

Sustainability Report 2023

Smart automated waste collection for all environments

www.envacgroup.com

ENVAC

Table of Contents

A Reliable Partner for the Future 4

About Envac 6

Envac's Solution 8

Addressing Urban Waste for a Sustainable Future 9

Envac's Sustainability Strategy. 10

Quality of Life 11

Minimise Emission 14

Resource Circularity 16

Business Responsibility 20

Sustainable Development Goals 24

Our Value Chain. 26

Continuously Innovating the Value Chain 27

Envac's Sustainability Risks 30

CSRD and ESRS Implementation Process. 32

The DMA Model. 33

Reducing Our Carbon Footprint 35

Performance Indicators. 37

Sources. 39



Outdoor inlet in London, England



The Past Year

6.6
MILLION DAILY USERS

99.3%
EMPLOYEES SIGNED CODE OF CONDUCT

87%
KEY SUPPLIERS SIGNED SUPPLIER CODE OF CONDUCT

2,500
NEW USERS OF REFLOW

GENDER DISTRIBUTION IN MANAGEMENT TEAM

WOMEN	MEN
29%	**71%**

A Reliable Partner for the Future

With a growing business comes the duty to operate sustainably. At Envac, we take this responsibility seriously, offering innovative solutions that empower stakeholders to make environmentally sound decisions in waste management. Our goal is to be a reliable partner in sustainability for future generations.

"In 2023, we faced numerous challenges, from global economic instability and political turmoil to rising international tensions' states Joakim Karlsson. "Despite these hurdles, we maintained a robust business performance, enhancing both our turnover and market share worldwide."

"Sustainability is increasingly crucial due to enhanced legal reporting requirements and evolving customer expectations," explains Eva Granljung. "Envac is gearing up to meet these new demands, particularly the disclosure of non-financial data mandated by the Corporate Sustainability Reporting Directive (CSRD)." As Envac is part of the Stena AB Group, the formal CSRD reporting in accordance with the ESRS standards will be consolidated into the Stena reporting, which will be effective for the financial year of 2025. Stena's ongoing preparations include training, double materiality assessment, and setting up procedures and controls for adequate data collection.

Envac is securing its position as an environmental technology leader in the market by following and tracking the sustainability impact in a way similar to financial control. Ready to evolve into a data-driven business for the future, complying with the positive change possibilities that support the new industry standards. This financial and non-financial reporting approach will enable Envac to meet regulatory requirements and make more informed strategic decisions, thus improving overall business performance and sustainability.

Joakim Karlsson continues, "Our waste collection solutions are tailored to meet the unique challenges of urban areas. By utilizing the latest technology, we enable these cities to build safe, clean, sustainable environments that support their eco-friendly vision. With continuous research and development in waste management, we ensure that millions can enjoy a healthier and more liveable urban environment."



Joakim Karlsson, Chief Executive Officer, Envac Group



Eva Granljung, Chief Financial Officer, Envac Group


Stopp i sopsugen?




09:41
Your Waste
HOUSEHOLD
BUILDING
Residual waste
Household
AWESOME!
So far this month you have thrown away 5.6 kg residual waste, which is about 5 trash bags.
1.2 kg
less than this time last month
10%
less than the average in your area
HOW TO IMPROVE
Remember your waste
Your Waste
Stats
Guide
Account




WELCOME






R91
R93
R89
R88



About Envac

Envac has pioneered the development of automated waste collection systems for over fifty years, revolutionizing waste management across multiple sectors. Our integrated approach includes specialized waste collection systems for smart cities, enhancing urban living with cleaner and quieter environments through efficient underground waste transport. We also deliver targeted solutions for airports and provide waste management services tailored for healthcare facilities, including the safe disposal of soiled linen, residual, and infectious waste.

Our commitment to innovation extends to optical sorting technologies that significantly improve material recovery and recycling rates. Additionally, Envac's ReFlow platform offers a digital solution for resource circularity, optimizing waste logistics with smart, data-driven insights.

Envac is a group comprising five business regions that operates across 20 countries with 35 local offices to deliver solutions globally with, and a part of the Stena AB Group.

Envac is organised in five business regions:

- Envac China, South East Asia & India
- Envac EMEA
- Envac North Europe
- Envac North America
- Envac South Korea & Australia

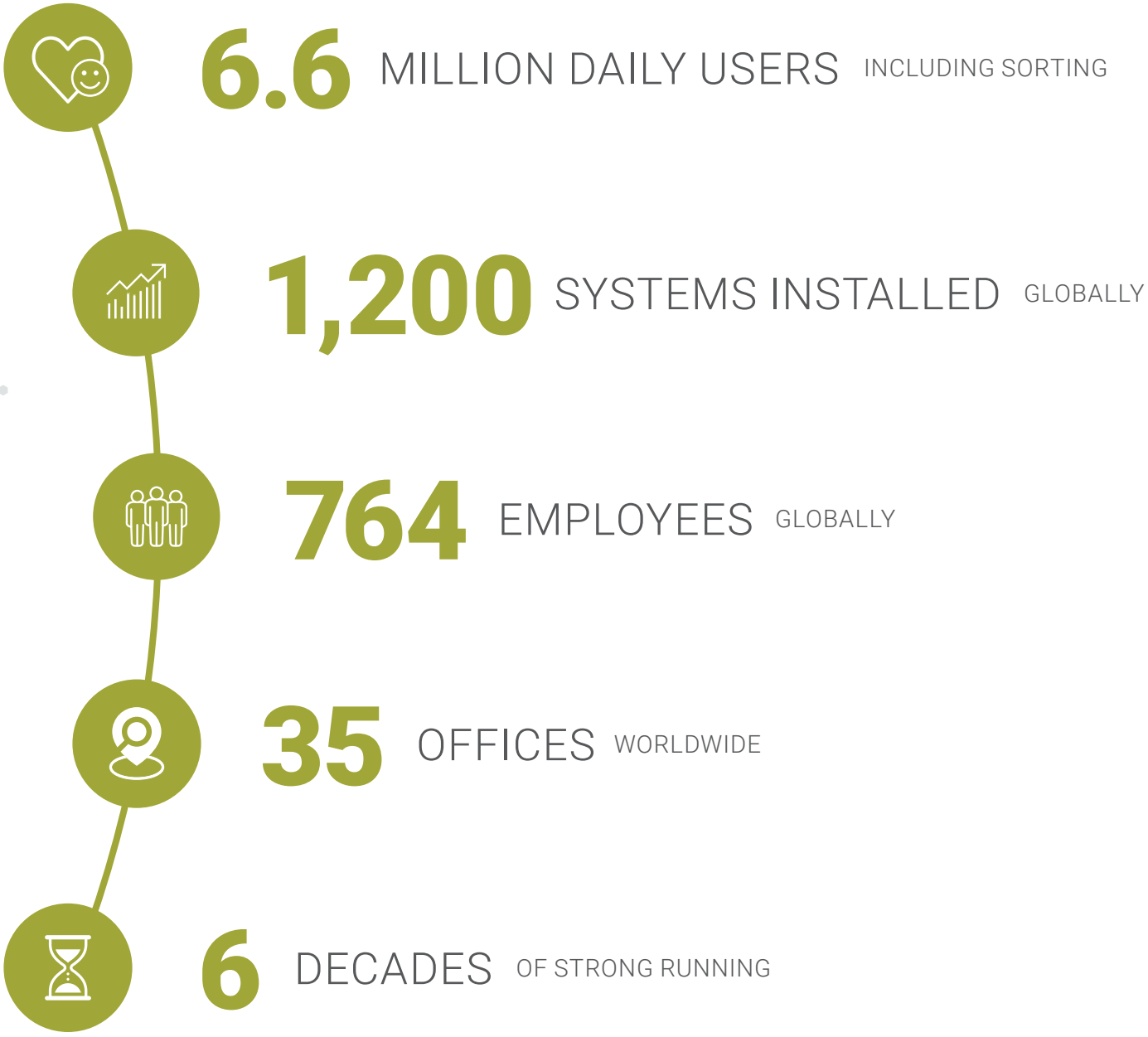


MISSION

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.

VISION

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



Envac's Solutions

ENABLES SUSTAINABLE URBAN ENVIRONMENTS BY:

- Automated waste collection system for smart city development
- Waste handling for healthcare
  - soiled linen
  - residual
  - infectious waste
- Waste handling for airports
- Optical sorting
- ReFlow: An interactive and educational platform for enhanced circularity
- Kitchen waste collection system



Inlets in Fornebu, Norway

Addressing Urban Waste Challenges for a Sustainable Future

As cities continue to expand, the challenges faced by traditional waste management systems become increasingly complex. Rapid urbanization worsens issues such as limited space for waste facilities and heavy traffic, which hinders efficient waste collection and contributes to higher emissions from diesel refuse trucks. In the US, each of these trucks adds roughly 100 metric tons of carbon emissions annually, highlighting a significant environmental impact.

Moreover, the inefficiencies in recycling processes are prominent, with 91% of plastic waste not being recycled each year, contributing to environmental degradation. Additionally, the management of hazardous waste, such as the 15% of healthcare waste that is hazardous, requires meticulous handling to prevent health risks, further straining existing waste management infrastructure.

The manual handling of waste also poses a significant risk to workers, with 32% of non-fatal injuries in the UK waste industry attributed to manual processes. This issue points to the urgent need for improvements in safety protocols and systems. Envacs automated waste collection system reduces manual handling in waste providing a safe working environment for the employees.

These challenges underscore the pressing need for rethinking waste management strategies in urban environments to address the mounting pressures of the increased waste generation, safety concerns, and environmental impacts. In this context, Envac's automated waste collection systems can play a key role. By enhancing efficiency, reducing emissions, and improving safety and recycling rates, Envac can help mitigate these issues, enabling not only sustainability but also a higher quality of life in urban settings.

Impact Areas for Envac

GLOBAL DATA



15 %
of healthcare waste is hazardous

91 %
of plastic waste is not recycled





1 Billion
meals of edible food is wasted every day

100 Metric Tons
carbon emissions per diesel refuse truck in US per year





32 %
waste industry non-fatal lost time injuries in the UK are due to manual handling

IT IS TIME TO REDUCE THE NEGATIVE IMPACT AND LOOK AT WASTE HANDLING AS A PART OF A SUSTAINABLE URBAN DEVELOPMENT

Envac's Sustainability Strategy

Automated waste collection should be an integrated infrastructural solution for the future urban sustainable city. Envac actualizes this by providing more than just waste collection solutions; we address and solve the complex challenges associated with traditional waste handling in urban environments. Our approach not only streamlines waste management but also significantly contributes to the broader goals of urban sustainability.

ENVAC FOCUSES ON ADDING VALUE TO FOUR TOPICS TO REACH THE STRATEGY:

- Increasing the **Quality of Life**
- **Minimise Emissions** from waste handling
- Driving **Resource Circularity**:
  Empowering behavioural change through fractioning, optical sorting, and ReFlow
- Upholding our **Business Responsibility**
  as a reliable and ethical partner



Envac optical sorting illustration

Quality of Life

Envac's waste collection system is highly efficient and cost-effective, requiring minimal maintenance and reducing the need for landfill sites. The system operates silently and out of sight, ensuring the urban landscape remains clean and free of unsightly waste disposal facilities.

SUPPORTING SMART CITY DEVELOPMENT

Clean and vermin free cities

- Contained waste handling eliminates the possibility of vermin and ensuring a clean and hygienic environment.

Reduced noise

- Single point of waste collection minimises the need for garbage trucks to drive in the city centre.

Safe cities

- Reducing the risk of accidents caused by garbage collection trucks in highly dense areas.

Space saving & green areas

- The system frees up space in the city, which creates opportunities for more green areas and alternative higher value use.

Proof of Concept

CITY OF TRONDHEIM

Trondheim, a city in Norway, has gained recognition for its practical and eco-friendly waste management practices that have significantly reduced the amount of waste collected in landfills. In Trondheim, a waste collection system powered by Envac sorts waste into different categories. Envac handles 8% of the city's total waste collection. This innovative underground system has been adopted to promote efficient space utilization for residential units in the face of rapid urbanization. The city's approach is to improve the existing infrastructure rather than develop new ones. Manual waste collection in mixed-use spaces is not sustainable; hence, there is a need for an innovative waste collection plan for sustainable urban development.

Trondheim's sustainable urban development planning requires safety, efficiency, and space-saving measures. With an innovative waste collection plan in place, an automatic waste sorting system will support their primary target by keeping large trucks from residential units, saving available space, increasing safety, and decreasing environmental impact. Other added value from the system is hygiene, reduced noise, pollution and odor control.



> ***In Norway, the least preferred solution is waste disposal in landfills. The most favored solution is to prevent waste generation and reuse and repair products. If waste is still generated, the key target is to recycle the materials.***
>
> Berge Holberg, Nåstad,
> Trondheim Municipality

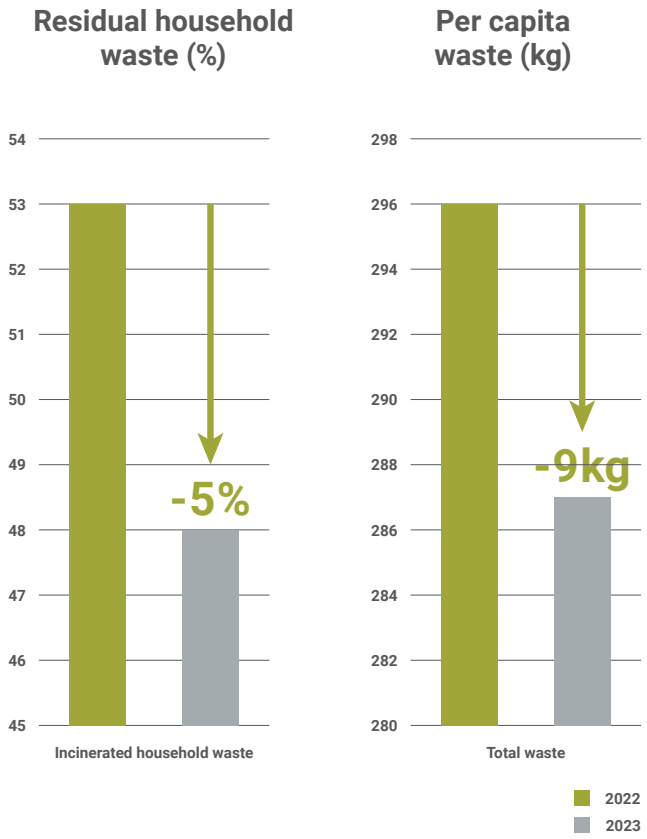
Envac system connected to the city

11 k
apartments connected, with over 24,000 in planning

30 %
total underground waste with almost 2,300 tonnes of residual waste collected approximately

4
fractions (plastic, paper, food & residual waste)

9
terminals and 15 upcoming terminals



Commitment towards sustainable development

- Residual waste is collected, incinerated for energy use in central heating.
- Paper and plastic waste are sorted out at an automated plant, paper is significantly recycled regionally. Producers handle the treatment of plastic and glass packaging waste.
- Food waste is processed into biofuel, liquid, and dry fertilizers. The biogas powers garbage trucks and public transport.
- In 2023, 48% of residual household waste was incinerated, a 5% improvement from 2022.
- The annual total waste generation has decreased, despite rapid urbanisation.
- Per capita waste production in Trondheim was 287kg in 2023, down from 296kg in 2022.
- Around 30% of Trondheim's total waste is collected via underground waste collection systems.

Envac inlets in Trondheim, Norway







AUTOMATED WASTE COLLECTION AT THE ST. OLAVS HOSPITAL

St. Olavs Hospital in Trondheim with its 206,600 square meters provides treatment to the population of Central Norway. Envac has installed an automated waste collection system that supports the hospitals strict requirements for hygiene, occupational health, and safety. With only one disposal inlet four different waste fractions (paper, confidential paper, residual, and plastic) can be collected in the underground pipe transportation system and are then automatically sorted into separate containers. The solution, also known as Sort-More even supports the waste collection for the nearby 20,000 square meter care home Øya Helsehus.

The system reduces the need for transport and eliminates odours and need for manual handling of waste bags or bins/containers.

The benefits of the visionary system for healthcare facilities include

- One point of collection of refuse and recyclables
- Automated underground transport of waste and recyclables to collection point
- Reduction of manual handling, energy consumption, and gas emissions
- Empowering recycling to reduce waste generation
- Improved safety, hygienic environment and, reduced risk of transmittable infections
- No need to transport waste in hospital hallways

St Olavs and the sort-more solution

120
inlets with touchscreen and sensors

1800
tonnes of waste per year

4
fractions (paper, confidential paper, residual, and plastic)

20
sort-more units collecting waste

The system is integrated into the hospital's infrastructure to enable efficient operation and service delivery to its patients with high accessibility and utilization. Installed high-quality components and preventive maintenance activities has contributed to its longevity as the system has been in operation since 2005.

Modernisation roadmap for the future-driven hospital

To make sure the lifecycle of the system is extended further with improved efficiency Envac has presented a modernisation plan:

1. Upgrade the control system to the latest version of the Envac Automation Platform to improve energy efficiency with approximately 15% and extend equipment and filter service interval with approximately 20%
2. With new advanced technology full efficiency in the collection process can optimise operations
3. Adding Food waste as a fraction to the existing system to contribute to food waste reduction

With data-driven waste handling and efficient data analysing methods, Envac's automated waste collection system will pave the way to identify operation areas of improvement using smart technology.



"The hospital is easier to maintain, clean and tidy. The waste management system is designed to expose no bacteria associated with the waste throughout the facility, resulting in no unpleasant odour in the hospital wards, corridors, or collection stations. The system can handle large volumes of waste, requiring less workforce for waste management."

Lars Nordvik
Facility Manager at St Olav Hospital

Envac terminal in the lower right building supporting St Olavs Hospital

Minimise Emission

Envac's waste collection system reduces emissions associated with waste handling by improving operational efficiency and optimising energy consumption through automation and sensor-driven technology, that can be controlled remotely. The level sensors work only when the system is at capacity, optimising space and ensuring that collection is done periodically. This reduces the need for traffic movement that causes emissions in the urban environment.

EMPOWERING CUSTOMERS TO MAKE SMART GREEN WASTE HANDLING DECISIONS

Operational Efficiency
- Seamless operations due to technology and preventive maintenance

Energy Efficiency
- Systematic running that prevents high-energy use and sensor-based design that uses the system during off-peak hours

Automation Design
- A customised configuration understands the specific needs of the smart establishment and provides a tailored solution

Less Traffic
- Waste collection vehicles from dense neighbourhoods disappear as there are organised collection stations connected underground

BENEFITS OF ENVAC'S SYSTEM AT EXPO PARK IN LISBON AFTER 25 YEARS OF SERVICE



214
TONNES OF CARBON EMISSIONS
IS PREVENTED IN 25 YEARS

15
TONNES OF NITROGEN OXIDE
IS PREVENTED IN 25 YEARS

53
TONNES OF CARBON MONOXIDE
IS PREVENTED IN 25 YEARS



240
THOUSAND TONNES OF WASTE
HAS BEEN COLLECTED

MINIMISE EMISSION IN PRACTICE: EXPO PARK, LISBON

As Envac's waste collection system celebrates its 25th anniversary 2023, it is worth noting the positive environmental outcomes it has yielded. The Expo Park system is a successful example of improving the quality of urban life while preserving the environment. The system has supported urban planning and management by eliminating heavy-duty collection vehicles and bulky waste storage containers on the streets.

Envac's waste collection system at Expo Park in Lisbon uses a vast network of pipes to transport waste from various locations to a central collection station. The system was implemented in 1998 as part of the infrastructure for Expo '98 and has since been expanded and modernised to accommodate the area's growing needs. The technology transports waste, eliminating the need for traditional garbage trucks to collect waste from individual bins. The system has proven benefits in the area, including reduced noise pollution due to waste trucks, cleaner streets, no open bins occupying space, creating nuisance, and overall improved hygiene.

It also reduces the carbon footprint typically associated with waste collection, eliminating the need for heavy fossil fuel-powered garbage trucks to travel through the area. Envac is in discussions with the municipality to utilise clean energy sources like solar energy from on-site photovoltaic panels. This would make the project a prime example of sustainable urban development.

WHAT IS CONNECTED?

Around 120,000 inhabitants. The residential apartments, offices, and the Vasco da Gama shopping centre are all connected to one of three underground waste transport systems. These systems are also linked to the railway station, bus, and metro terminal and can handle waste from cinemas and museums with 24/7 availability.



Envac's system has been in use for over 25 years at Expo Park, Lisbon

Resource Circularity

Envac's waste collection systems are designed to sort, collect, and reuse waste for various purposes, such as recycling and waste-to-energy, thereby reducing the load on landfills. Technology has proven to be highly efficient and has the potential to reduce the carbon footprint significantly.

Our digital solution, ReFlow, has been created to help individuals and municipalities manage waste more effectively while contributing to broader sustainability goals.

Envac's contribution to the circular economy is to empower end users to change their behaviour to reduce waste, increase reusability and increase recyclability.

ENABLING BEHAVIOURAL CHANGE

Envac ReFlow

Envac's digital solution educates, and guides end users to the right recycling and waste behaviour. The app gives the end users direct feedback on their recycling behaviour and compare it with other residents. Nudging is then used to improve the result going forward.

Envac Sorting

Envac enables end users to easily sort their waste into fractions using different coulored plastic bags to increase recyclability. The colours are sorted at a waste treatment facility to the respective fraction. Increasing the opportunities to reuse waste fractions as a resource to be used again. One example is food waste that is transformed into biofuel or biofertilizers.





Indoor inlet from H Firstier I Park in South Korea

FOOD WASTE: A GLOBAL CONCERN

Recent reports indicate that food waste remains a significant global issue, with millions of tons of food wasted annually. According to the UNEP FOOD WASTE INDEX REPORT 2024, as much as 158 million tonnes of edible food was wasted in households in 2022. In reality, it is likely to be much more than that, perhaps even double. The results indicate that 1.05 billion tonnes of food were wasted across the three sectors (household, food service and retail) considered in this report in 2022, equal to 132 kg per capita per year. Around 60% of this waste comes from households, 28% from food service, and 12% from retail.

	GLOBAL AVERAGE (KG/CAPITA/YEAR)	2022 TOTAL (MILLION TONNES)
Household	79	631
Food Service	36	290
Retail	17	131
Total	**132**	**1,052**

Proof of Concept

TACKLING FOOD WASTE: SOUTH KOREA'S SUCCESS STORY

South Korea's Successful Efforts to Tackle Food Waste: A Model for Other Countries to Follow

South Korea has made significant progress in tackling its food waste problem in recent years. In 2013, the country introduced a mandatory food waste recycling program, which requires households to separate their food waste from other types of garbage and dispose of it in designated bins. The waste is then collected and processed into biomass, compost or animal feed. The policy has effectively reduced the amount of food waste generated in the country. According to government data, the amount of food waste produced in South Korea fell by around 10% between 2013 and 2019. This has not only helped to reduce environmental pollution but also saved the country a significant amount of money that would have been spent on waste disposal. In addition to the mandatory recycling program, South Korea has introduced other policies to reduce food waste. For example, restaurants must charge customers for any uneaten food left on their plates to encourage people only to order what they can eat.

Looking to the future, South Korea has set an ambitious target to reduce its food waste by 50% by 2030. The government plans to invest in new technologies and infrastructure to help process food waste more efficiently. It also plans to work with businesses and consumers to raise awareness about the importance of reducing food waste and develop new policies to help achieve this goal. Overall, South Korea's food waste policy is an excellent example of how effective government action can help to address a considerable environmental problem. By continuing to invest in new technologies and policies, the country can build on its success and reduce food waste in the coming years.

Pay as you throw (PAYT)

South Korea has implemented a "pay as you throw" policy to address the growing issue of food waste. This policy and various measures ensure that almost 90% of discarded food is kept out of landfills and incinerators. Under this policy, household food waste is weighed using sensors in the AWCS inlet and disposed of based on the weight measured in kilograms. If a person accidentally disposes of plastic bags, the recycling plant's equipment sorts them out. People buy and use separate bags, commonly a 20-litre bag, for general waste. The local government sets the cost of the waste bags, which varies depending on the region. The policy encourages households to reduce food waste by making them more aware of the price and environmental impact of throwing away excess food. The information is processed on an individual/household basis, as the inlet is operated

using the RFID issued by the building management. In addition to the financial incentive, the government has introduced various education and awareness programs to promote better food management practices. This initiative is in cooperation with the Ministry of Environment, Korea.

Envac's Automatic Waste Collection System supporting Seoul's vision

- Weighing sensors installed in food waste inlets linked to individual/household RFID to reduce the amount of food waste.
- Real-time control and monitoring of waste collection through EAP is possible from a central location. For more information see page 36.
- Using inlets eliminates the possibility of overflowing waste, as seen in traditional waste collection systems.
- Waste is temporarily stored at the valve until a level sensor or a timed sequence controlled by EAP activates a collection cycle, optimising energy usage.
- User friendly, resilient system with long life cycle.

Behaviour change & environmental impact

- Under this policy, residents are charged for the amount of trash they generate, and the more waste they produce, the more they have to pay. This has led to a significant change in behaviour among South Koreans, who are now more conscious about their waste disposal habits.
- The PAYT policy has positively impacted the environment by reducing the amount of waste that ends up in landfills. Residents have become more aware of the amount of waste they generate, and many have started to recycle more.
- The policy has also led to developing a recycling industry in South Korea. As more people have started to recycle, businesses have emerged to collect and process recyclable materials.
- Food waste is effectively utilised to produce biomass, animal feed, or compost instead of discarded as mere waste.

Households across the globe generate around 79 kg or more of food waste per person. Compared to this, South Korea has successfully reduced food waste through its "pay as you throw" policy. On average, households in South Korea generate only 33 kg of food waste per person per year. This number drops to 25 kg approximately. when a food waste drying machine is installed.

PROJECT NAME	HOUSEHOLDS	INHABITANTS	TOTAL FOOD WASTE GENERATED (in kgs)	FOOD WASTE GENERATED (in kgs, per capita per year)
Xi project in Seoul	1,772	5,316	202,260	38
Raemian Riocent	475	1,425	67,355	47
Bangbae project in Seoul	758	2,274	27,759 **	12.2

***food waste drying machine is installed (not part of the Envac solution)*



Indoor inlet in South Korea accessed with a personal key card

Business Responsibility

Responsible business is the foundation of Envac's sustainability work and we aim to be a sustainable business partner, by conducting business responsibly and by working with our three business responsibility topics.

Envac is committed to doing business in a fair and ethical way and ensures that our suppliers follow our high-level business standards. Finally, Envac is dedicated to providing a safe working environment for its employees and value chain workers.

FOSTERING BUSINESS ETHICS AND SAFETY

Fair and ethical business

- Envac has a well-defined code of conduct, frequently communicated to all employees through training and by obtaining sign-off. Additionally, Envac has established a whistle-blowing system open to all stakeholders. Envac conducts regular internal audits to verify compliance with the code of conduct.

Supplier partnerships

- Envac has a supplier code of conduct that is signed by key suppliers. Supplier performance is regularly evaluated to ensure that our suppliers follow our business standards. Action plans are implemented to address non-compliance.

Occupational health & safety

- Envac promote good working conditions for everyone impacted by our solutions and operations – including our own employees, our customers and waste collection workers. Envac takes a proactive approach to prevent accidents related to our own operations and systems, with the goal of achieving zero accidents.



3D illustration of an Envac system in a healthcare environment with multiple fractions

Proof of Concept

ENVAC HELP MITIGATE RISKS IN MEDICAL WASTE HANDLING

15 %

OF THE TOTAL AMOUNT OF PRODUCED HEALTHCARE WASTE IS HAZARDOUS AND CAN BE INFECTIOUS, TOXIC OR RADIOACTIVE

11 kg

OF HAZARDOUS WASTE PER HOSPITAL BED PER DAY (KG/BED/DAY) PRODUCED BY HIGH-INCOME COUNTRIES

2 Million

MEDICAL PERSONNEL ARE EXPOSED TO PATHOGENS AS A RESULT OF THEIR DAILY WORK ROUTINES, GLOBALLY

5.2 Million

PEOPLE WORLDWIDE DIE EACH YEAR, INCLUDING 4 MILLION CHILDREN, DUE TO ILLNESSES CAUSED BY UNMANAGED MEDICAL WASTE

10^6 - 10^8 CFU*/100cm²

BACTERIAL LOADS OF FABRIC ON TEXTILES THAT ARE HEAVILY CONTAMINATED WITH POTENTIALLY INFECTIVE BODY SUBSTANCES

** Colony Forming Units, a measure used in microbiology to estimate the number of viable bacteria or fungal cells in a sample*

MANUAL TRANSPORT OF SOILED LINEN AND INFECTIOUS WASTE, WITHIN THE HEALTHCARE PREMISE, POSE A BIG THREAT



BUSINESS RESPONSIBILITY IN PRACTICE: SOILED LINEN IN HEALTHCARE

It's crucial to keep a safe distance when manually handling contaminated linen in healthcare settings to prevent the spread of harmful pathogens and microorganisms. Appropriate precautions and proper protective equipment are essential to minimise exposure risks. Implementing an automated linen handling system dramatically improves the safety of healthcare professionals and patients.

- Contaminated textiles and fabrics should be transported in bags via a sealed chute to avoid airborne microbial contaminants.
- Proper design, maintenance, and use of laundry chutes are necessary to prevent the laundry bag from spreading
- Maintaining laundry chutes under negative air pressure helps to stop the spread of microorganisms from one floor to another.
- Avoid tossing loose, contaminated laundry into chutes; ensure laundry bags are closed or secured to prevent contents from spilling out.

ENVAC'S SYSTEM PROCESS OVERVIEW

Same for Manual Collection

1 Soiled linen collection from all departments

Automatic Collection

2 Manual collection in bags with several separate inlets close to the workplace

3 Waste, infectious waste and laundry are disposed of directly in the inlets in close proximity to the ward

4 Automatic collection through concealed system to laundry and waste storage in the collection station

TRANSPORT, RECYCLING (further sorting)

RECOMMENDATIONS FOR IDEAL WASTE COLLECTION SYSTEM IN HEALTHCARE

- Install a full-vacuum system for general, linen and infectious waste.
- Use access-controlled, concealed inlets.
- Ensure negative air pressure in the inlets.
- By using double doors for security and high quality plastic bags for infectious waste enables the healthcare workers a safe waste management.
- No long intermediate storage of waste in inlet locks secure that there is no intermediate storage of waste in inlet locks.
- Continuous disinfection of inlets and regular disinfection of the piping system.

REDUCTION IN MANUAL HANDLING OF SOILED LINEN (ESTIMATIONS)

PROJECT NAME	TOTAL NUMBER OF BEDS	DAILY SOILED LINEN (TONNES)	REDUCED MANUAL HANDLING BY	ADDED VALUE
Beijing Chaoyang Hospital (East), China	1,000	3	65%	■ Saved energy consumption by nearly 40% ■ Linen's service life extension by approx. 20% ■ 300 sq meters space saved
Hospital General Universitario Santa Lucía, Cartagena, Spain	500	2.5	64%	■ Avoid visual/secondary pollution and risk of infection during waste collection ■ Reduce labor cost for waste collection ■ Energy and space saving ■ Increase efficiency of waste collection
Kunshan Eastern Medical Center, China	2,000	2.2	50%	
Hospital de la Santa Creu i Sant Pau, Barcelona, Spain	700	2.7	64%	
Sirio Libanes Hospital, Brazil	150	0.5	34%	

Total time used for sorting/handling soiled linen* + Time used for operation of linen collection system = Envac system time
Total time used for sorting/handling soiled linen* + Total number of beds x Time used for navigating soiled linen in hospital hallways, manually = Manual handling time

**Total collection time for sorting/handling soiled linen from beds (same in manual and Envac linen system)*

RISKS WITH MANUAL WASTE HANDLING

The management of waste presents a multifaceted challenge that not only impacts environmental sustainability but also poses a significant threat to human health and safety. As we delve into the complexities of waste management, addressing the often-overlooked aspect of manual waste handling and its negative impact. From the health risks faced by workers to the broader environmental and economic implications, understanding these threats is essential for developing comprehensive strategies that protect both individuals and our planet.

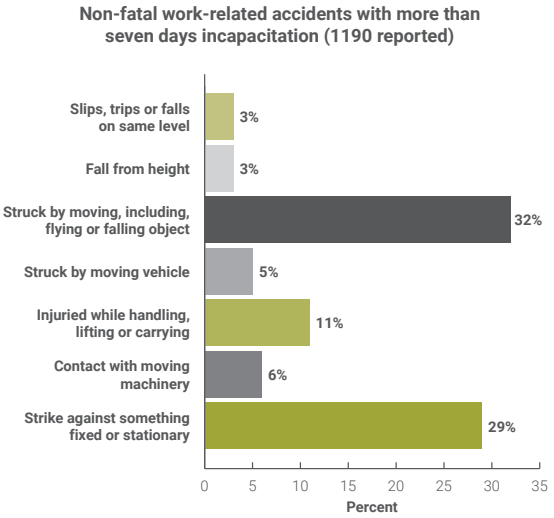
1. Health Risks to Workers: Individuals involved in manual waste handling are at risk of exposure to harmful substances and chemicals, leading to various health issues.
2. Accidents and Injuries: The manual handling of waste can lead to accidents and injuries due to sharp objects, heavy lifting, or hazardous materials, posing a significant risk to those involved.
3. Environmental Pollution: Improper handling and disposal of waste can lead to environmental pollution, including soil contamination, water pollution, and air pollution.
4. Spread of Diseases: Manual waste handling can facilitate the spread of diseases as workers and communities are exposed to harmful pathogens and vectors present in the waste.
5. Psychological Impact: The stigma and poor working conditions associated with manual waste handling can have a psychological impact on the individuals involved.
6. Economic Impacts: The health risks and environmental damage associated with manual waste handling can lead to economic burdens due to increased healthcare costs and the need for environmental cleanup efforts.
7. Inadequate Waste Segregation: Manual handling often leads to inadequate segregation of waste, reducing the effectiveness of recycling programs and leading to more waste ending up in landfills.
8. Impact on Wildlife: Poorly managed waste can harm wildlife on land and in aquatic environments, as animals can ingest or become entangled in waste materials.

RECENT REPORT FROM UK HEALTH AND SAFETY EXECUTIVE (HSE)

A recent report from UK Health and Safety Executive (HSE) shows that one of the top reasons for accidents leading to more than seven days of abscence in the waste industry comes from work tasks involving manual handling.

Increased safety opportunities for waste collection industry workers

Fresh statistics from UK Health and Safety Executive show that waste industry is the second highest industry accident ratio per 100.000 workers with a rate of 4,08. that is twice as much as the construction industry with a rate of 1,72. In seven years 2016/17 – 2022/23 4000 workers sustained non-fatal injuries. 32% of the accidents came from Slips, trips, or falls on the same level and 25% were injured while handling or lifting. If we look at data covering just 2023 the report says that 1616 Non-fatal injuries was reported in RIDDOR in 2022/23 and 1190 (74%) of them led to more than seven days of incapacitation. The traditional waste collection industry has a major opportunity to improve the safety for its workers. With a pneumatic waste collection system we take away the need for manual handling when collecting waste.



Sustainable Development Goals

The United Nations has set forth 17 global goals as part of its 2030 Agenda, which includes 169 targeted sub-goals for sustainable development. Naturally, our sustainability initiatives are designed to align with and support these objectives. We have identified six UN goals that are particularly relevant to us.



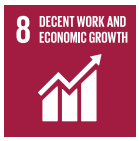
A scenario of comparing the city street with and without the Envac system, which effectively works with UN SDGs to improve quality of life and minimise emissions to safeguard future generations.





Ensure healthy lives and promote well-being for all at all ages

Envac's system promotes user safety and health as it prevents unsanitary conditions, odours and vermin and our touchless technology reduces the transmission of diseases. As waste collection traffic is reduced in densely populated areas, deaths and injuries from traffic accidents are minimised. the solutions for hospitals promote safer handling of contaminated laundry, as well as medical waste within the hospital.



Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Envac's focus is to run the automated platform with sustainable business strategies. From lean processes to green energy initiatives, we help building a world that values its people and planet. Our work process creates innovative and sustainable economic models that reduce inequality and create win-win situations for all involved.



Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

Envac's system is resilient and continues to operate even in extreme conditions. The installation on Roosevelt Island, NYC has been in operation since 1975 and operated through both the heavy snowstorm of 2010 and hurricane Sandy in 2012. It is also possible to retrofit our system in existing delicate urban areas. This has been done for example in the historical environment in Bergen, Norway and in Northern Spain, with great success.



Make cities and human settlements inclusive, safe, resilient and sustainable

Envac helps to create more sustainable urban environments where roads give way to walkways, bike lanes, and green areas. Combined with better air quality as a result of less waste collection traffic, we help cities achieve this goal and improve urban quality of life.



Ensure sustainable consumption and production patterns

Envac's innovative system minimises this pressure on water supplies and helps reach the UN goal of improved water management globally. Envac's system and services help reach the UN goals of responsible consumption and production by bringing the waste collection into the circular economy. The system can handle several fractions of waste and with our sorting system, recycling is made easy and cost-efficient, reusing resources in a never-ending loop. Food waste can be used to produce bioenergy and biofertilizers.



Take urgent action to combat climate change and its impacts

Envac's pneumatic waste collection has proven positive impacts on climate change, covered in goal 13, as the pneumatic collection reduces carbon emissions by up to 90%. This is one of the reasons the European Commission sees pneumatic waste collection as best practice for urban areas and why many of the world's cities, such as Singapore, Stockholm and Seoul have made it their waste collection of choice. The actions also call for improved recycling behaviour, which can make a huge difference in reducing environmental harm. Recent study by LocalLife, showed an increase of 48% in recycling behaviour of plastic and newspaper in Sweden among the focus group using Envac ReFlow app.

Our Value Chain

The value chain illustrates the main areas where our activities impact society and the environment in different ways. To maximise our positive impact and minimize our negative impact, we continuously analyse the various parts of the value chain.



RESEARCH & DEVELOPMENT

We develop and improve products with end-users in mind while ensuring quality, cost-efficiency, and regulatory compliance.



SUPPLY

We must partner with top suppliers that have robust manufacturing processes to ensure high-quality standards of ethical and environmental practices.



SALES & MARKETING

To effectively sell Envac systems, it is important to understand the sustainability benefits of our systems, using verified facts from trusted sources.



PROJECT INSTALLATION

We prioritise environmental, occupational health, and social standards in our installation work, often physically demanding and carries safety risks.



OPERATION & MAINTENANCE

Our technicians maintain the system for optimal operation and a long-life cycle.



MODERNISATION

Envac works with its customers to offer necessary system upgrade to improve efficiency and prolong the lifespan.



END OF LIFE

At the end of life, the customer considers various solutions such as demounting hazards and recycling materials.

Continuously Innovating the Value Chain

ENERGY OPTIMISATION THROUGH AUTOMATION



To increase energy efficiency of our system, we have installed our latest EAP 4 platform to give support for both ReFlow and new features to reduce energy consumption. Parallel to installing the new platform, the system was tuned to utilise the existing sensors as well as adding sensors to the upgraded system, the targeted energy reduction is between 30 – 50% where a more extensive upgrade allows for the higher improvement.

This is done to be able to utilise the IoT (Internet of Things) functionality implemented in the latest EAP. The installations and updates have been done throughout our regions, starting in Europe, North and South, followed by Singapore and Korea. The systems range from updated systems delivered in the 90's to newly installed systems, covering smaller condominiums with less than 200 apartments to districts with more than 5000 apartments. Data and findings from the turning are collected in the Envac data warehouse, allowing for the creation of best practices for the different system types. The best practices cover how to maintain/ service the systems and how to configure them. The tuning process will continue in 2024, adding further functionality.

OPERATIONS & MAINTENANCE



Automated waste and recycling removal systems need regular maintenance to work efficiently. It is crucial to have a maintenance agreement with a reliable service provider like Envac, even if another provider installed the system. Envac provides maintenance, modernization, and retrofitting services to update existing systems with the latest technology and standards. Retrofitting gravity chute systems into automated pneumatic waste and recycling systems has numerous benefits, such as enhanced efficiency, convenience, design options, reduced contamination risk, effective recycling, and improved sanitation and public health.

PRODUCTS AND PROCESSES



The quality of our products and processes is essential to deliver products and services that meet customer expectations and sustainability targets. We have a multi-certification for ISO9001 and 14001 in place globally, and in some countries, we also have local ISO45001 certifications.

We have defined procedures for delivering a project to our customers that ensures the quality and environmental work in our processes. We have a global R&D process and customer project delivery process to ensure that we have the right products for the market and offer a product that guarantees a long lifespan and complies with local regulations. We follow a project process that includes planning, quality checks, regular status reporting to customers, and a final project review to learn from successes and mistakes and have a continuous improvement mindset.

To support our work with continuous improvement and to ensure that necessary actions are taken in the event of a non-compliance, we have a global system that all countries use to document and be transparent about the learnings and to share best practices.

Continuously Innovation the Value Chain

OPPORTUNITIES & POSSIBILITIES IN BARCELONA



Continuous upgrades are essential for maintaining and extending the lifespan of Envac's automated waste collection system. Decommissioning and replacing the system with a new one would significantly impact the quality of life, given the years of planning and necessary infrastructure changes. Modernisation is ideal for systems after decades of use, considering the vast network of connections in the city. In Barcelona, the first system was installed in the Olympic Village in 1992.

Envac Spain is currently upgrading 221 automated waste collection inlets across central areas of Barcelona. The Gyro model has been chosen to replace the old system due to its wider opening diameter and more ergonomic design, which were made possible through years of research and development. The new system also has real-time data collection capabilities, allowing operators and owners to have high-improved usability and availability for end users.

Barcelona has the highest saturation of pneumatic collection stations among waste collection technologies, covering around 50,000 homes and numerous shops, serving a population of roughly 200,000 individuals. The lifespan of an automated waste collection system (AWCS) can vary depending on various factors, such as usage patterns, maintenance, and environmental conditions. However, by constantly upgrading and maintaining the system, it is possible to extend its lifespan and improve its efficiency. Envac commits to maintaining the efficiency and longevity of its Automated Waste Collection System (AWCS) by integrating cutting-edge technology and leveraging real-time data analysis while focusing on sustainability and minimising its ecological footprint.

IMPROVED RECYCLING IN THE LONDON PROJECT WITH NEW SHREDDER



Envac has launched the UK's first-ever residential cardboard shredder at Barking Riverside, one of Europe's largest housing developments. This innovative system will enable residents from approximately 2,000 homes to sustainably manage large volumes of cardboard waste, preventing around 105 tonnes of cardboard from being sent to landfills annually. The Team in Barking Riverside, recycling the cardboard with new feature 88cm wide cardboard shredder is the largest ever to be used in a residential environment, and it can shred packaging as large as TV boxes. It is also the first time that residential cardboard collection has been handled by vacuum waste collection in the UK and will see large volumes of cardboard handled in an underground pipe network from the shredder to the collection station every day.

The giant cardboard shredder is connected to Barking Riverside's existing AWCS, eliminating street bins by 98% and reducing waste-related carbon emissions by 90%. The system has already had a transformational impact on residents' recycling rates, with 47% of all waste at Barking Riverside being recycled in April 2023, higher than the London average of 12% for flatted properties.

Barking Riverside, which will offer over 10,000 homes and new facilities on a 443-acre brownfield site on the River Thames in East London, is a growing development. Overall, the latest addition to the Envac system, with the ability to shred an unlimited amount of cardboard and the capacity to transport four cubic meters of the material from the shredder to the collection station in only 26 seconds, will radically improve the sustainability of waste collection at Barking Riverside. The successful implementation of the cardboard shredder at Barking Riverside is a testament to Envac's thorough R&D work. It showcases how innovative waste management solutions can be developed and applied to address specific environmental challenges, leading to significant improvements in sustainability and efficiency in residential areas.



Inlet installation in Barcelona, Spain

Envac's Sustainability Risks

In 2023, we reviewed our sustainability risks to ensure that they were still relevant and aligned with our materiality topics. New risks that had emerged were identified and appropriate actions were taken to mitigate them.

To further strengthen our risk assessment process, a new digital risk assessment tool was implemented which enabled us to streamline our risk management efforts while reducing the likelihood of errors or oversights.

Stakeholders

- Customers
- Cities/Communities
- Building Owners
- City Developers
- End Users
- Employees
- Suppliers



Envac terminal in Maroochydore, Australia

	Risk	Risk if not Controlled	Risk Mitigation	
Environment	Climate change Emissions Envacs main impact for emissions comes from operation of our customers systems	• Unnecessary use of energy at customer sites • Unnecessary use of fossil fuels in transport • Cost of manufacturing and raw material	• Global R&D process • Optimising energy use at customer sites	High
Environment	Climate change Emissions Manufacturing of products including transport of them to our installation sites is a large contributor to emissions	• Unnecessary emissions from fossil fuels	• Transport efficiency measures through Supplier partnership with transport companies • Local sourcing for the majority of our products	Medium
Environment	Climate Change Envacs internal energy use comes mainly from company fleet and office energy use	• Unnecessary use of fuel • Unnecessary use of electricity	• Fuel efficiency/electrification • Energy sourcing via rental agreements with landlord	Medium
Environment	Climate change Pipes of steel and coating is put in the ground as a part of the waste handling. The compound of that material can have an impact on the soil	• Pollution of the ground	• Global R&D process • Relevant third part evaluation schemes of our products	Low
Environment	Product Material & Design The design of the product is important to make sure the quality of life of residents do not become negative	• Noise levels • Colour • Cleanliness of the system • Prescence of vermin	• Global R&D process • Professional design in each customer project • Continuous improvement through global reporting system	Low
Environment	Supplier sourcing If suppliers do not handle their responsibility correctly this indirectly effects Envacs sustainability impact	• Environment issues • Fair business incidents • Bad quality of products	• Supplier evaluations • Supplier Code of Conduct • Business agreements	Medium
Environment	Operation & Maintenance Our technicians maintain the system for optimal operation and a long-life cycle	• Unnecessary use of energy at customer sites • Less waste go to recycling	• Continous improvement of O&M Best practice	Medium-High
Envrionment	Modernisation Envacs modern technologies can be used to upgrade exisiting installations to improve site efficiency and extend the waste systems life span	• Unnecessary use of electricity • Shorter life span of customer systems	• Global R&D process • Continous improvement of O&M best practice	Medium-Low
Environment	End of use/life of Products & Services At the end of life, the customer considers various solutions such as demounting hazards and recycling materials	• Hazardous material in old buildings (i.e. Asbestos) • Injuries while dismounting the system	• Risk assessments • OHS policys and procedures	Low
Social Responsibility	Own workforce - Health & Safety Lack of understanding the OHS risks in the installation process could lead to physical or medical incidents for our employees or contractors	• Injuries at work • Severe injuries for employees	• Risk assessments • Global OHS Policy • OHS policys and procedures	High
Social Responsibility	Responsible Communication & Marketing Envac communicate that the products are a the better solution to enable a smart, efficient and more sustainable urban city	• Unclear sustainability marketing/communication • Bad brand reputation • Greenwashing/Greenhushing • Loss of market share	• Third-party Evaluations • Follow acknowledged standards • Transparency in sources of statements	Medium-Low
Human Rights	Workers in the value chain - Health & Safety Lack of understanding the OHS risks in installing our system we might end up with physical or medical incidents for our contractor or subcontractor	• Injuries at work • Severe injuries for third party workers	• Subcontractor agreements • Risk assessments • OHS policys and procedures	High
Human Rights	Discrimination Envac is a global business that believes in the strength of diversity and inclusion	Unethical behavior related to: Gender, age ethnic origin, sexual orientation, political opinion, religion, trade union activity, pregnancy or other legally protected characteristics	• Code Conduct • Supplier Code of Conduct • Global Diversity & Inclusion Policy	Medium
Anti-Corruption	Business Conduct Envac do business with private customers and municipalities. This also includes working with public tenders Envac also works with different joint organisations and comes in contact with policymakers around the world This responsibility also means we need to make sure our suppliers keep a fair business standard	• Unethical business • Corruption and bribery • Unfair competition	• Code of conduct • Supplier Code of Conduct	Medium

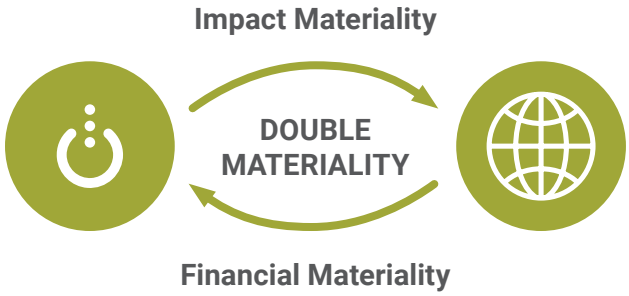
CSRD and ESRS Implementation Process

The new EU directive that develop sustainability reporting requirements took effect on January 1, 2024. Known as the Corporate Sustainability Reporting Directive (CSRD), it includes all key aspects of environmental, social responsibility, and corporate governance reporting. The CSRD reporting will adhere to the new unified European Sustainability Standards (ESRS) with the aim of improving transparency and consistency in sustainability disclosures. Envac will be impacted by this directive starting in 2025 as part of the Stena AB Group.

The ESRS includes 12 standards with 19 subcategories, and the specific standards that a company reports on are determined by a double materiality assessment (DMA). This dual materiality covers both inside-out (impact materiality) and outside-in (financial materiality) perspectives and is based on a variety of factors including internal policies, expert insights, operational data, statistics, and other external sources.

The findings from the DMA offer a clear direction on which sustainability issues related to environment, social aspects, and governance should be prioritized.

INSIDE-OUT PERSEPECTIVE



OUTSIDE-IN PERSEPECTIVE



New Envac terminal in Beijing, China

THE DMA MODEL



Material Subjects

		Positive		Negative
Environment ●	3	Climate change adaption	1	Climate change mitigation
	10	Circular economy- resource inflow	2	Energy consumption and mix within the organisation
Social ●	12	Own workforce equal treatment and opportunities - diversity	11	Own workforce working conditions - Health and safety
	18	Consumers and end-users - Health and safety	14	Value chain workers working conditions - Health and safety
	17	Affected communities - Land realted impacts		
Governance ●	19	Business conduct - Corporate culture	20	Corruption and bribery
	21	Political engagement		
	22	Lelationship with suppliers		

Non Material Subjects

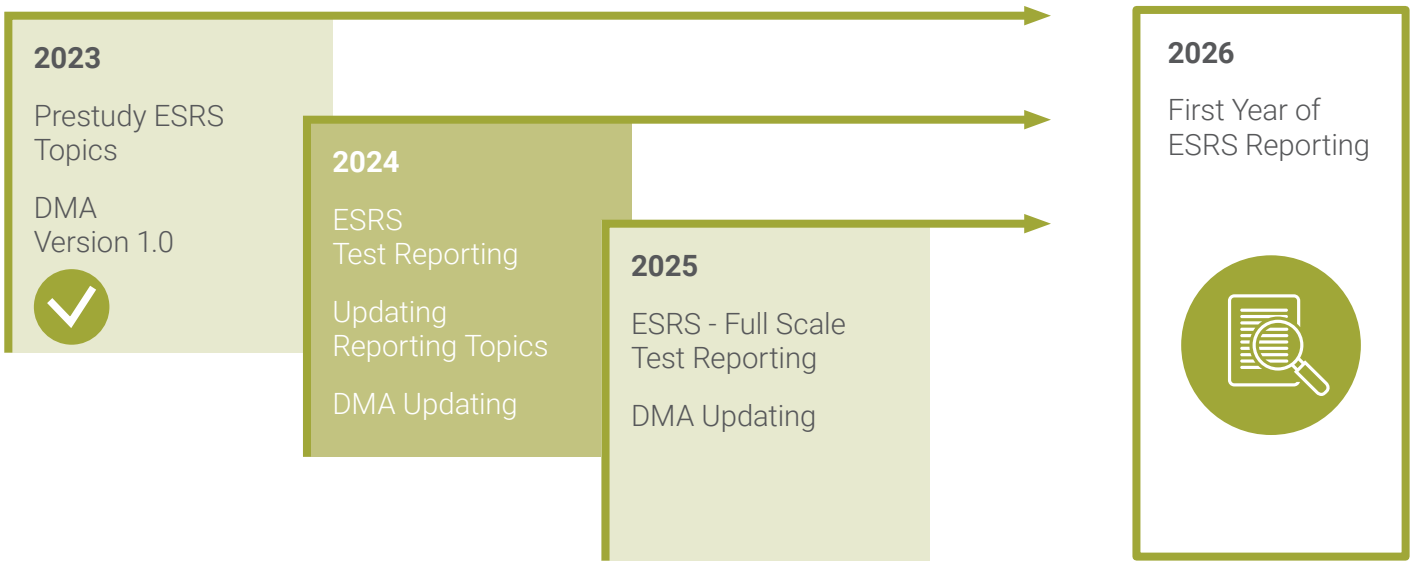
4	Pollution of air, water and soil	6	Microplastics	15	Value chain workers equal treatment and opportunities
9	Biodiversity and ecosystems	7	Water	16	Value chain workers other work-related rights
5	Hazardous substances	8	Marine resources	13	Own workforce other work-related rights

The findings from the performed DMA showed that Envac's sustainability strategy is well founded, and which was validated by our regional teams and the Global Executive Board and reported to the Stena AB Group.

Envacs Sustainbility Strategy	Quality of Life	Minimise Emissions	Resource circularity	Business Responsibility
Materiality Topics	Affected communities – Land related impacts Consumers & End users health & Safety	Climate change mitigation Climate Change adaption Energy consumption and mix within the organisation	Circular economy In/Outflows	Circular economy In/Outflows OHS - Own workforce Corruption & Bribery Relationship with suppliers Business conduct – Corporate culture Value chain workers - OHS
Non-Materiality Topic (Monitoring)		Pollution of Air, Water & Soil Biodiversity & Ecosystems Hazardous Substances Water Marine resources	Microplastics	Value chain workers equal treatment and opportunities Value chain workers other related rights Own workforce equal treatment and opportunities – Diversity Own workforce other related rights Political engagement

CSRD COMPLIANCE GROUNDWORK

2023 Envac completed the first DMA and identified the most material topics. The DMA was performed using insights from our previous materiality analysis, our risk analysis and results from customer and employee surveys and feedback from management reviews and finally learnings from stakeholder expectations. Moving forward, Envac will take focused steps to improve and prepare for ESRS reporting in 2026.

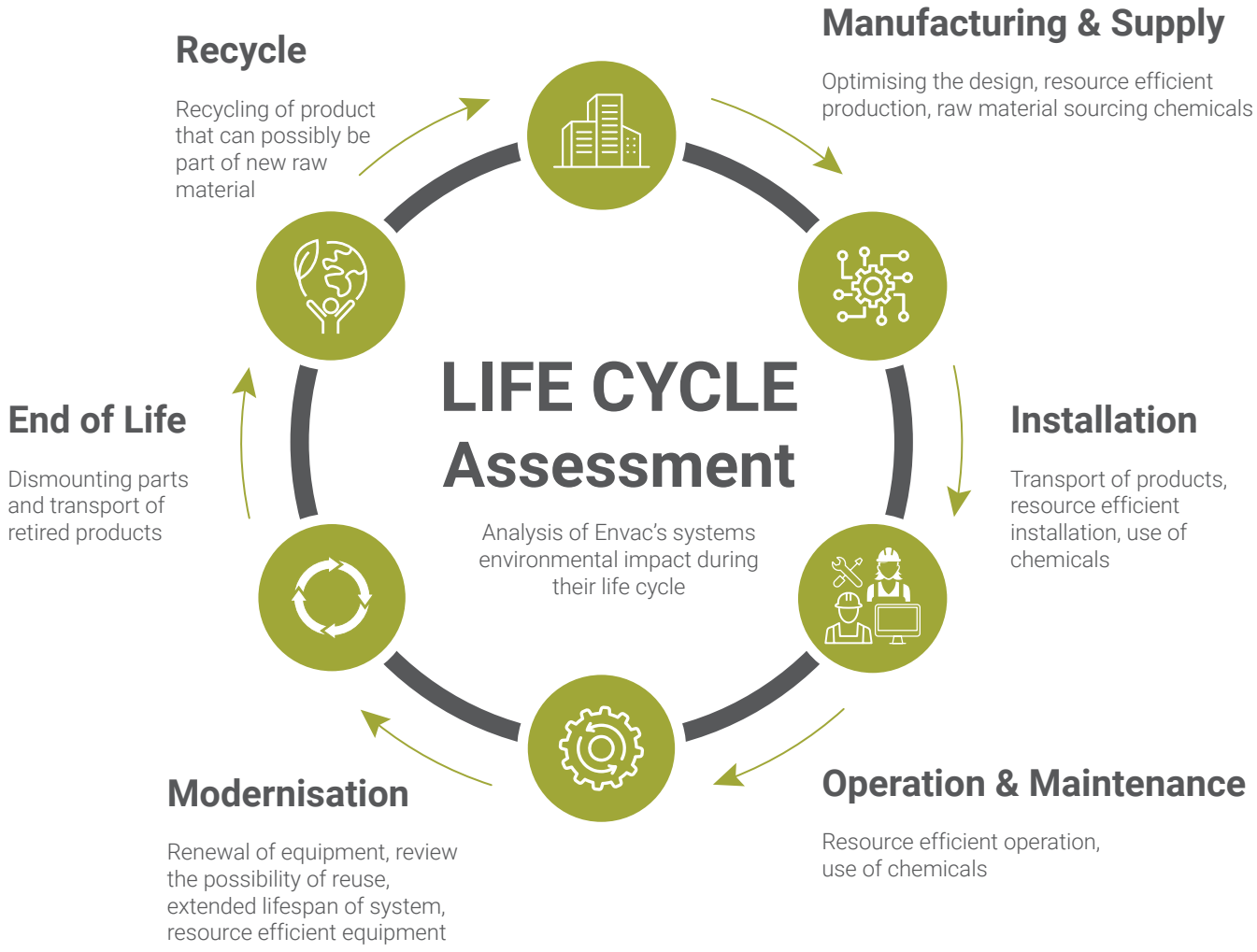


Reducing Our Carbon Footprint

LIFE CYCLE ASSESSMENT

In 2023, we conducted a Life Cycle Assessment (LCA) in four of our five regions to gain insight into our impact throughout the entire value chain. In the calculations, all regions used the same setup and conditions for a fictive representative customer waste collection system and the parameters used were based on actual figures.

The findings from the LCA showed that our energy consumption is similar in all markets and that our largest impact is related to use of energy at customers sites (Envac's Scope 3) but also that the accessibility to renewable energy in each region differs which has a significant impact.

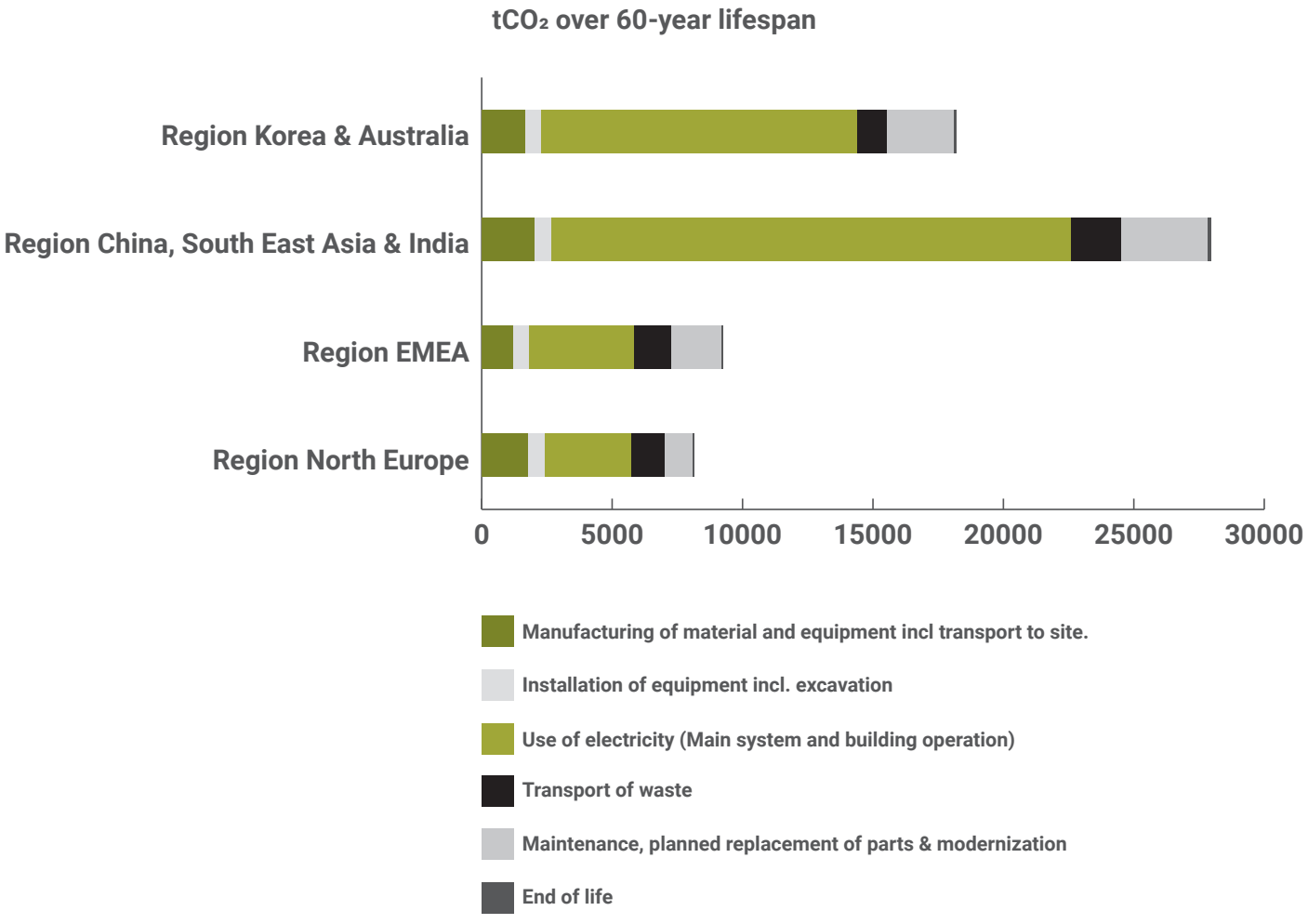


SUSTAINABLE TOGETHER

To improve our and our customers impact, we will continue to enhance our automation design and the Envac Automation Platform (EAP), develop our operational best practices, and ensure that our customer systems receive regular preventive maintenance to maximize efficiency.

The LCA verifies that we have taken the right decision to focus on energy efficiency in our products to enable customers to achieve minimised CO_2 emissions on their sites.

RESULT LIFE CYCLE ASSESSMENT PER REGION



Performance Indicators

Envac collects and analyse several key indicators on Group level to manage and reduce the environmental impact and ensure transparency in our communication. The table showes the perfomance indicators for 2023 with 2022 as a refence.

ENVIRONMENTAL DATA

IMPACT	CATEGORY	RESPONSE	2023 T CO_2	2022 T CO_2
SCOPE 3	Transport of products to customer site	Operational efficiency Code of conduct	672	863
SCOPE 3	Use of sold products	Operational efficiency Energy efficiency Automation design	31,592	31,834
SCOPE 1	Fuel for Envac vehicles	Operational efficiency	667	N/A
SCOPE 1	Heating & cooling (oil & gas)	Operational efficiency	137	131
SCOPE 2	Internal electricity (market-based)	Operational efficiency	51	72
SCOPE 2	District & electric heating & cooling	Operational efficiency	56	N/A
SCOPE 3	Business travel	Operational efficiency Code of conduct	677	N/A

SOCIAL DATA

BUSINESS REGION	NUMBER OF EMPLOYEES	NUMBER OF MANAGERS	NUMBER OF ACCIDENTS	LOST TIME INJURY RATE* (LTIR)	THIRD PARTY INCIDENTS
NORTH EUROPE	Male: 138 Female: 31	Male: 11 Female: 1	6 Serious: 1	0	4
CHINA INCLUDING SOUTH EAST ASIA, INDIA	Male: 147 Female: 25	Male: 11 Female: 4	2 Serious: 0	0	0
NORTH AMERICA	Male: 28 Female: 9	Male: 3 Female: 1	0 Serious: 0	0	0
KOREA & AUSTRALIA	Male: 135 Female: 8	Male: 14 Female: 4	1 Serious: 1	1.8	0
EUROPE, MIDDLE EAST & AFRICA	Male: 210 Female: 17	Male: 11 Female: 4	7 Serious: 0	14.4	0
HEADQUARTERS (STOCKHOLM)	Male: 10 Female: 6	Male: 2 Female: 2	0 Serious: 0	0	0

GOVERNANCE DATA

NUMBER OF WHISTLEBLOWING CASES	PERCENTAGE EMPLOYEES TRAINED IN CODE OF CONDUCT	PERCENTAGE EMPLOYEES SIGNED CODE OF CONDUCT	PERCENTAGE KEY SUPPLIERS SIGNED SUPPLIER CODE' OF CONDUCT
1	93.3%	99.3%	87%

Sources

OFFICIAL DATA (EXTERNAL)

Healthcare Waste—A Serious Problem for Global Health - PMC (nih.gov)

UNEP Food Waste Index Report 2024
- Launch Event

Waste statistics in Great Britain, 2023 (hse.gov.uk)

US refuse trucks
https://bigbelly.com/news/how-refuse-vehicles-impact-municipal-greenhouse-gas-emissions

Plastic recycling: an underperforming sector ripe for a remake (unep.org)

Manual handling Risk in society:
A Serious Problem for Global Health (mdpi.com)

Soild linen best practice and CDC
Laundry | Background | Environmental Guidelines | Guidelines Library | Infection Control | CDC

Healthcare Waste—A Serious Problem for Global Health - PMC (nih.gov)

UK waste collection safety
Waste statistics in Great Britain, 2023 (hse.gov.uk)

"South Korea's War on Food Waste" by BBC News: https://www.bbc.com/news/world-asia-44173237

"South Korea's food waste reduction policies and their effects" by The Korea Herald: http://www.koreaherald.com/view.php?ud=20191223000876

"South Korea's Food Waste Reduction Policies" by World Resource Institute: https://www.wri.org/our-work/project/food-waste-reduction/south-koreas-food-waste-reduction-policies

"South Korea's Food Waste Policy: How It Works and What We Can Learn From It" by The Diplomat: https://thediplomat.com/2019/07/south-koreas-food-waste-policy-how-it-works-and-what-we-can-learn-from-it/

World Health Organization (WHO). (Year). "Health Risks of Health-Care Waste."

United States Environmental Protection Agency (EPA). "Impacts of Mismanaged Trash."

Occupational Safety and Health Administration (OSHA). (Year). "Safety and Health Information Bulletins on Waste Handling."

International Labour Organization (ILO) "Safety and Health at Work."

National Institute for Occupational Safety and Health (NIOSH). "Waste Management and Worker Safety."



Our company's sustainability efforts are closely aligned with the UN's sustainable development goals, leading to significant improvements in life quality in Norway, reduced food waste in South Korea, lowered emissions in Portugal and more globally in 2023. Our solutions foster responsible waste management, water conservation, energy efficiency, and reduced transportation emissions, which are crucial for driving the behavioural shifts needed to meet these goals.

Christer Lundberg, Sustainability and Quality Lead, Envac