CLEARRIVERS

Kingdom of the Netherlands

PARTNERS FOR WATER
CO-CREATING IMPACT

from Waste to Wetlands

Eco-Innovation Design Challenge

BROCHURE

PROGRAM OVERVIEW

"From Waste to Wetlands" Challenge

Plastic pollution is a pressing environmental issue, particularly in Southeast Asia, where rivers are major conduits of plastic waste to the oceans. Vietnam, with its extensive network of rivers and growing environmental challenges, faces a significant threat to its aquatic ecosystems. After 3 months of operating the Litter Trap in Cai Khe Canal in Can Tho, CLEARRIVERS found that more than 50% of the waste collected by the Litter Trap was low-value plastic waste such as plastic cups, straws, plastic bags and especially styrofoam.

In addition to the problem of plastic pollution, we also noticed that the quality of water resources in this area is being polluted. According to a 2022 study by Dr. Tran Sy Nam (Can Tho University) titled Survey of Surface Water Quality of Bung Xang Canal Section, which is connected to Cai Khe Canal, several key pollutants in the lake exceed permissible limits set by Ministry of Environment and Natural Resources- QCVN 08-MT: 2015/BTNMT. The study found that chemical oxygen demand (COD) levels are 1.37-1.87 times higher than the limit, ammonia nitrogen (N-NH4+) exceeds by 5.01-10.16 times, and phosphorus (P-PQ43) levels surpass the threshold by 1.4-2.4 times. Dissolved oxygen (DO) is consistently below required levels, except during high-water periods. These issues primarily stem from residential and business activities along the canal.

Given these alarming levels of pollution, an effective solution is needed to improve the water quality. A potential strategy is the implementation of a floating garden model, which can served as a wetland, designed for water filtration. This approach could help mitigate the impact of pollutants by using natural systems to absorb and filter contaminants, thereby improving the overall health of the ecosystem.

Photos: Bung Xang Lake.

Bung Xang Lake is also a part of the City Tour waterway construction plan of Can Tho city and chosen as a water culture conservation area in the city's plan until 2045 → ***The floating garden model will beautify this area.***

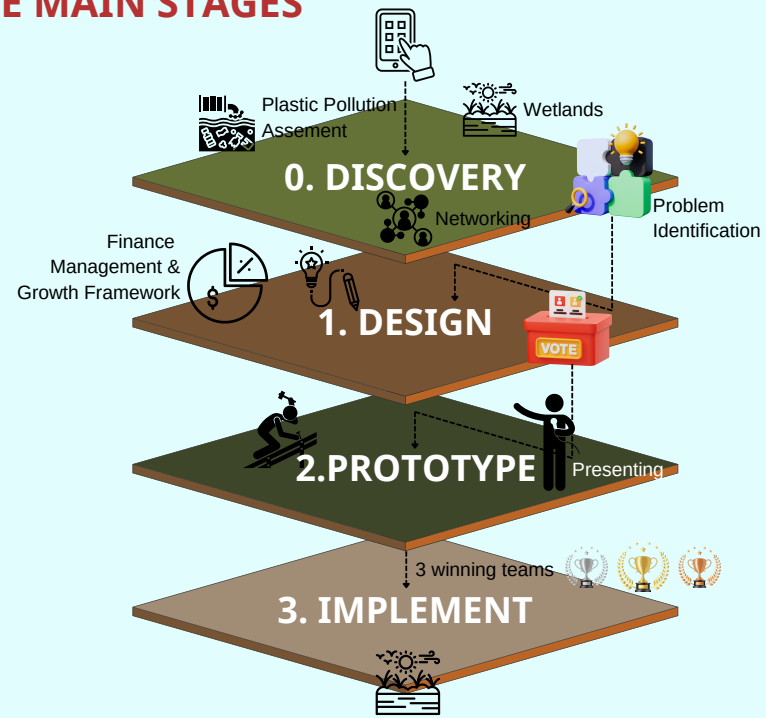
PROGRAM OBJECTIVES

To further CLEARRIVERS' efforts in Vietnam and encourage the development of environmental innovations, CLEARRIVERS is proposing the "From Waste to Wetlands" Challenge. The "From Waste to Wetlands" program seeks to empower ***50 students and young professionals aged 18-30 from colleges, universities, private enterprises, and organizations*** in Vietnam through a series of six online workshops. Participants will learn about plastic pollution, the role of wetlands, refillable plants, project planning, and pitching skills. The initiative culminates in a competition where participants will ***design a floating wetland system made from plastic waste collected by Litter Trap, aimed at purifying water and supporting ecosystems.*** Above all, the program also hopes to connect private sector businesses to participate in the innovation process, support environmental initiatives and expand potential markets for this field.

(1) Advance Environmental Efforts in Vietnam
(2) Educate youths about plastic pollution and the ecological importance of wetlands
(3) Promote Sustainable Designs
(4) Support Ecosystem Health
(5) Encourage Cross-Sector Collaboration
(6) Explore Market Opportunities

Photo: Litter Trap in Can Tho

THREE MAIN STAGES



STAGE 1 - DESCOVERY & DESIGN (2 months)

25 teams- 50 people, will be selected through an online application round. Each team is required to submit a 2-minute video on the topic, "Your Thoughts on Plastic and Water Pollution," along with a hand-drawing of a wetland model in their mind. The teams will be chosen by the organizers in collaboration with the Netherlands Consulate to participate in Stage 1 including 6 workshops.

WEEK 1

- Opening Ceremony
- WS I & II - Plastic Pollution

- Situation & Impacts
- Problem Identification

WEEK 2

- WS III & IV - Wetlands

- Definition & Structure
- The importance of Wetlands
- Refill Plants

WEEK 3

- WS V - Finance Management & Growth Framework
- WS VI - Pitching Skill

The online workshops will feature an interactive format, fostering engagement between the instructors and participants. Participants will connect and learn from experts and peers through interactive games, networking activities, and group exercises.

After the first 3 weeks, participants will have 2 weeks to complete the design of a floating garden model that functions as a wetland. 25 designs will be analyzed and evaluated carefully by our Jury Board (Page 11). The 10 best designs will be selected to enter Stage 2.

STAGE 2 - PROTOTYPE (1 month)

The top 10 teams will receive design funding and mentoring by our expert Mentors (Page 10) to build prototypes.

For the prototypes, each team will be provided with a recycled plastic plate made from plastic waste collected from rivers by the Litter Trap of CLEAR RIVERS and recycled by Plasticpeople, along with funding for project execution. This will help create new value for plastic waste and contribute to building a Circular Economy model for this type of waste.

10 teams will be required to make a video recording the model building process and present their team's product in the Final round. They will be evaluated and selected by the Jury Board (Page 11). The 3 best teams will receive the Gold, Silver and Bronze prizes respectively.

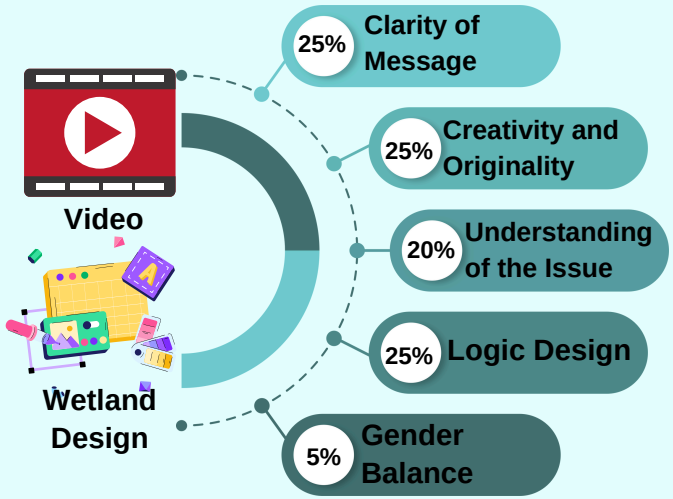
STAGE 3 - IMPLEMENT (6 months)

The 3 final models will be implemented in Can Tho, Vietnam.

The winning teams will work with experts- Mentors and Jury to finalize their designs. CLEAR RIVERS will be responsible for registering for legal permission and installing the models in Can Tho, Vietnam.

EVALUATION CRITERIA

ONLINE APPLICATION



TOP 10 MODELS

Innovation and Creativity (30%)	• Does the design showcase unique ideas or innovative techniques for a floating wetland? • Are there creative elements that make the garden stand out or improve its functionality?
Feasibility & Practicality (30%)	• How realistic is the design in terms of construction, maintenance, and implementation? • Are materials, costs, and resources considered, and is it viable in real-world conditions?
Aesthetic Appeal (20%)	• Is the design visually appealing and harmonious with the surrounding environment? • Does it promote a positive public perception and encourage community engagement with the wetland?
Adaptability & Resilience (20%)	• Can the design adapt to different conditions, like changing water levels or extreme weather? • Does it incorporate features that enhance resilience to climate change impacts?

After attending the workshops, the 25 teams will create a design for a floating garden model that applies the knowledge gained, with an emphasis on creativity. Additionally, the model should be practical, have a reasonable implementation cost, and exhibit key characteristics of a wetland model. Recognizability within the community is also an advantage, making the model more accessible. Alongside the design, teams must provide a description sheet detailing the model's features, functions, and operation methods.

BEST 3 MODELS

Video **Prototype** **Presentation**

In the final round, in addition to submitting their video and floating garden model, teams will need to present their model online to the judging panel. Models will be evaluated based on the same criteria as in Round 2, with additional scoring for presentation skills and the Q&A session.

The prizes are as follows:

300€ **500€** **100€**

TIMELINE

Online workshops will take place at 7 PM on Wednesdays and Fridays each week.

TASK	TIMELINE	OUTPUTS
Preparation (Create Workshop Content, Contact Stakeholders, Prepare promotion materials, etc)	15/03/2025 - 15/05/2025	• Curriculum • List of stakeholders • Materials
Participant Recruitment	17/04 - 10/5	
Participant Announcement + Confirmation	10/05 - 20/05	• List of 25 teams
Kick-off workshop	MON 02/06	Get to know each other and understand program's goals
Workshop 1- Plastic Pollution: Understanding the Issues and Impact on Our Environment and ourselves	WED 4/6	Engagement in individual and community-level actions.
Workshop 2- Problem Identification	FRI 6/6	Identify at least 2 local issues related to plastic waste
Workshop 3- Preserving Wetlands: Exploring Their Vital Role and Environmental Impact	WED 11/6	Submission of a mind map on how wetlands can be applied in urban river systems.
Workshop 4- Refill Plants: Sustainable Solutions for Water Conservation and Management	FRI 13/6	Submission of a basic plant selection chart with rationale and benefits.

TASK	TIMELINE	OUTPUTS
Workshop 5- Finance Management & Growth Framework	WED 18/6	Teams draft a basic budget for prototype development and implementation.
Workshop 6- Mastering the Art of Pitching: Techniques for Persuasive and Effective Presentations	FRI 20/6	Create and refine a 2-minute pitch video
Designing Phase	20/6 - 4/7	
Voting Phase & Annoucement 1	5/7 - 19/7	
Prototype Phase & Mentoring Sessions	19/7 - 19/8	Successfully design, develop, and present their prototypes
Voting Phase, Pitching Day & Annoucement 2	19/8 - 31/8	
Implementing Phase	01/09/25 - 30/4/26	• 3 models is set up on site • General report
FINAL SEMINAR	4/2026	Report on the implementation process, and scalability of the wetland models.

EXPECTED OUTCOMES

1. Reduction of River and Plastic Pollution	
~500kg of plastic waste collected for producing prototypes	• Significant reduction in plastic waste in targeted rivers through collected waste used in constructing wetland models. • Increased awareness and behavior change in waste disposal among communities near riverbanks.
2. Creation of Sustainable Floating Wetlands	
10 prototypes created 3 models implemented	• Development and deployment of floating gardens that serve as effective wetlands, helping to filter pollutants, enhance biodiversity, and improve water quality. • Demonstrated feasibility of using recycled plastics and other sustainable materials in eco-friendly wetland structures.
3. Educational and Community Engagement	
A series of program promotion	• Increased knowledge among participants and local communities about plastic pollution, wetland ecosystems, and sustainable water management. • Enhanced community involvement through public awareness campaigns and hands-on participation in model construction.
4. Skill Building and Capacity Development	
6 workshops 4 mentoring sessions	• Participants gain practical experience in environmental design, project management, and presentation skills. • Improved capacity among local youth and communities to address environmental challenges creatively and sustainably.
5. Strengthened Partnerships and International Collaboration	
More than 20 local & international partners involved	• Establishment of a cooperative framework involving local communities, environmental organizations, and international partners. • Opportunities for further collaboration on environmental projects and resource-sharing initiatives.

COMMUNICATION PLAN

Throughout the entire project we will have a strong and effective communication about the project and its achievements. This clear communication will consist of the following strategies:

External Communication

Website
Central hub for program details, resources, and registration (Application Form, Milestone updates, event promotions, and success stories.)

LinkedIn, Facebook & Instagram
Program updates, event promotions & voting

Email
Regular updates to participants, partners, and stakeholders.

Kingdom of the Netherlands in Vietnam Fanpage
Promotion Support & Program Updates
(*All posts will be prepared in advance)*

Internal Communication

Email & Google Drive

- Official updates, detailed plans, and meeting summaries.
- Centralized access to program documents, schedules, and resources.
- Main way to communicate with stakeholders

Zalo

- Quick updates, task assignments, and informal coordination.
- Different groups for organizing team, participants and stakeholders

Phase	Content
Pre-launch	• Program, Topics & Stakeholders Introduction • Open registration and promote
During Program	• Workshop highlights/ summary • Share updates, participant stories and Showcase team progress • Publish articles and videos related to plastic pollution, recycling, wetlands,etc • Public Voting
Post-Program	• Celebrate winners through online events and media coverage. • Share program results, impact metrics, and participant testimonials. • Create a report or video summarizing key achievements for stakeholders and the public. • Update follow-up activities • Thank you letters

This communication plan ensures that everyone involved and community are well-informed, motivated, and aligned with the program's goals, fostering a collaborative and efficient working environment.

🌿 Join Us in Turning Ideas into Impact!

From Waste to Wetlands is more than just a challenge—it's a movement toward reimagining the way we see waste, water, and community. Together, we can empower young innovators, promote sustainable thinking, and co-create solutions that protect our wetlands and environment for future generations.

Whether you're a participant, mentor, supporter, or curious learner—there's a place for you in this journey.

🌊 Let's transform trash into treasures, and creativity into climate action.

📩 For more information, partnerships, or to get involved:

- 🌐 HTTPS://WWW.CLEARRIVERS.EU/
- ▶ HTTPS://WWW.YOUTUBE.COM/@CLEARRIVERS
- f HTTPS://WWW.FACEBOOK.COM/@CLEARRIVERS.EU/
- ✉ VIETNAM@CLEARRIVERS.EU

CLEARRIVERS

Sponsored by:

Kingdom of the Netherlands

RVO

PARTNERS FOR WATER
CO-CREATING IMPACT