

Preserving Water and Marine and River Environments: Practical solutions

Workshop FR-NL

SDG Forum 2026

13.10.2026



... pour transmettre un monde habitable

Contents

Who We Are & What We Do
Meet Our Speakers
Panel Discussion
Q&A

Vision & Mission



Pass on a liveable world to
FUTURE GENERATIONS

The Foundation for Future Generations **trusts and funds** a **new generation** of **YOUNG TALENTS** to unfold their **360° ideas** and **tangible solutions** for tomorrow



Mainstream a 360°,
systemic approach

To tackle today's
immense challenges and
complex crises



The 4P model as a systemic lens

Respect the ecological limits of ecosystems and natural resources on which all life depends

An economy that creates sustainable value for people and the planet, beyond short-term growth



Ensure well-being and quality of life for all, in a fair and equitable way

Actively involving citizens and stakeholders in decision-making to co-create sustainable solutions and promote democratic governance

Our Strategy

→ Our **specific strength**: identifying, supporting, and bringing together a new generation of young problem-solvers who are developing solutions for tomorrow, at **three key moments** in their journey.



FOSTERING and BRINGING TOGETHER
A **NEW GENERATION** OF TALENTS

Meet our speakers



Maud Toussaint Schurmans

Recipient of the HERA Award
Sustainable Engineering 2025

**Improve access to
drinking water:
stakeholder-based
specifications**



MAUD
TOUSSAINT
SCHURMANS



AMÉLIORER L'ACCÈS À L'EAU POTABLE
À METRO CEBU, PHILIPPINES VIA
LE DÉVELOPPEMENT DE CAPTEURS
PORTABLES LOW-COST



A panoramic view of the Cebu skyline in the Philippines, featuring a mix of modern high-rise buildings and older structures, set against a backdrop of green hills and a body of water in the foreground.

Stakeholder-based Specifications for Portable Water Quality Sensing – Metro Cebu, Philippines

Maud Toussaint Schurmans
Professor Jean-Pierre Raskin
Margo Hauwaert

Stakeholder-based Specifications for Portable Water Quality Sensing - Metro Cebu, Philippines

Context

Metro Cebu, Philippines

- Unsatisfactory water **quantity** and **quality**.
- Challenges to **sustainable water quality monitoring**: lack of resources, available data, expertise, ...

Water quality sensors

- Inadequate traditional water quality monitoring methods
- **What about portable sensors?**



Objectives

Identify design-related recommendations specific to relevant use cases for portable water quality monitoring sensors

By determining specifications based on the user needs, i.e. local stakeholders involved in water quality monitoring in Metro Cebu.

The purpose is to **avoid a misalignment between conception and needs**.



Results

- **Trust** is primordial for confidence in results → Increases with **minimal human intervention**
- Consensus between stakeholders and end-users: **precision, price and user-friendliness** important specifications

Need for **affordable digital quantitative portable sensors** with high for use, calibration and maintenance steps

- **Systemic approach**: direct integration of end-users and in-depth study of context (social, economic and political) → **Innovative engineering approach**

Conclusion & Outlook

- First step in **multidisciplinary research** to increase access to affordable drinkable water, reduce waterborne diseases, develop knowledge and expertise, and promote sustainable resource and environmental monitoring.
- **Methodology** (including end-users), **user-based design recommendations** and in-depth study of context = **guidelines for further studies**

Methodology

Existing sensors review

1

Focus on **“low-cost” portable** sensors (Metro Cebu = resource-limited)
→ Existing sensor selection: context-relevant biochemical parameters

Context identification

2

- Local **water expertise** & relevant **stakeholders** in water sector
- Hurdles to **integrated water resource management**

Use of purchased sensors

3

Local end-users manipulate sensors purchased in Step 1 in real-condition scenarios
→ **Feedback** on the use of the sensors

Interview local stakeholders of water sector

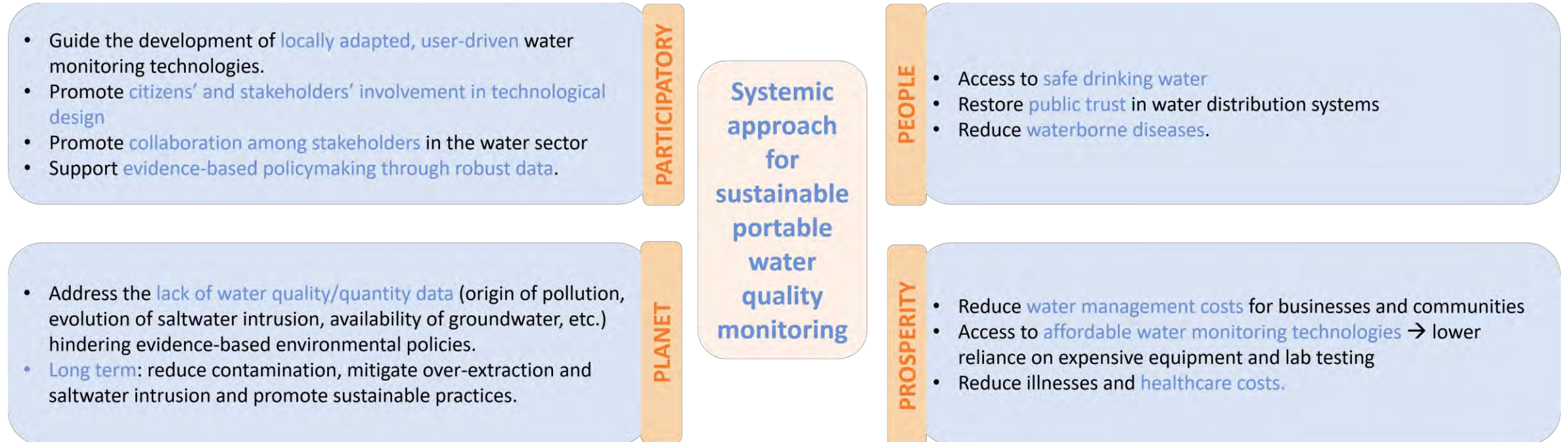
4

→ **Ranking** of sensors' specifications

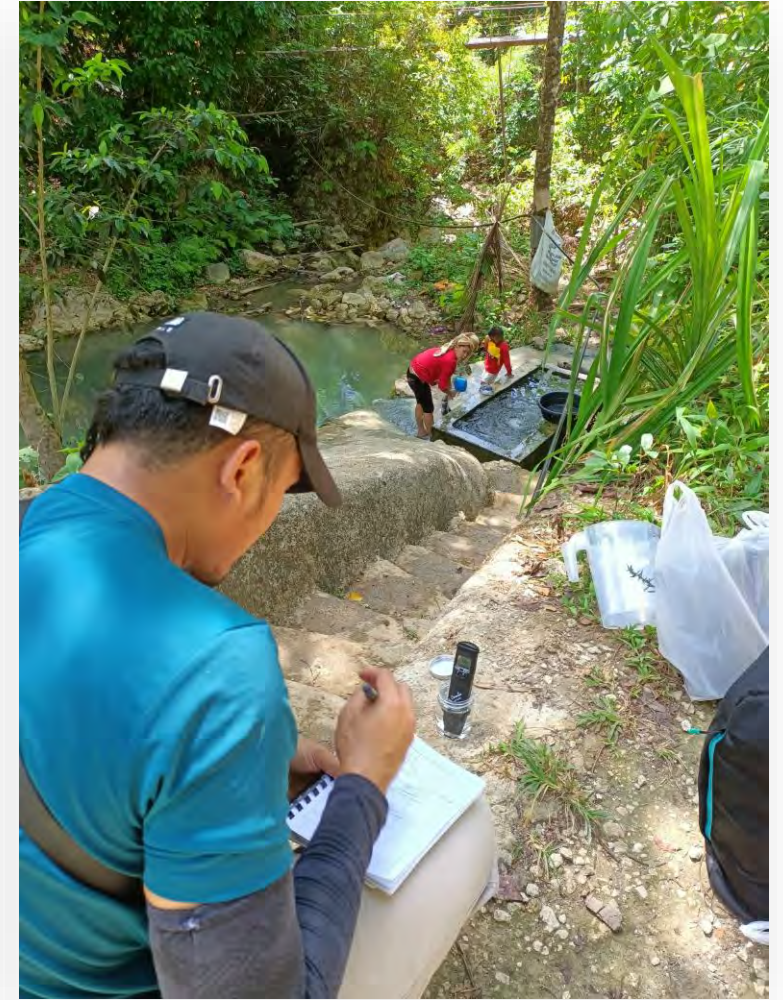
Steps 2-4 took place in Metro Cebu.



Stakeholder-based Specifications for Portable Water Quality Sensing - Metro Cebu, Philippines



Stakeholder-based Specifications for Portable Water Quality Sensing - Metro Cebu, Philippines





Catalina Codruta Dobre

Recipient of the HERA Award
Brussels for Future Generations &
HERA Doctoral Thesis Award 2022

New approaches to responding to floods: water-smart city



CATALINA-CODRUTA
DOBRE

DE NOUVELLES PRATIQUES
POUR RÉAGIR AUX INONDATIONS :
LA RÉGION DE BRUXELLES-CAPITALE
DEVIENDRA-T-ELLE BIENTÔT
UNE « VILLE SENSIBLE À L'EAU » ?



L'adaptabilité des territoires à travers l'eau, le paysage et la coproduction des savoirs.

Catalina C. Dobre

13 octobre 2026

Catalina.dobre@ulb.be

louiselab.be

raw.ngo

calmecollectif.be



Appel à la coproduction des connaissances

Faire face aux défis de l'eau implique de transformer nos pratiques, nos représentations et notre rapport au territoire. La coproduction des connaissances associe savoirs scientifiques, professionnels et celles des habitants.



Appel à l'action

Chaque goutte d'eau de pluie retenue à la source plutôt que dirigée vers le réseau d'égouttage compte.

N'attendons pas la solution parfaite : des interventions progressives, adaptées au contexte local, peuvent déjà produire des effets significatifs.



Appel à l'engagement collectif

L'adaptabilité du territoire ne peut reposer uniquement sur les initiatives individuelles. Elle nécessite une mobilisation coordonnée des habitants, des associations, des chercheurs et des acteurs publics.

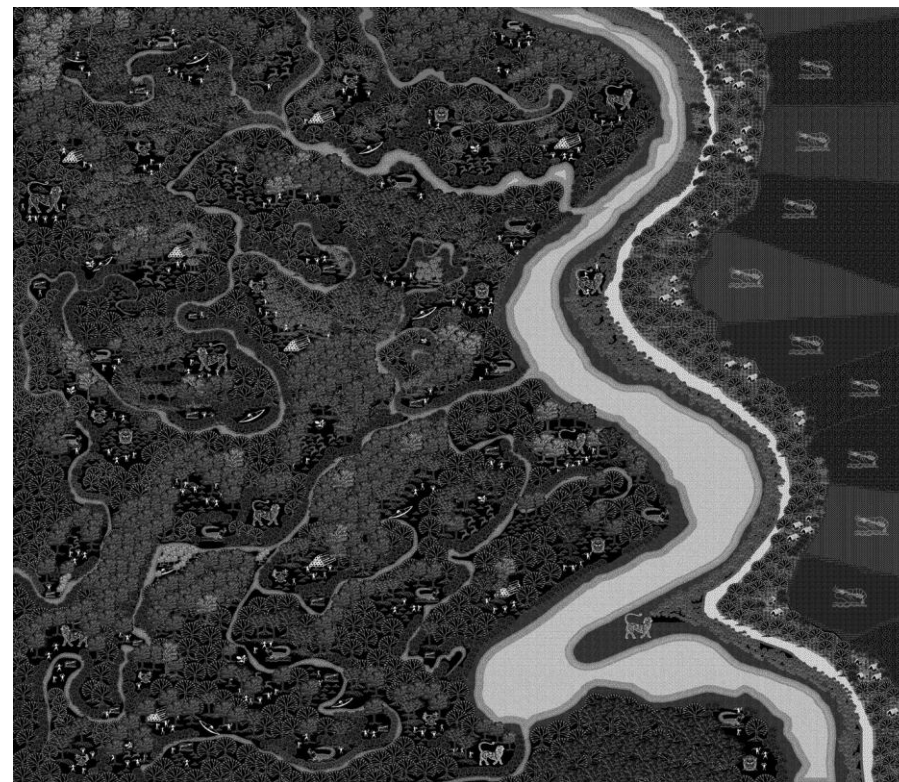


Appel à poursuivre la dynamique et à apprendre des Pays du Sud

Comme ULB ou l'association Risk&Architecture Workshop, il est nécessaire à continuer le développement de projets de recherche, d'expérimentation et de formation afin de consolider et d'amplifier cette approche de co-construction des solutions avec les communautés en apprenant uns des autres.



Friendship's mangrove afforestation is an example of Nature-based Solutions, which are actions to achieve sustainable development goals by protecting and restoring natural ecosystems to simultaneously provide social and biodiversity benefits. © KM ASAD/FRIENDSHIP





**Maud
De Hemptinne**

Project Manager City to Ocean
Recipient of the Aether Grant 2026

**Cleaning urban
waterways,
stopping plastic
pollution, restoring
biodiversity**



TRANSFORMER LES COURS D'EAU URBAINS POUR LA BIODIVERSITÉ ET LES CITOYENS

Depuis 2020



NOS OBJECTIFS POUR LES COURS D'EAU BRUXELLOIS



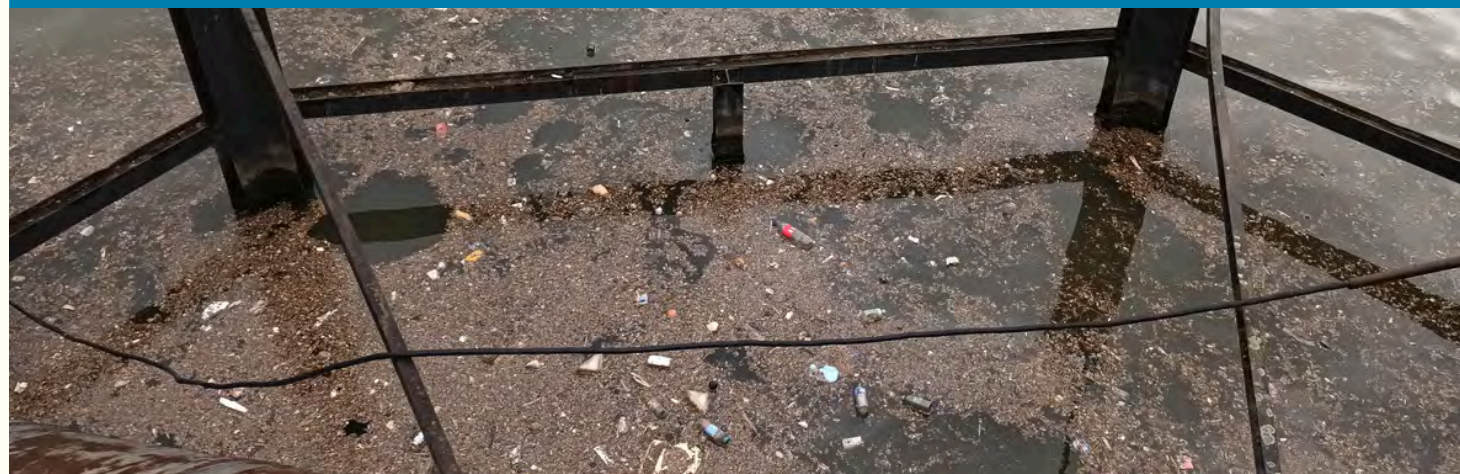
RÉDUIRE LA POLLUTION
PLASTIQUE



RESTAURER LA
BIODIVERSITÉ



RÉDUIRE LES
DÉBORDEMENTS D'ÉGOUTS

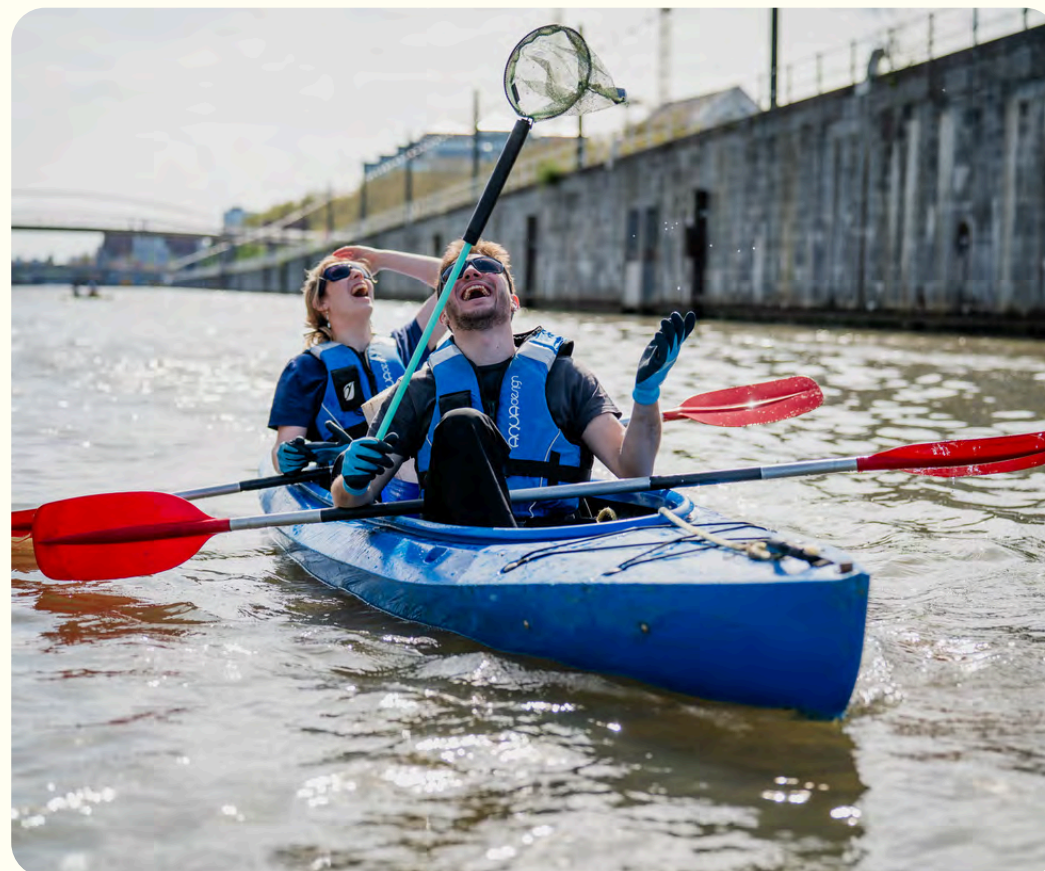


RECONNECTER LES BRUXELLOIS
À LEURS COURS D'EAU



NOS STRATÉGIES

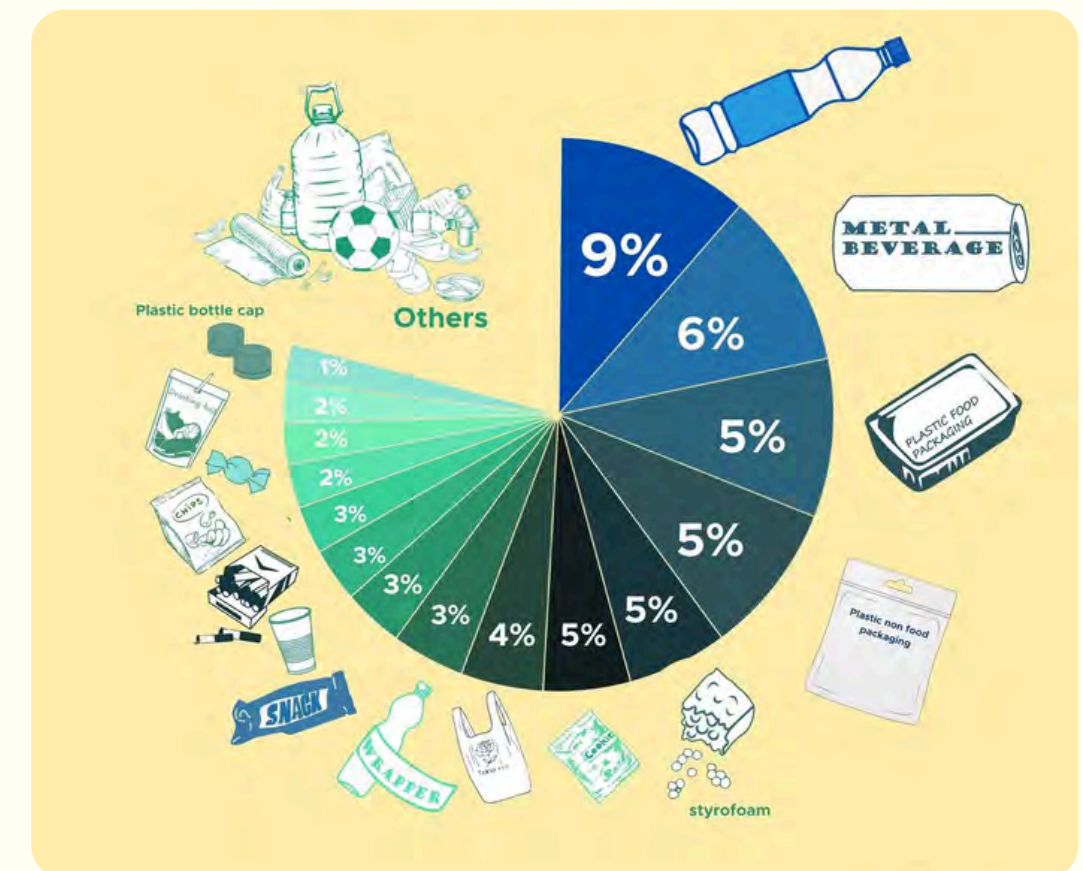
ACTIONS DE
SENSIBILISATION
PARTICIPATIVES



SOLUTIONS
STRUCTURELLES



COMMUNICATION
CRÉATIVE &
PLAIDOYER



ACTIONS DE SENSIBILISATION PARTICIPATIVES

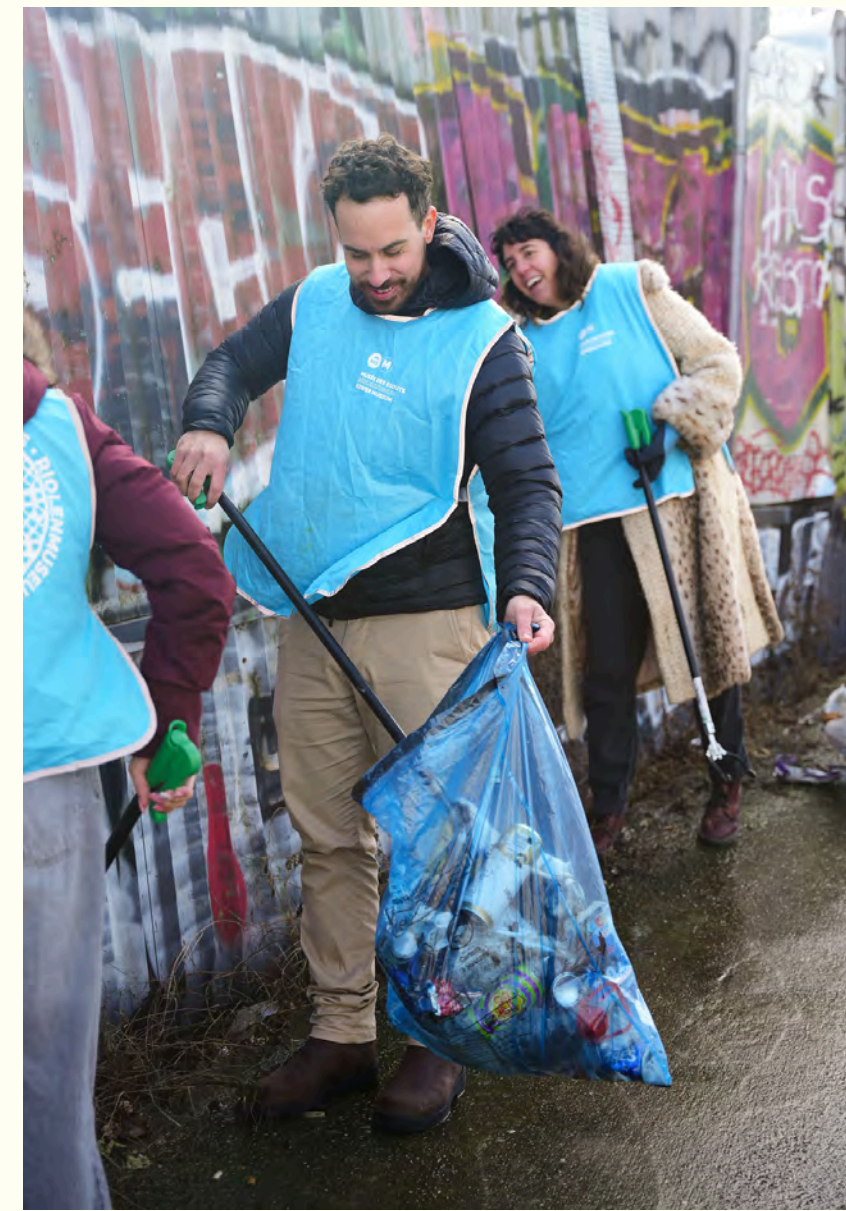
KAYAK CLEANUP SUR LE CANAL



CANOE-CATAMARAN CLEANUP



BALADE GUIDÉE DE RAMASSAGE DE DÉCHETS



WORKSHOP INTERACTIF MICRO(PLASTIQUES)





2000 PERSONNES PAR AN SUR L'EAU!



SOLUTIONS STRUCTURELLES

PLINTHES À DÉCHETS



ÎLOTS VÉGÉTALISÉS



VALORISATION D'EAU DE PLUIE



SODA CITRON-SAPIN



CAMPAGNE D'ADOPTION DE PLINTHES À DÉCHETS

STRUCTURELLEMENT, IMMÉDIATEMENT ET DURABLEMENT RÉDUIRE LES DÉCHETS QUI POLLUENT LE CANAL ET LA MER DU NORD!

Solution innovante qui permet d'éviter que les déchets des quais ne soient emportés dans l'eau à cause du vent.



Financement hybride innovant: citoyens et entreprises

Objectif: 1 km pour 2026

Lancement de la campagne en **juillet 2026**

	€29 pour un demi-mètre
	€59 pour un mètre

CAMPAGNE D'ADOPTION DE PLINTHES À DÉCHETS

STRUCTURELLEMENT, IMMÉDIATEMENT ET DURABLEMENT RÉDUIRE LES DÉCHETS QUI POLLUENT LE CANAL ET LA MER DU NORD!

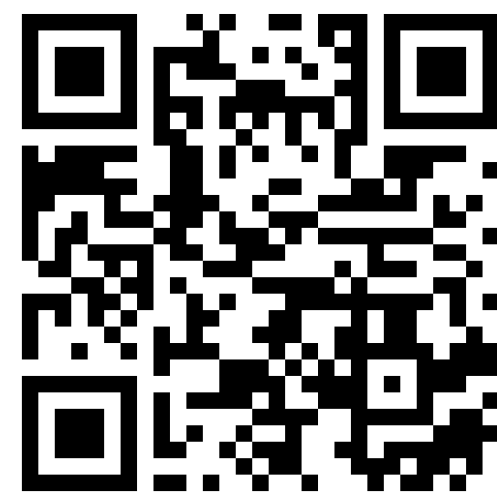


La campagne a connu un succès incroyable. **61 000 € ont été récoltés**, dont **32 000 € par des citoyennes et citoyens !**

OBJECTIF ATTEINT → NOUVEL OBJECTIF DE 2 KM POUR 2026!

150 m de Waste Bumpers sont déjà installés depuis début octobre !

VOUS AUSSI,
ADOPTÉZ UNE OU
PLUSIEURS PLINTHES
À DÉCHETS !



BIENTÔT AUSSI UNE CAMPAGNE DE FINANCEMENT HYBRIDE POUR L'ADOPTION D'ÎLOTS VÉGÉTALISÉS SUR LE CANAL DE BRUXELLES



Plus d'îles sur le canal permettra à la biodiversité aquatique de s'épanouir.

REJOINEZ-NOUS LA SEMAINE PROCHAINE!

Monday **19 October**
at 13h in Brussels

REIMAGINE URBAN WATERWAYS AS BLUE GREEN CORRIDORS

Inspiration from international
cities with ambitious projects for
people and biodiversity



Envie de collaborer, de participer à l'une de nos actions ou de nous rencontrer ?
Contactez-moi !



maud@citytoocean.org



www.citytoocean.org



Akenkaai 8, 1000 Brussel





Thomas de Groote

Founder River Cleanup

Recipient of the Aether Grant 2025

**Cleaning rivers &
preventing
pollution**



**RIVER
CLEANUP**
Together for clean rivers

An aerial photograph showing a vast, dense landscape of discarded plastic waste, primarily water bottles, covering the ground. The waste is a mix of various colors including blue, white, and clear. In the bottom left corner, there is a patch of green vegetation. A semi-transparent dark horizontal band is overlaid across the middle of the image, containing white text.

127 billion
every year



A photograph showing two workers in safety gear (hard hats, gloves, and masks) cleaning a large pile of plastic waste, including bottles and bags, in a rural area. The background features banana trees and a corrugated metal fence. The text "pollution x2" and "280 billion by 2040" is overlaid on the image.

pollution x2

280 billion by 2040

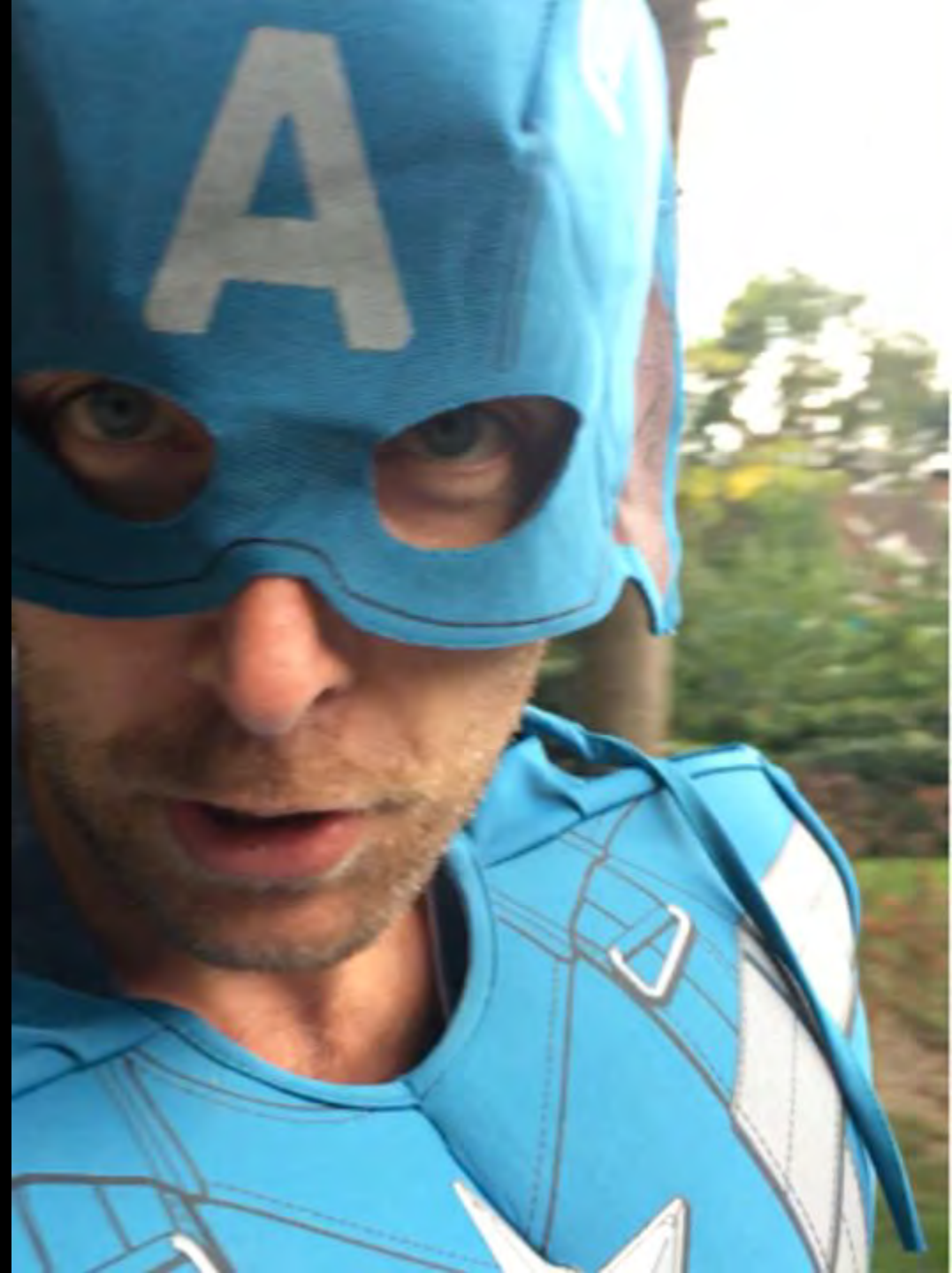


A person wearing a red jacket is seated at a table, using a smoking device that produces a thick plume of white smoke. The smoke rises and drifts across the frame, partially obscuring the background. On the table, there is a clear plastic container, a small black cup, and a red electronic device. The background shows a blurred view of a building with large windows.

50 years
of intense lobbying

10 minutes

2017





1 010 000 warriors – 102 countries – 4 351 934 kg

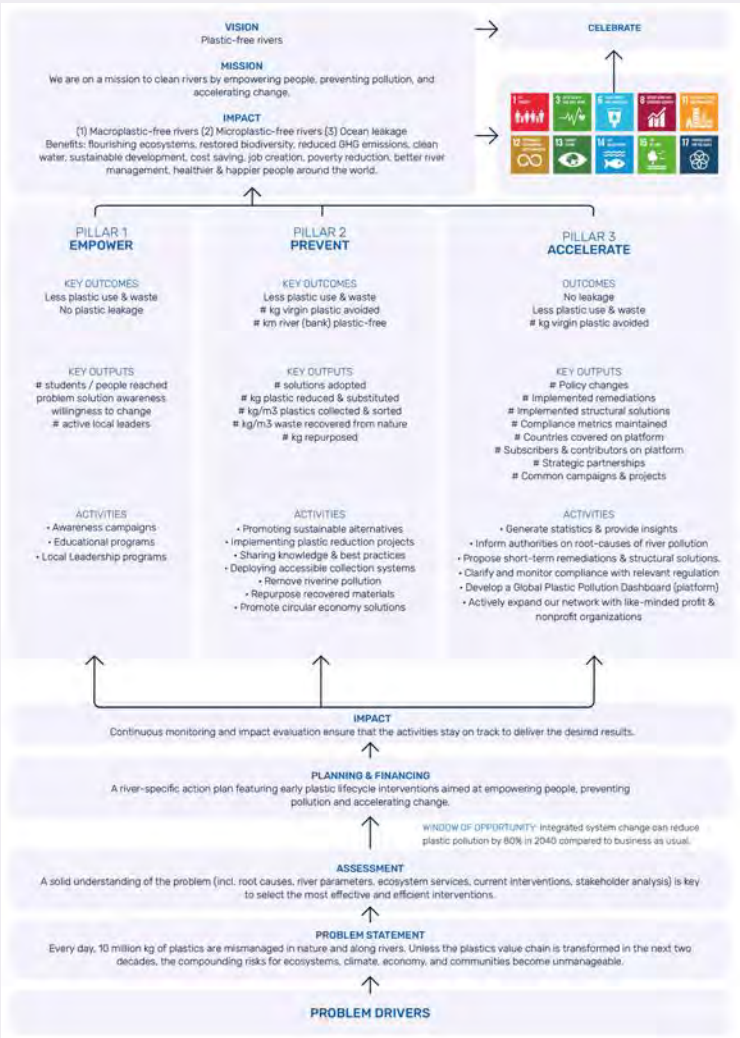
plastic-free rivers

our mission



CLEAN RIVER MODEL

Theory of Change





Approach Africa/Asia/South

Focus area: 7km²

- Raise awareness with monthly cleanups
- High impact cleanup
- ⌋ Delimit action zone with trashbooms
- Ecobins in all schools + communities
- Inform & activate all schools
- Involve all companies
- Activate MRF



Community cleanups



Ecobins



Trash barrier



Sorting Facility



Household collection



School programs



Reduce single-use





2021 Belgium







270
EVENTS

7976
WARRIORS

269 078
KG WASTE



USA

FRANCE

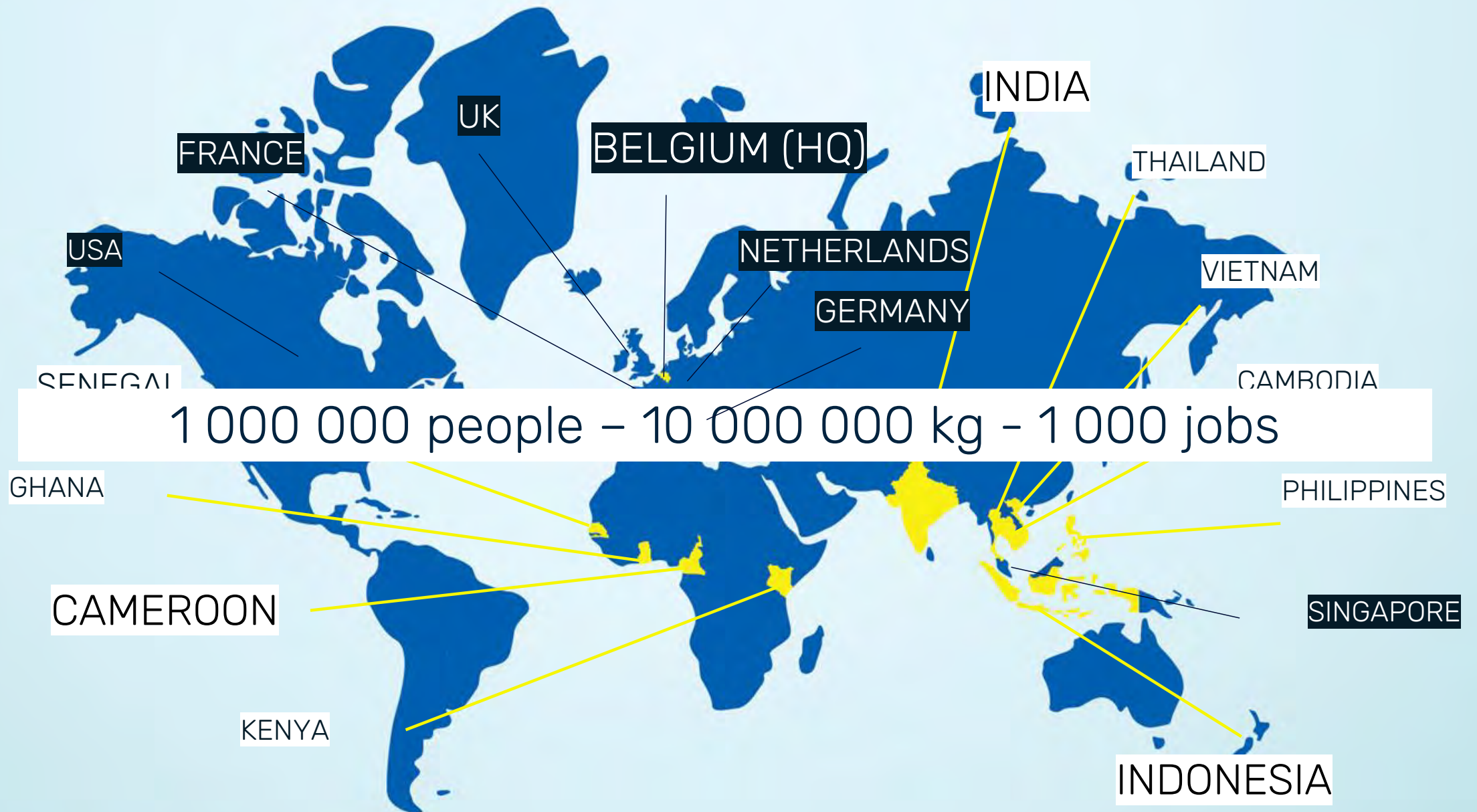
UK

BELGIUM (HQ)

NETHERLANDS

GERMANY

SINGAPORE



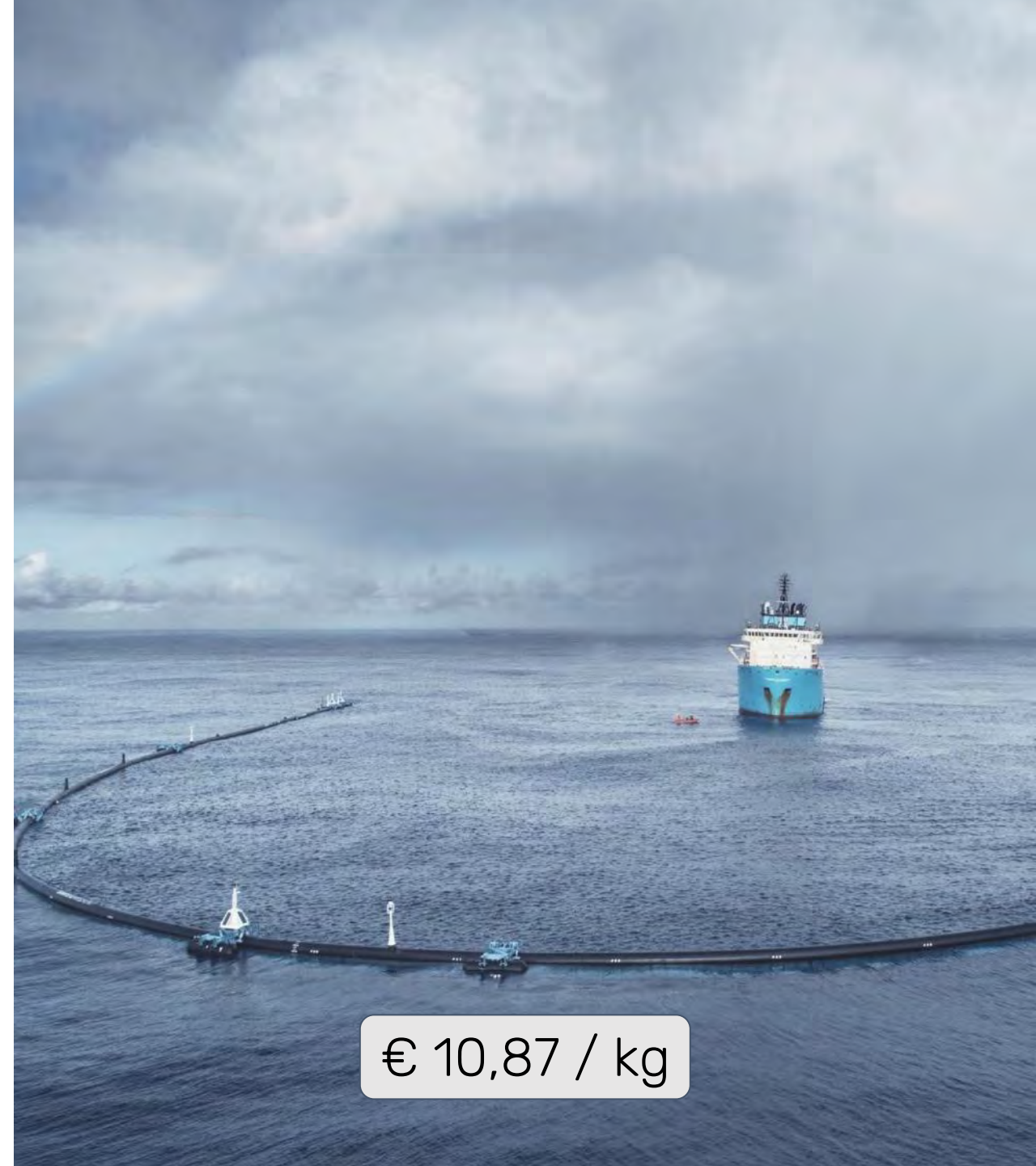


System

Prevention

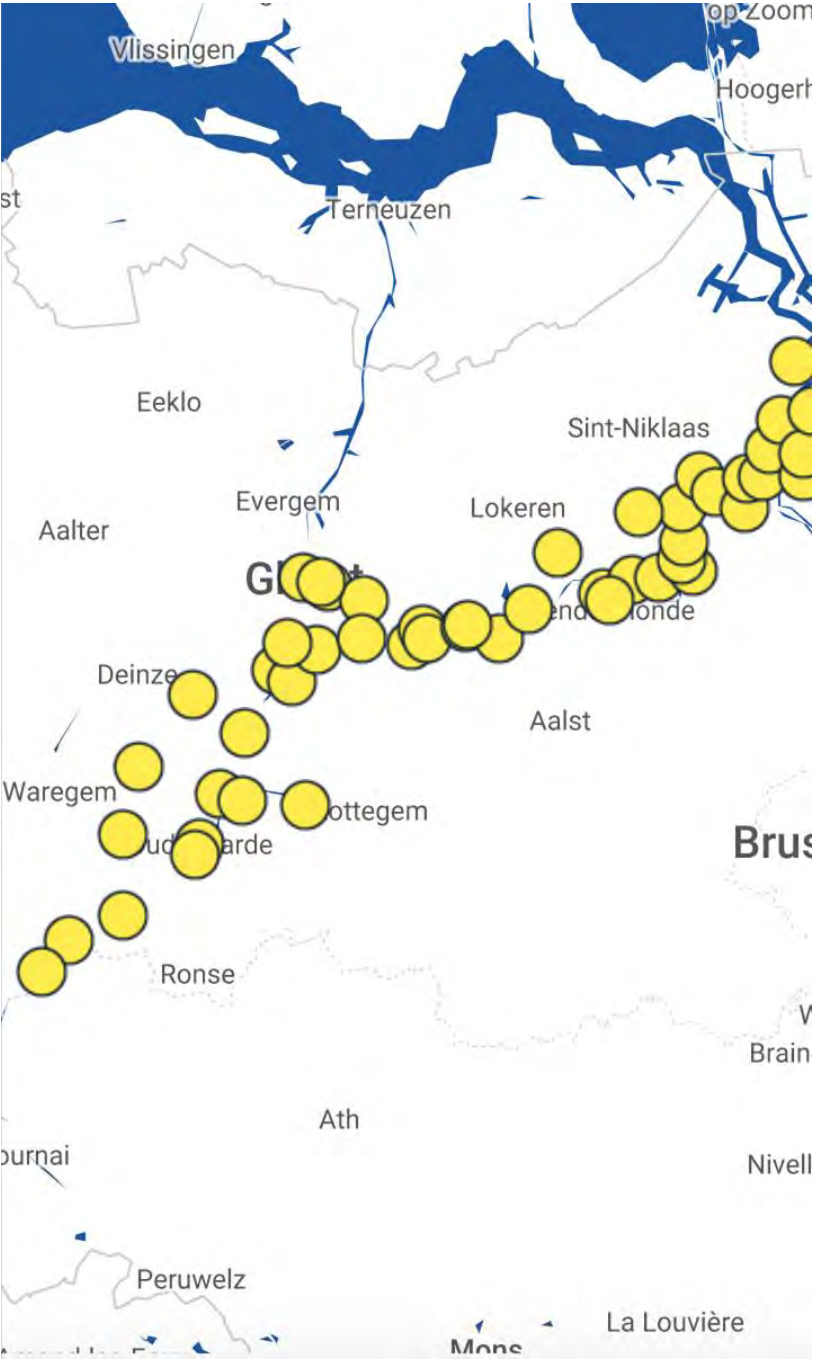
Behavior

€ 2,14 / kg



€ 10,87 / kg

Together for clean rivers





Caroline Reff

Moderator

Project Manager
Foundation for Future Generations

Preserving Water and Marine and River Environments: Practical solutions

Panel discussion



Preserving Water and Marine and River Environments:
Practical solutions

Preserving Water and Marine and River Environments: Practical solutions



Maud Toussaint
Schurmans

Specialist & Project
Engineer at Engie
Laborelec |
HERA Awards 2025



Catalina Codruta
Dobre

Lecturer and
Postdoctoral
Researcher at ULB |
HERA Awards 2022



Maud
De Hemptinne

Project Manager
City to Ocean |
Aether Laureate 2026



Thomas
de Groote

Founder
River Cleanup |
Aether Laureate 2025

Thank you and see you soon!

INVITATION

**FUTURE
GENERATIONS**
Summit

03.12.2026

ATELIERS DES TANNEURS - BRUXELLES - DÈS 17H

*Celebrating the transformative power
of young 360° entrepreneurs*





...to pass on a liveable world

www.FutureGenerations.be