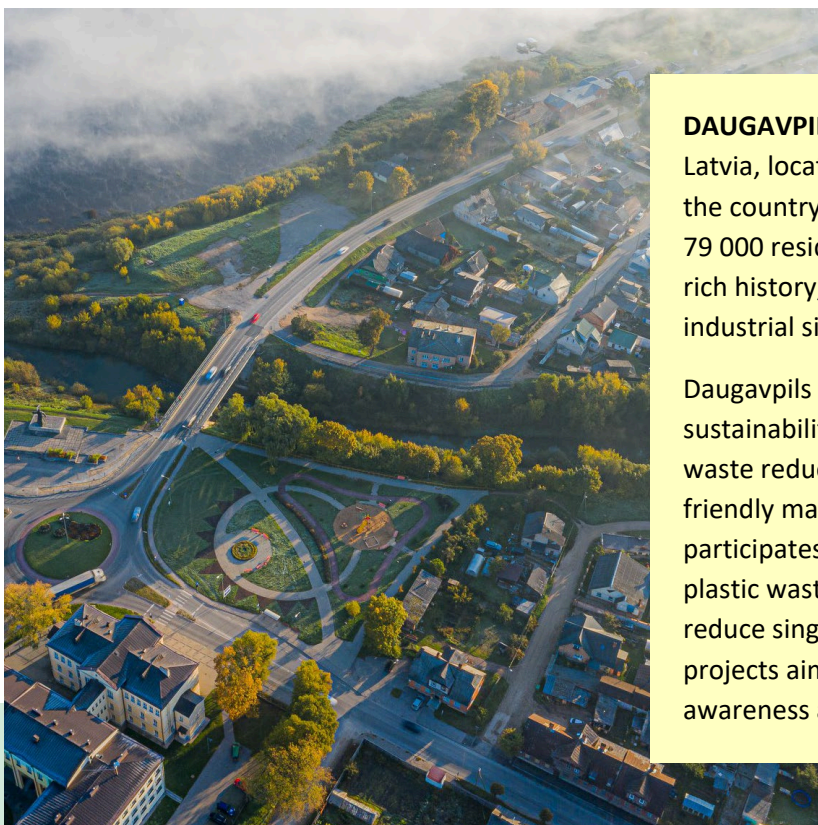


BEST PRACTISES IN PLASTIC-FREE SOLUTIONS

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

Engaging educational department and enabling data-driven decisions 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 eco-friendly 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.

67 %

CO2 reduction

This pilot in Daugavpils municipality aimed to address the challenge of reducing plastic waste within the Educational Department, focusing on food packaging and single-use plastics. Through inventory tracking, employee engagement, and the development of a reduction plan, the municipality successfully lowered plastic waste.

Challenges and actions

The pilot project in Daugavpils municipality, Latvia, aimed to address the challenge of reducing plastic waste in municipal facilities, specifically within the Educational Department responsible for **schools, preschools, and kindergartens**. The municipality faced the issue of **excessive plastic waste**, particularly from **food packaging, stationery, and single-use plastic items**. The Educational Department sought to promote proper waste management practices and increase awareness of recycling in educational institutions. By participating in the pilot, they aimed to **identify the specific types of plastic waste** being generated and **explore ways to reduce them** through targeted actions and employee engagement.

The key challenge lay in implementing a **consistent approach to waste reduction** in a large department with limited coordination opportunities. Despite these challenges, the department overcame barriers through **active participation, staff engagement, and reminder systems**, successfully reducing plastic waste.

The pilot not only highlighted the importance of conscious purchasing decisions but also set the groundwork for future waste reduction initiatives in educational facilities across the municipality.

Brief description of activities

To address plastic waste reduction, the pilot project began with an inventory of plastic waste, where employees collected, separated, and recorded plastic materials over a three-week period. This data was used to identify the types of waste generated. Following this, a seminar was held to educate staff about waste management and provide strategies for reduction, such as choosing products with alternative packaging and minimizing single-use plastics.

After implementing these measures, a second round of waste collection revealed a significant reduction in plastic waste. To maintain engagement, reminder emails were sent to staff throughout the process. These actions effectively overcame challenges in coordination and motivated employees to contribute to the ongoing reduction of plastic waste in the Educational Department.

Target groups

Educational Department staff (employees responsible for waste management in schools, preschools, and kindergartens)

Municipal departments involved in waste management and sustainability initiatives

Local waste operators and recycling services

Other municipalities and government institutions (potential replicators of the solution)

Timeline

The pilot in Daugavpils municipality took approximately **5 months** to implement, **from 15 April to 29 September 2024**. This included the inventory process, staff engagement activities, implementation of reduction measures, and follow-up analysis.

Results

- **Reduction in Plastic Waste:** The amount of plastic waste decreased from nearly 1 kg (for 25 employees) to 439 g after implementing reduction measures.
- **Increased Awareness:** Staff gained a clear understanding of the types of plastic waste generated, including food packaging, stationery, and single-use plastics.
- **Improved Waste Management Practices:** Employees became more conscious when purchasing products, considering alternatives to plastic packaging.
- **Employee Engagement:** The pilot successfully engaged staff through the inventory process, seminars, and reminder systems, ensuring active participation in the reduction efforts.
- **Replicability:** The success of the pilot demonstrated that the initiative could be expanded to other departments and municipalities, fostering potential for broader impact.

Piloting the solution

During the pilot implementation, Daugavpils municipality used the solution developed in the project to systematically plan and execute plastic waste reduction measures. The municipality utilized the **inventory tool** to track and analyze plastic waste generated within the Educational Department. Employees collected and separated plastic waste over a designated period, and the data was entered into the tool for detailed tracking.

The solution also included a **reduction plan**, developed with input from the staff after analyzing the collected data. This plan focused on practical measures like purchasing alternatives to plastic packaging and reducing the use of single-use plastics. The municipality incorporated **seminars** to educate employees and promote best practices for waste reduction. Throughout the process, reminder emails were sent to ensure continued participation.

The solution helped in tracking progress and provided a framework for sustainable waste management practices, which will be used to expand the initiative within other departments and municipalities.

Enablers



- + **Strong support from the stakeholders** and interest of target groups
- + **Employee engagement** through educational seminars
- + **Effective communication and reminder** systems to maintain participation

Barriers



- **High demand for human resources** to manage the development process
- **Financial constraints**, particularly when implementing the reduction plan with alternative – often more expensive – packaging
- **Challenges in coordinating activities within a large department** with limited opportunities for all staff to meet

Key takeaways

The pilot demonstrated that active engagement and clear communication were key to its success.

Regular seminars and reminder emails kept employees involved and aware of the waste reduction goals. Data-driven decisions, based on the plastic waste inventory, helped identify effective strategies, such as choosing alternative packaging and reducing single-use plastics.

Despite coordination challenges in a large department, reminder systems helped maintain participation.

The pilot's success also showed that the solution is scalable and replicable, making it suitable for expansion to other municipal departments and institutions, both locally and regionally.