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Towards soft measures for single-use plastic reduction at municipal entities, schools and businesses

Deliverable 1.3

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Interreg Baltic Sea Region
Co-funded by the European Union
CIRCULAR ECONOMY BALTIPLAST

BaltiPlast

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What is the INTERREG BaltiPlast about? Which problems does it address?

The INTERREG BaltiPlast project is focusing on prevention and reduction of single use plastic, improvements in plastic packaging collection and treatment system and supporting innovation in plastic waste management at municipality level. Despite the immediate need for a reduction of plastic use in the urban environment, many local authorities lack the knowledge and experience on concrete solutions to address the problems posed by plastic waste. Therefore, the main objective of the project is to identify, test and deploy concrete management solutions to handle and reduce the flow of plastic waste to the Baltic Sea.

How does the project address these problems?

One specific objective is to provide a practical tool for public entities and businesses for reducing single-use plastic and plastic packing in a short period of time – we call them “soft measures”. With "Soft measures" we mean non-infrastructure, low-investment, low-effort measures that can actually be implemented easily (the so-called "low hanging fruits", or “good housekeeping measures”).

The basic idea is that the entities or facilities (any business, any public entity – office building, child-care, education or recreation facility, manufacturing company) is doing an “Inventory of single-use plastics and plastic packaging” at its premises. As supporting instrument for this inventory, we are applying a “Plastic Inventory Tool” recently developed by one of our partners, the NGO KuBuS (Plastic-Free City): during the first project year (2023), this tool has been discussed, advanced and it is now available in an excel format for piloting by all project partners in all project countries. We developed slightly different versions for businesses (any type of business), schools (addressing the overall school facility as well as classrooms) and, generically, municipal entities.

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How does the tool work and how does it interact with reduction measures?

The entity is performing a guided inventory of all its single-use plastic items. The piled-up plastic consumption is analysed with the help of the project team. The tool describes and also quantifies the plastic amounts. It provides to the user a decisive insight for the individual change process. On the basis of the inventory, targeted measures are then taken to reduce single-use plastic consumption at each entity. An internal reduction programme, as well as consultation by the project team, promote the exchange of best practice approaches and their rapid transferability. With the help of a ready-made document, the "supplier letter", participants can also take action outside their own regulatory framework, for example by asking their suppliers to deliver goods as plastic-free as possible.

The minimum goal of the first phase in the plastic-free process is a saving of 10 per cent single-use plastic. The success of plastic savings is shown on a plastic-free scale in three levels - 10, 50 and 80% savings. The tool is easy to use. It has been thoroughly discussed among the international project team, and will now be tested by pilot facilities (municipalities, schools, businesses) during the coming project year 2024.

The following pages give an insight on how the tool is structured by showing elements of it (static screen shots). After the piloting phase, the tool shall be programmed and available online. This document also provides the step-by-step guide for implementing the plastic inventory at the three facilities: businesses, schools and (other) municipal entities.

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Plastic Inventory Tool in Detail

1. The Overview Page

The first tab of the tool records the organisational data such as a contact person who is responsible of the inventory. Other data, such as the economic sector and number of employees will serve as a valuable insight during the evaluation of the project.

Information about the organisation	
Organisation	
Name of the Organisation	
Economic sector	
Description of field of activities	
Address	
Number of employees	
Legal form	
Number of branches	
Address branch 1	
Address branch 2	
add further row if required	
Contact details	
Name contact person	
Position within the organisation	
E-mail	
Telephone	
Plastic-free Process	
Start of plastic-free process (auto-analysis)	
Completion of plastic-free process (auto-analysis)	

The first tab of the tool also provides the sums and percentages of the baseline consumption and reduction achieved with the help of the inventory.

Total consumption of single-use plastics in kg	Total consumption of single-use plastics in %
0.00	100
Reduction in kg	**Reduction in %**
0.00	0

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Plastic Inventory Tool in Detail

2. Collection of Waste Data

Occurrence of Waste

Separate Plastic Waste and Packaging Container	
Volume of container (Litres)	
Number of collected/emptied containers per month	

Residual Waste Container	
Volume of container (Litres)	
Number of collected/emptied containers per month	
Is plastic waste currently disposed of in the residual waste container?	Yes/ No
Why is plastic waste disposed of in the residual waste?	
Which kinds of plastic products are being disposed of in the residual waste?	

Please list other waste containers where plastic is disposed of (if any). If this concerns several containers, please separate data with a semicolon(;)	
Type of waste container	
Volume of container(s) (Litres)	
Number of collected/emptied containers per month	

The second tab of the tool records the organisation's waste data. On the one hand, the information is relevant for an analysis of potentials for improvement in more sustainable waste management. On the other hand, it provides the evaluating project partner with a figure for cross-checking the levels of consumption indicated in the following inventory tabs.

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Plastic Inventory Tool in Detail

3. Inventory in Different Organisational Areas

The image below is extracted from the third part of the tool. It consists of an inventory of current consumption levels of products and packaging made from SUP (here in the area of administration). To this end, it accounts for the number of products consumed per time period and their material type as well as current disposal practices. The latter are evaluated by a traffic light scheme to provide quick feedback (red = general waste, yellow = recycling bin). To support the inventory, an extensive list of products and their weights have been pre-entered into the tool. The inventory results in an annual consumption baseline of the organisation.

1. inventory of the products made from single-use plastics and packaging

							columns H+I =100%	
Products: Administration & Office 1/9	**Quantity (number of items)**	**Unit of Time**	**Weight per Unit**	**Unit of Weight**	**Total Weight per 365 days in kg (calculated automatically)**	**Material (type of plastics) tip: look for the recycling code on the product**	**Disposed of in recycling bin %**	**Disposed of in general/ residual bin in % (calculated automatically)**
**Please note! Columns marked in blue are free to adjust and change (the product names and the weight in columns A+D have been collected from previous users and may serve you as an orientation). Please adjust the time and unit of weight t be identified via the recycling code on the packaging/ product). In Column H you can choose between "existing" or "not existing" via the drop-down menu. Please indicate the rates of avoidance/reuse/recycling/ alternatives (Columns I-L) in % enable them to reduce their consumption of single-use plastics - please feel free to add your tips and tricks here.*								
	count	choose	weigh	choose	0.00	choose		
wrapping foil (similar cling film for food)			2.2	kg	0.00			100
felt tip pen					0.00			100
Fineliner pen					0.00			100
plastic box for pins or paper clips					0.00			100
folder			26	g	0.00			100
fileback fastener					0.00			100
hot glue blanks					0.00			100
Hygiene-gel (for hands)			100	g	0.00			100
cable tie					0.00			100
cash register roll (for receipts)			76	g	0.00			100
ball pen			12	g	0.00			100
laminating foil			1.369	kg	0.00			100
bubble wrap 80m x 1m x 5mm			3.5	kg	0.00			100
name sign (protection)					0.00			100
Folder (big)			375	g	0.00			100
plastic rails for bindings / blanks					0.00			100
Plastic wrapping for copying paper					0.00			100
Post-Its incl wrapping			14	g	0.00			100
Post-It wrapping (6-pack)			5	g	0.00			100
price tag foil			17	g	0.00			100
price tag holder			2	g	0.00			100
eraser					0.00			100
ringbinder					0.00			100
writing tape cassette			63	g	0.00			100
conference folder					0.00			100
paper handkerchief case			1	g	0.00			100
highlighter pen			12	g	0.00			12

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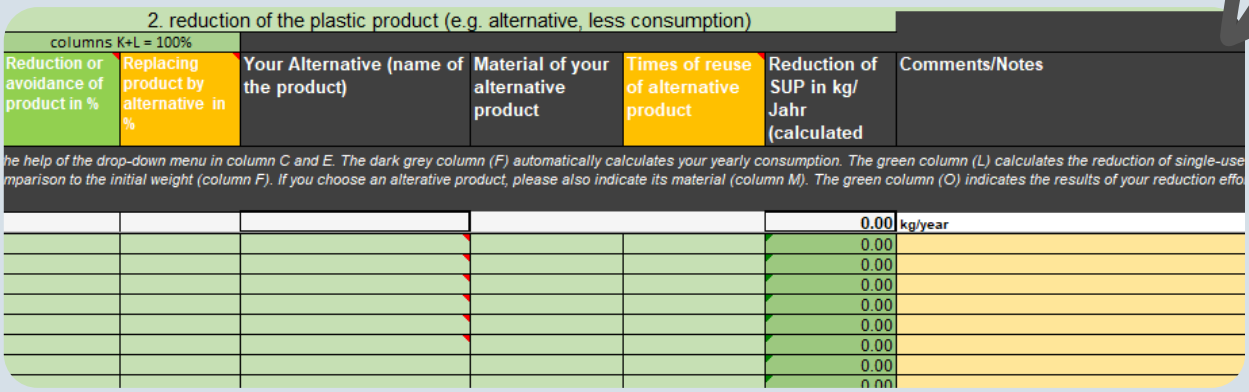
Plastic Inventory Tool in Detail

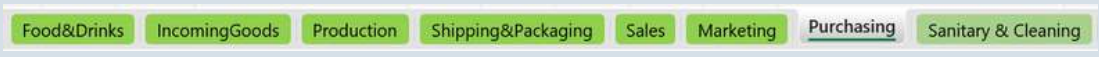
After the inventory of current consumption levels, the tool accounts for the reduction measures adopted by the respective organisation. It differentiates between a reduction by avoidance (green according to the traffic light scheme) and a replacement by an alternative material (yellow according to the traffic light scheme). The alternative material and the number of reuses is collected to feed the environmental impact analysis. As a result of the reduction section, an annual amount of saved plastics is calculated by the tool. To facilitate the search for alternative, the tool provides users with numerous best practices and tips.


2. reduction of the plastic product (e.g. alternative, less consumption)

columns K+L = 100%

Reduction or avoidance of product in %	Replacing product by alternative in %	Your Alternative (name of the product)	Material of your alternative product	Times of reuse of alternative product	Reduction of SUP in kg/ Jahr (calculated	Comments/Notes
he help of the drop-down menu in column C and E. The dark grey column (F) automatically calculates your yearly consumption. The green column (L) calculates the reduction of single-use mparison to the initial weight (column F). If you choose an alterative product, please also indicate its material (column M). The green column (O) indicates the results of your reduction effo						
					0.00	kg/year
					0.00	
					0.00	
					0.00	
					0.00	
					0.00	
					0.00	
					0.00	
					0.00	

4. Other Organisational Areas



To facilitate the internal organization of the inventory, the tool offers different pre-defined typical business areas with respective typical products. These are structured as previously described (see 3.). To be suitable for every kind of organisation, the organisational areas can be adapted to the respective structure of the participating organisation.

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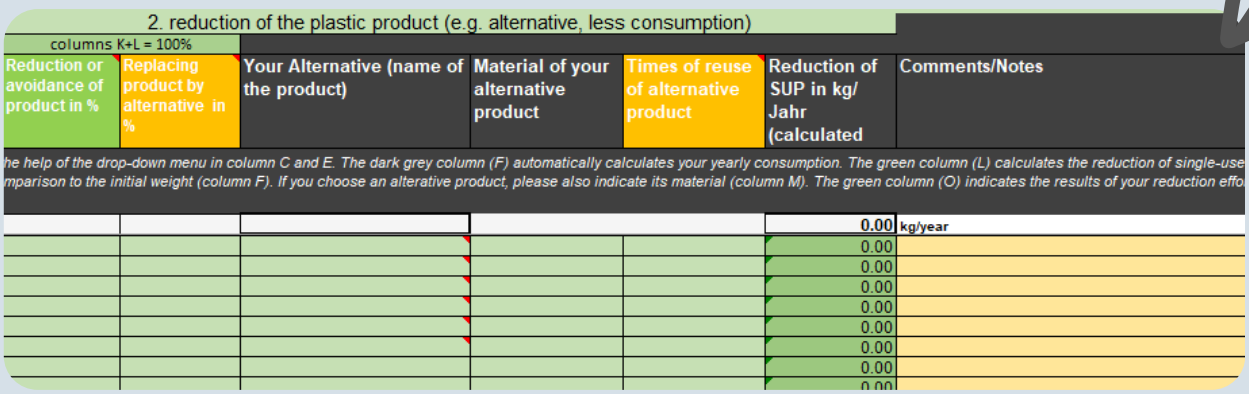
Plastic Inventory Tool in Detail

After the inventory of current consumption levels, the tool accounts for the reduction measures adopted by the respective organisation. It differentiates between a reduction by avoidance (green according to the traffic light scheme) and a replacement by an alternative material (yellow according to the traffic light scheme). The alternative material and the number of reuses is collected to feed the environmental impact analysis. As a result of the reduction section, an annual amount of saved plastics is calculated by the tool. To facilitate the search for alternative, the tool provides users with numerous best practices and tips.



4. Other Organisational Areas

businesses

schools

municipal entities

To facilitate the internal organization of the inventory, the tool offers different pre-defined typical organisational areas with respective typical products. These are structured as previously described (see 3.). To be suitable for every kind of organisation, the organisational areas can be adapted to the respective structure of the participating organisation.

THE INVENTORY PROCESS

Municipal Entities

KEY COMPONENTS OF THE INVENTORY PROCESS

1
December 2023

KICK-OFF

The respective pilot municipal entity receives the inventory tool. Key staff attends a workshop with the responsible project partner, specifying the details of the inventory process. The contact with the responsible project partner is maintained throughout the whole process.

ENGAGE STAFF

Engaging staff to participate in the inventory is decisive for its success. Tips: start a mailing process, set up a pin board or letter box in common spaces to receive suggestions, organize regular staff events. Adapt to the existent infrastructure within your municipal entity.

2
January 2024

3
February 2024

PLASTIC INVENTORY

For a measurable reduction addressing individual leverage points, a baseline of consumption is needed. To gain an overview on which kinds and how much plastic packaging and single-use plastics are currently consumed, the organisations examine its waste bins regularly and documents their contents in the light blue parts of the tool.

REDUCTION PLAN

When the main leverage points for reducing plastic have been identified during the inventory, measures to reduce the consumption can be taken. While drafting a plan for reducing single-use plastic and plastic packaging, special attention should be given to “low-hanging fruits”. Implementation should be prepared in these months.

4
May 2024

5
August 2024

IMPLEMENTATION OF FIRST MEASURES

Starting with the “low-hanging fruits” (measures that can be implemented easily/ without additional costs), the municipal entity adopts tailored measures to reduce the identified sources of plastic.

EVALUATION OF THE REDUCTION MEASURES

With a potential second scrutiny of the waste bins, the municipal entities gain insight on the effectiveness of their measures. The observations can be entered as savings into the inventory tool (light green columns).

6
October 2024

7
November 2024

REPORTING AND COLLECTION OF DATA

The filled out tool is sent in to the respective contact person from BaltiPlast. In the following, best practices and data from the municipal inventories are collected. These feed into further adaptations of the process and the inventory tool.

THE INVENTORY PROCESS

School facilities

KEY COMPONENTS OF THE INVENTORY PROCESS

1
December 2023

KICK-OFF

The respective facility management/ administration receives the inventory tool. Key staff attends a workshop with the responsible project partner, specifying the details of the inventory process. The contact with the responsible project partner is maintained throughout the whole process.

ENGAGE STAFF

Engaging staff to participate in the inventory is decisive for its success. Tips: start a mailing process, set up a pin board or letter box in common spaces to receive suggestions, organize regular staff events. Adapt to the existent infrastructure within your school.

2
January 2024

3
February 2024

PLASTIC INVENTORY

For a measurable reduction addressing individual leverage points, a baseline of consumption is needed. To gain an overview on which kinds and how much plastic packaging and single-use plastics are currently consumed, waste bins in key areas such as offices, staff spaces, corridors/ courtyards and canteens are examined regularly and their contents are documented in the light blue parts of the tool.

REDUCTION PLAN

When the main leverage points for reducing plastic have been identified during the inventory, measures to reduce the consumption can be taken. While drafting a plan for reducing single-use plastic and plastic packaging, special attention should be given to “low-hanging fruits”. Implementation should be prepared in these months.

4
May 2024

5
August 2024

IMPLEMENTATION OF FIRST MEASURES

Starting with the “low-hanging fruits” (measures that can be implemented easily/ without additional costs), the school adopts tailored measures to reduce the identified sources of plastic.

EVALUATION OF THE REDUCTION MEASURES

With a second scrutiny of the waste bins, the school gains insights on the effectiveness of their measures. The observations can be entered as savings into the inventory tool (light green columns of the tool).

6
October 2024

7
November 2024

REPORTING AND COLLECTION OF DATA

The filled out tool is sent in to the respective contact person from BaltiPlast. In the following, best practices and data from the school inventories are collected. These feed into further adaptations of the process and the inventory tool.

THE INVENTORY PROCESS

Pupils

KEY COMPONENTS OF THE INVENTORY PROCESS

1
Week 1

KICK-OFF
The project class is introduced to the project and the 3-step process laid out below.

PLASTIC INVENTORY
The class and their teacher receive age-specific content to accompany and carry out the plastic inventory (e.g. example worksheet for younger children or an online survey for older age groups.). After each school day, the classroom bin is examined and the results documented. The data will be entered into the tool by the responsible project partner.

2
Week 1

3
Week 2

DATA ANALYSIS AND WORKSHOP
Having sent in all the data, the responsible project partner analyses the data and identifies the biggest potentials for reduction. These are taken up in a workshop that will be held with the class, tailored to the age group.

REDUCTION PLAN & INVOLVING FAMILIES
The class makes a plan and a commitment to reduce selected items made out of single-use plastics. They e.g. talk to the school cafeteria. Or they plan an announcement to their families to implement these measures.

4
Week 2-3

5
Week 4

SPOTLIGHT INVENTORY
To evaluate the success of the reduction plan, a spotlight inventory is carried out on a random day of week 4 to observe potential changes. These are communicated to the responsible project partner.

FOLLOW-UP AND REFLECTIONS ON REDUCTION
Upon integrating the observed savings into the tool, the project partner communicates the total reduction made by the class. Further educational material is provided to the teacher.

6
Week 4

7
November 2024

REPORTING AND COLLECTION OF DATA
The filled out tool is sent in to the respective contact person from BaltiPlast. In the following, best practices and data from the school inventories are collected. These feed into further adaptations of the process and the inventory tool.

THE INVENTORY PROCESS

Businesses

KEY COMPONENTS OF THE INVENTORY PROCESS

1
Month 1

KICK-OFF
The respective pilot business receives the inventory tool. Key staff attends a workshop with the responsible project partner, specifying the details of the inventory process. A contact person from the business is identified. The contact with the responsible project partner is maintained throughout the whole process.

ENGAGE STAFF
Engaging staff to participate in the inventory is decisive for its success. Organize the inventory in teams.
Tips: start a mailing process with a survey, set up a pin board or letter box in common spaces to receive suggestions, organize regular staff events. Adapt to the existent infrastructure within your business.

2
Month 1

3
Month 1-2

PLASTIC INVENTORY
For a measurable reduction addressing individual leverage points, a baseline of consumption is needed. To gain an overview of which kinds and how much plastic packaging and single-use plastics are currently, the waste bins within the organisation's premises are examined regularly and the quantities are entered into the light blue columns of the tool.

REDUCTION PLAN
When the main leverage points for reducing plastic have been identified during the inventory, measures to reduce the consumption can be taken. While drafting a plan for reducing single-use plastic and plastic packaging, special attention should be given to "low-hanging fruits". Implementation should be prepared in these months.

4
Month 2

5
Month 3

IMPLEMENTATION OF FIRST MEASURES

Starting with the "low-hanging fruits" (measures that can be implemented easily/ without additional costs), the business adopts tailored measures to reduce the identified sources of plastic.

EVALUATION OF THE REDUCTION MEASURES
If it is not possible to estimate the savings generated by the reduction measures (e.g. from number of ordered alternative products), a second shorter scrutiny of the waste bins is conducted for the business to gain insight into the effectiveness of their measures. The observations are documented as savings in the inventory tool (light green columns).

6
Month 3

7
End of Month 3 or latest November 2024

REPORTING AND COLLECTION OF DATA
The filled out tool is sent in to the respective contact person from BaltiPlast. In the following, best practices and data from the inventories are collected. These feed into further adaptations of the process and the inventory tool.