

Envac's higher purpose

We enable smart, sustainable communities and drive the circular economy by redefining how society thinks of waste – today and for future generations.

We call this our higher purpose.

Our Vision

To create smarter cities, improve quality of life today and help secure a greener planet for future generations.

Our Mission

Combining innovation and experience, we create and implement clean, clever and resource-efficient waste handling technologies, providing our customers with game-changing solutions for sustainability and quality of life.

Learn how our products support our higher purpose

Our four Business Strategy Topics highlight how our systems minimise environmental impact, promote cost efficiency, add value for building owners, and promote user safety and satisfaction.



Our Business Strategy Topics



Best environmental performance

We aim to inspire, motivate and lead our customers into a greener tomorrow.

This is driven with a focus on:

- Innovation
- Resource efficiency
- Partnerships



Cost efficiency

We deliver the most cost-efficient waste collection systems for cities.

This is possible through:

- Smarter logistics & waste collection solutions
- Energy efficiency



Added value

We offer game-changing pneumatic waste collection solutions that create added value for building owners and developers around the world.

This is possible through:

- Space saving
- Increased liveability value
- Increasing property value
- Empowering the circular economy



Minimise environmental impact

We provide safe and user-friendly systems for end users.

This is possible through:

- Availability, accessibility and ease of use
- Safe, clean & hygienic usage
- Safer living areas



The best environmental performance

We aim to inspire, motivate and lead our customers into a greener tomorrow.

Minimise environmental impact

Management approach

Our solutions contribute to more sustainable urban development by enabling highly efficient waste management systems. At the same time, we understand that our solutions have a negative environmental impact through the energy and resources they use. We work continuously to further reduce our environmental impact by developing even more energy efficient solutions and by reducing the impact of our own operations.

We want Envac customers to know that they have chosen the best waste collection solution on the market from an environmental perspective.

How we do it

Our digital solutions optimise energy use

The Envac Automation Platform (EAP) is an Artificial Intelligence platform that enables pneumatic waste collection systems to learn and optimise over time.

In 2021, we continued to install and upgrade existing customer systems with the latest third generation of EAP (EAP3). We launched 23 new EAP3 systems in 2021 and by the end of the year we had a total of 53 systems running on EAP3 around the world.

Digitalisation

Our digital tool ReFlow increases recycling rates and supports broader municipality sustainability objectives. ReFlow also combines with EAP3 to use data from the platform to further optimise energy through Artificial Intelligence.

[Read more in our Case Story about Envac ReFlow](#)



Long-term experience and expertise

Our long experience of pneumatic waste collection systems has given us the right expertise to always improve and develop our customer installations to decrease energy use. We have decreased energy use by 39% since 2015 at our customer site in León, Spain, by using our expertise and optimising the operation of the facility.

[Read more in our Case Story about León](#)



By understanding the need for retrofitting and installing a business intelligence system at Roosevelt Island in New York City, we managed to decrease energy consumption by 67% between 2018 and 2021 in a system that is over 50 years old.

[Read more in our Case Story about Roosevelt Island](#)



Reduced need for heavy traffic

Our pneumatic waste collection solution reduces the total mileage driven by waste collection trucks. Less fuel use and the number of trucks needed to collect waste reduces CO2 emissions, environmental impact and financial costs. In the Majadahonda municipality in Spain, Envac's system has reduced the amount of truck kilometres by over 90%.

[Read more in our Case Story about Majadahonda](#)



Optimising energy efficiency

We proactively work to promote energy efficiency – both at our customer sites and within our own operations.

In 2021, we connected our internal resource efficiency targets within Envac Scandinavia to our total revenue. Our company targets were broken down to department targets to focus on areas where we can have the greatest positive effect. One example was our service department that launched an employee-driven target of fuel efficiency per tonne of collected waste, which resulted in a 15% decrease during the year.

In 2022 and beyond, we will increasingly take a global approach on energy efficiency at our customer sites and our internal operations.

Going forward

In 2021, our Group Executive Board (GEB) set ambitious energy efficiency targets – both at our customer sites as well as striving to make our internal operations CO2 neutral by 2030.

In 2022, all Envac regions will start to develop procedures to collect energy use data, and regions that already collect energy data available will start working on CO2 reduction activities with a target to reduce CO2 by 2% in 2022. Our employee awareness programme will be integrated into our global work.

We are already measuring kWh/tonne at selected customer sites globally, and we need to improve the focus on energy efficiency activities at these sites. In 2021, we measured an average of 265 kWh/tonne at these sites. We will continue to add sites that measure energy efficiency with a target to achieve 100 kWh/tonne on average by 2030. This will require us to continue our hands-on approach and to use our expertise to further optimise our technology.

In 2021, we clarified and updated our R&D processes to always include sustainability topics when developing new or updating existing products.



Planned action to further minimise environmental impact

Target	Completed activities	Planned activities
<100kWh/tonne of waste collected at customer sites by 2030.	R&D process updated to promote environmental aspects when developing new products.	<p>Implement concept of energy management plans at customer sites. Develop in 2022 Launch in 2023</p>
CO2 Neutral operations by 2030	Locally implemented -renewable sources of electricity at customer sites.	<p>Develop data collection process of energy use of internal operations Develop in 2022 Launch in 2023</p> <p>Report on CO2 emissions throughout the entire value chain Scope 2 & 3 reporting completed for reporting of year 2024</p>
<p>50% of all new Envac installations shall have ReFlow installed by 2023</p> <p>90% of all upgraded Envac installations shall have ReFlow installed by 2027</p>	Implementation of ReFlow	<p>Full release on ReFlow End of 2022</p>



The lowest operational costs for cities

We deliver the most cost-efficient waste collection systems for cities.

Cost efficiency

Management approach

Our automated waste collection systems provide customers with the most cost-efficient waste collection solutions on the market. We help customers to reduce their waste collection costs by requiring less waste collection trucks, labour and vehicle fuel costs.

Our systems provide additional opportunities to reduce other costs for cities that are indirect benefits of choosing our system, such as by freeing up more space for public amenities, and reducing property insurance premiums and pest control costs.

Reducing costs related to managing hospital linen and waste

Waste management and collection in hospitals are challenging due to the different waste streams and logistical difficulties in the hospital setting. But these are challenges that our hospital segment provides solutions for in the form of pneumatic waste collection systems for waste and used linen.

In recent years, we have also developed an automated collection system for infectious waste, which was launched in 2021 and is being installed in a new hospital in France. The solution will solve the complexity of handling infectious waste and meeting all the related regulations. It also includes a built-in solution that converts the hazardous waste into non-hazardous waste on site – to reduce costs, save hospital space and decrease labour costs. The return on investment is calculated to be 3-5 years compared to conventional waste management systems.

High-quality and resilient waste management infrastructure

Unlike traditional waste collection solutions that are dependent on vehicle access in residential streets, automated waste collection systems are not affected by weather conditions as they transport waste underground in pipes. For example, our waste collection system on Roosevelt Island in the US has been running since 1975 and was fully operational during the heavy snowstorm in 2010 and hurricane Sandy in 2012.

[Read more in our Case Story about Roosevelt Island](#)



Going digital to lower total cost of ownership

Envac ReFlow is a digital solution that reduces costs for customers and further improves their waste management to meet wider sustainability objectives.

[Read more in our Case Story about Envac ReFlow](#)



Going forward

Our products promote cost efficiency for our customers – not only directly in terms of the total cost of ownership of their waste collection system, but also indirectly through overall cost efficiency for an organisation. For example, indirect costs can be significantly reduced for waste, linen and infectious waste collection logistics.

We constantly seek to further develop and improve our products and services to provide even more cost-efficient solutions for cities and businesses using smart solutions for waste collection. This will help us to expand our global footprint and bring cost-efficient waste collection solutions to more cities around the world.



Planned action to further improve cost efficiency

Target

Completed activities

Planned activities

50% of all new Envac installations shall have ReFlow installed by 2023.

90% of all upgraded Envac installations shall have ReFlow installed by 2027.

Implementation of ReFlow.

Strengthen the cost efficiency message & promote independent studies on cost efficiency.

Evaluate findings from the student thesis in 2022.

Develop cost efficiency data collection.

Evaluate findings from the student thesis in 2022.

Full release of ReFlow.

End of 2022.



The happiest users in the waste collection industry

We provide safe and user-friendly systems for end users.

Safe & user friendly systems

Management approach

Envac pneumatic waste collection systems offer high user availability with easy access and user friendliness. Our systems contribute to a safer living area for users and are clean and hygienic while keeping vermin away.

How we do it

Less heavy traffic – Contributing to safer and liveable areas and preserving historic cities

In some cases, Envac systems have helped to preserve the aesthetic value and traditional charm of historic cities – including urban areas with narrow streets that hinder traditional waste collection. For example, our system was installed in León's old town to provide an efficient waste collection system while preserving its architectural and historic value.

Read more in our Case Story about León



Safe waste management in hospitals

Envac's pneumatic waste collection systems are perfectly suited to managing waste and used linen in hospitals to protect the safety of hospital personnel, patients and visitors while reducing costs.

In 2021, we introduced a new solution to collect infectious waste from hospitals, which can be combined with our existing solutions to collect waste and used linen. The infectious waste collection solution reduces the manual handling of potentially harmful waste and converts it into non-hazardous waste before it is transported from the hospital.

Read more in our Case Story about Infectious waste collection



Read more in our Case Story about Rennes Hospital



Improving recycling rates

Envac pneumatic waste collection systems promote increased recycling rates in residential areas and the wider municipality. By collecting multiple waste fractions, our systems make it easy for the end user to improve their individual recycling rate. Many municipalities in the world have made it mandatory for newly developed areas to have a pneumatic waste collection system.

In Majadahonda in Spain, the municipality has made it mandatory to connect newly developed neighbourhoods to the local pneumatic waste collection system to improve recycling and meet the EU waste directive.

Read more in our Case Story about Majadahonda



To make it even easier to communicate with end users and help them to optimally manage their waste, Envac introduced its digital solution ReFlow in 2021.

Read more in our Case Story about Envac ReFlow



Going forward

We value the safety and satisfaction of our end users. Our digital solution ReFlow takes our end user engagement to the next level – to enable them to improve their waste management awareness, motivation and ultimately their recycling rate.

Our solution for infectious waste will help us to strengthen our hospital offering and further increase the safety of hospital personnel, patients and visitors.



Planned action to further increase safe & user friendliness

Target	Completed activities	Planned activities
<p>50% of all new Envac installations shall have ReFlow installed by 2023.</p> <p>90% of all upgraded Envac installations shall have ReFlow installed by 2027.</p>	<p>Implementation of ReFlow.</p>	<p>Full release of ReFlow. End of year 2022.</p>
<p>Increase safety in handling hazardous waste and linen in hospital environments.</p>	<p>Launch of Infectious Waste Collection system.</p>	<p>Finalise first Infectious Waste Collection system installation. To be completed 2023.</p>



Real value for building owners and developers

We offer game-changing pneumatic waste collection solutions that create added value for building owners and developers around the world.

Added value

Management approach

As the global urban population continues to grow, we are faced with increasing liveability challenges in cities around the world. Envac's pneumatic waste collection systems can be a significant part of the solution that add value for building owners and developers by promoting more efficient and cleaner waste collection solutions that require less space.

How we do it

By 2050, urbanisation around the world will have increased by 40%. Around 2.5 billion more people will live in urban areas that will generate 50% more waste than they do today.

This will involve major challenges for cities, building owners and city developers. Finding more urban space and the solutions to decrease traffic will be essential.

Urban waste management goes digital with ReFlow

Having pioneered waste management solutions for six decades, Envac ReFlow is our latest game changer. ReFlow is a digital communication tool that allows communication directly with each resident served by an Envac system and provides them with feedback on their waste management habits.

The solution promotes resident commitment to recycling, and contributes towards the circular economy by reducing waste and connecting people to be part of the shared economy. It also helps to monitor and reduce neighbourhood greenhouse gas emissions.

Read more in our [Case Story about Envac ReFlow](#)



Freeing up valuable urban space

An Envac automated waste collection system requires less space – both within and outside of the terminal for waste handling. This leads to freed up space that a building owner or developer can use for additional development space or other value-added uses.

The saved space outside can be used to create more green areas, value-adding businesses or services that improve the quality of life for residents. This adds value for building owners, city developers and local residents.

Going forward

Envac solutions add value to a neighbourhood, such as by creating opportunities for more green spaces, and additional amenities or additional residential units. Our products also contribute to less noise, odours, vermin and heavy traffic in residential areas – all of which improve quality of life for residents and visitors to the neighbourhood.

As such added value can be difficult to quantify and clearly communicate, we are collaborating with an organisation that coordinates students and their theses. In 2021, we took the decision to have two students work together on their bachelor thesis on the topic. The work began in 2022 and will help guide our work with added value in the coming years.



Planned action to continue to add value and increase quality of life

Target	Completed activities	Planned activities
<p>50% of all new Envac installations shall have ReFlow installed by 2023.</p> <p>90% of all upgraded Envac installations shall have ReFlow installed by 2027.</p>	<p>Implementation of ReFlow.</p> <p>Decision to cooperate with student organisation on the topic.</p>	<p>Full release of ReFlow. End of 2022</p> <p>Develop recycling rate efficiency data collection. To be completed in 2024.</p> <p>Promote independent studies on added value. Evaluate findings from the student thesis in 2022.</p>
<p>Promote quality of life by increasing the number of users of Envac systems by 25% by 2025.</p>	<p>Implementation of ReFlow.</p> <p>Decision to cooperate with student organisation on the topic.</p>	<p>Full release of ReFlow. End of 2022</p> <p>Develop recycling rate efficiency data collection. To be completed in 2024.</p> <p>Promote independent studies on added value. Evaluate findings from the student thesis in 2022.</p>