



**AVK GROUP**  
**SUSTAINABILITY REPORT**  
**2024/2025**

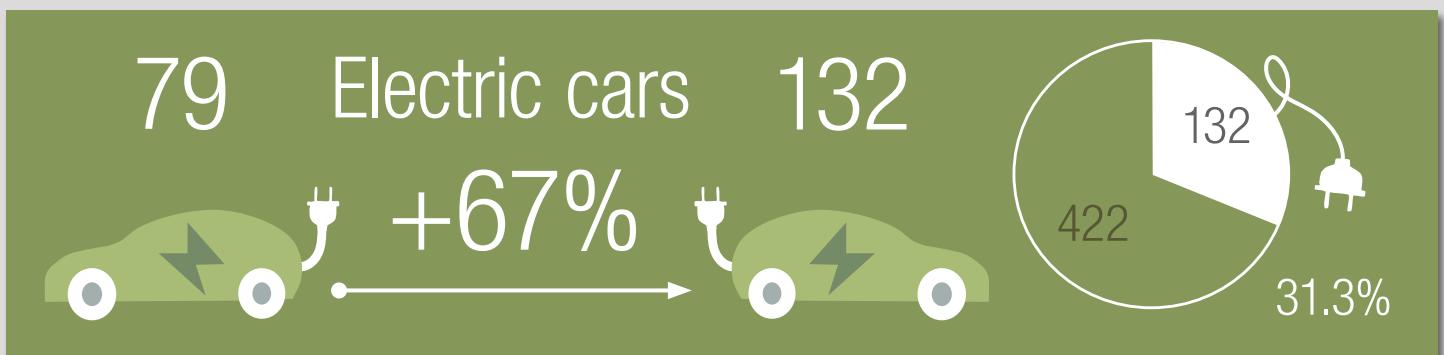
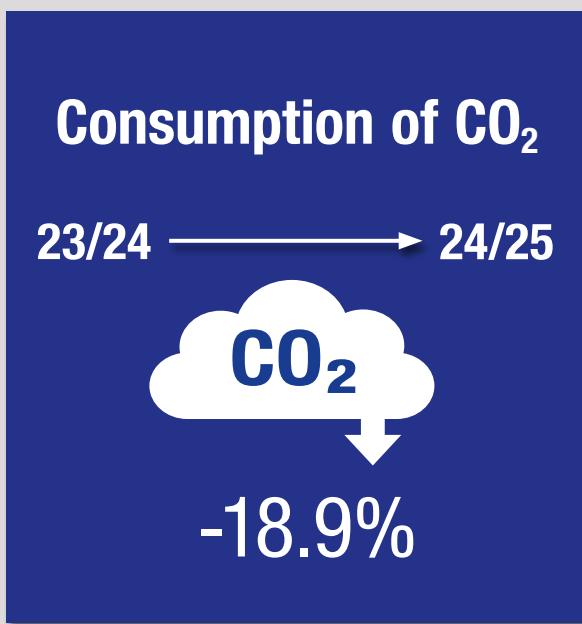
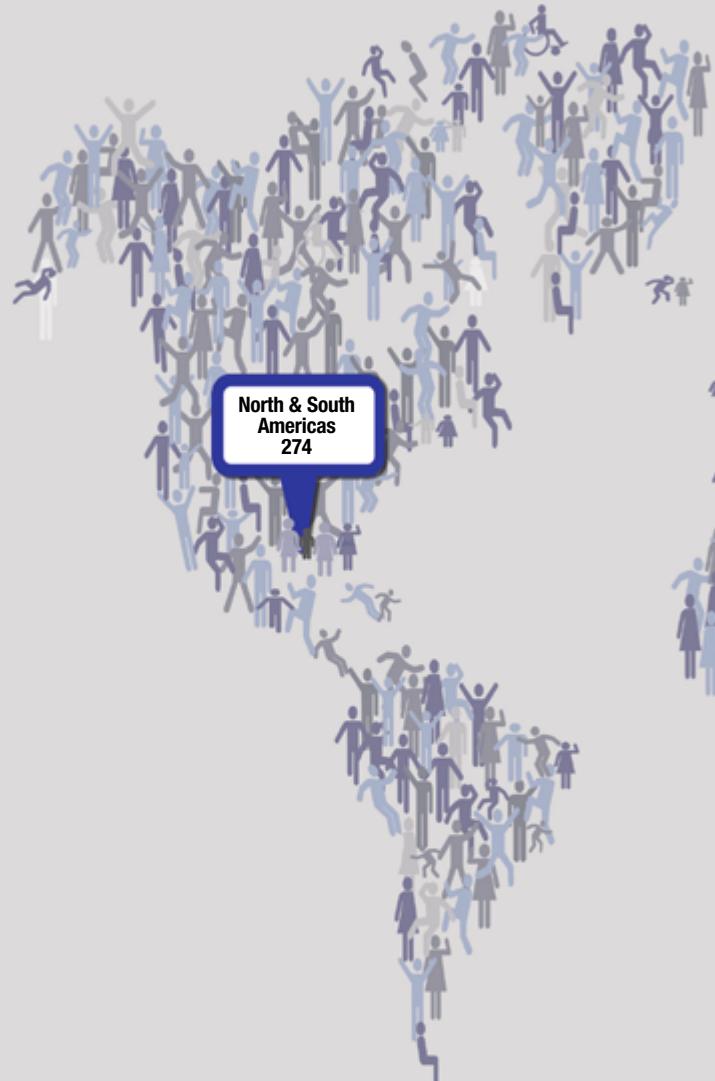
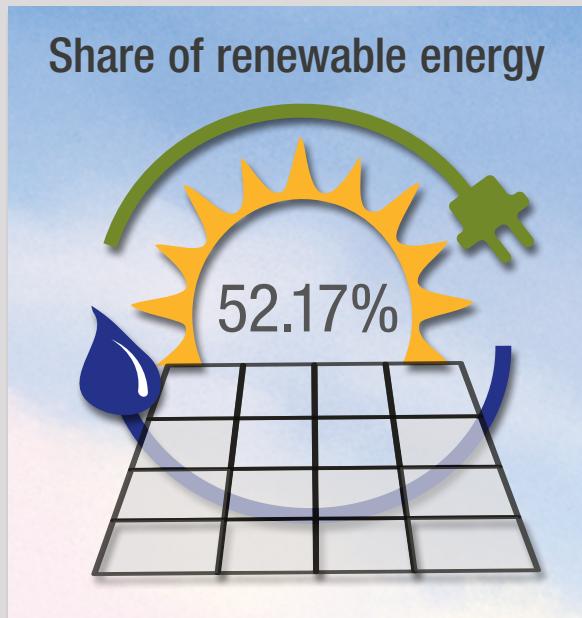


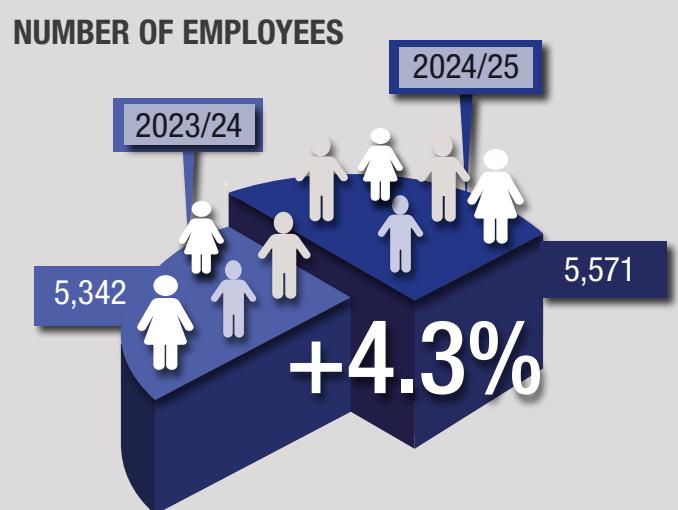
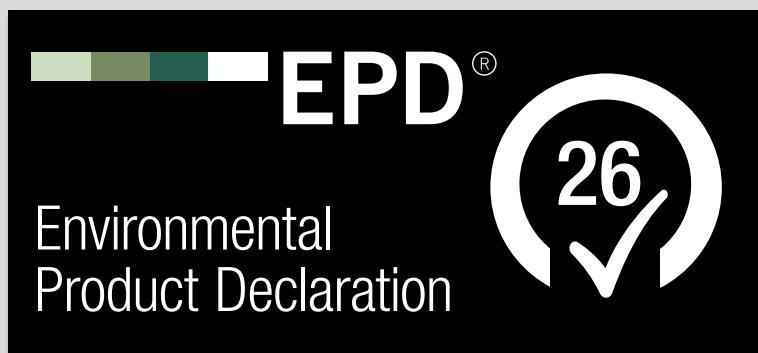


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# 2024/25 IN HIGHLIGHTS







Niels Aage Kjær  
Chairman of the Board and  
Owner of the AVK Group

# LETTER FROM NIELS AAGE KJÆR

We are pleased to present this year's sustainability report, which outlines our continued commitment to responsible business practices in a year marked by both complexity and opportunity.

Global economic uncertainty, geopolitical tensions, inflationary pressures, and evolving regulatory landscapes have all influenced our operations and supply chains. At the same time, the growing urgency to address climate and environmental challenges has led to new opportunities for innovation and long-term value creation. In response, AVK has made strategic investments to strengthen local production and enhance supply chain resilience.

A key milestone this year was the transition from three divisions – Water, Industrial, and Advanced Manufacturing – to two: Water Solutions and Advanced Manufacturing. This new structure enables a more integrated and agile approach to serving our customers across water and industrial segments, while supporting operational efficiency and collaboration across our global footprint.

Since our founding in 1941, AVK has been guided by our Core Values: quality, innovation, reliability, sustainability, and customer service. Our purpose is to develop and produce high-quality, long-lasting products essential for vital infrastructure – including water supply, wastewater management, energy, and industrial applications – contributing to public health, environmental protection, and sustainable development.

This report features cases that illustrate how our solutions contribute positively to society and the environment. Among these are efforts to reduce water loss through AVK Smart Water technologies in collaboration with Silkeborg Forsyning and to strengthen wastewater management in China. We also signed a Memorandum of Understanding with the State of California to support the development of water infrastructure. These examples reflect our commitment to developing solutions that

actively promote better resource management, public health, and environmental protection. As part of our ongoing efforts to reduce our environmental impact, we have taken several important steps this year. We have initiated the process of phasing out lead and PFAS in our products, increased the use of recycled materials, and all AVK-owned companies in Denmark have fully transitioned to renewable energy.

At the same time, we have worked to improve the quality of our environmental data and calculation methods, providing a more accurate basis for understanding our carbon footprint. While this has not necessarily led to reductions, it strengthens our foundation for future action. That said, we have seen a reduction in both Scope 1 and 2 emissions, and we are proud of the efforts across the AVK Group that have made this possible.

We increased the number of Environmental Product Declarations from 15 to 26, implemented our AVK Group Code of Conduct for our employees, revised our Supplier Code of Conduct, and increased the number of supplier audits. These initiatives reflect our commitment to transparency, accountability, and continuous improvement throughout our value chain.

Not all developments have been positive. We have experienced an increase in the Lost Time Accident Frequency Rate (LTAFR) as it reached 7.09. This is partly due to improved reporting practices. However, this highlights the continued importance of our focus on safety, well-being, and a strong culture of responsibility.

Looking ahead, we will continue to advance our sustainability agenda through targeted actions in climate, circular production, and responsible business conduct. We will develop a climate transition plan, increase the use of renewable energy, reduce gas consumption, and further implement ISO 50001. Likewise, we will further expand the use of recycled materials, strengthen water management in high-risk areas, and improve Scope 3 data.

With operations across multiple countries, our diverse workforce is one of our greatest strengths – supporting both local engagement and global development. We are committed to fostering a safe, inclusive, and professionally rewarding work environment where diversity is embraced and well-being is prioritised. We continue to work actively to reduce work-related accidents and promote a culture of care, responsibility, and continuous improvement. At the same time, we are strengthening governance through clear ethical standards, transparency, and structured follow-up.

AVK operates in sectors that are central to sustainable development. In recent years, the importance of managing drinking water and wastewater has gained increased attention – not only for its impact on health and quality of life, but also for its role in energy efficiency and climate resilience.

This past year has demonstrated AVK's ability to remain resilient and forward-looking in the face of global challenges. The transition to a new divisional structure has strengthened our ability to respond to market needs, leverage global capabilities, and support long-term value creation through innovation, efficiency, and responsible conduct. We remain firmly anchored in our Core Values, ensuring that our products deliver value to customers and contribute positively to society and the environment.

As we look to the future, we are energised by the opportunities ahead and remain committed to driving progress through responsible leadership and continuous improvement. Thank you for your continued support.

Niels Aage Kjær

Chairman of the Board and Owner of the AVK Group

# OUR HISTORY, PURPOSE, AND BUSINESS UNITS

AVK is a family-owned Group with headquarters in Galten, Denmark. It is built on the foundation of an 80+ year old machine shop founded in 1941 by Aage Valdemar Kjær, creating the company name from his initials – AVK. Today, the global AVK Group employs approximately 5,570 people and consists of 110 manufacturing and sales companies.

## **Our purpose**

It is our purpose to develop, manufacture, and market products of a high quality and with a long lifespan.

The products are used in vital infrastructure, including water supply, wastewater treatment, energy supply, as well as a wide range of industrial applications that contribute to sustainable development, human health, and a better environment.

## **Business units**

AVK is divided into two business units: AVK Water Solutions and AVK Advanced Manufacturing. Both units consist of companies with a strong product portfolio and competencies used in many different business segments around the world. To accommodate the needs of our customers, we design, manufacture, and market our products ourselves.

### **AVK Water Solutions**

AVK Water Solutions is a group of companies that develop, manufacture, and supply high-quality valves and integrated solutions for a wide range of applications.

We serve municipal, state and private sectors within water treatment, transmission, distribution, wastewater handling, irrigation, desalination, flood- and stormwater, district

heating and cooling, fire protection, dams and reservoirs, hydropower, and natural gas distribution. Likewise, we serve industrial water-based segments within the marine sector, mining, pulp and paper, petro-chemical plants, biogas, energy data centres, air separation and industrial water/wastewater treatment plants.

We deliver to markets and customers all over the world, but that does not mean our solutions are universal. On the contrary, we always deliver unique solutions tailored to meet local conditions and requirements according to local standards and approvals.

### **AVK Advanced Manufacturing**

AVK Advanced Manufacturing consists of companies that manufacture components and products made of metal, rubber, and plastic. For more than 50 years, AVK Advanced Manufacturing has grown its business to become an important supplier to defined key global customers in addition to the AVK Water Solution business.

The components and products are used in various industrial applications that require high quality, technical expertise and know-how, high tolerances, and long-lasting durability.

Cast, machined, and processed components made of steel, iron, aluminium, and bronze are used in sectors such as logistics, green tech/

energy, among others. Rubber components are applied in equipment for municipal water, food processing, green tech/energy, technical products, and healthcare industries. Plastics components are used in applications related to drinking water, stormwater, green tech, and logistics. The product portfolio includes proprietary brands in street covers, waste containers, and pallets, with a strong focus on increasing the share of recycled plastic in products.

The two business units, Water and Industrial, were merged during the financial year 2024/2025. For more information, please refer to our financial report and overview of the companies in the AVK Group, which can be found under "Downloads" on our website.

# OUR VALUES

At the core of AVK's DNA is our five values that act as our guiding principles and set the direction for how we run our business. These values are the foundation for our growth and results.

The five core values ensure a healthy company and constantly commit us to remaining industry leaders by developing our business, solutions, and people continuously.

AVK operates on a global scale when it comes to both manufacturing and design, while serving our customers locally. We offer full-line partnerships and a single point of entry to a comprehensive range of products and solutions.

With our solid know-how and decades of experience, it is safe to expect more from us – now and in the years to come. We make a difference by driving progress for our customers.

The five core values serve as guiding principles for all in the AVK Group.

**The foundation  
we share**



## Quality

We strive for quality in everything we do

## Innovation

We innovate to make a difference

## Reliability

We strive to be credible and consistent

## Sustainability

We have a long-term approach

## Customer Service

We strive to be our customers' preferred partner

# AVK CORPORATE BRANDS





LUCAVAL



HYDRO - COS. LTD



# OUR BUSINESS MODEL

Our business model reflects our dedication to employee engagement, technological innovation, responsible sourcing and production, and stakeholder engagement.

## RESOURCES

### EMPLOYEES

We hire qualified employees who support the business with their knowledge and competences, and we focus on long-term relations, diversity, and development.

### INNOVATION AND DEVELOPMENT

We develop products with extended lifespan and are committed to continuous improvement and innovation in our processes, solutions, and business areas.

### SOURCING

We source materials and components responsibly from local as well as global suppliers and partners, and we have high standards regarding people, the environment, and business ethics.

## ACTIVITIES

### BUSINESS UNITS

AVK Water Solutions

AVK Advanced Manufacturing



### SOCIETY

Our products are part of vital infrastructure including water supply, wastewater treatment, and energy supply as well as a variety of industrial applications, all contributing to the sustainable development of society, the health of people, and a better environment.

### CUSTOMERS

We deliver solutions, not just products. We aim to build long-term relationships and to continuously optimise our solutions to fulfil our customers' needs and requirements.

## VALUE CREATION

## PRODUCTION

We manufacture high-quality products and operate our production in a responsible way within the Lean framework, with care for the environment and our stakeholders.

## STAKEHOLDER ENGAGEMENT

Our relationships are built on trust and long-term relations – always with shared value creation in mind.

## ACTIVITIES

### FINANCIAL YEAR 2024/25

Turnover: DKK 9,394m

Employees: 5,571

Operational companies: 110

Represented in 39 countries

## EMPLOYEES

We focus on being a healthy and safe workplace, providing attractive jobs, and creating the best framework for employee development and well-being.

## SHAREHOLDER VALUE

We prioritise reinvestment and active ownership as well as creating value for our shareholders.

AVK is a global Group. We operate in various segments and under different conditions. As we will describe in the section “Our risks and opportunities”, we are very conscious of the risks that come with being a global Group. Therefore, we monitor our own and external manufacturing units to ensure that the specified criteria for the environment and human rights are complied with.

Our foundation is to act in a responsible manner towards employees, the environment, and the surrounding community.



**INNOVATION AND  
DEVELOPMENT WITHIN  
OUR BUSINESS AREAS**

Economic growth, social development, and climate action rely heavily on investments in infrastructure, sustainable industrial development, and technological progress. In the face of a rapidly changing global economic landscape and increasing inequalities, sustained growth must be driven by industrialisation that, first and foremost, creates opportunities accessible to all people, and secondly, is supported by innovation and resilient infrastructure. Source: UN

A stream of disruptive events like decarbonisation of energy systems, economic uncertainty, political aspects, digitalisation, and AI is reshaping the business environment and the organisations. The effects of these trends will be uneven across markets and industries. For most companies, navigating the new landscape will require increased flexibility along with changes in strategy, financing, and talent.

The industrial market thus requires constant adaptability to ensure responsible and economic growth, while investing in green transformation, digitalisation of processes, and automation to ensure competitiveness. All these factors place great demands on innovation and development in AVK's manufacturing companies. As a result, we continuously invest in product development and optimisation of processes throughout the value chain, including automation and digitalisation of production.

### **Product development**

In the AVK Group, innovation and development of new and improved quality products, with a guaranteed long lifespan and recycling in mind, remain a constant priority. As described on the following pages, our focus on innovation affects many industries. At the core of our business is the development, manufacturing, and delivery of high-quality valves and solutions for clean drinking water supply, wastewater management, fire protection, and irrigation systems. In recent years, we have placed growing emphasis on expanding our product portfolio with intelligent valve technologies, developed and managed by AVK Smart Water.

In February 2025, AVK initiated a phase-out and subsequently implemented a ban on the use of lead in all AVK Group products. This decision is based on the European Drinking Water Directive 2020/2184 & the 4MSI regulation. Although certain metal alloys containing lead will remain permitted under current legislation, AVK has chosen to eliminate lead entirely from our products through a two-step process. The first step involves identifying all products and components containing

lead; the second is implementing suitable alternatives. This phase-out must be completed within a three-year timeframe.

Likewise, AVK has initiated the redesign of components containing PFAS within a three-year timeframe. This proactive approach ensures that we can offer PFAS-free products well ahead of the timelines expected in potential future legislation.

The S756 Double Eccentric Butterfly PN10/16 range (DN150 to DN2000) has undergone a complete redesign, resulting in an approximately 15% reduction in weight. Despite the lighter construction, product performance remains unchanged and, in some cases, even improved. The reduced use of raw materials, primarily cast iron, contributes to a lower environmental footprint in the production process.

The global electrification of the automotive industry continues to drive high demand for microchips, in a market already challenged by supply shortages. Combined with political development encouraging local microchip production, this creates promising business opportunities for AVK. Our ball valves and butterfly valves are well-suited for use in the microchip cleaning process, which places stringent requirements on all technical equipment involved.

Geopolitical developments have led to the introduction of new national standards and specifications for products used in shipbuilding. In response, AVK has adapted its product range of butterfly valves to meet these evolving requirements.

Rising competition calls for increased automation and digitalisation in our production processes. To support this transformation, AVK has initiated the development of a completely new design for our industrial knife gate valves, enabling greater automation and efficiency in our production.

### **Stable and more efficient production with robots**

At AVK, we continuously strive to optimise and develop our work processes. Robotics is one of the key technologies we use to ensure consistent product quality and to enhance production efficiency and stability, which are critical factors for maintaining future competitiveness.

Robotic solutions are particularly effective for tasks involving large volumes of similar products. These repetitive operations, known as unilateral-reciprocal work, can be physically demanding and demotivating for employees. By automating such tasks, we improve both working conditions and overall productivity.

Robots have been an integral part of AVK's manufacturing process for decades. Today, our advanced robotic system manages multiple processes simultaneously. Given the high demands for component consistency, the implementation of robotics has strengthened our quality assurance throughout the production process. With zero tolerance for deviations, all upstream processes must meet strict standards to ensure uniform component quality.

The integration of new technologies and digitalisation is also driving the development of new workflows. We continuously assess how logistics processes must adapt and what system changes are required to ensure seamless coordination across the entire manufacturing process.

Ultimately, the robotic system enables stable, high-quality production, and optimised workflow. At the same time, it frees up employee resources to support increased productivity and innovation.

# INTRODUCTION TO AVK'S SUSTAINABILITY & ESG ORGANISATION

We see sustainability as an integrated part of our business, and it is one of the global focus areas for the Group supported by AVK Holding. Activities and requirements are coordinated across all the companies of the Group.

## **Establishment of Sustainability & ESG function**

On February 1, 2024, a dedicated central Group Sustainability & ESG function was established with reference to AVK Group top management.

The function, which is responsible for anchoring sustainability across the organisation, draws on key specialist resources from other AVK Group functions: Group Finance, Legal, Communication, Supply Chain, and IT as well as key staff from our global companies.

In addition, the individual companies within the AVK Group are increasingly involved in the sustainability and ESG work. This includes continuous collaboration and dialogue with the companies regarding best practice, knowledge sharing, and the handling of specific tasks. This ongoing interaction ensures alignment across the organisation and strengthens the implementation of sustainability initiatives at both group and local levels.

## **Sustainability & ESG management structure at AVK**

Sustainability and ESG is a focus area for the Group, as we, as a global organisation, continue to face increasing demands related to sustainability and ESG responsibilities, requiring strong processes for data collection, documentation, and governance. We maintain a focus on current and emerging customer requirements, which continue to shape our sustainability direction. During 2023/24, AVK began the strategic implementation of the CSRD, with a key focus on carrying out a Double Materiality Assessment (DMA).

Due to the EU "Omnibus" proposal to postpone

parts of the Corporate Sustainability Reporting Directive (CSRD) and the Environmental, Social, and Governance Reporting Standards (ESRS) requirements, some legislative details are still pending. Nevertheless, AVK has maintained its structured approach to sustainability and how sustainability and ESG activities are organised across the Group.

To strengthen our readiness, we have continued to develop a Group-wide risk assessment in alignment with the initial requirements of the EU CSRD and the ESRS.

## **Double Materiality Assessment**

A central element of the European sustainability reporting framework, ESRS, is the concept of double materiality. The DMA sets the framework of reporting by addressing materiality from both an impact and a financial perspective.

Impact materiality refers to how a company can affect people, society, or the environment in a positive or negative way – also referred to as the company's inside-out perspective on its surroundings.

Financial materiality refers to how the external environment or society can or will affect a company's ability to conduct business now and in the future through financial risks and opportunities.

This assessment identifies and prioritises the AVK Group's most significant impacts, risks, and opportunities and forms the framework for our sustainability strategy.

## **Double materiality process**

The DMA was finalised in March 2025, using a top-down approach from the AVK Group to our operating companies and their value chains, including global suppliers. Following this, we initiated a gap assessment to evaluate the Group's current readiness in relation to ESRS disclosure requirements. Completion of this assessment is currently on hold, pending the final legislative outcomes of the "Stop-the-Clock" directive.

Based on the results of our DMA, we continue to identify the AVK Group's key risks and opportunities related to sustainability across environmental, social, and governance areas. These are being integrated into relevant internal controls, management processes, and policies to ensure a coherent and future-proof governance framework.

We continue to work towards ensuring that, where possible, our overall sustainability agenda and related requirements are managed and supported through our global ISO-based management systems.

## Matrix of Double Materiality Assessment outcome

Financial materiality	Double materiality
	<div style="border: 1px solid #ccc; padding: 10px; text-align: center;">  <p>E1: Climate change</p> </div> <div style="border: 2px solid #ccc; border-radius: 10px; padding: 10px; text-align: center;">  <p>G1: Business conduct</p> </div>
Not material	Impact materiality
<div style="border: 1px solid #ccc; border-radius: 10px; padding: 10px; text-align: center;">  <p>E3: Water and marine</p> </div> <div style="border: 1px solid #ccc; border-radius: 10px; padding: 10px; text-align: center;">  <p>E4: Biodiversity and ecosystems</p> </div> <div style="border: 2px solid #ccc; border-radius: 10px; padding: 10px; text-align: center;">  <p>S2: Workers in the value chain</p> </div> <div style="border: 1px solid #ccc; border-radius: 10px; padding: 10px; text-align: center;">  <p>S4: Consumers and end-users</p> </div>	<div style="border: 1px solid #ccc; border-radius: 10px; padding: 10px; text-align: center;">  <p>E2: Pollution</p> </div> <div style="border: 1px solid #ccc; border-radius: 10px; padding: 10px; text-align: center;">  <p>E5: Resource use</p> </div> <div style="border: 2px solid #ccc; border-radius: 10px; padding: 10px; text-align: center;">  <p>S1: Own workforce</p> </div> <div style="border: 2px solid #ccc; border-radius: 10px; padding: 10px; text-align: center;">  <p>S3: Affected communities</p> </div>

## Material ESRS sub-topics

 <p><b>Environment</b></p> <p><b>Climate Change</b></p> <p>E1 – Energy (R) E1 – Climate change mitigation (R) (O)</p> <p><b>Pollution</b></p> <p>E2 – Microplastics (I/N)</p> <p><b>Resource Use and Circular Economy</b></p> <p>E5 – Resource inflows (I/P) E5 – Resource outflows (I/P) E5 – Waste (I/N)</p>	 <p><b>Social</b></p> <p><b>Own Workforce</b></p> <p>S1 – Working conditions (I/N) S1 – Gender equality and pay for equal work (I/N) S1 – Health and safety (I/N) S1 – Training and skills development (I/N) S1 – Diversity (I/N)</p> <p><b>Affected Communities</b></p> <p>S3 – Water and sanitation (I/P)</p>	 <p><b>Governance</b></p> <p><b>Business Conduct</b></p> <p>G1 – Corporate culture (R) (O) G1 – Management of relationships with suppliers (I/N) G1 – Corruption and bribery (I/N)</p>
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# OUR VALUE CHAIN

The AVK Group is a global leader in valve manufacturing and operates across a range of industries such as water supply, wastewater management, energy, and industrial applications. In our value chain, we emphasise sustainable practices, including using recycled materials, enhancing production efficiency, and focusing on the environmental impact throughout the manufacturing processes.

## Raw materials and procurement

AVK sources a wide range of raw materials, including metals, plastics, rubber, and other components essential for our product lines like valves, hydrants, and fittings. Purchases are made from global suppliers based on our material specifications.

The use of recycled materials, particularly in cast iron and plastic products, is a focus area to minimise environmental impact.

## Manufacturing

Our global manufacturing facilities are operated in an advanced and energy-efficient manner that utilise modern technologies and automation to improve manufacturing efficiency and product quality.

We prioritise processes that integrate circular economy principles, such as reusing materials from manufacturing waste to minimise environmental impact and support sustainability.

## Logistics

AVK has a robust logistics network designed to deliver products efficiently to global markets. Logistics is optimised through technological solutions to track inventory and manage global shipments via road, sea, and air, supporting our international operations and customers.

## Customers

AVK's customer base includes national as well as local municipal authorities, utilities, and industries in need of water, wastewater, and energy infrastructure solutions.



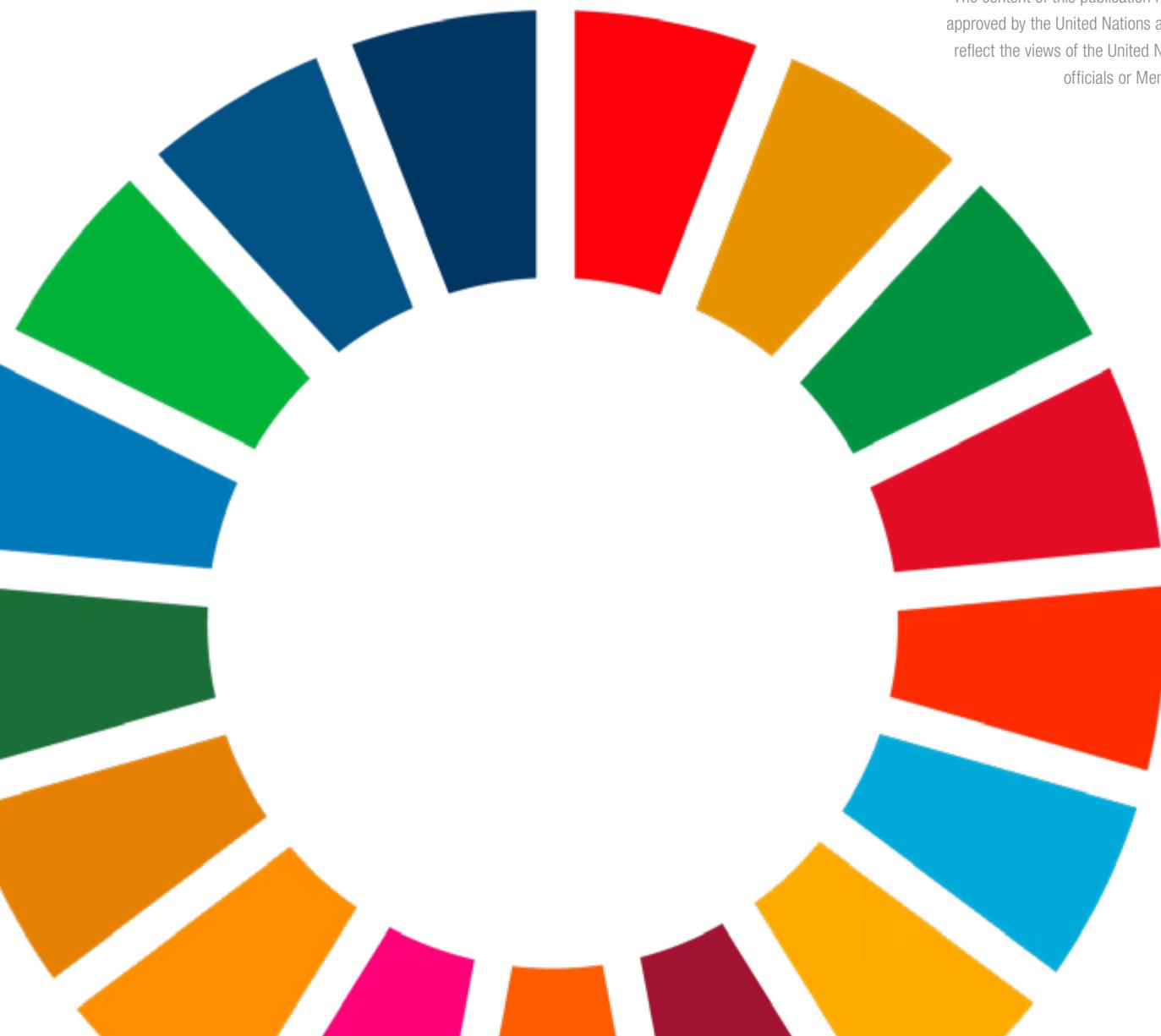


# OUR CONTRIBUTION TO THE UN SUSTAINABLE DEVELOPMENT GOALS

The UN 17 Sustainable Development Goals (SDGs) are the framework for the global sustainable development efforts until 2030. The goals recognise that social, economic, and environmental development are closely interlinked, and that achieving sustainable development outcomes requires a concerted global effort.

At AVK, we recognise that we have a shared responsibility. The SDGs 6 and 9 are particularly relevant to our business, but we also work with other goals, either at a strategic level or through decentralised activities as described below.

The content of this publication has not been approved by the United Nations and does not reflect the views of the United Nations or its officials or Member States.





Our product portfolio in AVK Water is a direct extension of **UN SDG 6**. This goal aims to ensure that everyone has access to clean drinking water and sanitation and that this is managed sustainably.

Our valve solutions help ensure clean drinking water in well-established water supply systems by providing reliable, long-lasting, and dependable water management and helping to reduce water waste and energy consumption. AVK products and solutions are used in a wide range of processes designed to ensure responsible wastewater treatment and to minimise risks to both the environment and human health.



**UN SDG 9** is concerned with developing reliable infrastructure, promoting sustainable industries, and investing in scientific research and innovation.

AVK contributes to this goal by designing and manufacturing innovative products, some of which are part of recycling initiatives and processes for energy, water, and infrastructure solutions.

Water influences health and quality of life.



By operating in the water and wastewater industry, we indirectly contribute to **UN SDG 3** which is about ensuring healthy lives and promoting well-being. Water-related diseases are a major problem worldwide and wastewater can contaminate drinking water sources.



Sustainable energy is the core of **UN SDG 7**. This goal aims to ensure that all people have access to affordable, reliable, sustainable, and modern energy by 2030. It specifies that the share of renewable energy in the global energy mix must increase significantly by 2030.

Our valves for wastewater treatment, biogas, and hydroelectric energy production contribute to a greater share of renewable energy.



We work with **UN SDG 8** which is about decent jobs and economic growth. This means that we must provide healthy and safe workplaces for our employees both in Denmark and internationally and respect their right to equal and fair working conditions.

We only want to co-operate with suppliers who guarantee compliance with human rights legislation and our ethical standard, the Code of Conduct.

As a financially robust and responsible company, we make significant investments to strengthen our competitiveness and maintain our market share.



Our product portfolio contributes to clean water and sanitation which are the foundation for ensuring more sustainable cities and communities. Equally, our solutions can help cities adapt to extreme rainfall by using underground drainage systems to prevent flooding. In this way, we support **UN SDG 11** on sustainable cities and communities.



**UN SDG 12** is about responsible consumption and production. We support this goal by conducting life cycle assessments and by identifying methods and processes that enable us to recycle materials from our factories. We also apply large quantities of recycled materials in our production, both metals and plastics.



**UN SDG 13** on climate action is concerned with reducing the increase in global average temperature and strengthening resilience and adaptation to climate change.

As a player in the water and wastewater industry, we contribute to this goal by addressing the link between water consumption and energy use. Our valve solutions help reduce water loss and enable efficient pressure management in distribution networks – thereby lowering energy required for pumping and supporting more sustainable resource use.

In the energy sector, our valves can be used in the distribution of water for district heating, biogas production, hydroelectric energy, and conversion of wastewater into green energy. To adapt society to extreme rainfall, climate adaptation solutions for flooding are needed. This is another area where AVK companies can contribute with valve solutions.

In addition, we have developed an environmental and climate strategy with the primary aim of reducing CO<sub>2</sub> emissions through energy reduction in the life cycle of our products and investing in green energy sources.



We consider **UN SDG 17** to be essential for the success of the other sustainability goals. At AVK, we are committed to contributing to a sustainable water and energy supply and fostering a society where circular economy principles play a greater role. Achieving this requires collaboration across local, national, and international organisations, authorities, industries, and professions – which is exactly what we do through partnerships.



#### **Non-revenue water (NRW)**

Non-revenue water (NRW) is produced, cleaned water lost somewhere in the water distribution system, never reaching its destination. This means the water is not used or paid for, affecting local economies as well as local resources available and wasted energy for pumping water.

A conservative estimate is that the level of NRW is between 20 and 50% in some countries. This means that between 20 and 50% of the water pumped into the pipes from the waterworks is not billed, either because it is lost due to leaks or because of unauthorised consumption.

# **WATER LOSS: PROBABLY THE MOST CRITICAL RESOURCE CHALLENGE OF OUR TIME**

Water has a significant impact on health, quality of life, energy consumption, and on our climate. “Clean water and sanitation for all” is UN SDG 6 which emphasises that water is a vital resource. In fact, water plays a crucial role in solving many of the underlying problems that have led to all UN’s Sustainable Development Goals.

#### **Today, we are wasting tomorrow's water**

Water is a scarce resource in many parts of the world. Yet, in some countries, between 20 and 50% of the treated water is wasted on its way to consumers. Consequently, up to 50% of energy used for production and distribution of treated water is wasted too. By 2040, approximately 79% more energy will be used for water management compared to 2014 if we continue to operate as we do now.

The reasons for water loss are many, ranging from leakages, pipe bursts, poor water

management to illegal connections and unauthorised consumption. Likewise, many solutions are available.

#### **The technologies are there – we just need the initiative**

In Denmark, legislation does not allow a water loss rate of more than 10%. Over time, this has resulted in one of the world's lowest average water waste rates of 7.8% and has placed Denmark as a front-runner in water technology and solutions.

As water sources are already overexploited and populations are increasing, we need to apply better management. And what better way to start than by minimising the waste of water.

The revised EU Drinking Water Directive, which addresses water loss, drinking water quality, and infrastructure risk assessment requirements, gives hope that more decision makers will see the positive effects of legislation in crucial areas such as water infrastructure.

## CASE

### **OPTIMISING SILKEBORG FORSYNING'S DISTRIBUTION NETWORK**

Silkeborg Forsyning, a Danish utility company located in Silkeborg, supplies drinking water to 60,000 consumers via a 640-kilometre pipeline network and 21,500 consumer metres, producing around 3 million cubic metres of water annually. Silkeborg Forsyning was looking for a way to optimise the water distribution network as they lacked real-time insight into flow and pressure, making it difficult to detect leaks and reduce Non-Revenue Water (NRW).

To address this, Silkeborg Forsyning initiated a strategic plan to divide its network into 24 District Metering Areas (DMAs). This approach would enable better control, faster leak detection, more efficient operations, and a better foundation for new investments in the network.

Silkeborg Forsyning researched several technologies to collect, send and analyse data for flow and pressure. They ended up selecting AVK Smart Water for its technical fit and competitive pricing.

Smart Water monitoring provides insight into which of the 24 DMAs receive the most water at night, helping identify potential water waste. Alarms triggered by abnormal night-time flow alert the utility to possible burst or irregularities,

supporting Silkeborg Forsyning's remediation strategy and helping prioritise pipe renovations.

In addition, the AVK Smart Water system is used in the daily monitoring of the pressure in the distribution system to provide consumers and plumbers with knowledge about the supply pressure they can expect at the household.

*“We monitor pressure levels throughout the day and across the week to identify opportunities for adjusting pressure in different sections of the network, with the aim of achieving energy savings”, says Gert Rasmussen from Silkeborg Forsyning.*

Likewise, Silkeborg Forsyning uses the Smart Water system to give contractors and blacksmiths a better understanding of how the water pipeline network is connected, including transmission lines and sections. Different maps have been imported into the VIDI Cloud system, which help with the visual understanding.

*“AVK Smart Water has provided us with several benefits, but if I were to highlight just a few, it would be that we, as a water utility, have gained an almost complete overview of the dynamics of our water networks and their sections. And the more data we log, the easier it gets for us to detect deviations.”*

The chosen solution included wireless, battery-powered sensors with stable data transmission, configurable measurement intervals, alarm functionality, and seamless integration with Silkeborg Forsyning's SCADA and IT systems.

Silkeborg Forsyning invested in 33 AVK VIDI Flow transmitters, 33 AVK VIDI flow metres, and 35 AVK VIDI Pressure sensors as well as a subscription for VIDI Cloud Basic. Next, the utility will implement VIDI Cloud Premium with Leak Monitor software to analyse night flow and pinpoint leaks within each DMA, further enhancing network efficiency and supporting more sustainable water management.



# AVK SMART WATER PROVIDES ACCESSIBLE AND RELIABLE DATA

The primary responsibility of water utilities is to ensure a safe and reliable supply of drinking water for their consumers. This requires effective operation and maintenance of the distribution network, along with the ability to respond quickly to any unexpected changes.

Today, many utilities have installed smart metres that measure water consumption and provide hourly readings to the utility company. While this data helps to ensure accurate billing and reduce Non-Revenue Water (NRW), there is even greater potential. By collecting, analysing, and acting on data from the distribution network, using sensors such as those developed by AVK in our Smart Water solutions, utilities can further reduce NRW, optimise pressure, and lower maintenance costs. By applying AVK Smart Water solutions to key network assets such as valves, DMA chambers, or fittings, data can be delivered directly to a dedicated software platform where it is transformed into valuable knowledge and insight to react on, saving both time, water, energy, and labour resources.

## Collecting valuable data

The AVK Smart Water solution is a combination of sensors and software. Our software allows for easy integration with a preferred IT system as well as visualisation in AVK Smart Water's own platform, VIDI Cloud.

The sensors are designed for our gate valves, fittings, hydrants, and DMA chambers. Once installed, they can provide data about pressure, flow, temperature, or open/closed position directly from applications in the distribution network. This way of monitoring network activities makes it possible to save resources, minimise water loss as well as optimise operation and maintenance activities, for example by quickly informing about and dealing with leaks.

The sensors use the wireless IoT technology NB-IoT (Narrowband Internet of Things) to ensure good coverage and long battery life. NB-IoT can penetrate closed structures such as wells, chambers, and other underground structures.

## Dividing the water network into sections

Leaks in pipes and other equipment caused by, for example, bursts or breaks are some of the main causes of water loss. When a leak occurs, it can take days, weeks, and even years before it is detected, and finding the exact area in a large, wide-reaching network is no easy task.

Therefore, dividing the supply network into separate sections, also referred to as District Metering Areas (DMAs), is an effective technique that makes it possible to get an overview of what is going on underground. Water loss can be calculated in the sections individually, and operators can better plan and prioritise their efforts.

## Improved NRW calculations and support for active leakage control with VIDI

### Positioner

As part of the LEAKman project, VIDI Positioners, battery-operated devices, are installed on valves located at the boundaries of the DMAs. Here, they provide reliable data on valve status and opening ratio which is vital information for the water balance and NRW level calculations.



At an early stage, the LEAKman partners identified the need for knowing if – and when – the DMA boundary valves are operated as this affects NRW management and often leads to false results when conducting the water balance assessment and the minimum nighttime flow monitoring.

Water balance calculations are highly dependent on valid data. It is a well-known issue that if the boundary valves have been opened for maintenance, they are sometimes not brought back to the closed position afterwards. In other words, monitoring the open/closed position of boundary valves can help prevent unmeasured flow between DMAs and thereby ensure more reliable data and calculations.

#### **Pressure management techniques to minimise leaks and reduce energy consumption**

Pressure management is considered an important and cost-effective leakage management activity. The higher the pressure, the more water is lost through bursts and leakages. Furthermore, most pipe bursts occur not only due to high pressure, but rather due to pressure fluctuations that cause pipes to constantly contract or expand, resulting in stress fractures.

Pressure adjustment is also a way to reduce unnecessary energy consumption. By allowing lower pressure in general, especially during off-peak hours, energy consumption for pumping can be reduced. The pressure can be adjusted to the critical point at a strategic consumer in the DMA, which means that no energy will be used to pump water to a higher level than necessary.

Manually monitored Pressure Reducing Valves (PRVs) require the utility to go to the valve location and manually check the pressure gauge. This is time-consuming and in principle, PRVs can fail within minutes of being manually inspected, meaning the pressure is not reduced correctly. Using wireless, battery-powered pressure sensors, PRVs can be monitored every minute or every five minutes, achieving a constant online monitoring.



#### **The LEAKman project**

The LEAKman project (LEAKage MANagement) intents to demonstrate Danish solutions to reduce the loss of clean drinking water and to pave the way for new Danish water technology.

Read more in the chapter on “Our partnerships for sustainable development” or at <https://leakagemanagement.net/>.



# WASTEWATER: A GLOBAL CHALLENGE WITH UNUSED POTENTIAL

The UN Environment Programme (UNEP), the leading environmental agency of the UN, reports that approximately 42% of all household wastewater is not treated properly, damaging ecosystems and human health. Source: UN

At the same time, wastewater can generate biogas, heat, and electricity. It can produce about five times more energy than is required for its treatment – enough to provide electricity for around half a billion people per year.

Source: UNEP, 2023.

AVK develops, manufactures, and markets products specifically designed to handle the substances in wastewater.

## CASE

### **Suzhou Industrial Park sets new emission standards with AVK's advanced valve solutions**

As part of China's commitment to sustainable development, Suzhou Industrial Park, in the Jiangsu province, was selected to be one of the first national carbon-peaking pilot parks in 2023. Covering an area of 278 km<sup>2</sup> and home to 1.37 million people, the park includes the Suzhou No.1 Wastewater Treatment Plant, which has recently been upgraded and equipped with 367 new valves from AVK.

### **Carbon-peaking pilot park: Suzhou No.1 Wastewater Treatment Plant sets an example**

With a treatment capacity of 200,000 cubic metres per day, Suzhou No.1 Wastewater Treatment Plant is the sole wastewater treatment facility in the northern part of Suzhou Industrial Park. Currently, an expansion project is under construction, with an expansion capacity of 150,000 cubic metres per day. It adopts the advanced process of pre-treatment, enhanced multi-stage aerobic oxidation (AO), high-efficiency sedimentation tank, V-shaped filter, and sodium hypochlorite disinfection. After the completion of the current expansion

project, the total treatment capacity of the wastewater treatment plant will rise to 350,000 cubic metres per day.

### **Comprehensive application, enabling efficient and energy-saving operation**

AVK has provided a wide-ranging valve solution for the current expansion project, including multiple series of products such as gate valves, butterfly valves, knife gate valves, plunger valves, and penstocks, totalling 367 units (DN80-1200). These valves are applied in various key processes, covering more than 90% of the total number of valves installed at the plant, ensuring stable operation of the wastewater treatment system.

AVK has supplied electrical actuated metal-seated valves, ranging up to DN1000, that have been installed in connection with the sedimentation tanks. The valves have been designed using special copper alloy seats to secure optimal sealing.

On the pipeline connecting the aeration tank to the primary sedimentation tanks, large diameter knife gate valves (DN1000-1200) have been installed. The knife gate valves were

selected because of their ability to work in high solid particle wastewater. AVK plunger valves were selected for the aeration processes and equipped with remote actuation to allow for precise air regulation, which is essential for maintaining optimal process conditions.

### **AVK's solution supports the industrial park in building a zero-carbon future**

AVK's solution supports the implementation and efficient operation of the expansion project of Suzhou No.1 Wastewater Treatment Plant, enhancing its protective role in the Taihu Lake Basin and the Wusong River. This is just the starting point of the new practices of this wastewater treatment plant. The project is undergoing a comprehensive low-carbon transition, turning wastewater into a resource by converting by-product sludge into fuel for thermal power plants. At the same time, a 4.482 MW distributed photovoltaic system is being installed, expected to generate 4.39 million kWh annually and reduce carbon dioxide by approximately 2,632 tonnes per year.



# IMPROVED USE OF WATER RESOURCES THROUGH SMARTER IRRIGATION METHODS

A growing global population demands increased food production and a shift towards more plant-based agriculture, along with improved food management. This calls for more sustainable methods of producing and handling food. At the same time, water scarcity is becoming an increasingly global challenge.

## More sustainable use of water resources in the irrigation industry

It is necessary to optimise available water resources, intensify agricultural production in a sustainable way, improve water networks to avoid leaks, and find more sustainable, intelligent, and controlled solutions for irrigation. Many countries, such as Spain and Italy, are allocating funds for the sustainable use of water resources, which creates opportunities for AVK.



## Irrigation

Irrigation is the artificial process of applying controlled amounts of water to plants at regular intervals. It is used in the growing of agricultural crops, landscape maintenance, frost protection and revegetation of disturbed soils in dry areas – i.e., during periods of inadequate rainfall.

## HYDROPASS – LESSONS FROM SOUTHERN SARDINIA

AC.MO, located in Italy and a member of the AVK Group, provides innovative products and smart solutions designed to enhance irrigation planning and water resource management. Among these solutions is the Hydropass system, an advanced irrigation monitoring and control system that enables water utilities and farmers to manage and optimise water usage for irrigating fields and crops. With over 100,000 Hydropass systems installed, we have a strong foundation for collecting data and monitoring efficiency across large-scale irrigation networks. The autonomous and compact system supports a more sustainable, efficient, and water-conserving network.

### Management and communication

Hydropass is a system supplied as a stand-alone configuration or with a communication interface for real-time data collection. The system is managed by an Hydrokey card (battery-powered) and/or by the Hydropass App.

The data is collected by the management software, HYDROSOFT, which controls the whole system and allows the user to manage the entire irrigation grid. It allows for the creation of irrigation sectors, allocation of water resources based on soil and crop needs, and planning and scheduling of water distribution over both short- and long-term periods. Likewise, it is possible to enter the geographical location of hydrants for a georeferenced representation. The system also enables real-time monitoring of delivery groups and metres with remote reading capabilities via LoRaWAN™ Gateway.

The system can be integrated with national databases containing weather and soil data to forecast the most advantageous irrigation scheduling.

The Hydropass system can be interfaced with Irrisat®, a solution provided by ARIESPACE, to monitor and manage irrigation requirements. It enables satellite-based monitoring to verify the proper growth and ripening of crops. This integration provides useful support for optimising agricultural production, maintaining the same productive areas, while improving the efficiency of water resource use.

### Keeping track of the product life cycle

Hydropass has an Environmental Product Declaration (EPD). An EPD certification is a declaration that describes the environmental impacts linked to the production and life cycle of products and services, such as energy consumption of raw materials, waste production, emissions into the atmosphere, etc., in agreement with the International Standard ISO 14025.

Through the EPD, it is possible to quantify the product's carbon footprint, calculated over its entire life cycle in accordance with international standards.

### Hydropass system and water authority

Following the installation of more than 5,000 Hydropass units, the Consorzio di Bonifica della Sardegna Meridionale (Southern Sardinia Water Authority) created an agronomic report outlining the significant benefits achieved through the adoption of this advanced system. According to the report, *Agronomic Report on Water Savings*, the introduction of the electronic metres has led to an average saving of around 20%, reaching up to 40% in certain cases on water for irrigation.

Based on further analyses and field experience gathered in recent years, the reduction in water consumption is now estimated at approximately 30%.

The results obtained by several water authorities, including the Consorzio di Bonifica della Sardegna Meridionale, were achieved thanks to initiatives promoted by the Italian Government to improve the efficiency of the national irrigation network and mitigate the impacts of climate change. These measures were made possible through European and National funding programmes, such as the FSC – Fondo di Sviluppo e Coesione (Development and Cohesion Funds) and the PNRR – Piano Nazionale di Ripresa e Resilienza (National Recovery and Resilience Plan). Several water authorities throughout Italy have been

supported by these funds. As a result, an increasing number of water authorities now prioritise the renovation and modernisation of irrigation infrastructures. Over the past five years, this effort has led to the installation of approximately 50,000 Hydropass systems across the Italian territory, mainly in Calabria, Basilicata, Umbria, Abruzzo, Lazio, Sardinia and Sicily.

At the same time, several international markets have become more aware of water conservation issues regarding irrigation. In recent years, the growing impact of climate change has made irrigation a central element in many infrastructure investment policies, encouraging the adoption of efficient and sustainable irrigation systems. The main ones, among others, are Serbia, Greece, India, and Jordan.

Considering that agriculture accounts for 70% of global freshwater use, adopting technologies that reduce water consumption in irrigation is essential for achieving tangible environmental and economic benefits, while improving the efficiency and sustainability of water resource management.



# RECYCLED PLASTIC IN OUR PRODUCTION

Recycled plastics is a value-adding component in the product manufacturing process in the AVK Plastics companies where thousands of tonnes of recycled plastics go into production every year.

The mission of the AVK Plastics group, consisting of four companies, is to support the circular economy of plastics through the development, manufacturing, and sales of injection moulded products made from recycled plastics. Every year, thousands of tonnes of recycled plastics are converted into new products with conversion volumes growing steadily.

AVK Plastics' major product categories are transport pallets, surface boxes, and waste containers. In addition to marketing of their own products, the AVK Plastics companies also manufacture products and components for other companies within the AVK Group as well as for other businesses. In the financial year 2024/25, AVK Plastics converted about 35,000 tonnes of post-consumer plastics into new products.

Circularity of materials is becoming increasingly important, and recycling is an important part of AVK's business. As the global population grows and consumption patterns continue to strain natural resources, we are using materials faster than they can be replenished. In parallel, environmental pollution from end-of-life product waste is another major topic, especially for materials as lasting as plastics. Implementing circularity is a way for AVK Plastics to reduce CO<sub>2</sub> emissions.

Most injection moulding companies, producing with some degree of recycled plastics, use granulated plastic materials, which can be processed like virgin plastic. However, the production of granules from plastic waste, involves an energy intensive extrusion step.

Over the years, AVK Plastics have adjusted the production process to use recycled materials such as regrind. Regrind is produced by sorting, washing and shredding hard plastic waste. It is a simple process, resulting in a significantly reduced energy consumption and CO<sub>2</sub> footprint of the recycling activity compared to the use of re-granulated material.

AVK Plastics produce at four different European locations to serve the European market. All sites use locally sourced recycled raw materials produced to controlled specifications. This decentralised operation approach, with locally sourced materials and proximity to the end customer, significantly reduces the transport requirements compared to a centralised setup, thereby contributing to a lower CO<sub>2</sub> footprint for AVK Plastics' products.

All AVK Plastics' manufacturing sites use renewable energy, generally based on Certificates of Origin (COO) from the energy supplier. Recently, AVK Plastics' largest production site in Balk, NL, stepped up further in their contribution to the renewable energy transition by entering into a corporate Power Purchase Agreement (cPPA) with a nearby solar park. Through this long term cPPA, AVK Plastics commit to using 100% of the solar energy generated by this park, on average covering 25%, and during peak performance 100%, of the electricity used at AVK Plastics site in Balk.



# LOST FOAM TECHNOLOGY

Boosting efficiency in production while contributing to a lower environmental impact

Our Advanced Castings foundry in Anhui, China, supplies the AVK Group with valve, hydrant and other metal castings. At the foundry, we use the innovative lost foam method.

The lost foam method refers to the process of creating a foam model of the desired casting, embedding it in binder-less moulding sand, and finally replacing the foam with molten metal.

In traditional casting of components with multiple sand cores, each core must be individually manufactured, handled, and assembled for each casting. In contrast, the lost foam method enables the production of complex parts with near-net shape and eliminates the need for separate cores, making it possible to reduce material waste, as the core is integrated into a single foam pattern. The production method allows for low wall thickness and minimal draft angles, contributing

to reduced component weight. Another benefit is that the use of a single foam pattern with integrated core and mould eliminates the complex, physically demanding, and time-consuming process of assembling sand cores.

The sand used to embed the foam model is ceramic and requires no binders, which simplifies demoulding and allows for exceptionally high reclamation rates – typically above 99%. As a result, the process generates only about 1% sand waste and produces minimal dust. In comparison, traditional casting typically results in 5-7% of the sand mixture being discarded as hazardous solid waste due to the use of chemical binders, creating a continuous waste stream. Additionally, since the ceramic sand contains no resins or chemical binders, there are no unpleasant chemical odours, and emissions of Volatile Organic Compounds (VOCs) are significantly reduced.

Compared to traditional sand casting, the process offers improved performance by reducing energy consumption and lowering particle emissions into the atmosphere. In addition, the process supports a safer working environment in our production, as the lightweight foam patterns reduce physical strain on operators.

We use recycled steel scrap as the main material in our castings, constituting 85-90% of the total melt. Melting is done in electric induction furnaces.

AVK Advanced Castings maintains a strong safety-oriented culture and is widely renowned for its clean working environment. The foundry is frequently visited by other industry professionals and government officials seeking updated knowledge and valuable experience.



# OUR PARTNERSHIPS FOR SUSTAINABLE DEVELOPMENT

It is difficult to create change on your own, and the sustainable transition is one of the biggest change management projects facing public and private companies, governments, and the like. That is why we consider SDG 17, Partnerships for Sustainable Development, to be crucial for achieving the goals of the other SDGs.

At AVK, we therefore co-operate with partners across industries, governments, authorities, civil society, and the academic world. In recent years, we have had a special focus on partnerships in the water industry and thus, a special focus on SDG 6.

Read more about our formal partnerships in the next sections.

## Water Valley Denmark

Water Valley Denmark (WVDK) is a co-operation between Dansk Industri (Confederation of Danish Industry), DI Water (Confederation of Danish Industry - Water), water supply companies, universities, research units, and manufacturing companies, including AVK. The purpose of WVDK is to bring together the most skilled players to help create a CO<sub>2</sub> and climate neutral water sector, to develop solutions for the water industry, and to unlock the Danish water sector's potential to become a world leader and double the export of water technology by 2030.

AVK is one of the founding partners of WVDK and holds a position on the steering committee. Water Valley Denmark has received DKK 57 million as a part of the REACT-EU programme for the development of equipment and techniques, and the plan is to develop a Water Living Lab to do so. At AVK, we see

great opportunities to further develop our Smart Water solutions as participants in a Water Living Lab. The lab provides a unique environment to test innovative technologies, both hardware and software, together with other manufacturers, suppliers, utilities, consultants, and universities.

## The LEAKman project

LEAKman was initiated to demonstrate how Danish solutions can reduce loss of drinking water and pave the way for innovative technology. The LEAKman project has been developed by a confederation of nine Danish partners representing consultants, water supplies, the Technical University of Denmark (DTU), and technology suppliers such as AVK.

The LEAKman initiative aims to showcase Danish solutions for minimising losses in drinking water systems while paving the way for innovative technologies. Its goal is to create a state-of-the-art leakage management solution.

## Strategic partnership between Ukraine and Denmark

In 2022, Ukrainian President, Volodymyr Zelenskyj, approached the Danish government with a request for Denmark to support the reconstruction of the city of Mykolaiv, once this is possible.

Denmark agreed and had a master plan prepared for the city's reconstruction, including

not only reconstruction, but also modernisation of the city's water infrastructure. This was the starting point for AVK, through its membership of both the Danish Water Forum and DI Vand, to start working with the Ukrainian water sector. The first contact was made in 2023, with Ukrainian participation in the summer school for water, Advanced Water Cycle Management Course, which subsequently has led to repeated visits to Ukraine and the Ukrainian water sector.

In October 2024, at the Lviv Eco Forum, a MoU, Memorandum of Understanding, was signed between the Danish Water Forum and the Ukrainian organisation Ukrvodokanalechologyia, Ukraine Water Association, with the title "Roadmap to Sustainable Water Infrastructure". As a result of the MoU, Danish Water Days, has been established. Danish Water Days is a series of events and initiatives where Denmark provides expertise and support to Ukraine's water sector. Several Danish companies in the water industry, including AVK, have presented solutions for groundwater mapping and management, drainage and leak reduction, as well as wastewater treatment and resource recovery.

AVK has been the main player in arranging Danish Water Days as well as responsible for the content of the days. Together with the Danish Embassy in Kiev, AVK structured and carried out a delegation visit to Denmark with

**REACT-EU** is recovery aid to areas in Europe supporting investment projects that promote crisis management measures and contribute to a green, digital, and resilient economic recovery. The aid is an extension of the crisis preparedness and crisis management measures that have been implemented in response to the coronavirus.

the participation of 27 water professionals who visited several locations around Denmark to get a first-hand look at solutions presented at the initial Danish Water Days.

Ukraine has major challenges with worn-out and poorly maintained water infrastructure, which does not live up to current standards in Europe regarding drinking water or utilisation of wastewater resources.

Denmark is recognised as a credible and competent partner within the water sector and is viewed by the Ukrainian water organisation as a strong example to follow. Therefore, this collaboration is not only about good relations, but equally about supporting Ukrainian water and wastewater companies in creating the best possible conditions. AVK is very invested in this work.

#### **Water Technology Alliance and California Collaboration**

The Water Technology Alliance (WTA) fosters knowledge sharing between the North American and Danish water industries, promoting the exchange of views and experiences within water supply and wastewater management. This collaboration involves American utilities and authorities alongside Danish players, utilities, and companies, including AVK, and originates from an agreement between the Californian state government and the Danish government, signed in 2016.

Both AVK Holding A/S and American AVK actively participate in this partnership. In Denmark, AVK hosts delegations on fact-finding trips, sharing insights into Danish water supply and wastewater treatment practices. These insights are adapted to the American context, with American AVK taking a leading role. This collaboration has significantly strengthened AVK's brand presence in the American market.

Building on this foundation, AVK joined a high-level Danish delegation in California as Denmark and the State of California signed a Memorandum of Understanding (MoU) on August 22, 2025. The MoU establishes a five-year framework for cooperation on green economy, resilience, technology, and innovation, reinforcing a shared commitment to carbon neutrality by 2045. This highlights joint leadership in decarbonisation, renewable energy, and sustainable growth, providing a strong political and institutional foundation for future initiatives.



# OUR ENVIRONMENTAL AND CLIMATE EFFORT

## Our commitment to the environment and climate

Based on our Double Materiality Assessment, the topics "Climate Change Mitigation" and "Energy" are material to the AVK Group. These topics align with our previous work related to reducing our environmental footprint. AVK has established a Group climate strategy focused on reducing greenhouse gas emissions and gradually transitioning to energy sources with a lower climate impact. AVK recognises climate change as a significant influence and risk – both operationally and strategically – and we will work systematically to integrate climate considerations into decision making processes, investments, and production activities across our organisation.

### Climate change

At AVK, we aim to analyse, track, and measure our carbon footprint in relation to our products, processes, buildings, and value chains. We address both the CO<sub>2</sub> emission of operations and of individual products.

Our Group climate and energy strategy commits all companies to:

- Reduce energy consumption and emissions in line with the Group's climate targets (including reductions in Scope 1 and Scope 2).
- Increase the use of renewable energy wherever technically possible.

The strategy supports the Group's overall objective of contributing to global climate mitigation in line with the EU's climate targets.

Key highlights of 2024/25	Future goals and activities
<ul style="list-style-type: none"><li>• AVK is actively reducing greenhouse gas emissions and increasing the share of renewable energy in our operations. In 2024/25, 52% of our electricity consumption came from renewable sources, either from our own solar installations or from purchased renewable electricity backed by Guarantees of Origin.</li><li>• 11 Environmental Product Declarations (EPDs) have been achieved during this financial year, and the AVK Group now has 26 EPDs, all approved by a third party.</li><li>• A global company car policy is currently being implemented. As part of this, cars using fossil fuel are replaced with electric vehicles (EVs) where charging infrastructure is available. The number of EVs in AVK has increased by 67%.</li><li>• An additional three companies have obtained certification for the ISO 50001 Energy Management System.</li><li>• The number of ISO 14001 certifications in environmental management has increased from 44 to 50.</li></ul>	<ul style="list-style-type: none"><li>• A climate transition plan will be drawn during the financial year 2025/26, once the updated CSRD/ESRS requirements and guidance have been finalised. AVK expects to implement the transition plan in 2026.</li><li>• We will install solar cell systems on additional manufacturing buildings.</li><li>• We will continue to reduce water consumption, especially in countries with scarce water resources and AVK companies with high water consumption.</li><li>• We will increase the number of EPDs to cover more of our product range.</li><li>• We expect further implementation of ISO 14001 and ISO 50001 during the next years.</li><li>• We will implement a baseline calculation for Scope 3 for our larger EU companies in 2025/26.</li></ul>

\* For further details, see Environmental under Tables, comments, and accounting policies.

### Energy effort

The AVK Group uses a structured management system based on international standards, including ISO 14001, which supports a systematic approach to energy management and climate impact reduction.

The AVK Group conducts annual greenhouse gas emission inventories in accordance with ESRS E1 and the GHG Protocol and continuously reports internally on progress against established targets and KPIs.

Moving forward, we will continue to implement processes and initiatives aimed at reducing energy consumption across our operations.

AVK works systematically with energy management through:

- Creating a climate transition plan.
- Conducting energy mappings and continuous monitoring of energy consumption across production units.
- Implementing energy-efficient technologies, including optimisation of furnaces, machines,



compressor systems, and other production equipment.

- Continuous implementation of ISO 50001 in energy management.
- Initiating Scope 3 data baseline in the coming year.

Note: ISO definitions are given in the section "AVK's ISO certifications".

For Scope 1, the Group focuses on reducing the use of fossil fuel through heat recovery, improving heating system efficiency, and transitioning internal vehicles to electric or other low-emission alternatives.

For Scope 2, the Group works to increase the share of renewable electricity by procuring certified renewable energy and assessing opportunities for in-house solar energy generation at the Group's factories and warehouses.

Scope 3 impacts are reduced through collaboration with suppliers on low-emission materials (e.g. recycled metal) and optimised transport and logistics solutions.

#### **Environmental Product Declaration**

The demand for Environmental Product Declarations (EPDs) is driven by multiple factors, including customer requirements and an increasing focus on sustainability. Specifically, the construction and infrastructure sectors are leading the demand for these

declarations. Customers are seeking documentation of a product's environmental impact to make more sustainable choices.

Five AVK companies have implemented processes to calculate CO<sub>2</sub> equivalent (CO<sub>2</sub>e) emissions across their product value chain. This enables each company to identify the impact of energy consumption and CO<sub>2</sub> emissions as a design and production criterion, supporting the development of EPDs. In 2024/25, we implemented measures to track EPD availability on an ongoing basis. The number of EPDs with third-party approval continues to rise, and the AVK Group currently has 26 EPDs.

#### **Increased use of renewable energy sources**

Renewable energy and solar cells remain a focal point of our climate strategy to reduce our carbon footprint, especially in countries where the public energy supply is primarily based on a high proportion of fossil fuels.

By the end of September 2025, the share of energy generated from renewable energy sources accounts for 52.17% of the AVK Group's total energy consumption. In our efforts to reduce CO<sub>2</sub> emissions, we will both purchase and produce renewable energy ourselves.

The installation of solar cell systems at AVK companies is an ongoing effort, and it remains a key element of our climate strategy to equip

our manufacturing sites with renewable energy solutions.

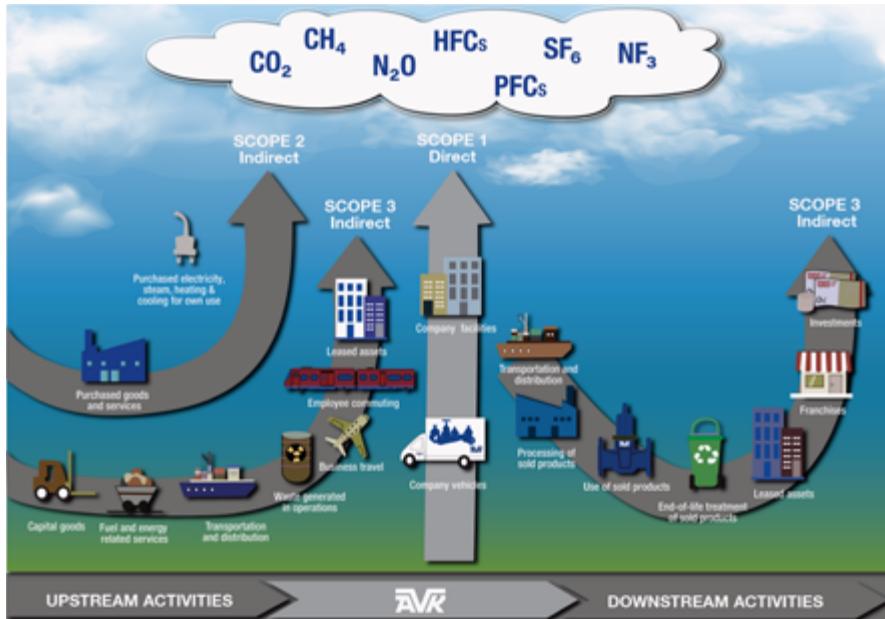
By the end of 2024/25, approximately 2.67% of our energy consumption is generated by our own installed solar cell systems. Overall, the share of renewable energy from solar cells continues to grow.

#### **Scope 3 Baseline**

A central objective for AVK is to establish a baseline for the Group's value chain emissions, also known as Scope 3 emissions. Scope 3 is complex to map, as our value chains are diverse and the carbon footprint of purchased raw materials varies significantly. Therefore, we are working to create a consistent and robust approach to data collection and reporting.

In 2025/26, we will conduct a pilot project with five EU-based companies. Here, the most significant Scope 3 emissions will be identified and calculated based on a materiality assessment. The results will form the basis for concrete actions to reduce CO<sub>2</sub>e emissions.

As part of the pilot project, our internal data systems will be upgraded to collect and report Scope 3 emissions effectively. The goal is for the selected companies to have a Scope 3 baseline ready by the end of the pilot period. We expect to begin a simple phasing-in of Scope 3 across the AVK Group from the financial year 2026/27.



## Electric cars

Number

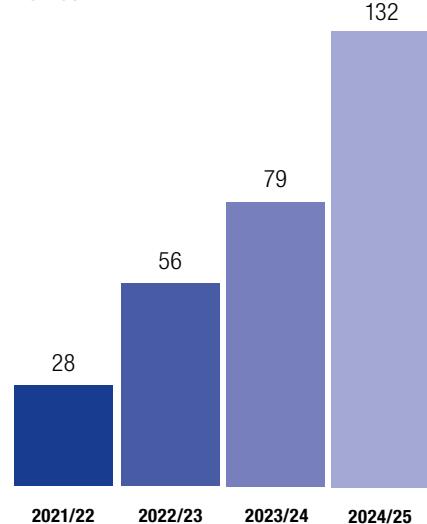


Figure 1

This pilot phase will be conducted to ensure that AVK works systematically and transparently with both direct and indirect climate impacts throughout the value chain and provides a solid foundation for full implementation going forward.

### Electric vehicles as company cars

It is our ambition to reduce the total amount of environmentally harmful emissions, including particles and CO<sub>2</sub> from our car fleet. At the same time, we strive for an optimal operating economy for the car fleet.

In 2023/24, we implemented a company car policy in Denmark. This means that from 2025, we only lease electric vehicles (EVs) as company cars. The policy has initially been implemented in our companies in Denmark, and subsequently implemented in countries where the infrastructure for charging electric vehicles is in place. The policy will only apply to passenger cars.

This will allow us to gradually phase out passenger cars that use fossil fuel when current leases expire. By 2030, all AVK passenger cars that use fossil fuel in Denmark will be phased out.

By the end of this financial year, we have 132 EVs globally, which is a 67% increase compared to 2023/24 where we had 79 EVs, equivalent to 31.3% of the total sum of company cars.

See Figure 1.

Additionally, some companies within the AVK Group have installed charging stations for

electric vehicles as well as electric bikes and electric scooters, which is a growing trend both in Europe and Asia.

### Microplastic as a source to pollution

Based on the AVK Group's Double Materiality Assessment, microplastics have been identified as a material topic solely within the plastics division. The handling of plastic pellets, regrind, and recycled plastics in this division may lead to unintentional release of microplastic particles, for example through pellet loss during transport and internal handling or through dust and fragments generated during granulation and reprocessing.

To minimise these risks, the plastics division has established controlled procedures for handling and storage, implemented filtering and collection systems in relevant processes, and introduced strict waste segregation to ensure that all plastic residues are either recycled or responsibly disposed of. Employees are trained in preventing spills and ensuring proper collection of plastic materials.

The division's circular approach, using return materials and recycled plastics in new components, further reduces overall waste and the likelihood that plastics end up in the environment as microplastics. Read more in the chapter Recycled plastics in our production.

For other business areas within AVK, including valve and rubber production, microplastics are assessed as non-material, as the processes and materials used do not generate microplastic emissions.

### Resource use and circular economy

Based on the AVK Group Double Materiality Assessment, resource use and waste are material impacts across the Group. We work systematically to improve resource efficiency and reduce waste throughout our value chain. Our production is primarily based on metals, rubber and plastics, and we continuously focus on using materials more efficiently through increased use of recycled and certified materials, improved process and inventory management, and evaluation of alternatives with a lower environmental footprint.

Our products are designed with longevity in mind and scrap and residual materials are collected and reused wherever possible. In the plastics division, return materials and production scrap are reprocessed into new components, supporting circular material flows and reducing the need for virgin resources.

Waste management is integrated into our ISO 14001 systems with a focus on source separation, recycling of metal, rubber and plastics, and minimising landfill.

Local sites already run targeted initiatives and collect operational data, but we currently lack consolidated AVK Group data to support consistent monitoring and comparable KPIs.

Strengthening central data quality and establishing a unified reporting structure is therefore a priority. As Group level data becomes available, we will set quantitative targets for waste reduction, recycling rates, and the use of recycled materials to ensure transparent tracking and continuous improvement.

Our goal remains to ensure that over 65% of our waste is recycled and reused. By the end of financial year 2025, non-recyclable waste accounts for 56% of our total waste volume, an increase from 46% last year.

When we achieve a valid amount of data, we will start monitoring the waste handling and performance of the individual sites.

## Water

Water is primarily used as a resource in our pressure testing processes and for cleaning and sanitation purposes, and due to the low water consumption in the AVK Group, the topic “Water and marine resources” is not rated material in our Double Materiality Assessment. However, as water is our core business, we want to keep water consumption monitored and managed and to reduce our usage wherever possible – for example through recycling in close circuits or similar initiatives.

In the coming years, we will focus on reducing water consumption, prioritising efforts on companies with the highest usage levels relative to their turnover and in areas with water scarcity.

## Greenhouse Gas Protocol (GHG)

The Greenhouse Gas Protocol (GHG) is the leading international standard for how CO<sub>2</sub> emissions are measured and reported as CO<sub>2</sub> equivalents (CO<sub>2</sub>e). You measure according to three types of emissions, referred to as Scope 1, 2, and 3.

### Scope 1

Direct emissions from activities that the company itself controls, i.e. emissions from own vehicles and own heat and energy manufacturing facilities.

### Scope 2

Indirect emissions from supplied energy, including electricity and district heating. The emission happens elsewhere, e.g. at local heat and power stations or district heating sites.

### Scope 3

Indirect emissions from the company's value chain (upstream and downstream).

## TRANSITION TO RENEWABLE ENERGY IN THE DANISH COMPANIES

At AVK, we are working proactively to reduce the company's climate footprint through an ambitious transition to renewable energy. As part of our long-term climate targets, all AVK-owned companies in Denmark have, by the end of the 2024/25 financial year, fully transitioned to renewable energy.

This transition marks an important step in our efforts to reduce Scope 2 emissions and strengthen our overall energy management. For several of our Danish companies, the renewable energy is based on a combination of certified

renewable energy from the power grid and on-site generation from solar panel installations located on the roofs of our factory buildings. This combined approach contributes to a stable energy supply, increased energy independence, and reduced emissions.

AVK will continue to expand the use of renewable energy sources, optimise our own production facilities, and develop new energy solutions in collaboration with our companies globally. Therefore, the initiatives in Denmark represent an important element of our global decarbonisation strategy and support our ambition for a more sustainable and responsible value chain.



# OUR SOCIAL RESPONSIBILITY

## Key highlights of 2024/25

- We have developed the AVK Group Code of Conduct for employees and are currently implementing it and providing training across all the companies in the AVK Group.
- During the financial year of 2024/25, we have launched the leadership development programme “AVK Future Leadership”.
- In 2024/25, we experienced an increase in the Lost Time Accident Frequency Rate (LTAFR) as it reached 7.09.
- The number of ISO 45001 certificates on management of occupational health and safety has increased from 33 to 39.

## Future goals and activities

- We will continue the implementation of the AVK Group Code of Conduct for employees across all companies, supported by integration into local management systems and defined KPIs to ensure effective monitoring and continuous improvement.
- We will intensify our safety work to reach our target of an LTAFR of less than 3.0 by 2030.
- We expect further implementation of ISO 45001 in 2025/26.

\* For further details, see Social under Tables, comments, and accounting policies

## Our employees and working conditions

The AVK Group employs more than 5,500 people worldwide and is committed to providing good working conditions, fostering diversity, and supporting employee development and well-being across all locations. We respect and value everyone regardless of age, gender, ethnicity, religious beliefs, or sexual orientation and we adhere to the UN Declaration of Human Rights and uphold equal rights regardless of gender, ethnicity, religion, or political views.

The AVK Group Code of Conduct and policies set clear guidelines on rights, obligations, and opportunities, as well as being a support to the value-based leadership that is fundamental to AVK.

In 2023/24, we updated our Code of Conduct and global policies to meet increasing stakeholder expectations and upcoming legal requirements. Key updates include strengthened provisions on human rights, prohibition of exploitative child and forced labour, and the right to collective bargaining. Implementation began in 2024/25 and will continue in 2025/26.

In 2023, as a part of our Group strategy, we established the People & Leadership function to drive global initiatives in talent and leadership development. Our leadership framework, The AVK Way of Leadership, is rooted in our Core Values – quality, innovation, reliability,

sustainability, and customer service – and outlines seven leadership principles that define good leadership across the AVK Group. These principles guide how we lead, develop, and support our people.

Locally initiated and implemented well-being initiatives, including mental health programmes, sports, team-building, and social activities exist across our decentralised structure. We also support charitable causes aligned with our values. Many employees celebrate 25 or even 40 years with AVK, reflecting our strong culture and commitment to being more than just a workplace.

## Occupational health and safety

The AVK Group prioritises healthy, safe, and attractive working conditions across all our companies. Working conditions have been identified as a material topic in our Double Materiality Assessment, as they impact both employee well-being and the Group's long-term performance.

### Safety First

“Safety First” is a programme designed by AVK Holding as a way of working with workplace safety for the individual companies within the AVK Group. The programme focuses on improving workplace safety by reducing accidents and enhancing the safety culture within the organisations.

Through targeted workshops, the Safety First programme promotes proactive identification, reporting of risks, and ensuring employees are engaged in maintaining a safe work environment.

The programme includes analysing the current safety situation, verifying safety activities, and collecting staff input on risks and unsafe practices.

Via continuous safety improvement, the goal is to establish a strong safety culture, minimise accidents, and reduce absenteeism caused by injuries.

We work systematically with HSE processes, risk assessments, and training to prevent risks and promote safe behaviour. Employees are encouraged to report incidents and near-misses, allowing us to learn from experience. Ergonomics is a key focus area, with workstations and lifting tasks continuously assessed to reduce strain and prevent injuries.

In addition to physical safety, we promote well-being, skills development, and inclusion, creating opportunities for learning and collaboration. AVK will continue to develop initiatives that ensure a healthy, safe, ergonomic, and inclusive working environment across all our companies.

### Safety First

Companies in the AVK Group operate within the process industry, and the employees perform manual work which involves heavy materials. While these processes are generally not considered high-risk, accidents can still occur, making Safety First a key priority.

We actively work to strengthen the safety culture among leaders and employees. Our goal is that no one takes unnecessary risks, and that all employees contribute to prevention by reporting unsafe conditions, unsafe actions, and near-misses. Ergonomics and correct working postures are integral to our preventive measures, helping reduce strain and work-related injuries.

We systematically collect and analyse accident and near-miss data to identify trends and root causes. This information forms the basis for targeted improvements and safety initiatives across our facilities, ensuring that preventive measures are evidence-based and effective.

Through workshops and regular safety walks, employees are trained to proactively identify risks and implement practical safety improvements. We use SQDIPP boards (Safety, Quality, Delivery, Inventory, Productivity, and People) for ongoing follow-up and collaborate with selected companies with elevated incident trend to establish local processes for reporting near-misses and unsafe actions, ensuring a consistent and high level of safety across the Group.



### AVK AUSTRALIA IMPROVES SAFETY OUTCOMES THROUGH CONSISTENT INJURY MANAGEMENT AND WELLBEING FOCUS

In 2024/25, AVK Australia achieved a remarkable improvement in workplace safety performance, reducing the Lost Time Injury Frequency Rate (LTIFR) from 23.47 in March 2025 to 3.77 in August 2025, and subsequently maintaining zero lost time injuries across all operations.

This achievement reflects the ongoing commitment of the teams to embedding a proactive and preventative safety culture across the business.

Following an internal review of incident data and hazard reporting trends, AVK Australia identified that many events leading to injuries were preventable through earlier intervention and improved situational awareness. As a result, a structured improvement programme was implemented under the theme "Stop, Think, Act", designed to strengthen decision-making and reinforce personal accountability for safety.

Key elements of this approach included:

- **Daily safety conversations:** Introducing "Start Safe" meetings at the beginning of each shift, encouraging employees to stop and assess their environment before commencing work.

- **Hazard identification and near-miss reporting:** Simplifying the reporting process and empowering staff to raise potential hazards immediately, fostering a culture of early intervention.

- **Leadership engagement:** Conducting safety walks and informal discussions between supervisors and employees to identify improvement opportunities in real time.
- **Focused training:** Delivering targeted training sessions on critical risk management and control verification, ensuring workers understand the 'why' behind safety protocols.
- **Collaborative reviews:** Reviewing all reported near-misses and hazards as a team to identify trends and implement corrective actions swiftly.

These initiatives have created stronger employee ownership of safety outcomes and improved communication across all levels of the organisation. The shift in focus from reacting to incidents to preventing them has been a key factor in driving the LTIFR down to zero.

AVK Australia's experience highlights the impact of combining leadership visibility, workforce involvement, and simplified processes to achieve lasting cultural change. The success demonstrates that when every individual takes responsibility for identifying and addressing risks before they escalate, true safety excellence becomes attainable.



## Training and skills development

We strive to foster a learning culture by making it easy for our employees to update their knowledge and strengthen their competencies. This ensures that they feel well-equipped to perform their job and act in line with the values of the AVK Group. To support this, we have an e-learning platform for employees.

Our e-learning platform is an increasingly important part of employee training. It is integrated into the onboarding process for new hires as well as ongoing training for existing employees. In addition, it provides a management platform to deliver online training to a broad group of employees. This includes mandatory courses such as the AVK Group Code of Conduct and IT security, which all employees with PC access must complete. As highlighted in the section on occupational health and safety, all manufacturing employees are required to complete safety training to prevent workplace accidents.

In 2025, we launched a new internal leadership development programme "AVK Future Leadership" aimed at preparing a new generation of leaders to meet the challenges of the future. The programme is built on "The AVK Way of Leadership" and will serve as a foundation for our ongoing work with succession planning, leadership development, talent management, and recruitment.

Additionally, new managers in the Group participate in an in-depth introduction course to provide a thorough insight into AVK and our expectations to them as managers.

### **Educating the next generation**

We do not only focus on the education of our employees. We believe it is our responsibility to educate the next generation of employees and partners and to create a forum where we can share the latest knowledge, technologies,

and trends within the water industry. Likewise, we always strive to have trainees and student workers among our employees.

Since 2019, AVK Holding has participated in the Danish nationwide campaign "Girls' Day in Science", now "Science Day", which aims to inspire more young people to choose an education in the field of science, technology, engineering, or mathematics (STEM education) and ensure more diversity in education choices and in Danish workplaces. As part of the campaign, we invite local students to a one-day event at the AVK Academy & Visitor Centre to spark their interest in our industry and introduce them to a variety of job opportunities.

[Bachelor of Business and Water Technology](#)  
The water industry is experiencing a growing demand for sales professionals and advisors with expertise in both business and the latest water technology. For years, AVK Holding has advocated for a more business-oriented education that highlights the opportunities within the water industry and emphasises understanding the various business cases surrounding water's journey through society. We aim to inspire young people to take an interest in good water infrastructure and contribute to the changes needed for better and more efficient water management.

In collaboration with Aarhus Water and Aarhus Business Academy, we have been actively involved in the development of the new bachelor's degree Business and Water Technology in Denmark, from the initial concept to ministerial approval. In August 2024, the programme welcomed its second cohort of students.

### [Advanced Water Cycle Management Course](#)

Since 2019, AVK Holding has participated in the summer school course "Advanced Water Cycle Management" alongside other companies and utilities from Eastern Jutland, Denmark, all of which contribute their knowledge and

expertise. This is a two-week international course designed to upgrade the students' skills and knowledge about the water cycle and get familiar with Danish innovations within water distribution, wastewater management, resource recovery, and water resource management.

The course is organised by the Centre for Water Technology at Aarhus University, Denmark, and counts for 5 ECTS credits. This year, 45 participants from all over the world participated

## Diversity

At AVK, we recruit and appoint managers based on the principle of selecting the most qualified candidate for the role. However, the technical and industrial nature of our industry has historically been male-dominated, resulting in a gender imbalance both at management level and among employees overall. Recognising this, we are committed to making our company more appealing to women and promoting greater gender diversity.

At the same time, we will improve our diversity data. Initially, our measurements will focus primarily on the gender composition of the management team. However, we will adopt a broader understanding of diversity that include age, seniority, nationality, and other relevant parameters for which we will begin data collection.

For more information on gender balance in management, please see the "Report on unequal gender representation in management" in the section on "Policies and ESG reporting".

## LILY'S JOURNEY: FROM PRODUCTION ASSISTANT TO PRODUCTION MANAGER

Women are underrepresented in leadership positions within the AVK Group. Therefore, we have focused on highlighting women in our industry in connection with International Women's Day over the past few years. On this day, we share stories through internal and external media that showcase the contribution of several female employees across different companies in the AVK Group. One of our cases on International Women's Day features Li Wili, also known as Lily, who is an example of a woman who has thrived in her career at AVK.

More than twenty years ago, Lily joined AVK Valves (Anhui) Co., Ltd as a Production Assistant, looking for a place where she could grow professionally. Today, she works as Production Manager, overseeing operations across three factories, coordinating daily production plans, and solving complex challenges with her team. Her energy and

dedication remain as strong as ever. Lily's development has been shaped by a supportive environment, a collaborative team, and leadership that has consistently empowered her to take initiative and grow. Throughout her career, she has benefited from guidance that emphasised integrity, effective communication, and resilience, not just in theory, but through practical learning opportunities that allowed her to apply and expand her knowledge.

She values the technical aspects of her role, but what she appreciates most is the collaborative spirit that defines her team. Lily is especially proud of how they approach challenges together, focusing on mutual learning and open dialogue. "Our team doesn't assign blame, we share knowledge, reflect, and move forward stronger," she explains.

Reliability is the Core Value that drives Lily's work. She is committed to delivering consistent product quality, meeting deadlines, and earning customer trust. For her, the unity of the team

and their shared pursuit of excellence represent the greatest achievements. She finds deep satisfaction in working collectively to reach goals and break new ground.

Looking back, Lily sees her journey as proof that with dedication and the right environment, growth is always possible. Her advice to others considering a future at AVK is clear: if you approach your work with diligence, dedication, and a willingness to learn, opportunities for advancing are waiting to be discovered.

Lily continues to thrive at AVK, not because the work is easy, but because the journey never stops. Every new challenge brings fresh opportunities to gain experience, improve, and grow together with a team that shares her commitment.



## Charity and humanitarian efforts

The AVK Group is involved in various kinds of charity, handled locally by both the management and through employee involvement. This social responsibility is reflected locally, nationally, and internationally through humanitarian work.

### Local commitment and support to charity organisations

As a global Group, with many charity initiatives undertaken by our individual companies, we do not have the full overview of all the initiatives, but a selection of key initiatives is detailed below.

At AVK Holding, we support numerous associations and initiatives that make a difference within health, community spirit, art, culture, and sports. We support both local sports clubs, such as Galten Forenede Sportsklubber, and elite sports teams, including Skanderborg AGF Handball for men and Skanderborg Handball for women and youth.

The AVK Group supports many charities such as cancer societies, the Danish Heart Foundation, the Danish Blind Society, the Make-a-Wish Foundation, Families with

cancer-affected children, Danish Hospital Clowns, and the World Wildlife Fund WWF. We also contribute to foundations that support individuals with mental disabilities or families in need, helping them celebrate their child's birthday or cover expenses for tuition and school books. Other forms of support include donations of food, toiletries, or similar essentials for the homeless or those in need. Finally, we support parasports and associations for individuals with disabilities, participate in local and beach clean-up initiatives, and take part in donation events.

In September 2025, AVK International became a "Jobpartner" and will collaborate with Skanderborg Municipality to actively support residents who, for various reasons, need assistance in returning to the labour market. For AVK International, this is a natural extension of their commitment to the local community, and the hope is that AVK can aid, especially young people, in moving closer to employment, education, and community engagement.

Additionally, we take part in various national fundraising campaigns, such as "Danmarks Indsamling," a televised event, where AVK

contributes DKK 100,000. Alongside other companies and private individuals, we support the efforts of 12 charitable organisations working to aid the world's most vulnerable populations.

## Affected Communities Water and sanitation

Our Double Materiality Assessment identifies "Affected Communities – Water and sanitation" as a material topic, reflecting how AVK's focus on infrastructure can improve access to clean water and sanitation. Subsequently, this leads to enhanced public health, reduced waterborne diseases, and sustainable water use. By supporting reliable and efficient water distribution systems, AVK contributes to the economic, social, and cultural well-being of communities, empowering them to thrive.



# OUR GOVERNANCE

## Corporate culture

In the AVK Group, our corporate culture is a critical foundation for sustaining growth, ensuring quality, and aligning our core values across our companies worldwide. The "AVK Way of Leadership", a leadership manifesto, has the purpose of embedding core principles and shared values, such as environmental standards, safety, and quality, in all operations, creating a unified culture regardless of regional differences.

Based on our Double Materiality Assessment, corporate culture has been identified as a material topic that affects both the Group's reputation and the trust of customers, suppliers, and other stakeholders.

AVK promotes a culture where transparency, accountability, and the reporting of concerns are central elements. We encourage dialogue and offer channels where employees, partners, and stakeholders can report irregularities or violations of policies without risk of retaliation.

Likewise, we have implemented guidelines and policies for business conduct, including anti-corruption, competition, responsible supplier management, and ethical standards for employees. These policies are supported by training, internal control mechanisms, and systematic follow-up, ensuring that our employees have the necessary framework to act correctly and consistently.

Going forward, we will continue to strengthen our efforts on responsible business conduct

Key highlights of 2024/25	Future goals and activities
<ul style="list-style-type: none"><li>• 113 supplier audits have been conducted in 2024/25 as part of the 2024/25 audit plan, an increase of more than 113% from the 53 supplier audits conducted in 2023/24.</li><li>• A revised Code of Conduct for suppliers, Business Ethics Policy, and Anti-Corruption and Anti-Bribery Policy have been implemented.</li></ul>	<ul style="list-style-type: none"><li>• A comprehensive Group-wide risk assessment will be developed in alignment with CSRD and ESRS requirements when updated requirements have been settled by EU in Q1 2026.</li><li>• We will secure implementation of our Code of Conduct for suppliers by incorporating it in our global and local management systems.</li></ul>

\* For further details, see Governance under Tables, comments, and accounting policies

by continuously updating policies, improving internal control processes, and ensuring that ethical standards are upheld across all companies in the Group.

## Supplier management and collaboration

During the financial year 2024/25, the freight situation has stabilised overall. However, there have been occasional minor disruptions, primarily due to tariffs imposed by the US government. These have led to increased pressure for early shipments aimed at avoiding the tariffs, which in turn caused congestion in other regions as vessels were diverted.

Part of this work has required an extra effort to ensure that both existing and new suppliers have been able to deliver while complying with agreed requirements and standards.

Despite the challenges in our value chain, we have managed to deliver to our customers and integrate new suppliers. These suppliers have been subject to our normal approval processes, including supplier audits, to ensure responsible behaviour.

### Code of Conduct

With the specified supplier requirements and the AVK Group Code of Conduct for suppliers, we want to make sure our suppliers are aware

of and work on decreasing their environmental impact, that they respect human rights, and that they do not use forced labour or exploitative child labour. AVK's Code of Conduct is integrated into all purchase agreements with suppliers, it is part of our standard terms and conditions for purchase, and it must be accepted for all purchase orders.

If an AVK supplier or collaborator does not comply with our Code of Conduct, we will initially notify them of non-compliance and initiate a dialogue to improve. In case of repeated non-compliance with our Code of Conduct and compliance is deemed unlikely, we will move to terminate the collaboration with the supplier.

We have initiated the rollout of the updated Code of Conduct for suppliers. All AVK Group managed suppliers have been notified about the reviewed Code of Conduct and a majority of our suppliers have already accepted and acknowledged it.

### Supplier selection

As we operate in countries where compliance with human rights, occupational health and safety, environmental and climate protection as well as anti-corruption are not necessarily a given due to existing culture and legislation, we are aware of the risk that our Group values are violated.

Because of this, we focus on compliance with our policies in all Group companies, and we support this effort with ongoing audits in our management systems.

We strive to only work with suppliers that guarantee compliance with all legislation on safety, environmental, climate, and human rights. Additionally, all selected suppliers must comply with our ethical standard outlined in the AVK Group Code of Conduct.

We work continuously with registration, control, follow-up, and further development of the supplier collaboration to ensure compliance with the Group's policies, including the Code of Conduct.

#### **Auditing**

Supplier audits are conducted on-site according to a set programme. The frequency of audits is based on an internal country and product-based risk assessment. Risk management is documented and managed in our internal ISO 9001 documentation.

Internal AVK auditors conduct supplier audits and consistently verify the ISO and third-party certifications required by our standards. We use a checklist that covers various topics and areas, which we continuously improve. We pay particular attention to countries with an increased risk of violating social and environmental responsibility.

We continue to work with existing foundries to meet or exceed specific national standards. Additionally, any new potential supplier must fulfil the minimum requirements, as stated in our internal procedure, to qualify as an AVK supplier.

## **Corruption and bribery**

AVK maintains a zero-tolerance policy against any form of corruption, extortion, or bribery. Such actions are regarded as gross misconduct and may lead to severe disciplinary actions.

Upon employment, it is standard practice for the general managers of all Group companies to sign our compliance policy, which requires compliance with anti-corruption and anti-bribery laws in the jurisdiction, as well as the AVK Anti-Corruption and Anti-Bribery Policy. This policy is reviewed annually during the board meetings of all companies to ensure that it remains a key point of attention in day-to-day business operations.

Likewise, all employees in the AVK Group are informed about and trained in anti-corruption and anti-bribery through the AVK Group Code of Conduct and its training material. Ultimately,

these practices should ensure that we avoid breaches.

No confirmed incidents of corruption or bribery were identified or reported in the AVK Group during the 2024/25 financial year.

## **AVK Group Policies**

Our global presence requires high ethical standards and a strong coordination to ensure consistent conduct across all countries. AVK has established Group Policies that define how we operate with integrity, consistency, and accountability throughout all companies. These policies cover key areas such as governance, employee welfare, and responsible business conduct, and they outline how each individual company should align with Group-wide efforts in these areas.

We want to be a responsible and credible company that balances economic, environmental, and social matters. This is mirrored in our Sustainability Policy.

We constantly strive to be a credible and ethically responsible partner for our customers and suppliers, a supportive workplace for our employees, and a responsible actor towards all other stakeholders.

During 2024/25, the Business Ethics Policy and Anti-Corruption and Anti-bribery Policy have been revised to ensure that they match both our Code of Conduct for employees as well as our Code of Conduct for suppliers.

The policies are available in the Group's management system (QHSE) and communicated to all companies in the Group.

The AVK Group Code of Conduct for Suppliers as well as the Conflict Minerals Policy and the Environmental Policy can be found on the AVK Group website: AVK Group Code of Conduct for Suppliers and Policies.

#### **The AVK Sustainability Policy**

We recognise that our global presence requires high ethical standards throughout our organisation and across all our actions.

We want to be a responsible and credible company with the ability to balance economic, environmental, and social matters.

This means that:

The AVK Group supports the UN Sustainable Development Goals (SDG). Our main area of attention is the goals relating to clean water and sanitation (SDG 6) and industry, innovation, and infrastructure (SDG 9) as these areas represent our core business. In addition, AVK also contributes to other goals. We consider SDG 17 on partnerships for sustainable development to be crucial for achieving the other SDGs.

We ensure that sustainable initiatives are fundamental to our production and that we have a healthy and safe work environment. We focus on the environment and long-lasting solutions and have achieved certifications that we are proud of:

- ISO 9001 – Quality management
- ISO 29001 – Quality management in the oil and gas industry
- ISO 14001 – Environmental management
- ISO 45001 – Occupational health and safety
- ISO 50001 – Energy management



## AVK's ISO certifications

AVK has been working with ISO since 1990 where we achieved our first ISO 9001 certification. Since then, ISO documentation has been integrated into our QEMS (Quality and Environmental Management System).

The ESG data overview, at the end of the report, provides a summary of how many of our manufacturing companies hold each certification. This overview is based on the certification descriptions provided by ISO.org, the International Organisation for Standardisation.

ISO 9001

ISO 9001 is a management tool ensuring that organisations of all sizes and sectors improve their performance, meet customer expectations, and demonstrate their commitment to quality. Its requirements define how to establish, implement, maintain, and continually improve a quality management system (QMS).

ISO 29001

ISO 29001 defines quality management system requirements for product and service supply organisations to the petroleum, petrochemical, and natural gas industries. This document is written as a supplement to ISO 9001. The supplementary requirements and guidance to ISO 9001 have been developed to manage

supply chain risks and opportunities associated with the petroleum, petrochemical, and natural gas industries, and to provide a framework for aligning requirements with complementary standards employed within the industries.

Improper handling of explosives and gases can lead to serious consequences for both people and the environment. For this reason, AVK has chosen this ISO superstructure (of additional requirements) in our supply chain for the oil and gas industry to demonstrate a high-quality level and proper management of the company's processes.

ISO 14001

ISO 14001 is a management tool within environmental management, which acts as the framework for the environmental performance. By adhering to this standard, we can ensure that we are taking proactive measures to minimise our environmental footprint, comply with relevant legal requirements, and achieve our environmental objectives. The framework encompasses various aspects, from resource usage and waste management to monitoring environmental performance and involving stakeholders in environmental commitments.

ISO 45001

ISO 45001 is an international standard that specifies requirements for an occupational health and safety (OH&S) management system. It provides a framework for organisations to manage risks and improve OH&S performance.

ISO 45001 utilises the Plan-Do-Check-Act methodology to systematically manage health and safety risks. It applies to organisations of all sizes and can be integrated with other ISO management system standards

ISO 50001

ISO 50001 is an international standard for energy management. The purpose of ISO 50001 is to specify requirements for establishing, implementing, maintaining, and improving an energy management system (EnMS). The intended outcome is to enable an organisation to follow a systematic approach in achieving continual improvement of energy performance and the EnMS.





# ESG KEY FIGURES – TABLES, COMMENTS, AND ACCOUNTING POLICIES

The data compiled in this report is from the financial year 2024/25 and includes activities from the entire AVK Group. The report details current initiatives, any new initiatives launched, and the results we have achieved over the past year. This is part of the AVK Group's annual report for 2024/25, and covers a section on social responsibility, gender balance in management, and data ethical policy.

# ENVIRONMENTAL

**Table 1: Environmental data, results**

	Unit	AVK Group 2024/25	AVK Group 2023/24	Development %	Description (2024/25 figures)
CO <sub>2</sub> e, Scope 1	tCO <sub>2</sub> e	12,416	14,748	-15.81	Direct emissions from burning of e.g. natural gas, oil, and petrol.
	tCO <sub>2</sub> e CO <sub>2</sub> per DKKm (turnover)	1.32	1.63	-19	
CO <sub>2</sub> e, Scope 2	Location-based Scope 2 (tCO <sub>2</sub> e)	34,732	27,620	25.75	Indirect emissions from purchase of energy, e.g. electricity and district heating.
	Market-based Scope 2 (tCO <sub>2</sub> e)	28,917	36,229	-20.18	
	Marked-based (tCO <sub>2</sub> e) per DKKm (turnover)	3.07	4.01	-23.44	
Total Scopes 1+2 (CO <sub>2</sub> e) market-based	tCO <sub>2</sub> e	41,333	50,977	-18.91	Total Scopes 1+2 (CO <sub>2</sub> e) market-based.
Energy consumption (Electricity)	MWh	110,455	104,032	6.17	Of these, 57,634 MWh (52.17% ↑) derive from renewable energy sources with certificate and own solar cell systems.
	MWh per DKKm (turnover)	11.76	11.52	2.08	
Heat consumption (District heating)	MWh	1,375	2,966	-53.64	
	MWh per DKKm (turnover)	0.15	0.33	-54.55	
Natural gas consumption (Heat & production)	M <sup>3</sup>	4,927,346	4,557,320	8.12	Of these, 326,141 M <sup>3</sup> (6.6% ↑) derive from biogas.
	M <sup>3</sup> per DKKm (turnover)	524.52	504.85	3.90	
Water consumption	M <sup>3</sup>	189,015	206,088	-8.28	
	M <sup>3</sup> per DKKm (turnover)	20.12	22.83	-11.87	
ISO 14001-certifications	Number	50	44	13.64	AVK consists of 110 production and sales companies.
ISO 50001-certifications	Number	6	3	100	AVK consists of 110 production and sales companies.
EPD certification	Number	26	15	73.33	Applicable for all AVK production companies.

## Comments to Environmental

All figures are based on total consumption for all companies within the AVK Group.

### Environmental policy

To address our responsible use of energy and address broader environmental impacts, the AVK Group has developed an environmental policy covering a wide range of topics, including energy consumption, climate change, pollution, and the use of water and other resources.

### Greenhouse gas emissions and calculation of CO<sub>2</sub>e emissions

This year's Scope 1 (direct) and Scope 2 (indirect) emissions have been calculated in accordance with international standards under the Greenhouse Gas (GHG) Protocol, applying both location-based and market-based methodologies for Scope 2 emissions.

Some countries remain reliant on coal for the generation of electricity and heat, resulting in comparatively high CO<sub>2</sub>e emission factors. These factors are largely determined by the national energy production mix – the proportion of energy sources such as coal, natural gas, biomass, wind, solar, and hydropower used in electricity and heat generation. A higher share of fossil fuels in the production mix leads to higher average CO<sub>2</sub>e emissions per unit of energy produced. Furthermore, the share of electricity sold as renewable or "green" power through Guarantees of Origin is withdrawn from the overall electricity mix. This reduces the renewable share of the residual, non-certified electricity, leading to higher average emission factors, particularly in countries that continue to rely heavily on fossil energy sources.

**Scope 1** emissions decreased in the 2024/25 reporting year, primarily driven by a reduction in the use of fossil fuel and an increased share of biogas in our energy mix. Additional contributing factors include lower natural gas consumption for heating, supported by a global transition to low-energy solutions such as the installation of heat pumps in our facilities as well as reduced gasoline and diesel consumption through the replacement of conventional vehicles with electric alternatives. These measures reflect our systematic efforts to minimise direct emissions from our operations and fleet in line with our long-term climate objectives.

**Scope 2** emissions decreased significantly in the 2024/25 reporting year, despite increased production activities. The reduction has primarily been driven by increased use of renewable electricity. This includes the

implementation of on-site solar PV installations and the purchase of certified renewable energy through Guarantees of Origin (solar, wind, and hydro). In addition, ongoing efforts to improve energy efficiency across our operations have contributed to lowering indirect emissions.

These measures are examples of how AVK works on minimising Scope 2 emissions from purchased electricity in line with our long-term climate objectives.

The overall CO<sub>2</sub> intensity, measured as emissions intensity, reflects decreasing trends.

The Scope 1 index decreased from 1.63 to 1.33, while the Scope 2 index decreased from 4.01 to 3.09. The overall CO<sub>2</sub> intensity, measured as the emissions intensity, reflects mixed trends.

See Figure 2 and Figure 3.

### Scope 1 - CO<sub>2</sub> emissions

Tonnes CO<sub>2</sub> per DKK million (turnover)

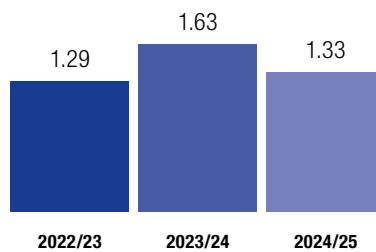


Figure 2

in 2024/25, with MWh per DKKm increasing slightly from 11.52 to 11.76 (+2.08%). The increase in absolute electricity consumption is primarily driven by higher operational activity and the inclusion of an acquired company. Historical data for previous periods has not been recalculated to include this acquisition.

Despite the increase in total consumption, our CO<sub>2</sub> intensity per turnover remains nearly stable due to the continued shift towards renewable energy. In 2024/25, 52.17% of our electricity consumption was sourced from renewables, supported by own solar cell installations and Guarantees of Origin. A number of subsidiaries have recorded reductions in electricity consumption as a result of local energy efficiency initiatives, such as equipment upgrades and process optimisation.

See Figure 4.

### Consumption - Electricity

MWh per DKK million (turnover)

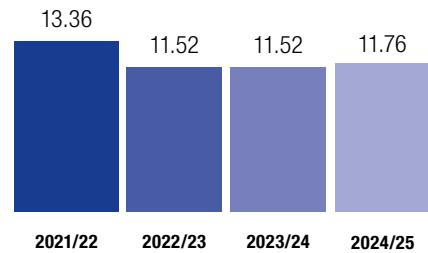


Figure 4

### Scope 2 - CO<sub>2</sub> emissions

Tonnes CO<sub>2</sub> per DKK million (turnover)

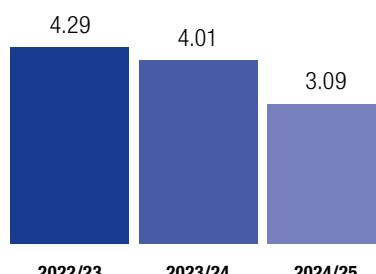


Figure 3

### Electricity consumption

The table and charts below show the AVK Group's electricity consumption in the last four years.

Our total electricity consumption increased from 104,032 MWh to 110,455 MWh (+6.17%)

### Water consumption

Our total water consumption decreased from 206,088 m<sup>3</sup> to 189,015 m<sup>3</sup> (-8.28%), with water use per DKKm decreasing from 22.83 to 20.12 (-11.87%). This reduction reflects efficiency improvements across our operations, particularly in companies that have successfully implemented water-saving measures.

Despite some variations across subsidiaries, we remain committed to minimising water consumption, prioritising efforts on companies with the highest usage levels relative to their turnover. These initiatives contribute to a positive environmental impact and reinforce our commitment to sustainable operations.

See Figure 5.

## Consumption - Water

M<sup>3</sup> per DKK million (turnover)

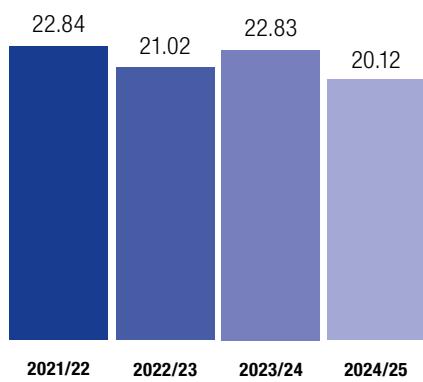


Figure 5

## Accounting policies (E)

### Greenhouse gas emissions

Reporting of greenhouse gas emissions is based on the GHG Protocol. The reporting follows the GHG Protocol's division into Scope 1 and Scope 2. Scope 3 emissions are not yet included in group-level reporting.

The reporting includes emissions of greenhouse gases specified in the GHG Protocol, such as carbon dioxide, methane, nitrous oxide, HFCs, and others. These are reported together in CO<sub>2</sub> equivalents (CO<sub>2</sub>e).

**Scope 1** covers all direct greenhouse gas emissions from sources owned or controlled by the company. This includes emissions from the combustion of fossil fuels such as gas, diesel, petrol, or similar fuels. Emissions are calculated by multiplying actual fuel consumption by the relevant emission factors, using data collected directly by the company.

Fossil fuel for company-owned or leased fuel or plug-in hybrid vehicles is classified as Scope 1.

**Scope 2** covers indirect emissions from the consumption of electricity, district heating, or cooling purchased from external providers.

Electricity used to charge company-owned or leased electric vehicles is classified as Scope 2, using the emission factors of the country where the electricity is purchased.

### Emission factors source

Data has been sourced from the International Energy Agency (IEA) and the UK Department for Environment, Food & Rural Affairs (DEFRA). IEA's emission factors are based on the IPCC Sixth Assessment Report (AR6), while DEFRA

uses values from IPCC AR5. Both provide **emission factors**, which are used to calculate CO<sub>2</sub>e, not CO<sub>2</sub>e directly.

**Location-based:** Calculates emissions based on the average electricity grid where we consume power. This method reflects the overall environmental impact of our electricity use in that particular region.

**Market-based:** Calculates emissions based on the specific electricity we purchase through contracts or certifications (e.g., Guarantees of Origin). Residual mix is used when available; otherwise, location-based emissions are applied as a fallback.

The location-based method reflects the average emission intensity of the grid, while the market-based method accounts for the impact of purchased electricity, including renewable energy.

Consumption data is collected from energy bills or meters to calculate total energy use.

### Energy consumption

**Data on energy consumption** is collected locally from all our companies through monthly financial reporting, based on globally defined specifications and definitions. Both direct (Scope 1) and indirect (Scope 2) energy consumption are reported, along with the amount of energy sourced from renewable and non-renewable sources.

### Share of renewable energy

Electricity is classified as renewable only when appropriate certificates such as Guarantees of Origin verify a zero-emission factor for the specific consumption. Renewable energy sources include wind, solar, biogas, and green hydrogen.

### Emission and energy intensity

Emission intensity is calculated as total greenhouse gas emissions (Scope 1 and Scope 2) in tonnes of CO<sub>2</sub>e divided by total turnover in DKKm.

### Energy intensity

measures energy consumption relative to a unit of activity. Energy intensity per turnover is calculated as the total energy consumption, expressed in MWh and/or m<sup>3</sup>, divided by total turnover in DKKm. For energy sources measured in volume, such as gas in cubic meters (m<sup>3</sup>), consumption is converted to MWh using standard conversion factors to ensure consistency.

### Water consumption

**Water consumption data** is collected locally from all our companies through monthly financial reporting, based on globally defined specifications and definitions. Water use is measured using local meter readings and/or invoices.

### Environmental Product Declarations (EPDs)

EPDs are prepared locally in accordance with international standards such as ISO 14025 and EN 15804. They cover either the full product life cycle or specific life cycle stages, for example cradle-to-grave or cradle-to-gate.

Data is collected directly from the manufacturing process, including energy use, material consumption, and emissions. Each EPD is independently verified by a qualified third party to ensure compliance with the relevant standards and accuracy of the declared data.

EPDs have a defined validity period, typically five years, and may be revised if there are significant changes to the product or production processes.

# SOCIAL

**Table 2: Social data, results**

	Unit	AVK Group 2024/25	AVK Group 2023/24	Development %	Description (2024/25 figures)
Number of employees	Number	5,571	5,342	4.29	The average number of full-time employees in the AVK Group as per 30 September 2025.
Fatalities	Number	0	0	0	All AVK companies.
Number of work-related accidents resulting in absence	LTA	75	47	59.57	LTA = Lost Time Accident = number of accidents with >1 day's absence. All AVK companies.
Number of accidents per 1 million working hours	LTAFR	7.09	4.63	53.13	1,900 working hours are used as an average (ref. OECD). All AVK companies.
ISO 45001 certification	Number	39	33	18.18	Applicable for all AVK production companies.

## Comments to Social

### Human rights

We adhere to the UN Declaration of Human Rights, including equal rights regardless of gender, religion, or political views, as a core aspect of our commitment to social responsibility. This commitment is reflected internally in the AVK Group Code of Conduct for employees.

### Work accidents

To reach our 2030 target of reducing the Lost Time Accident Frequency Rate (LTAFR) to below 3.0, we have established several milestone targets.

The LTAFR measures the number of lost time accidents per one million working hours.

The goal for 2024/25 was to reduce the LTAFR to below 5.0. However, by the end of the reporting year, the rate had increased to 7.09 accidents per one million working hours. It is important to note that the accidents recorded in 2024/25 were all classified as minor and did not result in long-term absence.

Figure 6 provides an overview of the accident frequency rate over the past four years, taking into account changes in the number of employees.

The number of reported work-related accidents resulting in absence increased from 47 in 2023/2024 to 75 in 2024/2025 (an increase of approximately 60%). This rise can be explained by several factors. A significant part of the increase is due to a strengthened reporting culture and greater attention to workplace safety, which has led to more consistent recording and reporting of incidents across the organisation.

At the same time, data indicates that certain tasks continue to carry a higher level of risk – particularly those related to hand and finger injuries and ergonomic strains – where existing preventive measures have not yet fully reduced exposure to risk. Therefore, these areas will continue to have high priority in our ongoing health and safety efforts.

We remain committed to our overall objective of reducing the number of work-related accidents and continue to strengthen preventive measures and safety awareness throughout the AVK Group.

### Health and Safety management

#### (ISO 45001)

ISO 45001 plays a key role in strengthening our Health & Safety (H&S) structure and ensuring continuous improvement.

The numbers of companies achieving the ISO 450001 certification has increased. To date, 39 of our companies have achieved this international certification, demonstrating our commitment to systematic management of workplace health and safety. This is an increase from 33 last year.

### Safety performance

Number of accidents per 1 million working hours

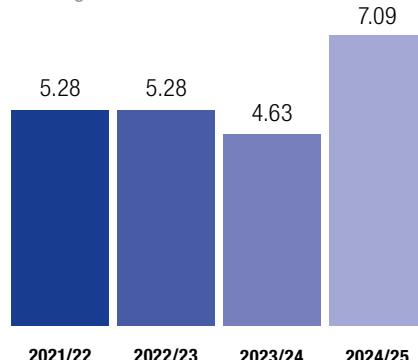


Figure 6

We are actively working to increase the number of certified companies within the AVK Group to ensure a consistent approach to health and safety across all business units. This effort

supports our long-term strategy to promote a safe and healthy work environment for all employees, to reduce work-related risks, and to enhance compliance with regulatory and customer specific requirements.

## Accounting policies (S)

### Accidents, Lost Time Accident Frequency

#### Rate, and fatalities

Information on accidents is collected locally from all our companies through monthly financial reporting, following globally defined specifications and definitions. The specifications and definitions of accidents resulting in lost time are outlined in the AVK H&S document 01.020.

Reported accidents are verified by the AVK Group's Sustainability & ESG function to secure that reported accidents are within the scope of accidents with lost time definition. All incidents are documented with details on the nature of the accidents and their underlying causes.

The total number of accidents refers to work-related incidents that led to absences extending beyond the day of occurrence. Lost Time Accident frequency (LTAFR) is calculated as the number of accidents per million working hours.

Lost Time Accident Frequency Rate (LTAFR)=  
(Total Number of Accidents  $\times$  1,000,000) /  
Total Working Hours.

To ensure consistency and transparency across our global operations, AVK has set an average of 1,900 annual working hours per employee. The benchmark of 1,900 annual working hours per employee is based on the global OECD standard for average working hours. This figure has been adjusted to reflect the geographic distribution of our workforce, the majority of whom are based outside the EU, including in China, and considers regional variations in working hours and labour legislation.

Fatalities are defined as accidents that occur at the workplace or while performing tasks directly related to one's employment.



# GOVERNANCE

**Table 3: Management data, results**

	Unit	AVK Group 2024/25	AVK Group 2023/24	Development %	Description (2024/25 figures)
ISO 9001- certifications	Number	69	67	2.99	Number of companies with said ISO certification.
ISO/TS 29001 certifications (Gas)	Number	12	11	9.09	Valid for all AVK companies that design, manufacture, and supply products for gas.
Supplier management and audits	Number	113	53	113.21	Our Code of Conduct applies to all suppliers, but we audit based on a risk assessment in risk areas.

## Comments to Governance

The AVK Group demonstrated continued progress in strengthening quality assurance frameworks and responsible supply chain management. The rise in audits and ISO certification coverage reinforces our commitment to operational excellence, risk mitigation, and sustainable business practices across all markets.

### Code of conduct

In response to increasing customer demands and the upcoming ESRS requirements, we have undertaken a comprehensive update of our internal Code of Conduct and global policies. Several sections, including the section on fundamental human rights, such as the prohibition of child and forced labour and the right to collective bargaining, have been clarified and expanded with new and updated policies.

### Human rights policy

We assess that the risk of human rights violations is most significant among workers further down the value chain, particularly in cases involving forced labour and unequal rights. We have greater control over suppliers the closer they are to us in the value chain. Therefore, we work systematically on registration, control, and follow-up via audits and further development of the collaboration with our suppliers.

### Supplier management

In the financial year 2024/25, we conducted 113 on-site supplier audits at selected suppliers, compared to 53 audits in 2023/24.

Ongoing supplier audits are carried out on-site according to a defined audit programme. The frequency of audits is determined by an internal country- and product-based risk assessment. Risk management is documented and maintained within our internal ISO 9001 quality management system.

The supplier audit programme is an integral part of our responsible sourcing strategy and aims to ensure that suppliers comply with AVK's Code of Conduct, applicable legislation, and relevant environmental and social standards.

Findings from the audits are followed up through dialogue and improvement plans where necessary, supporting continuous improvement throughout the supply chain.

No major incidents were identified among the audited AVK suppliers that warranted the issuance of major non-compliance reports or other corrective actions.

See Figure 7.

Regular training and awareness programmes ensure that employees understand their responsibilities, and any suspected cases can be reported confidentially through the AVK Group's whistleblower system. This is supported by the AVK Group's Anti-Corruption Policy and the AVK Group Code of Conduct.

### Supplier audits

Number

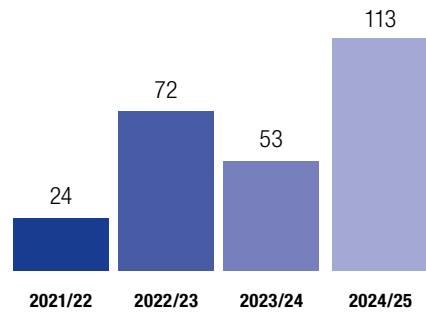


Figure 7

### Anti-corruption and bribery

As a global Group of companies, we assess corruption risks in some of the countries in which we operate. AVK does not accept any kind of action that may be considered corruption or bribery. We have zero tolerance for such incidents, and they are considered a gross misconduct that may result in disciplinary actions. The management of all our companies have signed our compliance manual, committing to comply with both national and international anti-corruption and anti-bribery laws.

## Accounting policies (G)

### Board of directors

Diversity on the Board of Directors is measured as the ratio of women to men among the elected board members of AVK Holding A/S, the parent company, excluding employee-elected members.

The ratio is calculated at the end of the financial year and reported as part of the company's governance disclosures in accordance with the applicable accounting policies.

Changes in the composition of the board during the financial year are reflected in the year-end calculation. The reported ratio provides a factual overview of gender representation at board level and is used consistently for internal reporting and disclosure purposes.

### Anti-corruption

Anti-corruption compliance is measured by the proportion of the relevant workforce – typically management, sales, purchasing, and other employees with external contact – who have formally confirmed adherence to the policy. Registrations are recorded by the local companies.

### Personal data protection

A Group-level Data Ethics Policy applies to all companies within the AVK Group. The policy is implemented and monitored locally and overseen by the AVK Group. Compliance is reported to the AVK Group annually, supporting adherence to applicable data protection legislation, including GDPR.

This ensures that personal data is handled responsibly across the organisation and aligns with AVK's governance and sustainability standards.



# POLICIES AND ESG REPORTING

In spring 2025, we successfully completed our Double Materiality Assessment (DMA), providing a clear overview of our most significant sustainability impacts, risks, and opportunities across the AVK Group. This marks an important milestone in preparing for future reporting obligations.

Although the formal implementation timelines for the CSRD and ESRS have been adjusted, we continue to follow the regulatory developments closely. Our strategic direction remains unchanged: we will maintain momentum and continue progressing within the ESG areas already initiated and developed over several years. Our long-term ambition and commitment to responsible business conduct and transparent reporting remain firmly in place.

## Risk assessment and policy alignment

A comprehensive Group-wide risk assessment will be developed in alignment with CSRD and ESRS requirements. Our approach is to ensure we are prepared and aligned with the direction of expected due-diligence obligations.

Building on the output of our double materiality results, we will continue identifying relevant sustainability-related risks and opportunities across environmental, social, and governance areas and ensure they are linked to appropriate controls, management processes, and policies.

During 2024/25, we have prioritised strengthening our governance foundation by updating and consolidating key policies. A central part of this effort has been a comprehensive update of the AVK Group Code of Conduct, which serves as the umbrella framework guiding ethical behaviour, responsible business conduct, and expectations for employees, suppliers, and business partners.

As part of this, related policies have been reviewed and aligned to support future reporting, due-diligence expectations, and stakeholder requirements.

Key policy focus areas include:

## Environment (E):

- Company Car Policy

The policy states that, starting in 2025, only electric vehicles (EVs) will be used as company cars in Denmark and in countries where the infrastructure for charging electric vehicles is in place.

- Environmental Policy

The policy addresses our responsible use of energy and other environmental impacts, aiming to mitigate the effects these could have on the environment.

## Social (S):

- Human Rights & Ethics Policy

The policy explicitly states that trafficking in human beings, forced labour, compulsory labour, or explorative child labour are not tolerated under any circumstances within the Group.

## Governance (G):

- Human Rights & Ethics Policy

- Anti-Corruption & Anti-Bribery Policy

This policy is part of our Code of Conduct and serves as an internal guideline that all portfolio businesses must adhere to. It specifies that the AVK Group actively combats all forms of corruption and that our businesses must comply with all relevant laws and regulations, regardless of where in the world they operate.

This reinforced governance structure and updated Code of Conduct ensure that AVK maintains a strong foundation for responsible business practices and is positioned to meet upcoming sustainability requirements once regulatory clarity, including CSDDD, is established.

## Report on unequal gender representation in management

When recruiting and appointing managers at AVK, we follow the principle of selecting the most qualified candidate for the role. However, the technical and industrial nature of our business has traditionally been male-dominated, resulting in a gender imbalance both at the management level and among employees overall. As such, we recognise our responsibility to make our company more

attractive to women and ensure a better gender balance across the AVK Group.

Therefore, we have set a target of achieving 25% female representation on the Board of Directors in 2025/26. In the financial year 2024/25, women accounted for 17% of the Board of Directors excluding employee representatives.

The AVK Group's Management Board, established in early 2025, consists of seven members, of whom two are women, equivalent to 28.5% female representation. The Management Board is responsible for overseeing the AVK Holding functions and ensuring that the Group functions have the necessary resources and competencies to effectively support the companies within the AVK Group.

To further reduce the gender diversity gap, management ensures that, whenever possible, qualified female candidates within the candidate pool are included in the final interviews for management positions at AVK Holding. At the same time, we are committed to strengthening our efforts to increase the number of women in global leadership positions.

## Report on Data Ethical Policy

In line with digital developments, such as artificial intelligence, machine learning, and the increasing cyber threats, the AVK Group is increasingly focusing on the use of data and how to ensure that physical persons remain at the centre of the processing. A responsible data culture involves, amongst other things, ensuring transparency, protecting privacy, being accountable for data usage, and staying informed about digital developments, cyber threats, and the tools employed. Therefore, AVK adopted a Data Ethical Policy in the financial year 2021/22, revised in the financial year 2023/24.

Our Data Ethical Policy reflects AVK's core values regarding data usage, ensuring that we handle data with respect for individuals. The policy is accessible on the AVK Group's intranet.

# OUR FUTURE ACTIVITIES AND AREAS OF ACTION

In the AVK Group, innovation and the development of durable, high-quality products designed for long life, repairability, and recyclability remain central to our business. Acting responsibly towards our employees, the environment, and the societies in which we operate is embedded in our values and reflected in our long-term strategic priorities.

Looking ahead, we will continue to strengthen our sustainability work by improving resource efficiency, advancing circular solutions, enhancing human rights and responsible supply chain practices, and maturing our governance and reporting processes in line with evolving global standards and stakeholder expectations.

Below, is an overview of key initiatives and focus areas that will guide our progress in the coming years.

## Future focus and planned sustainability initiatives

In the coming years, we will continue to strengthen our sustainability performance in line with the AVK Sustainability Strategy and evolving CSRD and ESRS requirements. Building on our results, we will accelerate initiatives that reduce environmental impact, support circular production, and ensure responsible business practices across our global operations.

A key focus will remain on improving resource and energy efficiency in our production, reducing reliance on fossil fuels, and increasing the use of renewable energy.

At the same time, we will continue advancing product transparency and circularity, particularly through the expansion of Environmental Product Declarations (EPD) and increased use of recycled materials.

## Key initiatives for the coming years include:

### Our environmental and climate effort

Decarbonisation & energy efficiency

- Develop a climate transition plan to define our roadmap for reducing emissions and supporting long-term decarbonisation.

- Increase the share of renewable electricity, including solar panel installations at more manufacturing sites.
- Reduce natural gas consumption, implementing energy optimisation programmes, and adopting alternative heating solutions.
- Conduct structured energy audits and continue to upgrade to energy-efficient systems, including LED lighting and smart building controls.
- Energy audits will be part of ISO 50001 activities and will follow this KPI.
- Further rollout of ISO 50001 across relevant facilities, with requirements set based on the company's total energy consumption and prioritised on our largest energy consuming companies.

### Circularity & sustainable materials

- Expand the use of recycled materials, such as plastics and metals in our production. This measurement is supported by KPIs, data, and defined targets.
- Establish internal processes for increased reuse, recycling, and waste reduction in production.
- Increase the number of EPDs to cover a wider share of our product portfolio. This measurement is supported by KPIs, data, and defined targets.

### Water management

- Continued focus on reducing water use, prioritising locations in water-stressed regions and sites with high consumption. This measurement is supported by KPIs, data, and defined targets.

### Climate data, transparency, & supply chain

- As a trial, we are implementing baseline calculations for Scope 3 emissions in five major EU companies, with plans to expand data maturity Group-wide across AVK from 2027.
- Strengthen supplier sustainability performance and due-diligence processes, including continued participation in EcoVadis assessments.

### Environmental management

- Extend ISO 14001 implementation across the AVK Group and drive continuous improvement at existing certified sites. This measurement is supported by KPIs, data, and defined targets.

Through these initiatives, we aim to continuously enhance our environmental performance, support our long-term decarbonisation ambitions, and contribute to a more circular and resource-efficient value chain. AVK will maintain a proactive approach to innovation, compliance, and responsible business conduct, ensuring that sustainability



remains embedded in our decisions, processes, and product development.

### Our social responsibility

At AVK, we are committed to building a safe, inclusive, and engaging workplace where employees are supported, empowered, and able to thrive. Our social responsibility initiatives in the coming years focus on health and safety, employee development, diversity, and ethical conduct.

#### Health, safety, & well-being

- Continue to implement ISO 45001 certification across all relevant sites. This measurement is supported by KPIs, data, and defined targets.
- Intensify safety initiatives to achieve a Lost Time Accident Frequency Rate (LTAFR) below 3.0 by 2030.
- Reduce numbers of accidents by strengthening safety culture through structured training, internal communication, and visibility of improvements.

#### Employee data & diversity

- Introduce a global measurement of sick leave using standardised definitions across the AVK Group to set targets and monitor improvements.

- Collect and monitor diversity data beyond gender, including age, seniority, nationality, and other relevant parameters.

#### Ethics & responsible conduct

- Implement the revised internal Code of Conduct for employees in all companies.
- Provide information and training material on Human Rights and Ethics policies to ensure responsible practices across the AVK Group and throughout the supply chain.

Through these initiatives, AVK aims to strengthen employee safety, well-being, and engagement, while fostering an inclusive and ethical workplace culture that supports long-term sustainable growth.

### Our governance

At AVK, sustainability is part of our Core Values. We are committed to meeting rising customer expectations for responsible, transparent, and sustainable business conduct. At the same time, we continue to align our operations with CSRD and ESRS requirements to ensure compliance and support long-term sustainable development across the AVK Group.

Planned initiatives for the coming years include:

- Rollout and optimise the Code of Conduct for employees and suppliers, including training,

communication, and engagement to ensure understanding and commitment.

- Expand and strengthen supplier audit programmes to monitor compliance with ESG policies and responsible business standards.
- Enhance knowledge of the Business Ethics Policy and Anti-Corruption & Anti-Bribery Policy.
- Establish simple, systematic processes for monitoring, follow-up, and continuous improvement in governance and supplier collaboration.

Through these initiatives, AVK will strengthen governance, support ethical practices, and improve supplier oversight. We will work closely with employees, suppliers, and other stakeholders to ensure understanding and engagement with our ESG strategy, supporting steady progress towards our sustainability goals.

# OBJECTIVES FOR THE FINANCIAL YEAR 2024/25

**Table 4: Environmental data, objectives for the financial year 2025/2026 →**

Environmental data	Unit	Result 2024/25	Objective 2025/26	Action (Description)
CO <sub>2</sub> e , Scope 1 + scope 2 (Marketbased)	Tonnes	41,333	5% ↓	Reduction of CO <sub>2</sub> emissions by phasing out fossil-fuelled company vehicles and natural gas, increasing our use of renewable electricity, and installing solar energy systems.  Reduction in number of fossil-fuelled company vehicles and natural gas.
Water consumption	M <sup>3</sup>	189,015	1% ↓	Local improvement initiatives, such as recycling of water at test stations and water-economical lavatories.
Waste for reuse/recycling	%	56%	> 65%	Percentage of waste that can be recycled. Monitor local waste fractions and thus increase recyclability.
ISO 14001 certified production companies (number of total)	Number	50	52	One additional AVK company is in the process of achieving its ISO 14001 certification.
ISO 50001-certifications	Number	6	>10	Three additional AVK companies are in the process of achieving ISO 50001 certification.
EPD certification	Number	26	>30	Applicable for all AVK production companies.

**Table 5: ESG key figures, objectives for the financial year 2025/2026 →**

<b>Social data</b>	<b>Unit</b>	<b>Result 2024/25</b>	<b>Objective 2025/26</b>	<b>Action (Description)</b>
Number of employees	Number	5,571	–	The average number of full-time employees in the AVK Group as per 30 September 2025.
Number of work-related accidents resulting in absence	LTA	75	<50	LTA = Lost Time Accident = number of accidents with >1 day's absence. All AVK companies.
Number of accidents per 1 million working hours	LTAFR	7.09	<5	1,900 working hours are used as an average (ref. OECD).
ISO 45001 certifications	Number	39	>41	Three additional AVK companies are in the process of achieving their ISO 45001 certification. Applicable for all AVK production companies.

**Table 6: ESG key figures, objectives for the financial year 2025/2026 →**

<b>Management data</b>	<b>Unit</b>	<b>Result 2024/25</b>	<b>Objective 2025/26</b>	<b>Action (Description)</b>
ISO 9001 certifications	Number	69	69	Applicable for all AVK production companies.
ISO/TS 29001 certifications (Gas)	Number	12	12	All AVK gas companies have implemented ISO 29001.
Supplier management and audits	Number	113	>120	We audit based on a risk assessment in risk areas. We will expand our activities to other countries – especially those listed as IROs.

