

# Concluding remarks

FanpLESStic-SEA Final Conference  
30 November 2021



# Questions raised

- Is it possible to tackle microplastics?
- What can the global, regional, European, national and local community do to tackle the issue?
- How would you foresee the situation to be in 10 years' time?
- What would you change if you could?
- Which of the three actions addressing microplastics in the revised HELCOM Regional Action Plan on Marine Litter should be prioritized?

# Is it possible to tackle microplastics? (1/2)

- The occurrence and hazardous nature of MPs in the sea environment has been realized only **recently**. Thus, not much effort is yet put to tackle the problem. With a **comprehensive approach** starting from **replacing** plastic materials whenever possible, **collecting** macro- and microplastic litter at their origin and finally **removing** MPs along their pathways before they reach the sea, it is possible to significantly reduce MP pollution.
- In principle **yes**, but it is a **long-term effort**, needing patience, determination and an **integrated** approach.
- **Yes**, but the ways to tackle MPs can differ dependent on the type of **source** or **pathway**. Some can be handled **preventively** (e.g., through bans and substitution) while for others, different ways to control the pollution (e.g., through water treatment) may be more suitable.

## Is it possible to tackle microplastics? (2/2)

- Regarding **MPs in wastewater**, research studies conducted nowadays confirm that MP pollution can be reduced with **advanced treatment technologies** as well as with the use of **nature-based solutions**, for example constructed wetland systems. Thanks to the analysis of samples from Gdansk municipal WWTP carried out in the FanPLESStic-sea project, high efficiency of MPs removal during conventional wastewater treatment technology was also proved.
- Despite the great work going on the different aspects of the MP pollution problems, we are still at the start of our way. We are living in the lack or **insufficient information** about the **consequences** of this pollution. So, much of the resources are going to assess of **data needed** for further managing the problem including legislative initiatives developing.
- It is **not possible to fully eliminate MPs**, however, it is **possible to minimise the emissions**.
- **Yes**, if we manage to shift from fragmented researches to **joint efforts** of academy, policy makers, businesses and community.

# What can the global, regional, European, national, and local community do to tackle the issue? (1/3)

- Changes in **policies** for guiding consumption towards products with less MP emission, **supporting technology/product research/development** to enable new innovative solutions to enter the market both regarding alternative materials and removal methods, **awareness raising** campaigns for consumers, citizens and school children for sustainable life-style.
- Address **sources** (such as products), **pathways** (such as road and maritime transport, wastewater collection and treatment); adequately **monitor** aquatic environment, in particular seas and coasts and link monitoring with **measures**; **engage** with stakeholders, at the appropriate level (e.g. global solutions for global industries).
- **Everyone can do their part.** The local community can largely influence by implementing measures, for example stormwater treatment or capturing granulate at artificial turfs, while governance on a higher level is needed to provide legal frameworks and policies to guide the local management action.

# What can the global, regional, European, national, and local community do to tackle the issue? (2/3)

- On a **global** scale: government **bans on single use plastic, development of public transport system** (car tyres are a major source of MPs. In cities that have heavy traffic, this leads to a phenomenon known as “city dust” — clouds of plastic debris and other particles. By using public transportation instead of a personal car, you can limit the overall amount of tyre erosion and plastic pollution.) On a **local** scale: **buy plastic-free cosmetics, use public transportation, buy clothes made from natural materials, change how you do laundry.**
- For sure **we cannot live without plastics**, what we have to do is to **use them properly and minimize uncontrolled waste of plastic.**
- Decision makers should introduce **suitable regulations**, which will be helpful in tackling the problem. Additionally, at every level, **dissemination of knowledge** is needed as well as – the **tips for consumers** in order to help them to replace plastic products with more ecological ones or to change their everyday habits like e.g. ecological driving.

# What can the global, regional, European, national, and local community do to tackle the issue? (3/3)

- Regional and local communities are lacking even of basic knowledge and information based on trusted research. **Communication** should be done at all levels. **Business** is **willing** to do **changes** in reducing use of plastic package, but **financial issues** come over: costs of another kind of packaging is higher or no requested quality. More academical efforts should be allocated for investigation of new nature friendly packaging materials able to substitute plastic (same level of costs and characteristics). Waste and water management should be constantly improved and upgraded.

# How would you foresee the situation to be in 10 years' time? (1/2)

- **Greta Thunberg** started her campaign against climate change in 2018. Already after three years the political atmosphere has changed remarkably. **Ten years is a long enough time period** to tackle the macro- and microplastic problem if there is **enough political willingness and global collaboration**.
- Hopefully **concrete prevention measures will be in place**, unclear to which extent results (e.g. reduction of concentrations in seawater) will be visible by then.
- I believe several **more efforts to tackle large sources** have been **implemented** and that we have a **better picture of the harmful effects** of plastics on organisms and potential differences between plastics.
- As the global overall microplastic pollution in oceans is said to be growing over the next decades, **more efforts would need to be done** at the same time, in a concerted effort, this way we really can make a huge difference over time.

# How would you foresee the situation to be in 10 years' time? (2/2)

- In the next 10 years, we can achieve **some reduction of MPs from consumption habits**, especially in the case of single-use products and in developed cities but the synthetic textiles and other resources are unpredictable. This will depend on many different factors. Still, we cannot solve the problem only by people choosing the product they use, many people still do not have sustainable alternatives available, thus **practical initiatives top-down should also be developed**.
- It strongly **depends** on how quickly **suitable regulations** will be introduced and, on the **availability**, and the **costs of removal technologies** to be applied. Additionally, the understanding of the problem by end users can change a lot. Nevertheless, **in case nothing changes the situation can be really difficult**, especially if speaking about the condition of fauna and flora, progressive climate changes and negative impact on human health will possibly be confirmed.
- **It will not change if we do nothing to change it**. The hill to overcome is big, but every tiny change goes up.

# What would you change if you could? (1/2)

- **Ban the use of excess plastic** in e.g. packaging if it is not necessarily needed. **Tighten the requirements for car tyres** in regard to MPs emissions. Arrange MP catchment along the pathways when possible, e.g. **snow treatment and banning direct dumping of urban snow to the sea.**
- **Enforce** very rapidly **prevention measures on products**; **reinforce** marine environment **monitoring and assessment.**
- There is a need for **improvements in the waste management system** and **increased recycling of plastic material.**
- I would focus more on the approach that: **“Plastic is not the root of the problem, but rather the single-use lifestyle we have become accustomed to”.** The most important thing is what we do and will do with plastic in general (reducing and recycling). We **can all help** to tackle plastic pollution by changing the way we use plastics.

## What would you change if you could? (2/2)

- For sure **we cannot live without plastics**, what **we have to do is use them properly, and minimize uncontrolled waste of plastic.**
- I would **speed up the legislative procedure**, focusing on **unifying the analytical methods** (maybe a kind of common protocol, procedure for sampling and analysis should be introduced) in order to have the possibility to compare the results of research studies undertaken by different institutions and **increase the funding of research.**
- **During this project science-based piece of information tackling MP was developed and presented in an easy-to-understand way**, so it is a tool to share at regional/national/EU level. **Everyone can do small steps** starting from the nearest environment. I have started from myself, shifting to family, colleagues, friends, community. Tiny steps as sharing information, reusable bags and packaging, efforts to collect, separate and bring to appropriate disposal waste that can be handled separately by waste management facilities.

# Which of the three actions addressing microplastics in the revised HELCOM Regional Action Plan on Marine Litter should be prioritized? (1/3)

- *“RL7: Based on the evaluations made in the EU and among the contracting parties of the most significant products and processes that release both primary and secondary microplastics, assess if they are covered or not by legislation, and act, if appropriate, to influence or adjust the legal framework, or identify other necessary measures to reduce emissions to the aquatic environment.”*
- *“RL8 Evaluate the possibility to introduce regional recommendations to reduce release of microplastics from WWTP utilizing the outcome of related studies.”*
- *“RL9 Development of a HELCOM guideline on establishment and operation of artificial turfs, to prevent plastic losses, taking into account the ongoing work within the EU including the proposal by ECHA.”*

# Which of the three actions addressing microplastics in the revised HELCOM Regional Action Plan on Marine Litter should be prioritized? (2/3)

- **RL7** since the most significant source of MPs are stormwaters, containing e.g. traffic MPs, and they are not treated.
- **RL7** is the most comprehensive and promises clear synergies with EU policies, seems therefore the most important one.
- I think that it is important to assess when it is possible to avoid introduction to the system to begin with and work as far “upstream” in the system as possible. Treatment can be the most suitable option on some occasions, but that still moves pollution from for example water to sludge or sediments, which needs to be taken care of. This points to **RL7 and secondly RL9** to be prioritized.
- **RL7 & RL8**

# Which of the three actions addressing microplastics in the revised HELCOM Regional Action Plan on Marine Litter should be prioritized? (3/3)

- For sure we cannot live without plastics, what we have to do is use them properly, and minimize uncontrolled waste of plastic. Regarding the **WWTPs: They release nearly zero plastics**. Hence, they cannot be asked to reduce releases. They are only a tiny-minor part of the release.
- According to HELCOM Recommendation, the most urgent, of course, is to **find a legal framework for measures to reduce emissions of microplastics**, since many organizations, due to their “nature” (receiving money for a product or service at a lower cost) are not interested in implementing voluntary measures, but the most interesting practical work in the existing environment I see in **RL9, because it seems that it should have a roadmap on how to prevent microplastics emissions**.
- **RL7 as the one that can change the situation and furthermore bring visible results.**

Thank you for your  
attention!

