



Interreg
Slovakia-Austria



EUROPEAN UNION



**PlasticFree
Danube**
European Regional Development Fund

Universität für Bodenkultur Wien
University of Natural Resources and
Life Science, Vienna



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PlasticFreeDanube

Macro plastic in and along the Danube: introduction of the
PlasticFreeDanube project
Sabine Lenz - 28/06/2018



PlasticFreeDanube

Project Facts

- ❖ Duration: 1 October 2017 – 30 September 2020
- ❖ 5 Project partners, 18 strategic partners
- ❖ Funding programme: [Interreg V-A Slovakia-Austria 2014-2020](#)
- ❖ Budget: EUR 1.23 Mil. / EU-Funding (ERDF): EUR 1.05 Mil.





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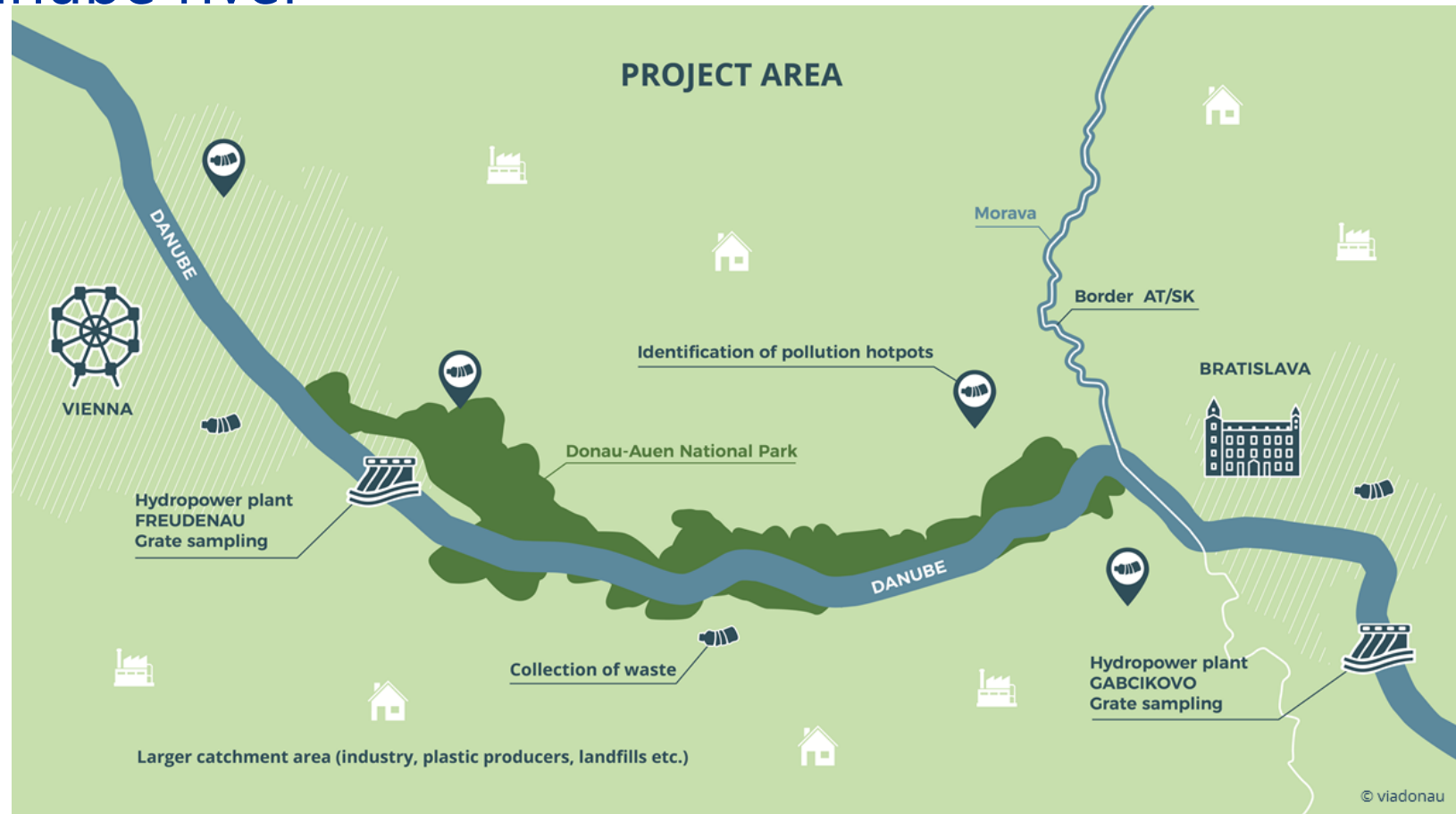
**Reduction of quantities and negative
impacts of plastic waste on fluvial
ecosystems with focus on the Danube river**



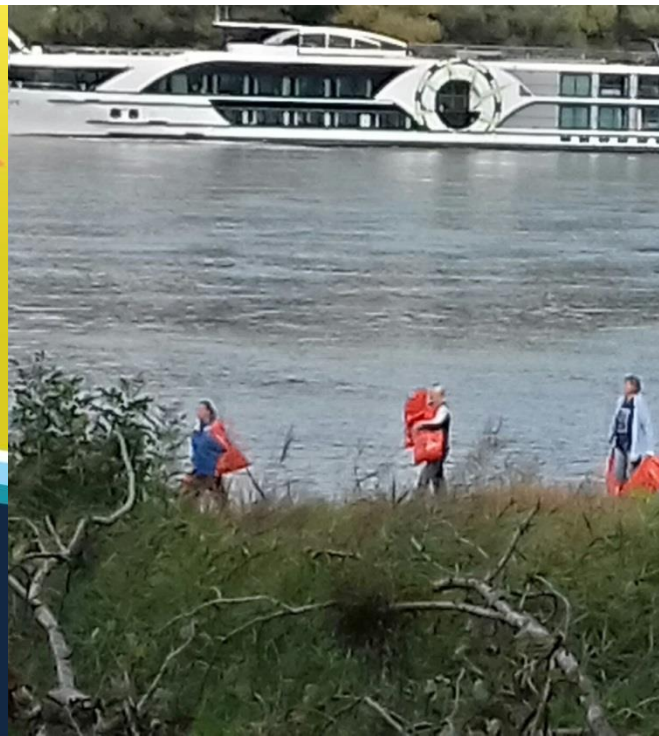
Project aims – main expected results

- 1) **Development of method** and supply of data for **assessment and monitoring of plastic pollution** in fluvial ecosystems
- 2) Development of an **action plan** for plastic waste management and **implementation of pilot measures** against plastic pollution in and along the Danube
- 3) **Increase** of public and stakeholder **awareness** about plastic pollution in the rivers

Project activities: Identification of on-shore plastic pollution sources and hotspots along and in the Danube river



Project activities: Collection and identification of macro plastic waste along and in the Danube river



source: Joint Research Centre, European Commission (2017)

Project activities: Sampling & Sorting methodology

Development of a standardized sampling & sorting methodology and a guideline

- for the collection and sorting of plastics
(Manual & Sorting protocol)
- to get well-founded data on the quantities and composition of plastic waste



Project activities: Material flow analysis - Transport model



Identify on-shore and off-shore plastic waste sources



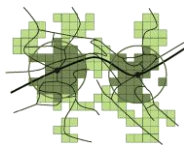
Pollution hot spots



Entry points into the Danube



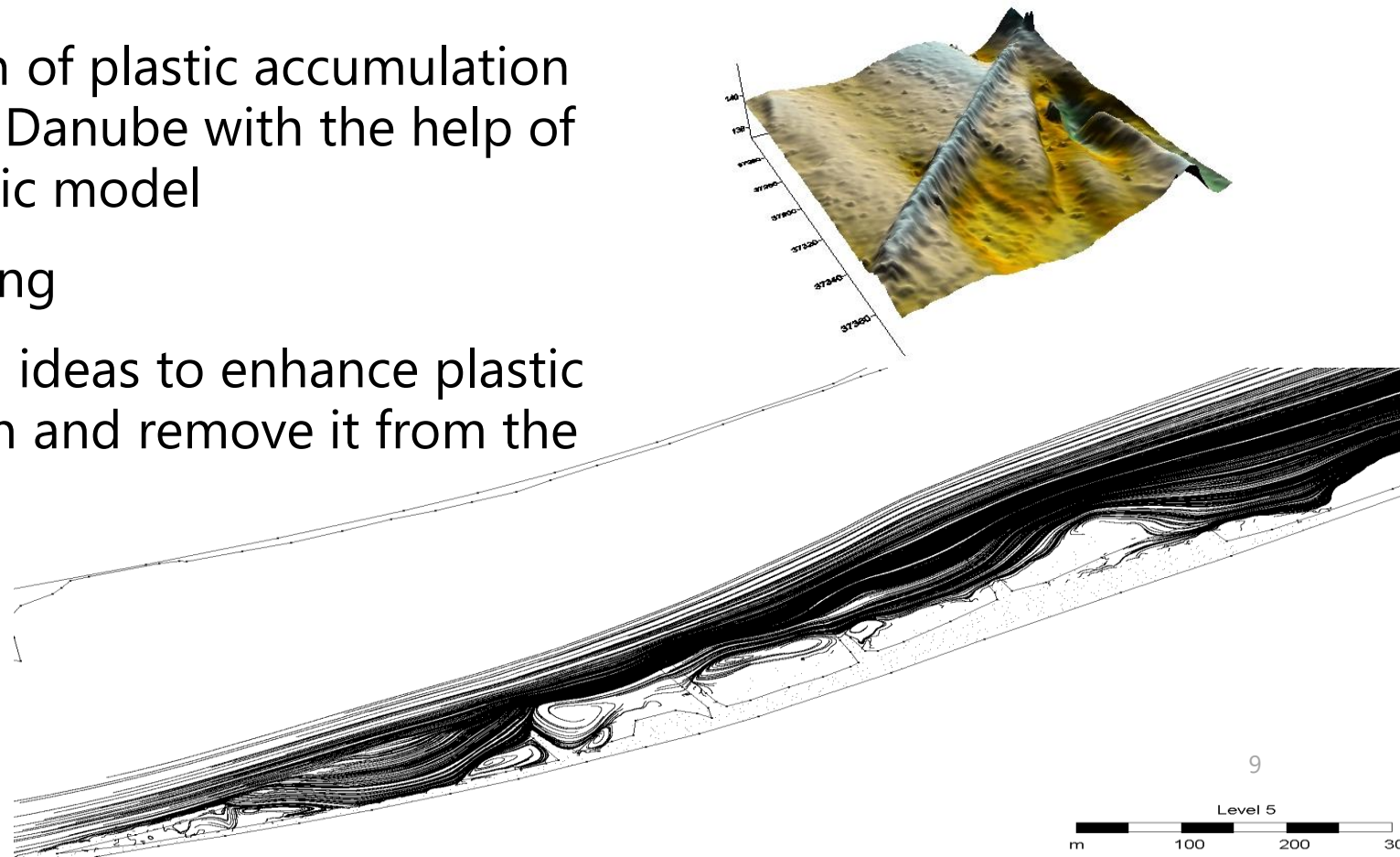
Transport ways and accumulation zones



Design hydraulic accumulation structures

Project activities: Modelling plastic transport in the river and design of retention structures for plastic accumulation zones

- Identification of plastic accumulation zones at the Danube with the help of hydrodynamic model
- Particle Tracing
- Construction ideas to enhance plastic accumulation and remove it from the river



Project activities: Analysis of plastic as pollutant and assessment of potential environmental threats

- Evaluate **degrade and abrasion resistance** of plastic collected from rivers



Project activities: Policy recommendations and implementation of pilot measures,

- **Actionplan**
 - Integration in programs
 - National stakeholder conferences
- **Pilot Actions**
 - Infrastructure & Communication



Project activities: Capacity building and awareness raising activities

- **Raise awareness** concerning plastic pollution
- **Education and Training**
 - Development of Training Material





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First results: Sorting of Macro plastic waste



First results: Sorting of Macro plastic waste



Food packaging: hard plastic



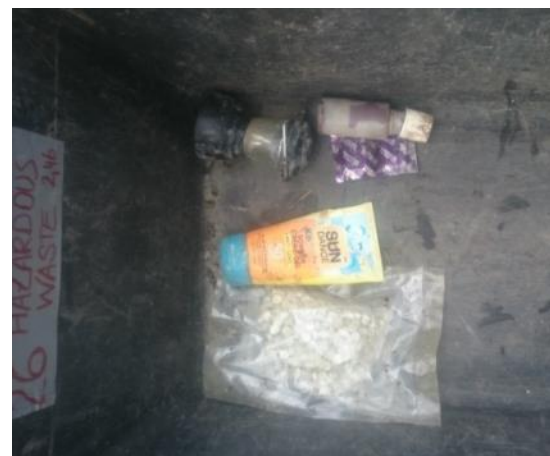
Foam packaging/ insulation /PUR



Other plastic & composite packaging



Other plastics items



Hazardous waste



Shoes, Clothes

First results: Sorting of macro plastic waste

Classification Issues



High amount / volume

- 2nd largest fraction

Versatile application

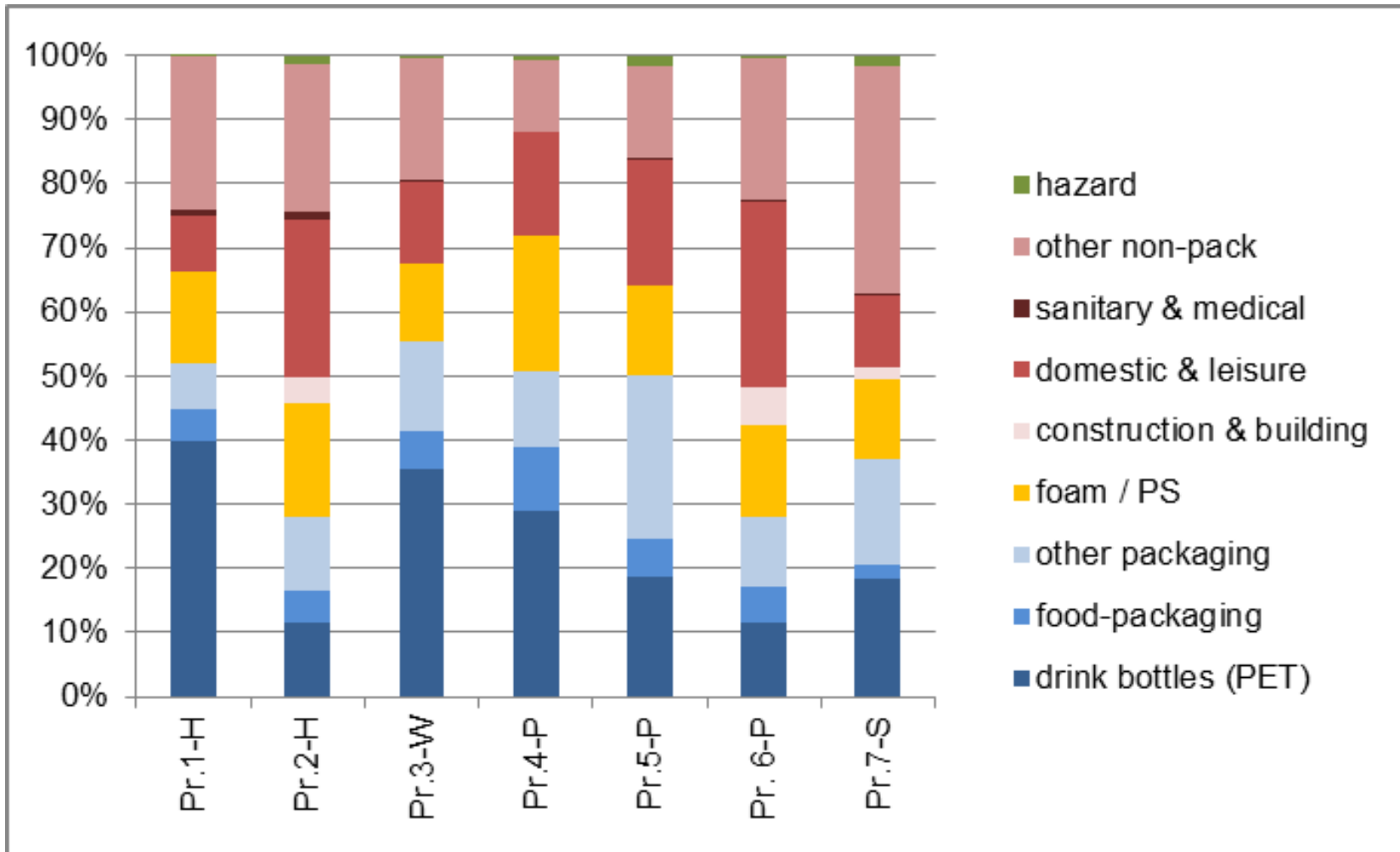
- (Food) packaging
- Insulation (additives environmentally relevant)
- Furniture, toys, etc.

Difficult classification

- Additional sorting
- Estimation & allocation to origin/sector



First results of sampling & sorting





Thank you for your attention!

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Protect Nature – avoid pollution!