BEST PRACTISES IN PLASTIC-FREE SOLUTIONS

The BALTIPLAST project co-financed by Interreg BSR helps to drive the transition to a green and resilient Baltic Sea region.

Analysing plastic waste and raising awareness to start the action

DAUGAVPILS, LATVIA



DAUGAVPILS is the second-largest city in Latvia, located in the southeastern part of the country. With a population of around 79 000 residents, the city is known for its rich history, cultural diversity, and industrial significance.

Daugavpils has been taking steps toward sustainability by promoting recycling, waste reduction, and the use of ecofriendly materials. The city actively participates in initiatives to eliminate plastic waste, encouraging citizens to reduce single-use plastics and supporting projects aimed at increasing environmental awareness and green practices.

66 %
CO2 reduction

The pilot in Daugavpils municipality aimed to reduce plastic waste in the Development Department by raising awareness and implementing waste management practices. The team collected and analyzed plastic waste using the BALTIPLAST inventory tool, engaged in a seminar on plastic reduction, and developed a plan to minimize waste.







Challenges and actions

The pilot in Daugavpils municipality addressed several challenges, including **limited awareness** of plastic waste and **communication issues** with the cleaning staff. The Development Department initially had **little knowledge of the types and quantities of plastic waste** they generated, especially in the staff kitchen. To address this, they collected and separated waste using the BALTIPLAST tool and participated in a waste reduction seminar. Challenges also arose with the cleaning staff discarding separated plastics, but after **clear communication, cooperation improved**. The department faced difficulties in finding affordable alternatives to plastic packaging but **successfully reduced waste from 2 kg to 342 g**. Despite resource constraints, they **began recycling plastics and metals** and plan to continue these practices beyond the pilot.

Target groups

Development Department staff in Daugavpils municipality, incl. 14 employees involved in the pilot

Cleaning staff responsible for waste management in the Development Department

Municipal departments within Daugavpils municipality interested in plastic waste reduction

Other local government institutions and municipalities in Latvia

Employees of other municipalities or organizations in the Baltic Sea Region looking to adopt sustainable waste practices

Local waste operators and experts involved in waste management and recycling education

Timeline

The pilot was carried out from 15 April to 29 September 2024, spanning over approximately 5 months.

Results

- Significant reduction in plastic waste: The department reduced plastic waste from 2 kg to 342 g by the end of the pilot.
- Increased awareness: Employees gained a clear understanding of the types and amounts of plastic waste they were generating.
- **Active participation**: The Development Department staff actively engaged in discussions and took conscious steps to reduce plastic waste.
- **Improved waste management**: The department began recycling plastics and metals, with plans to continue these practices.
- Behavioral changes: Employees started making more sustainable purchasing decisions, considering packaging alternatives.
- **Successful collaboration**: Effective communication with the cleaning staff was established, ensuring proper waste separation for inventory tracking.
- **Replication potential**: The pilot demonstrated replicability in other municipal offices and government institutions.

Piloting the solution

During the pilot implementation, Daugavpils municipality used the solution developed in the project by following a structured approach to inventory and waste reduction. The **BALTIPLAST inventory tool** was employed to track and monitor plastic waste generated by the Development Department. Staff collected and separated plastics over two periods (April-May and September), inputting the data into the tool after weighing and categorizing the waste.

The tool helped the department gain a **clear overview of the types of plastic waste** they were producing, such as **food packaging** and **single-use items**. This data was essential for planning their reduction measures. The municipality also organized a **seminar to educate staff** on plastic waste reduction and recycling, using insights from the inventory results to inform the development of a targeted action plan.

The solution facilitated both the tracking of waste and the creation of strategies to reduce plastic use, fostering more sustainable practices within the department.

Enablers



- + Strong support from the stakeholders and interest of target groups
- Active participation and enthusiasm from the Development Department staff
- + **Effective collaboration** with the BALTIPLAST project expert for waste data analysis
- Clear communication and engagement from the department head, fostering discussions on waste management
- + **Educational seminar** that increased knowledge and commitment to plastic waste reduction

Barriers



- High demand for human resources to manage the development process
- Financial constraints due to the cost of alternative packaging options
- Initial reluctance and lack of cooperation from the cleaning staff
- Limited availability of affordable and sustainable packaging alternatives

Key takeaways

Awareness is crucial: The pilot highlighted the importance of raising awareness about the types and quantities of plastic waste generated. It encouraged employees to make more conscious decisions regarding waste reduction.

Clear communication: Effective communication at all levels, including with cleaning staff, is essential for successful implementation. Ensuring everyone understands the purpose and process helps avoid misunderstandings and supports cooperation.

Collaboration drives success: The active involvement of the whole team, including the department head, created a positive atmosphere for change. Collaborative efforts lead to better results when working toward a common goal.

Challenges with alternatives: Finding affordable and sustainable packaging alternatives remains a challenge. While the reduction in plastic waste was significant, there is still a need for more accessible alternatives in everyday operations.

Resource management: The pilot demonstrated that while financial and human resources are required, the benefits of increased awareness and sustainable practices outweigh the costs, especially with low-budget solutions.

Replicability potential: The pilot's success indicates that similar initiatives can be replicated in other departments and municipalities, making it a scalable model for wider application.