



sustainable entrepreneurship

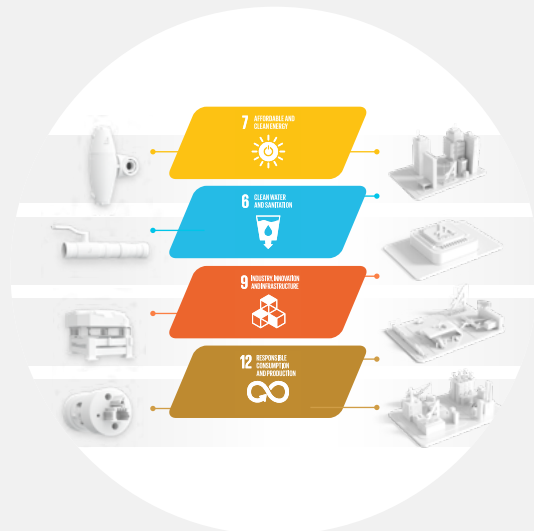
At Aalberts, we are no-nonsense, straight-talking, proudly technical people, who engineer mission-critical technologies for a clean, smart and responsible future. So it should be no surprise that sustainability has been a concern of ours since 1975 because it's just common sense.

Day in, day out, our strong team of entrepreneurs is focused on achieving our objectives as sustainably as possible. From creating technologies that enable our customers to enhance their own businesses and get the planet back into good shape, to ensuring our own operations are as clean, green, and waste free as possible. We are there, relentlessly doing our bit. Because that's 'the Aalberts way'.

We believe there is no magic technology or machine that will save the planet overnight. But there are many inventions that are being made or have yet to be even imagined that can cut down waste, introduce efficiencies, and contribute to a greener society. At Aalberts, that's music to our ears, because that's what we do.

We have been on this pathway since day one and are pretty sure that, working with our customers and partners, we will continue to break new ground. And every step forward we take, we get more efficient ourselves and share this knowledge and practices throughout the entire organisation. Our partners and customers know that the mission-critical technologies we develop are clean, green and non-polluting throughout their lifecycle.

our impact



“SDG impact increases to **>70% in 2026**, CO₂ intensity reduces with **30% in 2026**”

our commitment



message of the CEO

about Aalberts

- our essence
- our way of value creation
- the Aalberts playing field
- the Aalberts playbook
- the Aalberts way
- Aalberts strategy & objectives
- our lean and effective structure
- innovation
- our people
- stakeholder dialogue
- sustainable entrepreneurship**

progress and performance

risk & governance

report of the Supervisory Board

financial statements 2022

supplementary information



our impact

To create shared value for all our stakeholders, sustainable entrepreneurship is fully embedded in our strategy, accelerating our unique positions with high growth potential and sustainable impact.

We identify three megatrends that are shaping our future: urbanisation, energy & resource scarcity and internet of things (see page 13).

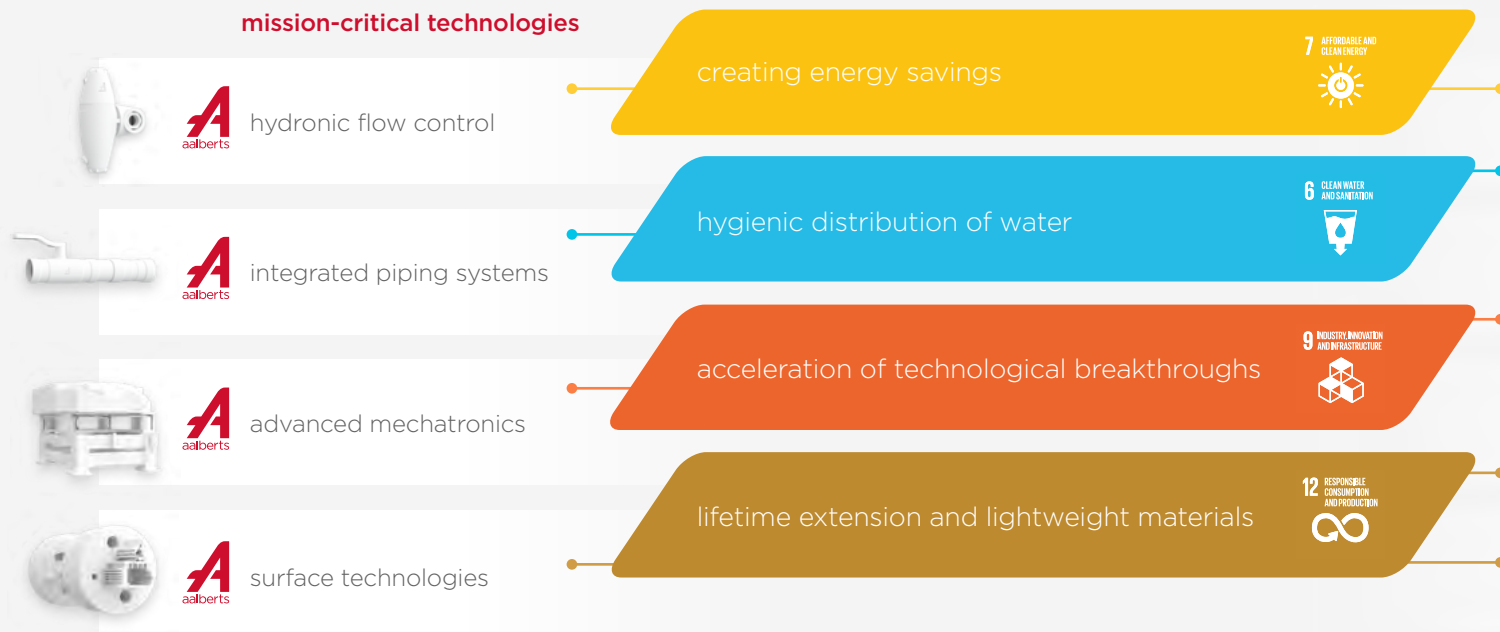
These megatrends are bringing a shift towards co-development, connectivity and integration in

the Aalberts playing field, providing opportunities for growth, while they may also pose transition risks to our business (see our risk paragraph on page 51).

In our end markets eco-friendly buildings and sustainable transportation for example, the EU Green Deal with the expected renovation wave and the focus on a carbon neutral economy in 2050 and the US Inflation Reduction Act with the focus on reducing carbon emissions by roughly 40% in 2030, offer us many opportunities.

Our sustainable entrepreneurship strategy focuses on realising social and environmental impact in all four end markets and demonstrates our own commitment to take responsibility. Our social and environmental impact is reflected in our SDG rate: already 68% of our revenue contributes to those subgoals of the Sustainable Development Goals that are material to us.

mission-critical technologies



our playing field



SDG impact 68% of revenue

we engineer mission-critical technologies enabling a clean, smart and responsible future

message of the CEO

about Aalberts

- our essence
- our way of value creation
- the Aalberts playing field
- the Aalberts playbook
- the Aalberts way
- Aalberts strategy & objectives
- our lean and effective structure
- innovation
- our people
- stakeholder dialogue
- sustainable entrepreneurship

progress and performance

risk & governance

report of the Supervisory Board

financial statements 2022

supplementary information



creating energy savings



Climate change and urbanisation reinforce the need for more energy efficient, comfortable and healthy buildings and smart, sustainable transportation. Space heating and cooling is accounting for a substantial part of the energy consumption in buildings. From the heat source to emitter, to distribution of heating or cooling, Aalberts hydronic flow control and Aalberts integrated piping systems cover a broad spectrum of mission-critical building technology systems that make residential, commercial and industrial buildings eco-friendly. Our technologies provide improved energy efficiency through hardware products such as balancing valves and air dirt separators. But also by digitised products and services, such as intelligent thermostats, smart radiator heads and remote services. Our air and dirt separators for example, can save up to 15% in energy consumption when installed. Intelligent thermostatic heads, balancing valves, underfloor heating, expansion vessels and manifolds are other products that will make heating and cooling in buildings efficient by at least 20%.

Aalberts is partnering with its customers to engineer solutions that offer optimal efficiency for new build as well as for renovation. Our piping systems complement the hydronic flow control technologies as key parts of hydronic systems for large residential, domestic, commercial and industrial buildings. We facilitate the growth of renewable and low carbon energy use with our technologies. We empower the energy transition by providing solutions needed for renewable energy systems, such as solar panels, heat pumps and hydrogen installations. For example, expansion vessels for solar powered installations or a thermal battery for domestic water, powered by solar. Our fittings and piping systems have a very high temperature resistance and are therefore suitable for use in solar installations. In addition, we have a wide range of technologies for district heating and underfloor heating. In 2022, Aalberts hydronic flow control contributed to the realisation of approximately one million installations operated on renewable energy. Also in our sustainable transportation end market, creating energy savings is high on the agenda. We engineer mission-critical technologies for e-mobility, with electric cars, e-bikes and e-scooters becoming increasingly important across society. For e-mobility we provide solutions such as surface treatments for electrical car parts and lightweight aluminium battery housing for e-bikes.

For the maritime transport sector our measurement systems enable ships to significantly decrease their fuel consumption and maintenance costs. For example, our high-tech propeller thrust sensor enabling shipowners to save up to 15% on fuel consumption and CO₂ emissions.

hygienic distribution of water



More efficient use and sustainable water management are critical to address the growing demand for water, threats to water security and the increasing frequency and severity of droughts and floods resulting from climate change.

Each year, Aalberts piping systems delivers over three hundred million meters of pipes and connections for the hygienic distribution of drinking, potable and waste water. Our solutions ensure clean water and sanitation for millions of households worldwide and focus on efficient water use and water savings. For example, the Airfix vessel, an expansion vessel for domestic hot water that saves up to 1,200 litres of drinking water per household per year when installed.

The materials used in the distribution systems are of a significant importance. A high potable water quality begins with the planning and the selection of the right material. Chemical substances must not be present in concentrations that are harmful to human health. For example, lead in drinking water can be harmful for humans and more in particular for children. We address such topics by offering lead free piping systems, for example from lead free alloy or composite. Obviously, our piping systems have all major national and international quality certifications and approvals in this respect, such as NSF/ANSI, KIWA, DVGW and qualify for green building rating systems like LEED, DGNB and BREEAM. In addition, we offer technologies to protect and improve water quality including filtration, purification and softening.

message of the CEO

about Aalberts

our essence

our way of value creation

the Aalberts playing field

the Aalberts playbook

the Aalberts way

Aalberts strategy & objectives

our lean and effective structure

innovation

our people

stakeholder dialogue

sustainable entrepreneurship

progress and performance

risk & governance

report of the Supervisory Board

financial statements 2022

supplementary information



lifetime extension and lightweight materials



Climate change and resource scarcity reinforce the need for solutions that improve energy efficiency, lower waste and make materials more lightweight and durable. These solutions are crucial for the transition to more sustainable transport by land, sea or air. Aalberts accelerates the transition towards sustainable transportation by engineering mission-critical technologies for the electrification of vehicles, from valve engineering for battery cooling to surface treatments for electrical car parts.

As the world becomes increasingly interdependent and complex, every single component needs to work and needs to work together. We respond to energy & resource scarcity by making materials more lightweight and durable. Lightweight materials are an important enabler of sustainable transportation.

Aalberts surface technologies partners with leading industrial customers worldwide to develop, produce and finish functional and highly durable surface designs of metals through sophisticated heat and surface treatments. The improved strength and stiffness of the materials improves product quality and reliability, while extending the entire lifetime of the manufactured parts.

We also develop and produce high-tech, lightweight aluminium and magnesium components that are both strong and light. They are of great importance for sustainable transportation in the automotive, e-mobility and aerospace industries. For electrical vehicles surface technologies play a role in noise reduction, lightweight constructions to extend the range, safety measures and extension of service life due to lifetime extension of components, such as increased corrosion protection.

Aalberts hydronic flow control and Aalberts piping systems also apply these lifetime, quality and reliability improvements to their products and innovations. In eco-friendly buildings, longevity of components matters and corrosion protection is important. Our R&D departments engineer with a 'fit to last' strategy, focusing on maximising lifetimes of components and solutions.

acceleration of technological breakthroughs



With the advent of super-fast 5G networks, internet of things will further accelerate technological breakthroughs for smart homes, autonomous driving and industry 4.0. Breakthrough innovation is necessary to address large-scale challenges such as ageing economies and climate change, while new, digital solutions are also targeting minor challenges making life easier, for example, through simplifying digital payments or streaming.

Aalberts advanced mechatronics delivers leading-edge innovative, tailor-made and future-proof technologies, enabling the roadmaps and manufacturing challenges of high-tech customers. From mechatronic systems, to motion and fluid control in high-end machines and process installations, environmental control solutions, ultra-high purity liquid and gas supply systems and ultra large and accurate machining.

With our technologies and innovations, we are part of the high-tech infrastructure needed for technological breakthroughs. These breakthroughs enable the manufacturing of low carbon technologies and the world's shift towards decarbonisation. We continuously focus on long-term innovation and disciplined investments in R&D.

message of the CEO

about Aalberts

our essence

our way of value creation

the Aalberts playing field

the Aalberts playbook

the Aalberts way

Aalberts strategy & objectives

our lean and effective structure

innovation

our people

stakeholder dialogue

sustainable entrepreneurship

progress and performance

risk & governance

report of the Supervisory Board

financial statements 2022

supplementary information



creating energy savings with our full range of balancing valves, ensuring accurate flow distribution across buildings resulting in minimising energy usage and cutting costs



aalberts.com/energy



hygienic distribution of water through supplying water connections to the largest drinking water company in Belgium, by using our plunger valve



aalberts.com/water



acceleration of technological breakthroughs by enabling reuse of installed base end-of-life modules and supporting responsible usage of materials for the semiconductor industry



aalberts.com/breakthroughs



lifetime extension and lightweight materials through developing a highly advanced process to harden the surface of stainless steel while maintaining corrosion resistance



aalberts.com/lifetime

message of the CEO

about Aalberts

- our essence
- our way of value creation
- the Aalberts playing field
- the Aalberts playbook
- the Aalberts way
- Aalberts strategy & objectives
- our lean and effective structure
- innovation
- our people
- stakeholder dialogue
- sustainable entrepreneurship

progress and performance

risk & governance

report of the Supervisory Board

financial statements 2022

supplementary information

follow our progress

aalberts.com/progress

linkedin.com/company/aalberts


twitter.com/aalbertsnv



our own commitment

At Aalberts, engineering solutions enabling a clean, smart and responsible future, goes hand in hand with a responsible way of doing business and addressing the risk of climate change. We nurture sustainable entrepreneurship in a safe and clean working environment with room for personal growth, enhancing our strong reputation and track record of sustainable, profitable growth.

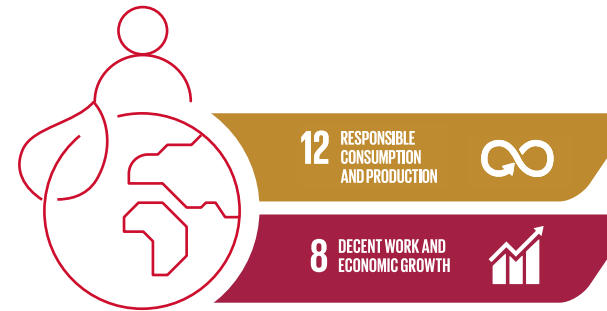
environmental policy

-  operate from sustainable buildings with world-class operations
-  increase energy efficiency and reduce CO₂ emissions
-  reduce water consumption
-  reduce waste and hazardous substances
-  reduce and more efficient use of raw materials
-  perform LCAs and work towards a circular economy
-  travel consciously, limiting downstream and upstream transport
-  enhance commitments in our supply chains

committed to be net zero carbon in 2050 or earlier

Aalberts is committed to be net zero carbon by 2050, or earlier. In line with our material topics presented in our materiality matrix on page 29, we measure, manage and monitor energy use, CO₂ emissions and energy and CO₂ intensity. It is Aalberts' objective to decrease its CO₂ intensity with 30% by 2026, taking 2018 as a base year. Some business teams have calculated their total carbon footprint in 2022 and with several other business teams we have started measuring material categories of our scope 3 emissions, like purchased goods and waste. As soon as we have good insight into scope 3 measurement and performance at group level, we will make further disclosures on scope 3.

Sustainable entrepreneurship and the opportunities and risks of climate change are regularly on the agenda of the Management Board, the Executive Team, the business teams leadership and the head office leadership team of Aalberts. Opportunities and risks are included in the innovation roadmaps of the various business teams to create technological innovation with sustainable impact. Sustainable entrepreneurship plays a role in co-development with customers and adaptation to fast-changing circumstances and addresses the transitional risks of climate change. Social and environmental performance, innovation and governance are a recurring topic on the agenda for the annual strategy meetings of the business teams. The strategic long-term improvement plans related to these topics are discussed with the Management Board and head office leadership. Sustainable entrepreneurship, including



the Aalberts commitments and objectives, is integrated in the strategy Aalberts 'accelerates unique positioning'.

Sustainable entrepreneurship and social and environmental performance are embedded in our HSR & sustainability network, driving health & safety, risk and sustainability performance. The network is chaired by the CEO and the director sustainable entrepreneurship. Each business team is represented by its COO or equivalent position.

All business teams have developed a long-term strategic HSR & sustainability improvement plan, including clear targets per business team. The improvement plans must cover the social and environmental Aalberts key performance indicators. Performance and progress of the sustainability improvement plans are monitored via quarterly HSR & sustainability meetings throughout the year and more frequently where necessary. Best practices, such as energy savings by installing power quality systems or scope 3 measurement and calculations, are shared throughout the businesses via webinars and through other means. Ongoing interactions with and between the group companies enable fast-learning and adaptation.

Risk management is included in the HSR & sustainability improvement plans. Besides property and safety risks, physical climate risks related to extreme weather conditions to our operations are addressed. Our business teams evaluate these risks regularly in cooperation with our property risk insurer and follow

message of the CEO

about Aalberts

- our essence
- our way of value creation
- the Aalberts playing field
- the Aalberts playbook
- the Aalberts way
- Aalberts strategy & objectives
- our lean and effective structure
- innovation
- our people
- stakeholder dialogue
- sustainable entrepreneurship**

progress and performance

risk & governance

report of the Supervisory Board

financial statements 2022

supplementary information



up climate adaptation recommendations in this respect, such as implementing flood emergency plans in areas with flooding or heavy rainfall risk or roof securement in hurricane zones. In addition, physical climate change risks and climate adaptation measures are integrated in the business continuity plans of our business teams.

Most of our group companies have their environmental management systems certified in accordance with the ISO 14001 standard, while our German companies also have certification in accordance with the ISO 50001 standard. A few of our group companies conform their sustainable management behaviours to the ISO 26000 standard.

energy efficiency and CO₂ reduction

Energy use, energy intensity, CO₂ emissions and CO₂ intensity are KPIs for all our sites and locations. Energy and CO₂ efficiency action plans are integrated in the sustainability improvement plans of the business teams covering all locations of Aalberts. Where applicable, those energy efficiency plans are in line with the energy efficiency directive and requirements of ISO 14001 and ISO 50001 certifications. Action plans contain activities such as the roll-out of LED lighting, usage of residual heat for the heating or cooling of buildings, monitoring and reducing energy peaks and motion detector lights. As a result, increased energy efficiency has been realised at various group companies in 2022 and CO₂ intensity reduced.

Following our strategy, energy use and CO₂ emissions are part of our business decisions. This applies for medium-term investments, such as LED lightning and for long-term investments, such as equipment, solar panels or new sustainable buildings. This approach reduces both emissions and energy costs. Considering the worldwide transition to a carbon neutral economy, related legislation and (future) CO₂ taxes in the countries we operate, reducing CO₂ is also important from a risk perspective.

We stimulate increasing the use of renewable energy, but believe that the most sustainable long-term solution for our planet and our company is energy efficiency. We focus on working as energy efficient as possible, by improving processes and looking for new energy efficient solutions. The group companies work towards targets set for their business team, enabling us to reduce our CO₂ emissions in line with the Paris Agreement.

reduce water consumption



Due to climate change, droughts have become more extreme and unpredictable, which may lead to water becoming a scarce resource in certain areas causing risk for society. Although Aalberts' operations do not require significant amounts of water for production or processing, we can play a role in mitigating this risk by optimising water management in such areas. With help of the WRI Aqueduct tool, we have assessed our operational sites on water withdrawal availability. Approximately 20% of our operational sites is either located in 'high' or 'extremely high' water stressed regions. The analysis enables Aalberts to proactively act

on the risks related to water-stressed areas which is part of business continuity management.

Aalberts seeks to promote responsible use of water throughout the company, efficient water management is a KPI for all our operational locations. Our water management policy focuses on reducing water withdrawal, increasing water recycling and increasing water treatment where possible. These measures contribute to reducing our water consumption intensity.

For instance, one way to increase our water recycling is through the installation of closed-loop water systems for cooling processes. This also prevents the discharge of legionella and avoids treatment of water with chemicals. These closed water circuits save up to 80% in water use. In Europe we have several locations with a closed water circuit and this number will increase in the coming years. Another example is the use and recycling of rainwater for use in CNC production and other internal processes.

water management policy

 reduce water withdrawal reduce use of third party, surface and ground water for sanitation and production processes	 increase water recycling install closed-loop water systems, reuse treated wastewater and rainwater	 increase water treatment discharge purified process water to the water cycle
---	---	---

committed to reducing our water consumption intensity

message of the CEO

about Aalberts

- our essence
- our way of value creation
- the Aalberts playing field
- the Aalberts playbook
- the Aalberts way
- Aalberts strategy & objectives
- our lean and effective structure
- innovation
- our people
- stakeholder dialogue
- sustainable entrepreneurship

progress and performance

risk & governance

report of the Supervisory Board

financial statements 2022

supplementary information

To minimise our impact, we remove solids, pollutants and organic matter from the water before it is discharged back to the source. This way, the water withdrawn holds the same or a higher level of water quality before it enters back into the water cycle. Particularly in water-stressed regions, there is a high focus on responsible use of water and there are many initiatives in place for water recycling and treatment to mitigate risks, like own water treatments stations.

reduce waste and hazardous substances

Aalberts is committed to continuously improving its waste management throughout the lifecycle to minimise its adverse impact on the environment. Monitoring the generation of waste by following the flow of materials and products throughout the production process helps to understand the flow of waste within the organisation. An overview of this waste flow and its causes, helps identifying opportunities for waste prevention and for adopting circularity measures. Waste flows are mapped at production and service locations and waste reduction programmes are in place and addressed in the sustainability improvement plans prepared by the business teams. Aalberts' focus is to reduce waste and to reuse and recycle as much as possible, so minimum waste ends up in incineration or landfill.

At our production locations scrap, for example brass, is separated and sent to a recycling company or melted down in our own foundries as a raw material for reuse in our production process. For some of our processes chemical use is unavoidable. Where applicable, action plans for reduction or elimination of hazardous substances, such as CMR substances are in place. We develop and apply alternatives for hazardous substances, for example IVD coatings as substitute for chrome and cadmium coatings.

reduce and more efficient use of raw materials

As a manufacturing company we are aware of the use of natural resources, such as raw materials, and strive to use these as efficient as possible. Starting at the design

phase, where we assess how to use raw material smart and efficient and the effect of raw materials on our scope 3 CO₂ footprint. This may lead to the use of other (recycled) materials. We believe in sustainable sourcing and transport of raw materials to minimise our carbon footprint. To further reduce production wastage, we use recycled and/or recyclable materials wherever we can and responsibly source high-quality materials that enhance the life cycle of the system, reducing the need for replacements.

In order to monitor and manage the efficient use of raw materials and waste streams from an Aalberts level, we started pilots for gathering raw materials and waste data on an aggregate level with several of our business teams in 2022. We will continue this in 2023 and will use this data as a basis for the calculation of the impact of raw materials and waste on our scope 3 emissions.

LCAs and circular economy

Our aim is to provide high-quality technologies with a minimum of natural resources and a responsible end of life. We see the circular economy as an opportunity and continued our projects to develop more products and technologies with a circular design. Life cycle assessments (LCAs) are performed for many of our products in accordance with standardised and internationally recognised methods (ISO 14040 and ISO 14044 standards) and by using professional programmes and data. The LCAs provide valuable reliable data about the environmental footprint of our products enabling us to make the right choices for material use. Upstream and downstream transport is taken into account and enhances the trend of reshoring. We use the data to innovate and realise further (environmental) savings. We also make the data accessible to our customers, so they can use it to substantiate their product choices. In 2022, we organised a global webinar on LCAs and facilitated the exchange of best practices on performing these LCAs via the HSR & sustainability network. In addition, a start has been made with performing circular design analyses for our products leading to a circular design strategy for many product types.

reduce packaging

Packaging is part of the LCAs performed and a focus point in the sustainability improvement plans of the business teams where it is a material topic. Many projects are initiated to reduce, replace or eliminate packaging. Think of more eco-friendly packaging such as cardboard, biodegradable foil and plastics, carton & pet tape, removing or using a smaller foil or bag, or the replacement of user manuals by QR codes.

travel consciously

We monitor business travel and make more sustainable choices. Based on our experiences in the past two years, we found a balance in traveling and choosing for alternatives online. For example, with video-meetings or using augmented reality to train colleagues overseas. For employees commuting, we stimulate the choice for sustainable cars and train and bike as a preferred choice.

biodiversity

A responsible way of doing business includes an awareness of our surroundings. Healthy ecosystems and biodiversity are a prerequisite for a clean future. Approximately 10% of our operational sites are in a 1-kilometer radius proximity of a Key Biodiversity Area, according to the Integrated Biodiversity Assessment Tool (IBAT). Although the biodiversity impact of our sites is limited, Aalberts seeks to mitigate the risk of biodiversity loss by reducing energy and CO₂ emissions and the use of natural resources such as raw materials and water. For new locations we strive to actively work with the natural environment around the buildings to create space around the buildings where the local plant and animal could thrive. For example at our location in Almere where we have several green spaces and biodiversity friendly initiatives like a sedum roof, insect hotels and kestrel boxes. Aalberts did not receive any fines or sanctions related to environmental issues in 2022.

message of the CEO

about Aalberts

our essence

our way of value creation

the Aalberts playing field

the Aalberts playbook

the Aalberts way

Aalberts strategy & objectives

our lean and effective structure

innovation

our people

stakeholder dialogue

sustainable entrepreneurship

progress and performance

risk & governance

report of the Supervisory Board

financial statements 2022

supplementary information

