotes the creation of closed resource and product cycles. To further increase the recycling rate, AUMOVIO has identified two primary levers in relation to resource outflows:

- **Continuation, improvement and further roll-out of waste recycling contracts:** AUMOVIO has already entered into various agreements with waste disposal companies that process and transport a large portion of the waste at many locations for recycling. In cooperation with the procurement department, AUMOVIO is striving to expand these agreements to cover as many locations as possible and to increase the recycling share of waste.
- **Specific programs for focus sites:** Efforts are also focused on locations that have a negative impact on the waste for recovery quota in the respective region. These actions include prioritized contract negotiations in coordination with purchasing, definition of location-specific target achievement paths and focused performance monitoring of the level of achievement, as well as increased exchange of experience on exploitation options with comparable locations.

The scope of this sustainability target relates to all subsidiaries under AUMOVIO's management control, with a focus on production plants.

This target is measured on the basis of the metric of the waste recovery quota.

AUMOVIO has set the interim target of achieving a 93 % waste recovery quota by 2035.

The overall commonly recognized concept of recovery of certain specific waste components refers to materials or substances that have been discarded but retain physical, chemical, or energetic properties that allow them to be reprocessed, reused or converted into new products or energy. AUMOVIO's target setting follows this general approach but does not consider a specific methodology for science-based target setting.

The methodology for calculating the metric is described in the corresponding explanations for the metric. The target was defined based on internal qualitative analysis and calculations with regard to the increase in the share of waste that must be recovered. In general, waste is broken down into waste for material recovery e.g. recycling and waste for energy recovery such as incineration to generate electric power or other forms of energy. The target of 95 % was defined based on internal feasibility studies.

The target takes into account the interests of various internal stakeholders such as the location managers and ESH managers of the individual plants.

The target was set for the first time and was not changed during the reporting period. AUMOVIO's target focuses on resource outflows, especially with regard to the increase in the share of waste for recovery. We follow a waste management approach that was developed in accordance with ISO 14001.

The target in particular supports the recovery level of the waste hierarchy.

The target was set voluntarily to support the transition to closed resource and product cycles.

## Key Actions for Target Achievement

AUMOVIO has defined concrete key actions to achieve a 95 % waste recovery quota by 2040 and foster the transition toward enabling innovative closed resource and product cycles through a circular economy.

These actions are embedded in operational activities and are gradually being developed and implemented by the individual legal entities. The actions include short- and medium-term actions.

AUMOVIO's actions to increase the percentage of waste for recovery cover all subsidiaries, with a focus on production plants and their activities for waste management.

Increasing the percentage of waste that is recovered instead of disposed is a decisive factor in reaching the target. Two main levers were identified that mainly relate to improving and accelerating the rollout of waste recycling contracts that guarantee recycling, as well as a specific program for focus plants that have a negative impact on the waste recovery quota in the respective region.

AUMOVIO will focus its efforts on locations that are having a significant impact on the waste recovery quota performance of their respective region, ensuring that improvement initiatives deliver measurable results where they matter most.

Each location's progress is tracked through performance indicators, enabling data-driven decision-making and accountability at every level.

The ESH department actively promotes the exchange of best practices and recovery solutions between sites, fostering collaboration and accelerating the adoption of effective waste management strategies.

Waste tenders are prioritized for focus locations in the aim of securing sufficient recovery options and improving resource efficiency. Collaboration between the locations and the procurement department is aimed at achieving effective waste tenders and achieving more sustainable waste contracts.

Overall, the actions related to the target are also closely linked to the general management approach to circularity.

The progress of the related actions (in the reporting year) is measured in particular by the progress of the target KPI for the waste for recovery quota.

## Capital expenditures and operating expenditures for key actions to achieve the target related to resource use and circular economy

OpEx for key actions	2025
OpEx for key actions to achieve targets related to resource use and circular economy, in € millions	0

### Definitions, assumptions and calculation methods:

- Data is collected at the level of the key actions. Operating expenditure (OpEx) for key actions to implement the targets related to resource use and circular economy is considered.

Planned OpEx for key actions	Next 5 years
Planned OpEx for key actions to achieve the target related to resource use and circular economy, in € millions	0

### Definitions, assumptions and calculation methods:

- The time horizon applied is in line with the approved long-term planning.

- Data is collected at the level of the key actions. Operating expenditure (OpEx) for key actions to implement the targets related to resource use and circular economy is considered.

CapEx for key actions	2025
CapEx for key actions to achieve the target related to resource use and circular economy, in € millions	0

### Definitions, assumptions and calculation methods:

- Data is collected at the level of the key actions. Capital expenditure (CapEx) for key actions to implement the targets related to resource use and circular economy is considered.

- Data is collected at project level.

Planned CapEx for key actions	Next 5 years
Planned CapEx for key actions to achieve the target relating to resource use and circular economy, in € millions	0

### Definitions, assumptions and calculation methods:

- The time horizon applied is in line with the approved long-term planning.

- Data is collected at the level of the key actions. Capital expenditure (CapEx) for key actions to implement the targets related to resource use and circular economy is considered.

- Data is collected at project level.

## Metrics Related to Resource Use and Circular Economy

### Resource inflows

Total weight of products and materials used	2025
Total weight of products (including packaging) and materials used, in million t	0.6

### Definitions, assumptions and calculation methods:

- Includes all technical and biological materials, including raw materials (both primary and secondary) used to manufacture products as well as semi-finished goods and parts. Services, property, plant and equipment, trading goods or finished products that are resold without any transformation are excluded.

- If no weight information is available, this is calculated using the costs of the materials and goods, such as packaging materials, and applying conversion factors.

Percentage of sustainable biological materials	2025
Percentage of sustainably sourced biological materials (and biofuels used for non-energy purposes), in %	0

### Definitions, assumptions and calculation methods:

- Biological materials are considered renewable materials in accordance with generally recognized standards, e.g. GRI 301: Materials 2016.

- Sustainably sourced refers to resource inflows that have been verified by external standards and certifications or other comparable schemes (e.g. FSC and PEFC).

Weight of secondary components, intermediate products and materials used for products and services	2025
Total weight of secondary reused or recycled components, secondary intermediary products and secondary materials used to manufacture products and services (including packaging), in million t	0.1

### Definitions, assumptions and calculation methods:

- The total weight of raw materials used to manufacture products corresponds to the quantities of materials purchased. This value is corrected by a calculated factor for the change in inventory levels.

- Packaging from the upstream supply chain is not included.

- The share of secondary materials is based on information from suppliers and, for selected materials, on data from recognized third parties, if available, and in some cases on expert estimates for certain materials. Due to missing or inconsistent data on packaging in some cases, internal expert assessments of the weight of specific packaging types were used to extrapolate the total weight using a factor and corresponding expenditure.

**Percentage of secondary components, intermediate products and materials used for products and services** **2025**

Percentage of secondary reused or recycled components, secondary intermediary products and secondary materials used to manufacture products and services (including packaging), in %	21.4
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**Definitions, assumptions and calculation methods:**

- This metric is made up of the previously defined metrics.

**Weight of renewable and recycled material inflow** **2025**

Total weight of renewable and recycled material inflow, in million t	0.1
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**Definitions, assumptions and calculation methods:**

- Non-production-related materials, including packaging, are excluded. The total weight of raw materials used to manufacture products corresponds to the quantities of materials purchased.
- The metric is entity-specific.

**Inflow of renewable and recycled materials** **2025**

Percentage of renewable and recycled material inflow, in %	21.0
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**Definitions, assumptions and calculation methods:**

- The total weight of the recycled and renewable raw materials used to manufacture products corresponds to the quantities of materials purchased.
- Non-production-related materials, including packaging, are excluded.
- The metric is entity-specific.

These resource inflows are described in greater detail in the management approach to **circularity** in this section and in the Description of the business model and value chain subsection in the **General Disclosures (ESRS 2)** subchapter.

**Resource outflows**

AUMOVIO's main resource outflows, including waste, related to their material impacts, risks and opportunities are described in the **General Disclosures (ESRS 2)** subchapter as well as in this subsection.

**Products and materials**

AUMOVIO's product portfolio covers a broad spectrum, particularly in the areas of industry and vehicles. A detailed description can be found in the **General Disclosures (ESRS 2)** subchapter. The implementation of our Strategic Sustainability Focus Areas to enable innovative closed resource and product cycles is described in particular in the management approach to **circularity** in this section.

**Rates of recyclable content in product packaging** **2025**

Rates of recyclable content in product packaging, in %	100
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**Definitions, assumptions and calculation methods:**

- The quantity of purchased packaging corresponds to the quantity of packaging used.
- The data is reported centrally.

**Rates of recyclable content in products** **2025**

Rates of recyclable content in products, in %	49.8
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**Definitions, assumptions and calculation methods:**

- The data is based on purchasing data. This metric defines the share of the weight of the contents of products that can potentially be recycled. This value may differ significantly from the actual content recycled.
- If no weight data is available, it is calculated based on the cost of materials and goods, such as packaging materials, and applying conversion factors. The weight of materials used to manufacture products corresponds to the weight of products placed on the market.

AUMOVIO has a diverse product portfolio serving the automotive industry. Due to differences in individual products, target markets, use cases and user behavior, it is almost impossible to predict the expected durability across the board. The actual durability of a specific product may deviate from the following estimates in individual cases.

For the automotive industry, the key products of AUMOVIO are electronic brake systems, electronic control units, telematics, access systems, as well as surround radars and display solutions. Generally, the service life of our products for the automotive industry must be equal to the entire service life of the vehicle and thus correspond to the operational service life of the vehicle in which they are installed. In accordance with the assumptions applied to Scope 3 emissions for the use of products sold, the average service life of a passenger car is estimated to be 200,000 km and that of a commercial vehicle to be 1,000,000 km. Although the service life can vary greatly depending on the vehicle type and conditions of use, our products for the automotive industry are designed to meet the durability expectations of car manufacturers, which are generally for a minimum service life of 150,000 km or 10 years. Our aftermarket products can also meet corresponding expectations, e.g. batteries with a service life of three to five years or brake discs with a mileage of up to 150,000 km.

These main factors influencing the product's longevity determine a product lifespan ranging from a few years up to several decades.

To date, there is no established external assessment system for the reparability of AUMOVIO's products. Nevertheless, we are constantly working on expanding circular product design, as described in the management approach to circularity, and offer corresponding services and products, among others. In principle, our products can be repaired in the event of damage, but the actual possibility depends on many factors, including the actual condition of the product and the degree of damage. In the case of products for the automotive industry, repairs can often be carried out in motor vehicle workshops.

For safety-relevant components (e.g. brake systems), restrictions on reparability may also apply for safety reasons. The corresponding management approaches to technical and product compliance and safe mobility can be found in the **Consumers and End-Users (ESRS S4)** subchapter.

## Waste and recyclable content

Waste diverted from disposal, in million t	2025
(1) Non-hazardous waste for reuse	0.000
(2) Non-hazardous waste for recycling	0.066
(3) Non-hazardous waste for other recovery operations	0.008
<b>(4) Non-hazardous waste diverted from disposal</b>	<b>0.075</b>
(5) Hazardous waste for reuse	0.000
(6) Hazardous waste for recycling	0.008
(7) Hazardous waste for other recovery operations	0.002
<b>(8) Hazardous waste diverted from disposal</b>	<b>0.010</b>
<b>(9) Total waste diverted from disposal</b>	<b>0.085</b>

### Definitions, assumptions and calculation methods:

#### Overarching information for positions (1) – (9):

- The data is collected by the individual locations. For certain locations, modeled calculations are used considering the number of employees and the type of operation. Additionally, the December waste for individual locations has been calculated in case the necessary data or receipts were not available at the time of reporting.
- Waste that contractually belongs to an external third party is not taken into account.
- Hazardous waste is considered following Annex III of Directive 2008/98/EC of the European Parliament and of the Council on waste
- Waste diverted from disposal contains construction waste. The recycling share of construction waste is based on an expert assessment.
- Non-hazardous waste considers waste which is not covered by the definition of hazardous waste.

#### (1) Non-hazardous waste for reuse

- Reuse refers to any process where products and components that are not waste are used again for the same purpose for which they were designed, without significant modification.
- The material intended for reuse does not end up in the waste register, rather it is immediately transferred to the appropriate materials storage facility.
- Consequently, no waste is generated that is intended for reuse.

#### (2) Non-hazardous waste for recycling

- Recycling is defined as any recovery process in which waste materials are reprocessed into products, materials or substances, whether for the original or another purpose.

#### (3) Non-hazardous waste for other recovery operations

- Other recovery operations include the generation or recovery of energy through incineration of waste that is to be used as fuel or other means to generate energy.

#### (4) Non-hazardous waste diverted from disposal

- Total of positions (1) to (3)

**(5) Hazardous waste for reuse**

- Reuse refers to any process where products and components that are not waste are used again for the same purpose for which they were designed, without significant modification.
- The material intended for reuse does not end up in the waste register, rather it is immediately transferred to the appropriate materials storage facility. Consequently, no waste is generated that is intended for reuse.

**(6) Hazardous waste for recycling**

- Recycling includes all recovery processes in which waste materials are reprocessed into products, materials or substances, whether for the original purpose or for another purpose.

**(7) Hazardous waste for other recovery operations**

- Other recovery operations include the generation or recovery of energy through incineration of waste that is to be used as fuel or other means to generate electric power or other forms of energy.

**(8) Hazardous waste diverted from disposal**

- Total of positions (5) to (7)

**(9) Total waste diverted from disposal**

- Total of positions (4) and (8)

Waste directed to disposal, in million t	2025
(10) Non-hazardous waste for incineration	0.000
(11) Non-hazardous waste for landfill	0.003
(12) Non-hazardous waste for other disposal operations	0.000
<b>(13) Non-hazardous waste directed to disposal</b>	<b>0.004</b>
(14) Hazardous waste for incineration	0.001
(15) Hazardous waste for landfill	0.002
(16) Hazardous waste for other disposal operations	0.003
<b>(17) Hazardous waste directed to disposal</b>	<b>0.005</b>
<b>(18) Total waste directed to disposal</b>	<b>0.009</b>

**Definitions, assumptions and calculation methods:**

**Overarching information for positions (10) – (18):**

- The data is collected by the individual locations. For certain locations, modeled calculations are used considering the number of employees and the type of operation. Additionally, the December waste for individual locations has been calculated in case the necessary data or receipts were not available at the time of reporting.
- Waste that contractually belongs to an external third party is not taken into account.
- Hazardous waste is considered following Annex III of Directive 2008/98/EC of the European Parliament and of the Council on waste.
- Waste directed to disposal contains construction waste. The landfill share of construction waste is based on an expert assessment.
- Non-hazardous waste considers waste which is not covered by the definition of hazardous waste.

**(12) Non-hazardous waste for other disposal operations**

- Other disposal operations are defined as disposal activities that are not considered under incineration or landfill. This includes, for example, the pre-treatment of predominantly liquid and pasty special waste using a variety of chemical, thermal and physical processes to achieve an output suitable for disposal.

**(13) Non-hazardous waste directed to disposal**

- Total of positions (10) to (12)

**(16) Hazardous waste for other disposal operations**

- Other disposal operations are defined as disposal activities that are not considered under incineration or landfill. This includes, for example, the pre-treatment of predominantly liquid and pasty special waste using a variety of chemical, thermal and physical processes to achieve an output suitable for disposal.

**(17) Hazardous waste directed to disposal**

- Total of positions (14) to (16)

**(18) Total waste directed to disposal**

- Total of positions (13) and (17)

Total waste generated	2025
Total amount of waste generated, in million t	0.094

**Definitions, assumptions and calculation methods:**

- The metric comprises the total waste from all locations worldwide. Sold or discarded machines, wastewater and waste that contractually belongs to an external third party are not included.
- The data is collected by the individual locations. For certain locations, modeled calculations are used considering the number of employees and the type of operation.

Hazardous waste	2025
Total amount of hazardous waste, in million t	0.016

**Definitions, assumptions and calculation methods:**

- Total of positions (8) and (17) from the tables "Waste diverted from disposal" and "Waste directed to disposal."
- Waste that contractually belongs to an external third party is not taken into account.

<b>Radioactive waste</b>	<b>2025</b>
Total amount of radioactive waste, in million t	0.000

**Definitions, assumptions and calculation methods:**

- Radioactive waste is defined in Article 3(7) of Council Directive 2011/70/Euratom (Annex I).
- AUMOVIO does not generate any radioactive waste.

<b>Non-recycled waste</b>	<b>2025</b>
Amount of non-recycled waste, in million t	0.020
Percentage of non-recycled waste, in %	20.9

**Definitions, assumptions and calculation methods:**

- Amount of non-recycled waste.
- Total of positions (3), (7) and (18) from the tables "Waste diverted from disposal" and "Waste directed to disposal."
- Waste that contractually belongs to an external third party is not taken into account.
- Percentage of non-recycled waste.
- Amount of non-recycled waste divided by the amount of waste generated.

<b>Waste for recovery quota</b>	<b>2025</b>
Waste for recovery quota, in %	91.4

**Definitions, assumptions and calculation methods:**

- This metric is the total of hazardous and non-hazardous waste for recovery and energy recovery divided by the total volume of waste.
- Contrary to the amount of waste, construction waste is not included.
- The data is collected by the individual locations. For certain locations, modeled calculations are used considering the number of employees and the type of operation.
- The metric is entity-specific.

Relevant waste streams are described in this section in the management approach to waste in own operations.

The materials contained in AUMOVIO's waste are largely determined by the specific resource inflows and are described in the management approaches in this section.

