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RESTORE OUR OCEAN AND WATERS



**Scalable full-cycle marine litter remediation in the Mediterranean:
Robotic and participatory solutions**

SeaClear2.0

<https://www.seaclear2.eu>

D 6.4

Report on SeaClear2.0 app and portal, with validation

WP6-Public engagement, policy, dissemination

Grant Agreement no. 101093822

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¹ R = Document, report, DEM = Demonstrator, OTHER = Software, technical diagram, etc., DMP = Data Management Plan

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Definitions

- **Beneficiary:** A legal entity that is signatory of the EC Grant Agreement no. 101093822.
- **Consortium:** The SeaClear2.0 Consortium, comprising the list of beneficiaries below.
- **Consortium Agreement:** Agreement concluded amongst the SeaClear2.0 beneficiaries for the implementation of the Grant Agreement.
- **Grant Agreement:** The agreement signed between the beneficiaries and the EC for the undertaking of the SeaClear2.0 project (Grant Agreement no. 101093822).

Beneficiaries of the SeaClear2.0 Consortium are referred to herein according to the following abbreviations:

- **TU Delft:** TECHNISCHE UNIVERSITEIT DELFT
- **DUNEA:** REGIONALNA AGENCIJA DUNEA
- **Fraunhofer:** FRAUNHOFER GESELLSCHAFT ZUR FORDERUNG DER ANGEWANDTEN FORSCHUNG EV
- **HPA:** HAMBURG PORT AUTHORITY
- **ISOTECH:** ISOTECH LTD
- **MDanchor:** M. DANCHOR LTD
- **Subsea Tech:** SUBSEA TECH SAS
- **TECNOSUB:** TÉCNICAS Y OBRAS SUBACUÁTICAS, SLU
- **TUM:** TECHNISCHE UNIVERSITÄT MÜNCHEN
- **UNIDU:** SVEUCILISTE U DUBROVNIKU
- **UTC:** UNIVERSITATEA TEHNICA CLUJ-NAPOCA
- **VEO:** VEOLIA PROPTE
- **VLPF:** VENICE LAGOON PLASTIC FREE

Abbreviations

- **EC:** European Commission
- **GA:** Grant Agreement
- **WP:** Work Package
- **WCD:** World Cleanup Day
- **WWF:** World Wildlife Fund
- **TRL:** Technology Readiness Level
- **DoW:** Description of Work
- **EoL:** End-of-Life
- **OECD:** Organisation for Economic Co-operation and Development

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1. EXECUTIVE SUMMARY

The SeaClear2.0 project, funded under the Horizon Europe Programme (Grant Agreement No. 101093822), is dedicated to advancing marine litter prevention and remediation through a combination of robotic technologies and participatory solutions. As part of this initiative, Deliverable 6.4 will illustrate the development, deployment, and validation of the SeaClear2.0 app and portal, providing a detailed account of how these digital tools contribute to reaching the objectives of the Mission Ocean and Water and fostering a digital blue circular economy.

The following chapters will delve into the design, testing, and validation of the SeaClear2.0 app, showcasing how it serves as an innovative, user-friendly tool to promote citizen participation in marine litter cleanups. The document will explore the integration of engagement and data-driven functionalities, demonstrating how these features make cleanup activities more efficient, informative, and rewarding—both in terms of user experience and measurable environmental impact.

A key aspect to be covered in the deliverable is the Clean-Up Section of the app, which enables volunteers to organize, document, and track cleanup operations. To ensure that all cleanup activities are legitimate and properly recorded, the app incorporates an authorization mechanism, requiring validation from local authorities or event organizers. Additionally, to further motivate participation, the Gamification System will be presented, explaining how challenges, point-based rewards, and leaderboard rankings encourage competition and engagement among users.

The deliverable will also provide an in-depth look at the Plastic Footprint Calculator, a critical analytical feature that estimates the environmental impact of cleanup efforts. By analyzing collected waste, this tool computes the plastic footprint reduction at both individual and group levels, using statistical data on EU and national plastic consumption. Furthermore, the Certification System will be introduced, outlining how volunteers receive digital certificates of participation, which can be used for educational, professional, or corporate sustainability purposes.

In addition to exploring the app, the deliverable will examine the SeaClear2.0 portal, which serves as a centralized platform for monitoring and managing cleanup activities. It will describe the Activity Visualization feature, which allows users to track real-time cleanup locations, offering a geographical overview of ongoing efforts. Furthermore, the role of the Performance Analysis tools will be discussed, explaining how they enable data filtering and evaluation based on multiple criteria such as affiliated organizations, event type, and litter quantity. Lastly, the deliverable will present the Customization & Management interface, which provides administrative controls to adjust settings, modify features, and optimize the app's functionalities to meet the specific needs of users.

A dedicated chapter will highlight the validation process of the SeaClear2.0 system, which has been rigorously tested through multiple cleanup events, engaging volunteers, NGOs, academic institutions, and members of the Venice-based Community of Practice of SeaClear2.0. The document will present key pilot events that played a crucial role in testing and refining the app, including:

- World Cleanup Day (WCD) 2023 & 2024 – Large-scale citizen participation events that demonstrated the app's effectiveness in mobilizing volunteers and reporting data.
- University & School Engagements – Gamified cleanup activities involving Wake Forest University and Marco Polo High School, emphasizing the role of youth participation in marine conservation.
- Corporate and Third Sector Collaborations – Validation of the app's functionalities through partnerships with members of the Community of Practice, including WWF, Legambiente, and corporate participants who tested the tool with their staff in real-world cleanup operations.



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Moreover, we will showcase key findings and insights gained from the implementation and testing phases. This chapter will illustrate how the SeaClear2.0 app and portal successfully enhance user engagement, contribute to marine litter reduction, raise awareness among citizens, and promote corporate environmental and social responsibility. Additionally, it will discuss how the collected data supports marine litter policy management, strengthening decision-making processes at both local and European levels.



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2. SEACLEAR2.0 APP - FUNCTIONALITIES AND PORTAL ARCHITECTURE

A. The SeaClear2.0 app

It is a digital application designed to manage organized clean up events or individuals endeavoring in clan up activities. It promotes plastic pollution awareness and encourage community participation in coastal/marine clean-up activities. It integrates gamification elements and a plastic footprint tracking system, with more standard features such as kilograms, units of litter removed, pics uploading, etc. making it an engaging and educational tool.

The app features a user-friendly interface with essential functions, including a login and registration system, disclaimer page, and a section with hints and tips on plastics and plastics pollution.

At the heart of the app (downloadable via the below QR code for android and apple from left to right) are three main functionalities (for further details see chapter 5):

- Clean-ups functionality
- Games functionality
- Plastic Footprint functionality



By integrating **technology, gamification, and real-world impact**, the SeaClear2.0 app and portal serve as an innovative tool to **mobilize individuals and organizations** in tackling plastic waste and preserving marine ecosystems. Details on handling functionalities and interface are displayed in chapter 5.

I. Clean-ups functionality

The **Clean-ups** section is designed to facilitate the organization, tracking, and validation of cleanup activities. Users can view and create a **list of scheduled cleanup events**, categorized by type and location, allowing for efficient participation planning. A **location-tracking feature** ensures accurate documentation of cleanup efforts, helping to gauge clean up impact over time. To ensure that all reported cleanups are legitimate and properly recorded, there is an optionable **authorization string** to be marked by the cleanup organizer, confirming the greenlight from local authorities to proceed with the activities upon national or local regulatory provisions. By streamlining the tracking of the field work, this section enhances transparency, accountability, and user engagement in clean up events.

Cleanups Filter					
EVENT NAME	LOCATION	DATE	COUNTRY CODE	TOTAL WEIGHT COLLECTED	
Cleanup Murano	Sacca S.Mattia	16/09/2023	Italy	843	 
Beach at Pordelio Channel	Canale di Pordelio	15/12/2023	Italy	42.7	 
Clean up Alberoni WWF	Oasi WWF Alberoni	21/04/2024	Italy	14.46	 
Wed 2024	Sacca S.Mattia	01/06/2024	Italy	112.35	 
WCD 2024	Oasi WWF Alberoni	22/09/2024	Italy	64.28	 
Volontariato Aziendale	Isola della Certosa	30/10/2024	Italy	65.9	 

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Picture 1 Cleanup list



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II. Games Section

The **Games** section is managed by the organizer and introduces a **gamified approach** to clean up action, encouraging users to participate in eco-friendly challenges. Users can earn rewards and points by completing cleanup tasks, which are then reflected on **leaderboards** within the app. From in field experience we witnessed that this fosters a sense of competition and motivation, increasing user engagement substantially. The app tracks achievements and performance metrics, allowing participants to monitor their contributions and compare results with others. The gamification strategy makes environmental efforts more interactive and appealing, particularly for younger audiences, by transforming marine litter removal into an exciting challenge with moral and even material incentives if feasible, conducive to the enhancement of the sense of team belonging and a common purpose to pursue. For this reason, these activities are appreciated not only for environmental education and awareness but also for team building in corporate and enterprise, whose staff wish to taste such a community based social- environmental experience.

Games Table

Games

Boxed Full-Width

EVENT NAME	LOCATION	DATE	COUNTRY CODE	TOTAL WEIGHT COLLECTED	WINNING FACTOR	NUMBER OF TEAMS	
Wake Forest University	Oasi WWF Alberoni	31/08/2024	Italy	3	items collected	2	
Marco Polo - INTERREG	Oasi WWF Alberoni	08/10/2024	Italy	14.89	kg collected	2	
Fossil Boschettona	Spiaggia della Boschettona	15/10/2024	Italy	39.26	kg collected	2	
Pellestrina Halloween	San Piero in Volta	10/12/2024	Italy	227	kg collected	2	

Items per page: 10
1 – 4 of 4

Picture 2 Gamified cleanup list



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III. Plastic Footprint Functionality

The **Plastic Footprint** Functionality helps users understand the impact of plastic consumption and cleanup efforts. Using **data from EUROSTAT, OECD and scientific publication**, the app estimates **plastic waste generation per capita per year** and calculates the percentage of plastic removed during cleanups. In other terms, it provides the ratio between the overall generation of plastics per capita per year and the amount of plastic litter removed from the environment. The footprint analysis can be displayed at **both national and European levels**, providing insights into plastic usage in our daily lives and our effort to remediate it via the removal of plastics pollution legacy from our ocean and waters. By visualizing the difference that cleanups make, this feature helps raise awareness and encourages commitment at individual and collective levels.

Plastic Footprint in All Events					
NAME	TYPE	TOTAL PLASTIC COLLECTED	COUNTRY	AVERAGE IN EVENT COUNTRY	AVERAGE IN EU
Cleanup Murano	CLEANUP	332	Italy	591.80 %	919.67 %
Beach at Pordelio Channel	CLEANUP	33.5	Italy	59.71 %	92.80 %
Clean up Alberoni WWF	CLEANUP		Italy		
Wed 2024	CLEANUP	12.25	Italy	21.84 %	33.93 %
Wake Forest University	GAME	2	Italy	3.57 %	5.54 %
WCD 2024	CLEANUP	49.03	Italy	87.40 %	135.82 %
Marco Polo - INTERREG	GAME	13.69	Italy	24.40 %	37.92 %
Fossil Boschettana	GAME	33.14	Italy	59.07 %	91.80 %
Volontariato Aziendale	CLEANUP	53.8	Italy	95.90 %	149.03 %
Pellestrina Halloween	GAME	192	Italy	342.25 %	531.86 %

Picture 3 Plastic footprint list

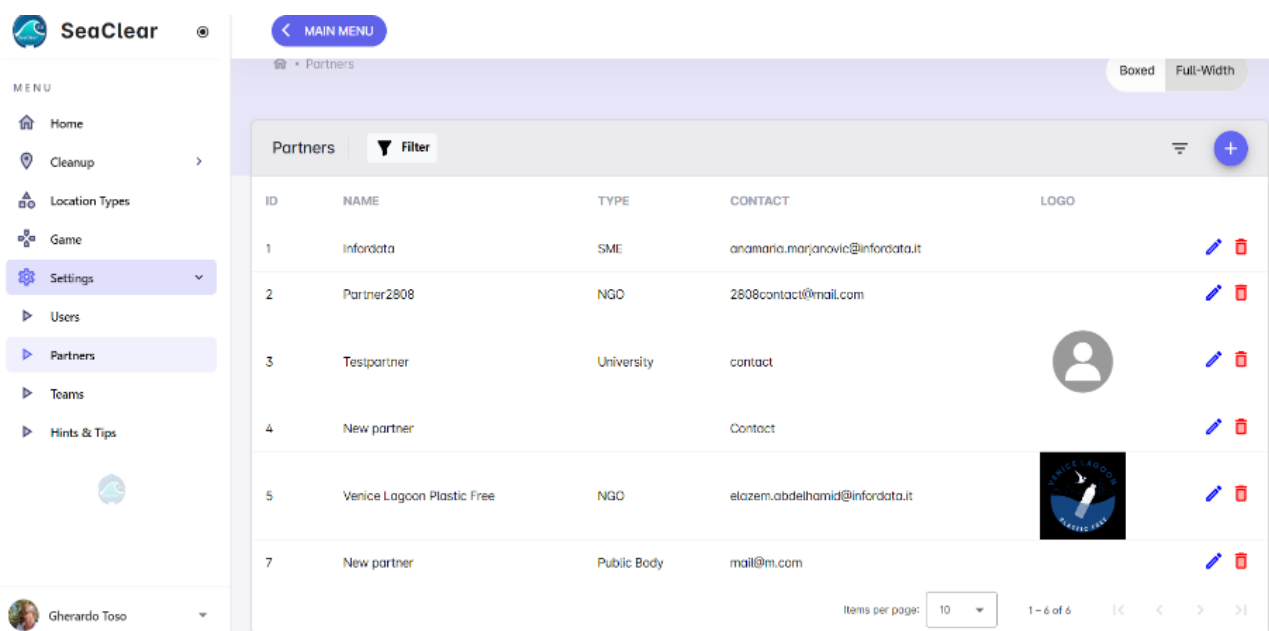


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B. Other Functionalities

I. Partners Registration

The Partners section allows organizations, such as companies, NGOs, and research institutions, to formally register in cleanup efforts and to have displayed all info from other app users. Participants can enter their details, including organization type and contact information, facilitating collaboration among different stakeholders. This feature ensures that businesses and environmental groups can actively contribute, support community-driven cleanup initiatives, and promote corporate social responsibility (CSR) programs. It also provides networking opportunities, enabling organizations to share best practices, pool resources, and coordinate larger cleanup events. By this functionality, the app facilitates a comprehensive understanding of the overall impact produced by partner/organizations involved in the activities both individually and collectively.



ID	NAME	TYPE	CONTACT	LOGO
1	Infodata	SME	anamaria.marjanovic@infodata.it	
2	Partner2808	NGO	2808contact@mail.com	
3	Testpartner	University	contact	
4	New partner		Contact	
5	Venice Lagoon Plastic Free	NGO	elazem.abdelhamid@infodata.it	
7	New partner	Public Body	mail@m.com	

Picture 4 Partner registration form screenshot



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II. Certification System

The Certification System acknowledges user contributions by generating official certificates upon completion of cleanup events or games. These certificates include detailed information on the activity, such as location, date, volume of plastic collected, and participant names. They may serve the function of public recognition of the committed efforts and can be used to verify the participation of the event(s) at stake. Certificates may also be leveraged by corporates for CSR reporting or by informal groups to showcase their contribution to achieve the Mission Ocean and Waters target in preventing and eliminating pollution from our Oceans, Seas and Waters, namely to reduce by at least 50% plastic litter and by at least 30% microplastics. This feature adds a direct liaison between citizens and the Mission Ocean and Waters in a very tangible way.



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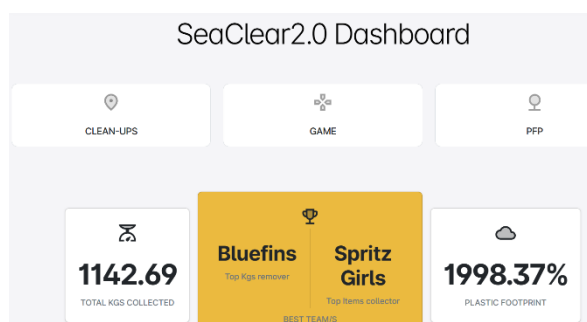
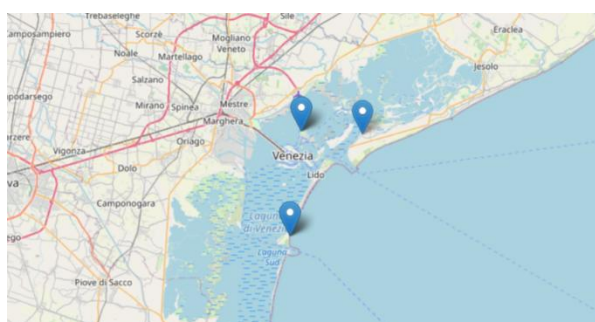
C. The SeaClear2.0 portal

The **SeaClear2.0 Portal** is a comprehensive clean up management tool and platform designed to provide an overview of activities performed by volunteers, offering key functionalities for tracking, analysis, and customization. The portal is accessible only to the app manager/owner (VLPP). Through an interactive interface, users can visualize the exact locations where activities have taken place, ensuring clear geographical mapping of efforts. This features secure efficient monitoring and management of the functions embedded in the app.

The portal also includes advanced performance analysis tools, enabling users to filter and evaluate results based on specific criteria such as affiliated organization, clean up sessions, game names, or winning factors and criteria.

Additionally, the **SeaClear2.0 Portal** serves to the app administrators as a central management system for configuring and customizing the **SeaClear2.0 App**. Users can adjust settings, modify features, and tailor the app to meet specific operational needs, ensuring flexibility and adaptability.

By integrating data visualization, performance metrics, and system customization, the **SeaClear2.0 Portal** offers a structured approach to monitoring and optimizing activities. It facilitates data-driven decision-making and enhances the overall impact of the activity, making it an essential tool for both volunteers and coordinator(s) to maximize efficiency and effectiveness in single or cluster clean up events or clean up campaigns either with a context- gamified format or without it.



Tips Table			
ID	AUTHOR	TITLE	PHOTO
12	pado	DO YOU KNOW THE CHEMICAL OF PLASTICS?	
13		DO YOU KNOW THE CHEMICAL OF PLASTICS?	
14		DO YOU KNOW THE CHEMICAL OF PLASTICS?	
15		DO YOU KNOW THE CHEMICAL OF PLASTICS?	
16		DO YOU KNOW THE CHEMICALS OF PLASTICS?	
17		DO YOU KNOW THE CHEMICAL OF PLASTICS?	

Average Plastic Consumption Table		
ID	COUNTRY	PLASTIC CONSUMPTION PER CAPITA IN KG/YEAR
2	Estonia	25.99
3	Romania	26.30
4	Sweden	27.80
5	Bulgaria	28.00
6	San Marino	28.30
7	United Kingdom	31.30
8	Greece	32.80
9	Spain	33.00

Pictures 8-9-10-11 Portal features



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3. ROADMAP FOR SEACLEAR2.0 APP - TESTING AND VALIDATION

This chapter highlights the diachronic history of app and portal validation and improvement through testing and demonstration in real and operational environment to increase the TRL. The app is now at TRL 8 (system complete and qualified) and the overall system and its components are sound and qualified to operate.

The demonstrations were conducted by VLPP in cooperation with other users and organizations according to the demos' settings, the functionality and overall context and their environmental characteristics.

The document will highlight the major points underpinning the results of 10 on field-testing, as it follows:

Location	Date	Functionalities tested and validated
Murano Island	September 19 th , 2023	Hints & Tips Login Regular Clean-up tool
Pordelio -Venice Lagoon	December 15 th , 2023	- Hints & Tips - Login - Regular Clean-up tool
Venice Lido Beach	April 21 st , 2024	- Hints & Tips - Login - Regular Clean-up tool - SeaClear2.0 Portal
Venice Lagoon Murano Island	June 1 st , 2024	- Regular Clean-up tool - SeaClear2.0 Portal - Authorization tool
Venice Lido Beach	September 22 nd , 2024	- Regular Clean-up tool - SeaClear2.0 Portal - Authorization tool - Certificate of participation - Plastic Footprint calculator
Isola della Certosa	October 31 st , 2024	- Regular Clean-up tool - SeaClear2.0 Portal - Authorization tool - Certificate of participation - Plastic Footprint calculator
Alberoni beach	August 31 st , 2024	- Gamified Clean-up tool - SeaClear2.0 Portal - Authorization tool - Certificate of participation
Alberoni beach	October 8 th , 2024	- Gamified Clean-up tool - SeaClear2.0 Portal - Authorization tool - Certificate of participation - Plastic Footprint



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Boschettona beach	October 15 th , 2024	- Gamified Clean-up tool - Certificate of participation - Plastic Footprint - Dashboard
Pellestrina Island	December 10 th , 2024	- Gamified Clean-up tool - Certificate of participation - Plastic Footprint - Dashboard

Table 1 SeaClear2.0 app and portal implementation plan

Event Name	Date	Participants
World Clean-up Day	16/09/2023	30
Pordelio clean-up	15/12/2023	3
WWF Oasis clean-up	21/04/2024	35
World Environment Day	01/06/2024	48
World Clean-up Day	22/09/2024	33
Certosa Island Clean-up	31/10/2024	14
Wake Forest University	31/08/2024	28
Marco Polo	08/10/2024	28
Boschettona beach clean-up	15/10/2024	12
Total Participants		231

Table 2 Participants per event

The field testing/demonstration is of paramount importance for the app progress, finalization and achievements. The activities were fully in line with the DoW having aimed at operationalizing the SeaClear2.0 system with the direct involvement, mobilization and participation of citizens and our Community of Practice in Venice, volunteers from our testing sites. Each single test scenario was built upon a preparatory process interfacing the level of TRL achieved and the next upgrade as a benchmark in the most effective way. In particular, we leveraged the knowledge VLPF has about the local stakeholders and the environmental settings in each different test location, instructing possible scenarios and identifying the most suitable demo sites for our testing phase.

The demonstrations were closely followed by dedicated internal validations with the software house company. This was done in order to customize and improve our app and portal after each first-hand experience of SeaClear2.0 integrated and modular functionalities, planning new and more complex scenarios in each demo phase after the consolidation of the previous and more basic services.

The advancement of the app was an interesting yet time consuming exercise that forced us to face and address a number of differentiated bugs. In particular, we founded and addressed: (i) **functional bugs** that hindered specific feature or component of the application so that it could not operate as intended according to the requirements; (ii) **Logical Bugs** leading to computational errors and incorrect outcomes; (iii) **Workflow Bugs with workflow interruption and dead ends**; (iv) **usability bugs** undermining the application's user-friendliness, and difficult to interact; (v) **level bugs** that were found in individual components/functionalities of the application detected through their testing one by one; (vi) **system bugs** when we found that the app and portal could not integrate and had visual and functional mismatches.



 101093822	D: 6.4 Report on SeaClear2.0 app and portal, with validation	
	WP: 6	Version: 1.9
	Author(s): Poletto – Toso – Le Nouvel	Level: C-UE/EU-C

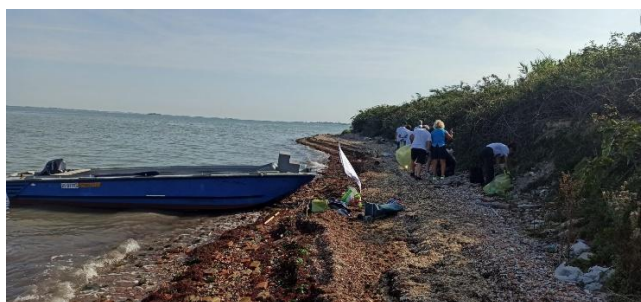
1) World Clean-up Day 2023

EVENT	DATE	VALIDATED FUNCTIONALITIES	LOCATION
World Clean-up Day 2023	16/09/2023	- Hints & Tips - Login - Regular Clean-up tool	Murano Island -Venice Lagoon

ACTIVITY DESCRIPTION

On September 16th, 2023, VLPF used the app for the first time on the island of Murano (Venice), in cooperation with the INNOPLASTIC Horizon2020 project, during a community cleanup event, registered among the official events of the World Cleanup Day.

The app successfully performed its basic services of instructing the cleanup event and tracking the following results: **275 kg of abandoned plastics retrieved** and **426 kg of other wastes**, among which **6 exhausted batteries** that we managed to remove and deliver to the waste management authority of Venice (VERITAS).



Pictures 12-13 Clean up in Sacca San Mattia (Murano)



 101093822	D: 6.4 Report on SeaClear2.0 app and portal, with validation	
	WP: 6	Version: 1.9
	Author(s): Poletto – Toso – Le Nouvel	Level: C-UE/EU-C

2) Pordelio beach

EVENT	DATE	VALIDATED FUNCTIONALITIES	LOCATION
Pordelio channel beach clean-up	15/12/2023	- Hints & Tips - Login - Regular Clean-up tool	Pordelio -Venice Lagoon

ACTIVITY DESCRIPTION

On December 15th, 2023, the app was tested when Venice Lagoon Plastic Free volunteers organized a small size cleanup event on the Pordelio beach (Venice Lagoon) to further test the basic functionalities of the SeaClear2.0 App.

The app successfully recorded the following retrieved marine litter: **37,5 kg of stranded plastics** and **9,2 of other wastes**. During the clean-up the volunteers spotted some End of Life (EoL) boats to remove in a following dedicated operation.



Pictures 14-15-16 Clean up in Pordelio Beach (Venice Lagoon)



 101093822	D: 6.4 Report on SeaClear2.0 app and portal, with validation		
	WP: 6		Version: 1.9
	Author(s): Poletto – Toso – Le Nouvel		Level: C-UE/EU-C

3) WWF Oasis at the Alberoni beach

EVENT	DATE	TESTED FUNCTIONALITIES	LOCATION
Alberoni Beach clean-up	21/04/2024	- Hints & Tips - Login - Regular Clean-up tool - SeaClear2.0 Portal	Venice Lido Beach

ACTIVITY DESCRIPTION

In collaboration with WWF and as part of the European Project Remedies and the EU Mission Restore our Ocean and Waters, Venice Lagoon Plastic Free organized, on the 21st of April, a day dedicated to monitoring and cleaning up at the Alberoni beach of the Lido di Venezia.

Volunteers dedicated their day to removing waste from the beach, contributing to its monitoring with REMEDIES app and clean up with SeaClear2.0 App that was further tested.



Pictures 17-18 Monitoring and clean up at WWF Oasis in Alberoni beach



 101093822	D: 6.4 Report on SeaClear2.0 app and portal, with validation	
	WP: 6	Version: 1.9
	Author(s): Poletto – Toso – Le Nouvel	Level: C-UE/EU-C

4) WED 2024

EVENT	DATE	TESTED FUNCTIONALITIES	LOCATION
World Environment Day 2024	01/06/2024	- Regular Clean-up tool - SeaClear2.0 Portal - Authorization tool	Venice Lagoon Murano Island

ACTIVITY DESCRIPTION

On May 30th, the fourth edition of the International Workshop **“Marine Litter Monitoring, Removal and Circular Economy: Solutions for the Mission Restore our Ocean and Waters”** took place in Venice at CNR-ISMAR, during the International Boat Show of Venice.

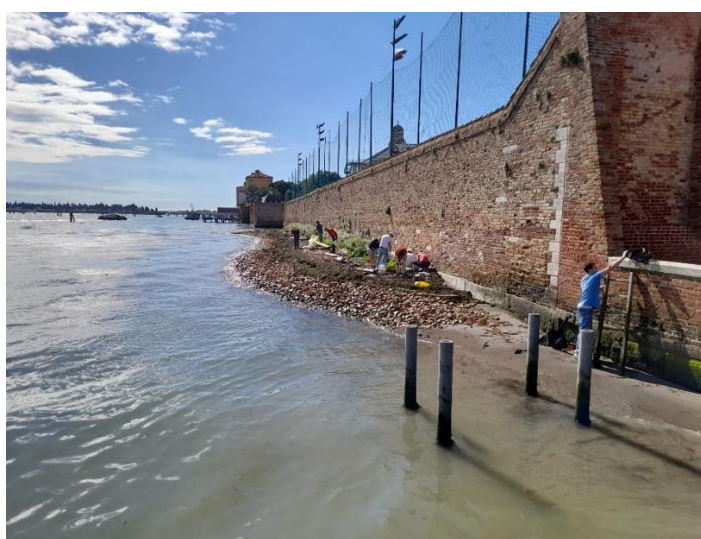
This international workshop, organized in collaboration with the BlueMissionMed Italian HUB and as a partner event of the European Green Week, tackled the critical issue of marine litter.

The workshop was tied in, both theoretically and operationally, with the XI edition of the International Clean Up and Marine Litter Monitoring Day held on 1st June, and organized by Venice Lagoon Plastic Free, side by side with the Red Cross and Legambiente Venice, as part of the EU projects MAELSTROM, REMEDIES and SeaClear2.0 in collaboration with the WWF’s Plastic Smart Cities.

The initiative was an official event of the UN World Environment Day #GenerationRestoration.

Under the supervision of VLPF, the event was tracked by the SeaClear2.0 project.

During the event, **the app recorded a total of 2,952 items were collected from Secca S. Alvise in the historical centre of Venice and 112,35 Kg of marine litter from Secca S.Mattia in Murano.**



Pictures 19-20 Monitoring and clean up at Murano Island and S. Alvise urban beach



 101093822	D: 6.4 Report on SeaClear2.0 app and portal, with validation	
	WP: 6	Version: 1.9
	Author(s): Poletto – Toso – Le Nouvel	Level: C-UE/EU-C

5) WCD 2024

EVENT	DATE	TESTED FUNCTIONALITIES	LOCATION
World Clean-up Day 2024	22/09/2024	- Regular Clean-up tool - SeaClear2.0 Portal - Authorization tool - Certificate of participation -Plastic Footprint calculator	Venice Lido Beach

ACTIVITY DESCRIPTION

The SeaClear2.0 app was employed at the World Cleanup Day, the largest civic action in the world, involving over 191 countries with the aim of addressing the global waste crisis and fostering awareness among citizens. Each year, Venice Lagoon Plastic Free (VLPF) organizes an event for this occasion, engaging local communities and volunteers. This year, VLPF hosted a waste monitoring and cleanup activity along the WWF Oasis Dune of Alberoni, a Natura 2000 site and part of Venice's natural heritage. The event was officially registered and recognized as part of WCD 2024 and was organized in collaboration with WWF Venice and Fondaco dei Tedeschi.

For the cleanup and waste removal activities, VLPF employed the SeaClear2.0 app. This app performed well so that we were able to register: 49.03 kg of plastic litter, 15.25 kg of other waste for a total of 64.28 kg of marine litter removed from the environment.



Pictures 21-22: Cleanup at WWF Oasis at Alberoni beach



 101093822	D: 6.4 Report on SeaClear2.0 app and portal, with validation	
	WP: 6	Version: 1.9
	Author(s): Poletto – Toso – Le Nouvel	Level: C-UE/EU-C

6) Clean up at Isola della Certosa

EVENT	DATE	TESTED FUNCTIONALITIES	LOCATION
Clean-up at Certosa Island	31/10/2024	- Regular Clean-up tool - SeaClear2.0 Portal - Authorization tool - Certificate of participation - Plastic Footprint calculator	Isola della Certosa

ACTIVITY DESCRIPTION

On October 31st 2024, in collaboration with a group of volunteers, Venice Lagoon Plastic Free organized, a day dedicated to clean-up the Certosa Island that faces the city of Venice, harboring a large marina. We managed the event with the SeaClear2.0 app having the participants engaged in cleaning up the island using the SeaClear2.0 App.

During the event we collected: **49.03 kg of plastic litter, 15.25 kg of other waste** for a total of **64.28 kg of marine litter**. All this was well recorded by the app with the issue of a certificate of participation and the successful computation of the Plastic Footprint reduction.



Pictures 23-24-25: Clean up at Certosa Island



 101093822	D: 6.4 Report on SeaClear2.0 app and portal, with validation	
	WP: 6	Version: 1.9
	Author(s): Poletto – Toso – Le Nouvel	Level: C-UE/EU-C

7) The Wake Forest University students at the WWF Oasis in Alberoni

EVENT	DATE	TESTED FUNCTIONALITIES	LOCATION
Wake Forest University	31/08/2024	- Gamified Clean-up tool - SeaClear2.0 Portal - Authorization tool - Certificate of participation	Alberoni beach

ACTIVITY DESCRIPTION

On Saturday, August 31, VLPP in collaboration with the American students from the Wake Forest University (Venice branch)—a member of the SeaClear 2.0 Community of Practice against marine pollution, established by VLPP in Venice, organized a monitoring and clean-up of marine debris on a transect of beach at the WWF Alberoni oasis on the island of Lido of Venice.

This clean-up took place in a part of Alberoni beach that is freely accessible to the public and is not mechanically or manually cleaned, thus being a representative example of a beach where marine litter pollution accumulates.

The app used during the clean-up contest allowed the participating students to experience a clean-up activity in the form of a challenge. The students from Wake Forest University thus had a first-hand experience, through a playful contest between two different teams (Spritz Girls and Blue Fins), of the presence and removal of marine waste along our coastlines.

The clean-up took place also in collaboration with the WWF's Plastic Smart Cities program, of which Venice is a signatory party.



Picture 26: Gamified clean up at Alberoni beach with Wake Forest University students



 101093822	D: 6.4 Report on SeaClear2.0 app and portal, with validation	
	WP: 6	Version: 1.9
	Author(s): Poletto – Toso – Le Nouvel	Level: C-UE/EU-C

8) Gamified clean-up with Marco Polo Highschool

EVENT	DATE	TESTED FUNCTIONALITIES	LOCATION
Marco Polo Highschool	08/10/2024	- Gamified Clean-up tool - SeaClear2.0 Portal - Authorization tool - Certificate of participation - Plastic Footprint	Alberoni beach

ACTIVITY DESCRIPTION

On October the 08, 2024 Venice Lagoon Plastic Free, in collaboration with Marco Polo Highschool Venice students, part of the Venice Community of Practice against marine pollution, established by VLPP under the SeaClear2.0 project, organized a gamified clean-up of marine debris on a section of beach at the WWF Alberoni oasis on the Lido of Venice.

The goal was to collect as much plastic waste as possible in an hour. Students and teachers were divided into two groups, “Pink Panther” and “Blue Lagoon”, and together collected nearly 20 kilograms of small plastic items.



Pictures 27-28: Gamified clean up at Alberoni beach with Marco Polo Highschool students



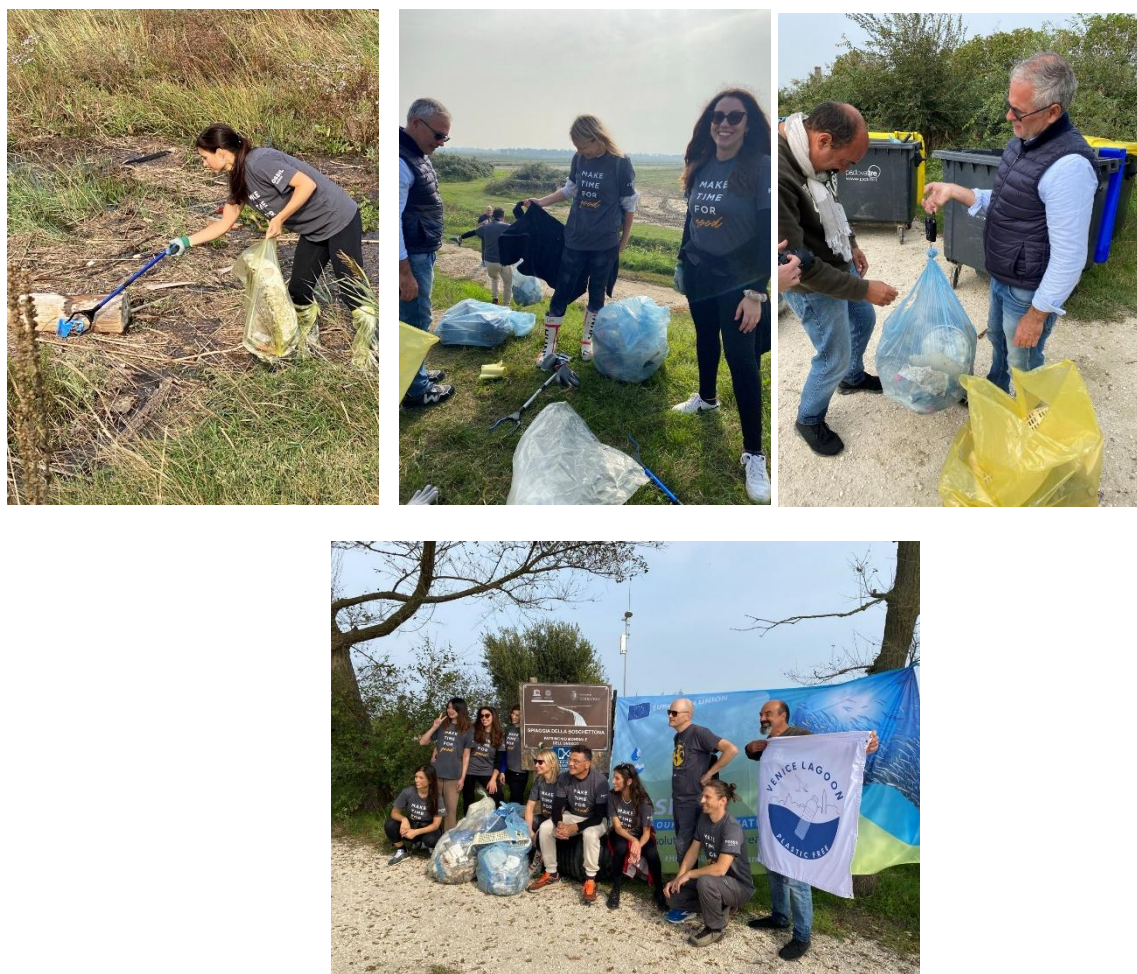
 101093822	D: 6.4 Report on SeaClear2.0 app and portal, with validation	
	WP: 6	Version: 1.9
	Author(s): Poletto – Toso – Le Nouvel	Level: C-UE/EU-C

9) Clean-up at Boschettona beach

EVE NT	DATE	TESTED FUNCTIONALITIES	LOCATION
Boschettona beach	15/10/2024	- Gamified Clean-up tool - Certificate of participation - Plastic Footprint - Dashboard	Boschettona beach

ACTIVITY DESCRIPTION

On October 15, 2024, the SeaClear2.0 app's functionalities were successfully tested and fine-tuned with a group of twelve volunteers from Carel Industries' local agency. Venice Lagoon Plastic Free (VLPF) organized a gamified contest based cleanup event at Boschettona Beach, a UNESCO World Heritage site located in the southern part of the Venice Lagoon. The competing teams (Boschettieri vs Intraprendenti) collected **33.14 kg of plastic litter** and **6.12 kg of other materials**, resulting in a total of **39.26 kg of marine litter** removed from the area.



Pictures 29-30-31-32: Gamified clean up at Boschettona beach



 101093822	D: 6.4 Report on SeaClear2.0 app and portal, with validation	
	WP: 6	Version: 1.9
	Author(s): Poletto – Toso – Le Nouvel	Level: C-UE/EU-C

10) S.Piero in Volta

EVENT	DATE	TESTED FUNCTIONALITIES	LOCATION
S.Piero in Volta	10/12/2024	- Gamified Clean-up tool - Certificate of participation - Plastic Footprint - Dashboard	Pellestrina Island

ACTIVITY DESCRIPTION

Venice Lagoon Plastic Free (VLPF) selected the beach on Pellestrina Island as the site for its final monitoring and clean-up event of 2024. Located south of Venice's Lido, Pellestrina serves as a barrier between the lagoon and the Adriatic Sea.

This geographical position exposes it to adverse weather conditions and tides excursions. Additionally, Pellestrina is known for its fishing and mussel farming activities, which contribute to the accumulation of marine debris along its coastline.

These conditions provide a critical backdrop for VLPF's clean-up and monitoring initiatives.

On December 10th, more than sixty students and their teachers participated in the event. They were three fifth-year classes and one fourth-year class from the Vendramin-Corner Technical and Professional Institute in Venice, specializing in "Environmental Biotechnology." A group was from the "Transport and Logistics" department of the Sebastiano Venier Nautical Technical Institute, and a delegation of students representing the Jesuit College A.M.D.G., also took part.

Despite the cold weather, the students were divided into two Teams (Pink and Rose), and engaged in a clean-up activity contest. Items retrieved included numerous stranded buoys, mussel-farming nets, life rings, inflatable beach mattresses, toys, plastic bottles, wooden artifacts, and more.

The waste collected during the clean-up contest was weighed and catalogued by the Sea Clear 2.0 app. The event resulted in the removal of 185.24 kg of stranded waste, including 12 buoys.





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WP: 6

Version: 1.9

Author(s): Poletto – Toso – Le Nouvel

Level: C-UE/EU-C



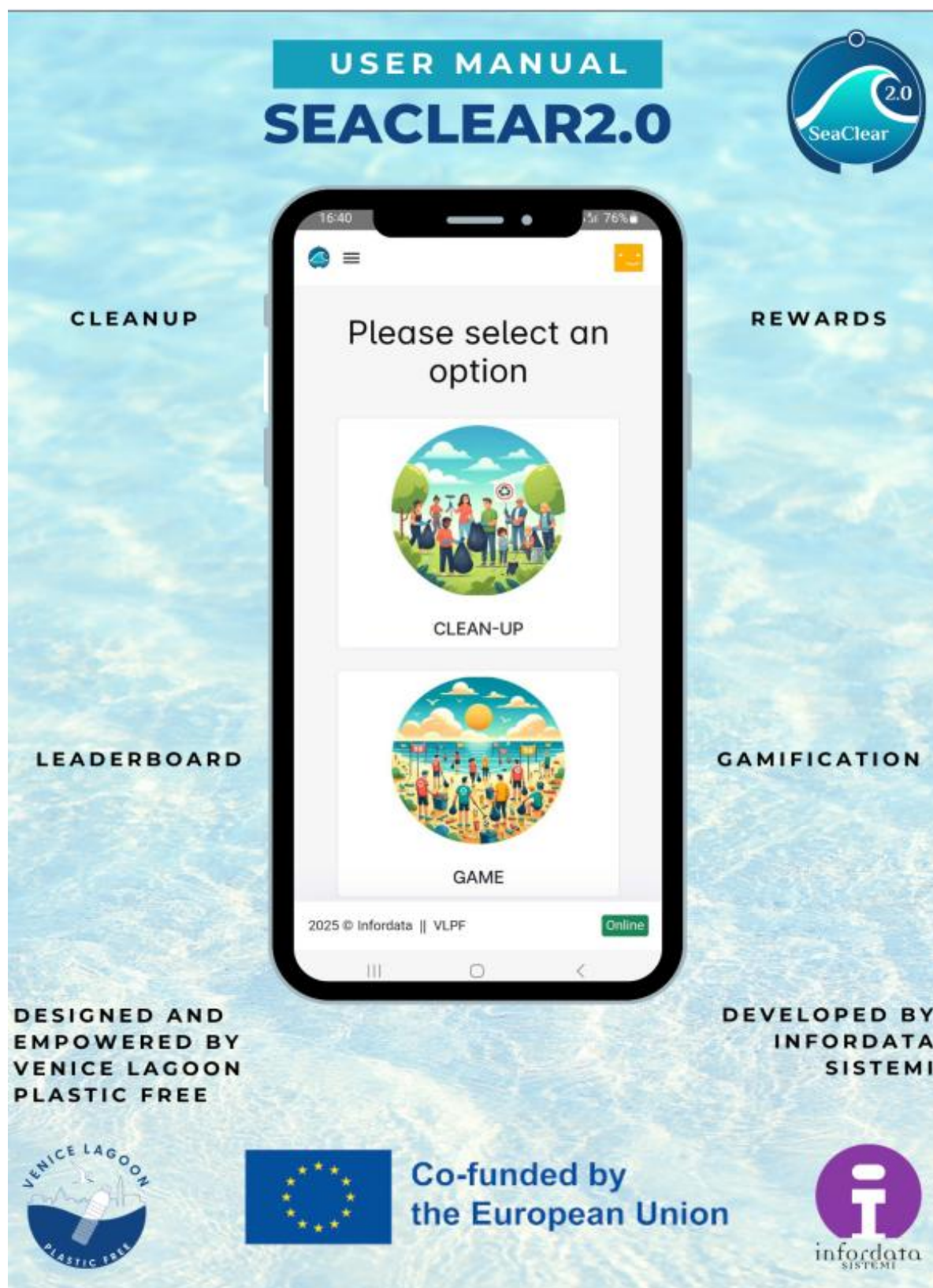
Pictures 33-34-35-36: Gamified clean up at Pellestrina beach



Co-funded by
the European Union

 101093822	D: 6.4 Report on SeaClear2.0 app and portal, with validation	
	WP: 6	Version: 1.9
	Author(s): Poletto – Toso – Le Nouvel	Level: C-UE/EU-C

4. ACCESS TO SEACLEAR2.0 - MOBILE APPLICATION



Picture 37: SeaClear2.0 info graphic



Co-funded by
the European Union

 101093822	D: 6.4 Report on SeaClear2.0 app and portal, with validation	
	WP: 6	Version: 1.9
	Author(s): Poletto – Toso – Le Nouvel	Level: C-UE/EU-C

QR code to download the Seaclear2.0 mobile application for **Android** devices:



QR code to download the Seaclear2.0 mobile application for **Apple** devices:



Steps to install SeaClear2.0 Progressive Web Application to iOS devices:

1. Scan provided QR code.
2. Once the website opens and loads in Safari, tap the **Share** button at the bottom of the screen (it resembles a square with an arrow pointing upwards).
3. In the Share menu, locate the **Add to Home Screen** option and tap on it.
4. You will be prompted to customize the name of the app and, in some cases, the app's icon.
5. Tap the Add button in the screen's upper right-corner.
6. The Seaclear2.0 PWA will now be added to your home screen as an app icon.
7. You can launch the app by tapping its icon like any other app on your device.

Link and QR code to access mobile app from **mobile browser**:



 101093822	D: 6.4 Report on SeaClear2.0 app and portal, with validation	
	WP: 6	Version: 1.9
	Author(s): Poletto – Toso – Le Nouvel	Level: C-UE/EU-C

5. STEP-BY-STEP INSTRUCTIONS

5.1. Select option from main menu

The first step after opening the mobile application in the browser is to select one of the 4 options offered:

- **Disclaimer**
- **Tips**
- **Register**
- **Login**

Disclaimer and **Tips** views do not require authorization, while **Register** and **Login** are used to obtain authorization and enable manipulation of cleanups and games data. Each of the options will be described in more detail below.



Picture 38: Register and login page



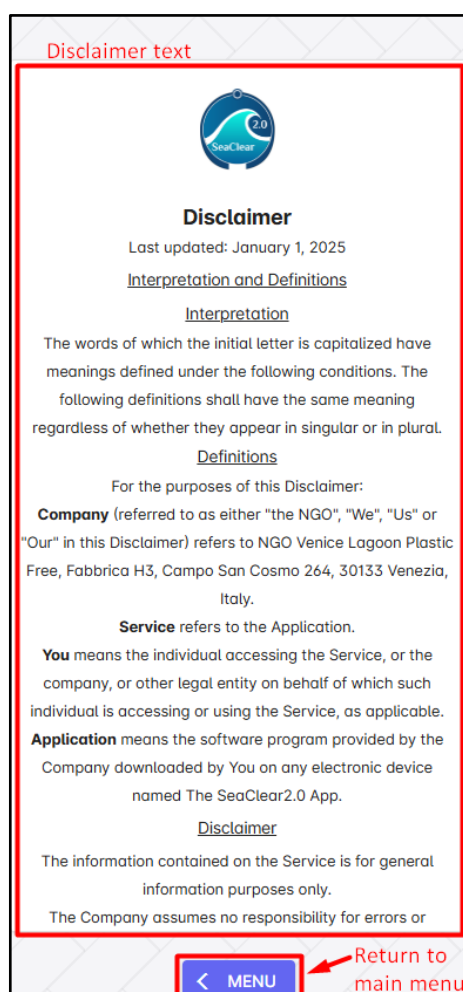
 101093822	D: 6.4 Report on SeaClear2.0 app and portal, with validation	
	WP: 6	Version: 1.9
	Author(s): Poletto – Toso – Le Nouvel	Level: C-UE/EU-C

5.1.1. Select Disclaimer

This option is selected if you want to view the disclaimer text which serves several important purposes, primarily to inform and protect both the app developers and users.

It also helps app developers avoid legal issues, build trust with users, and ensure compliance with industry and legal standards.

To return to the main menu, select the **< Menu** button.



Picture 39: Disclaimer page



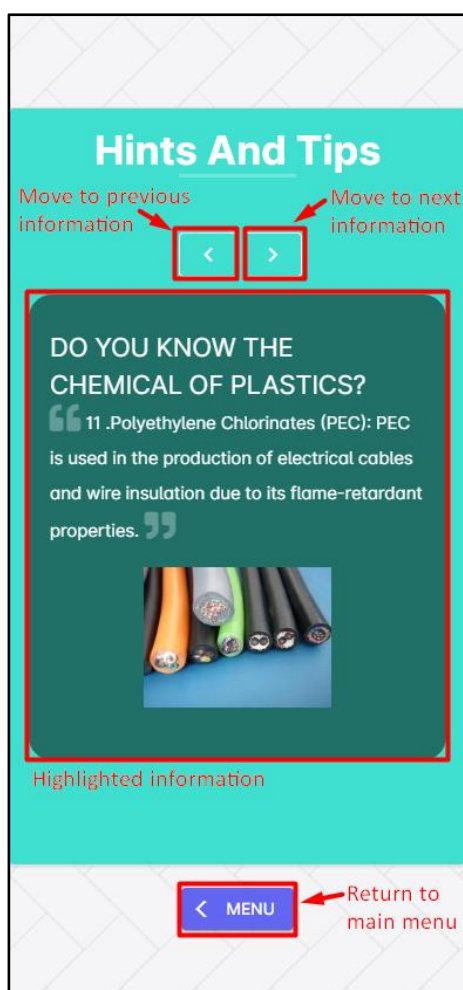
 101093822	D: 6.4 Report on SeaClear2.0 app and portal, with validation	
	WP: 6	Version: 1.9
	Author(s): Poletto – Toso – Le Nouvel	Level: C-UE/EU-C

5.1.2. Select Tips

Selecting the **Tips** button on the main menu opens the “*Hints and Tips*” view, which contains short and interesting information about litter or similar highlighted by the admin.

The information changes automatically after the timeout, but, if necessary, it can be changed manually using the arrows **<** and **>**.

To return to the main menu, select the **< Menu** button.



Picture 40: Hints And Tips page

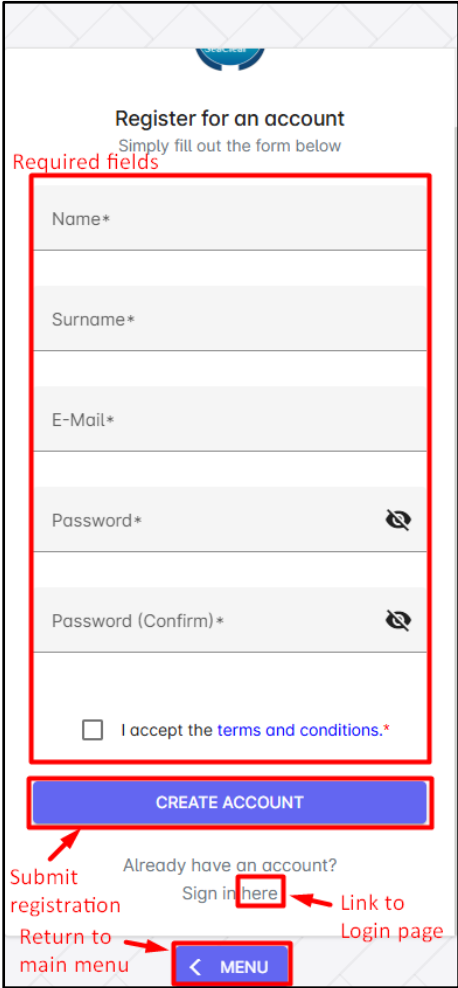
 101093822	D: 6.4 Report on SeaClear2.0 app and portal, with validation	
	WP: 6	Version: 1.9
	Author(s): Poletto – Toso – Le Nouvel	Level: C-UE/EU-C

5.1.3. Select Register

Creating a new user account is possible by selecting the Register button.
The mandatory user information that needs to be entered to create a new account is:

- **Name**
- **Surname**
- **E-mail**
- **Password**
- **Password (confirm)**

In addition, it is necessary to accept the terms and conditions stated in the disclaimer text.
When the mandatory fields are filled and the text of the disclaimer is accepted, it is possible to confirm the registration by clicking on the **CREATE ACCOUNT** button.
If the user has already logged in to the system and actually wants to log in rather than register, it is possible to open the login view using the **Sign in here** button.



Picture 41: Register for an account page



 101093822	D: 6.4 Report on SeaClear2.0 app and portal, with validation	
	WP: 6	Version: 1.9
	Author(s): Poletto – Toso – Le Nouvel	Level: C-UE/EU-C

To return to the main menu, select the **< Menu** button.

5.1.4. Select Login

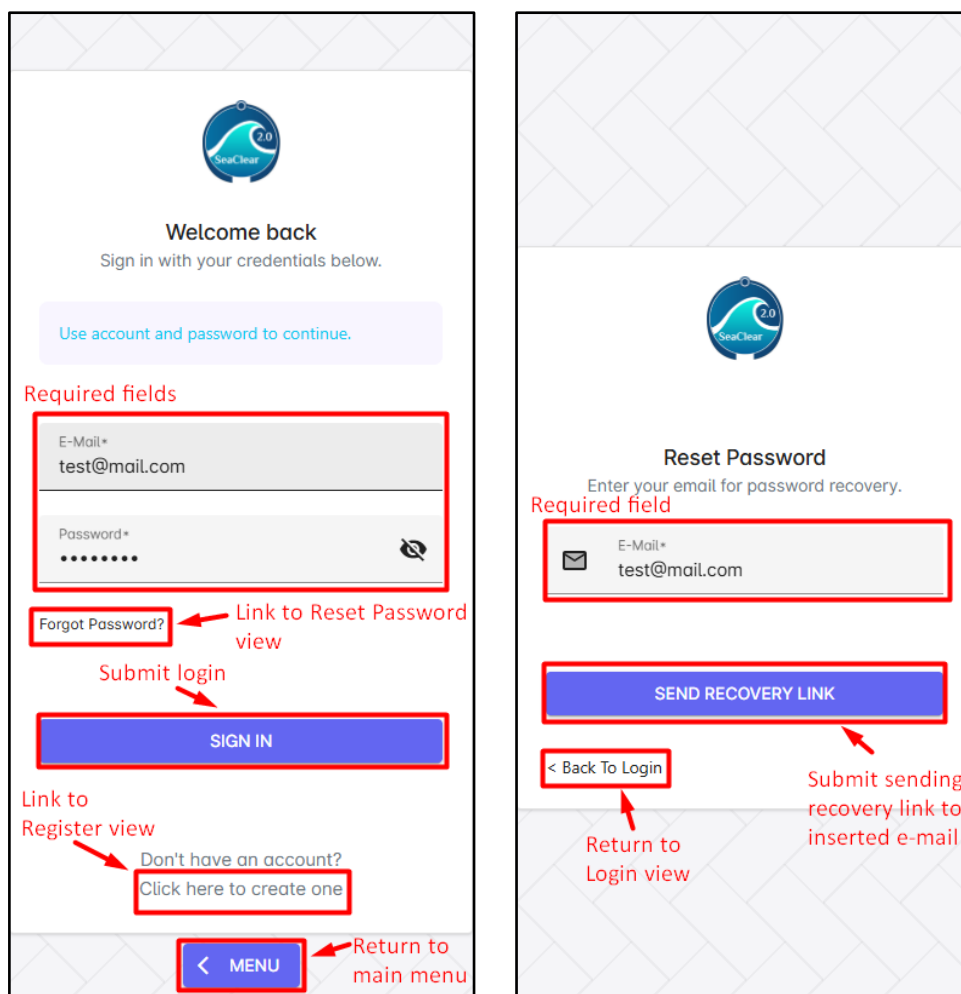
A user whose credentials and user data have already been added to the system logs in by selecting the **Login** button.

The login view contains a form with fields for entering an email and password. After entering the correct data in the fields and clicking the **SIGN IN** button, the user will be redirected to the Dashboard view.

If the user's data has not already been entered into the system and the user wishes to create a new account, this can be done by clicking the **Click here to create one** button.

Additionally, if the user has forgotten the password for the associated email, he can reset it using the button **Forgot Password?** below the form field. Selecting the mentioned button opens the “Reset Password” view where you can enter the email for which you need to recover the password. Initially, the button **SEND RECOVERY LINK** is disabled and can be clicked after entering the correct email format in the field. To return and open the login view, use the **< Back to Login** button

To return to the main menu, select the **< Menu** button.



The image displays two screenshots of the SeaClear 2.0 app interface, illustrating the login and password reset process.

Left Screenshot (Login View):

- Header: SeaClear 2.0 logo, "Welcome back", "Sign in with your credentials below."
- Text: "Use account and password to continue."
- Form Fields: "E-Mail*" (test@mail.com), "Password*" (masked).
- Buttons/Links: "Forgot Password?" (Link to Reset Password view), "SIGN IN" (Submit login), "Don't have an account? Click here to create one" (Link to Register view), "< MENU" (Return to main menu).

Right Screenshot (Reset Password View):

- Header: SeaClear 2.0 logo, "Reset Password", "Enter your email for password recovery."
- Form Fields: "E-Mail*" (test@mail.com).
- Buttons/Links: "SEND RECOVERY LINK" (Submit sending recovery link to inserted e-mail), "< Back To Login" (Return to Login view).

Pictures 42-43: Creation of an account pages



 101093822	D: 6.4 Report on SeaClear2.0 app and portal, with validation	
	WP: 6	Version: 1.9
	Author(s): Poletto – Toso – Le Nouvel	Level: C-UE/EU-C

5.2. Authorized part of the application

After successful registration/login, the user is redirected to the part of the application where he can view or take actions related to cleanup and games. Additionally, it is possible to view the Leaderboard by filtering by organization or game and victory factor. Below, each of these sectors will be described in detail with all the actions that can be taken.

5.2.1. Overview of main layout and menus

The layout of the authorized part of the application is characterized by vertical, horizontal and dropdown menus, a main part where a specific view is displayed, and a footer with basic information (current year, links to the Infodata and VLPP websites, and network status - which can be “online” or “offline”).

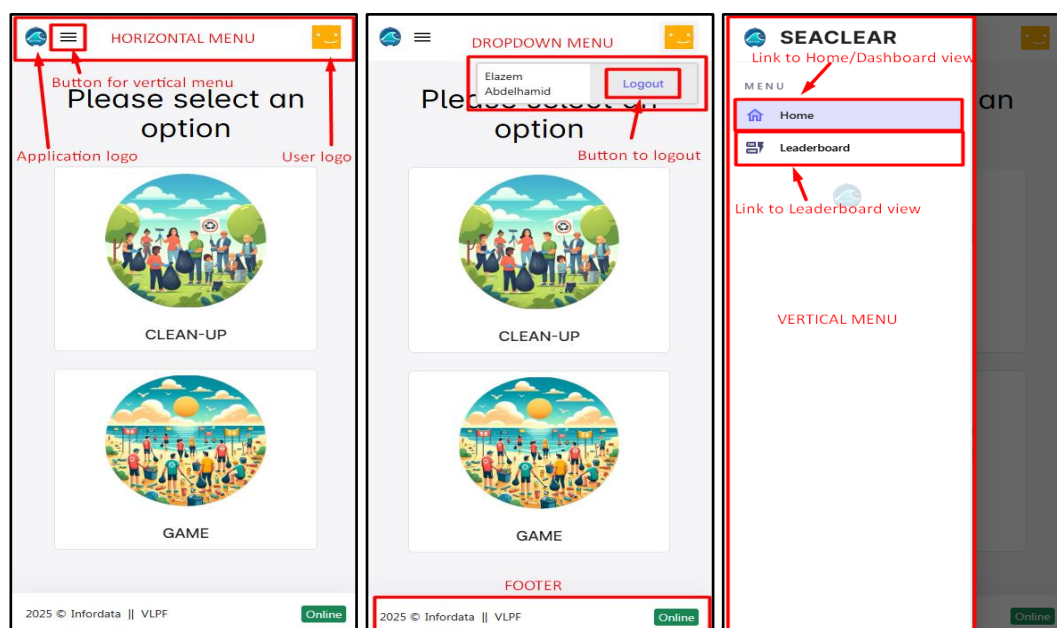
The horizontal menu contains:

- Application logo
- Button  to open the “burger menu”
- User logo to open a dropdown menu with the name and surname of the currently logged in user and a **Logout** button

The vertical menu consists of:

- Application logo and name
- Links (for Dashboard and Leaderboard views)

To close a dropdown or vertical menu, click/tap anywhere outside the open menus.



Pictures 44-45-46: Overview of main layout and menus

 101093822	D: 6.4 Report on SeaClear2.0 app and portal, with validation	
	WP: 6	Version: 1.9
	Author(s): Poletto – Toso – Le Nouvel	Level: C-UE/EU-C

5.2.2. Dashboard Overview

Within the “*Dashboard*” view there are two large buttons:

- Clean-up
- Games

Depending on the planned activity in the application, clicking on a certain button will redirect you to the selected module.



Picture 47: Dashboard page

5.2.3. Cleanup Overview

Opening the “*Cleanup*” module gives us the following options:

- Display of all cleanups
- Creating a new cleanup
- Updating and generating certificates for already existing cleanups

Initially, after selecting this module, a list of cleanups is displayed, and this view will be described in the next subsection.

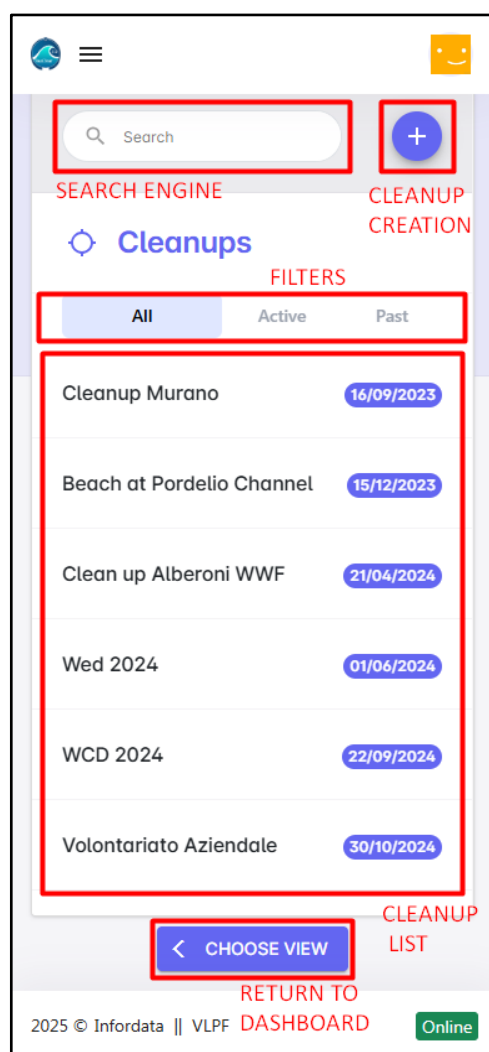


 101093822	D: 6.4 Report on SeaClear2.0 app and portal, with validation	
	WP: 6	Version: 1.9
	Author(s): Poletto – Toso – Le Nouvel	Level: C-UE/EU-C

5.2.3.1. Cleanup list

The cleanup list view contains the following options:

- Search for cleanups
- Filter cleanup events by "All", "Active" and "Past"
- Create a new cleanup event
- Update an existing cleanup event
- Return to Dashboard view

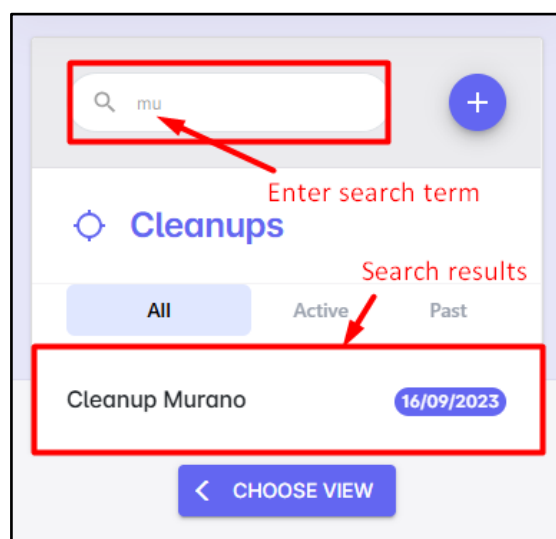


Picture 48: Cleanup list view page



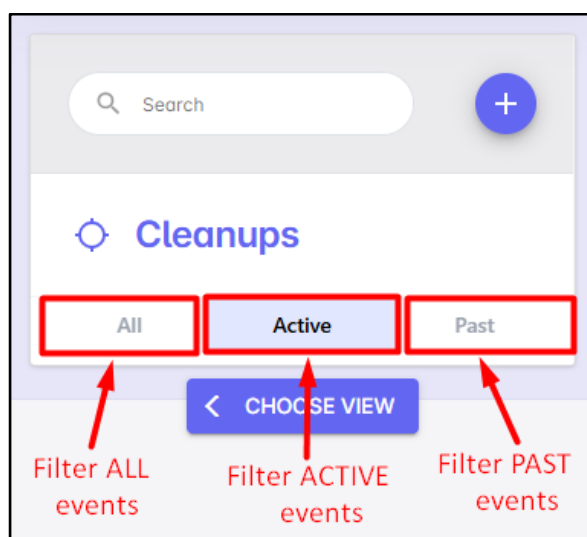
 101093822	D: 6.4 Report on SeaClear2.0 app and portal, with validation	
	WP: 6	Version: 1.9
	Author(s): Poletto – Toso – Le Nouvel	Level: C-UE/EU-C

The search is performed using the input field labeled  **Search** . You need to enter the name or the first few letters/characters of the event you are looking for, and the results are automatically and dynamically changed and displayed in the table below depending on the characters entered in the search engine.



Picture 49: 'Do a search' page

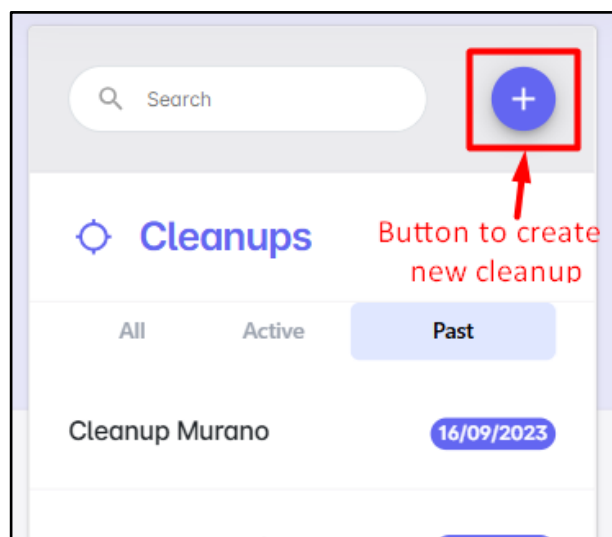
Filter options "All", "Active" and "Past" above the cleanup event table are used to filter all, current or past cleanup events. The currently active filter will be highlighted so that its name will be bold and will have a light purple background. In the example in the image below, the currently active filter is "Active" and the results are empty, meaning there are no currently active cleanup events.



Picture 50: Filter options "All", "Active" and "Past" page

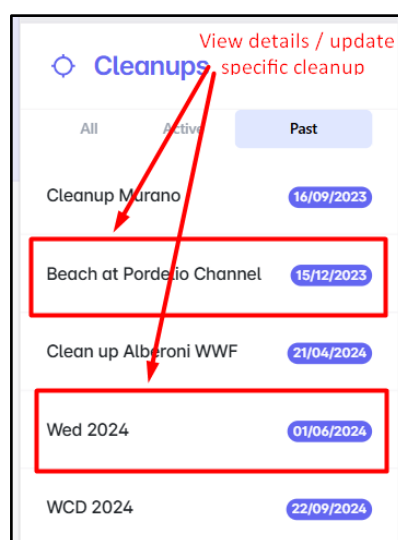
 101093822	D: 6.4 Report on SeaClear2.0 app and portal, with validation	
	WP: 6	Version: 1.9
	Author(s): Poletto – Toso – Le Nouvel	Level: C-UE/EU-C

The creation of a new cleanup event is enabled by clicking on the **+** button located to the right of the cleanup browser. After clicking, a popup window opens, which will be described in more detail in chapter 5.2.3.2.



Picture 51: Button to create new cleanup page

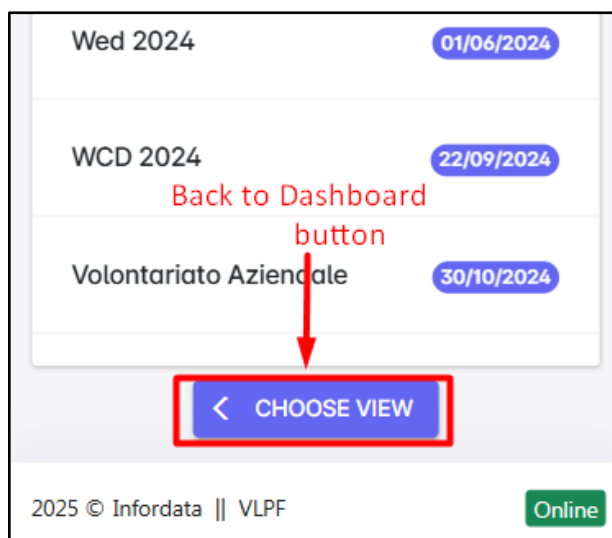
To update cleanup, select and click/press the event from the list of cleanup events for which you want to change the data or just view the details. After selecting, a popup opens with an update form, which will be described in more detail in chapter 5.2.3.3.



Picture 52: Update cleanup page

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	WP: 6	Version: 1.9
	Author(s): Poletto – Toso – Le Nouvel	Level: C-UE/EU-C

To return to the Dashboard view, use the **< CHOOSE VIEW** button at the bottom of the cleanup list view.



Picture 53: 'Chose view" page

5.2.3.2. Cleanup create form

The form for creating a cleanup in the popup window contains several fields that can be divided into two categories: fields for entering arbitrary data and fields for selecting data.

Fields for entering arbitrary data include:

- Event name
- Number Of Participants

Data selection fields include:

- Date
- Location
- Location Type

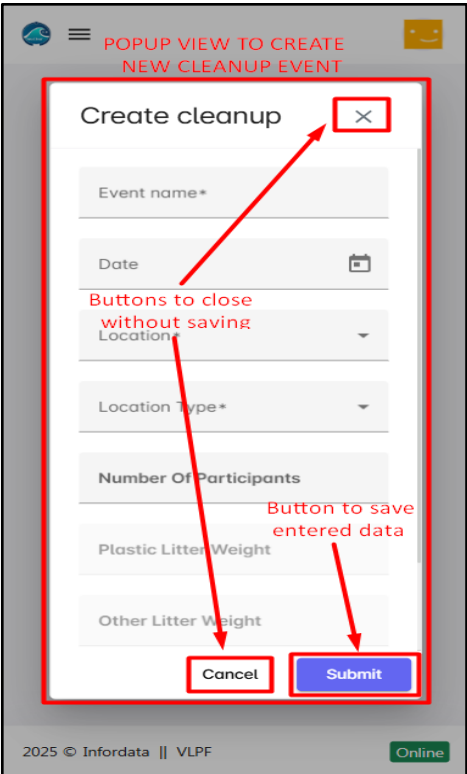
The other fields (*Plastic Litter Weight*, *Other Litter Weight* and *Total Weight Collected*) are disabled and the values of these fields will be calculated later by adding objects so that the weight of collected objects for this event will be added up.

It is necessary to enter/select the required information and press the **Submit** button to save the entered data. After saving and creating a new cleanup, a popup editing window automatically opens (will be described in detail in next chapter) to update the data of the created event.

To close the cleanup creation popup window without saving and creating a new cleanup event, select the **X** button in the upper right corner or the **Cancel** button at the bottom of the popup window.



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POPUP VIEW TO CREATE NEW CLEANUP EVENT

Create cleanup

Event name*

Date

Location*

Location Type*

Number Of Participants

Plastic Litter Weight

Other Litter Weight

Buttons to close without saving

Button to save entered data

Cancel Submit

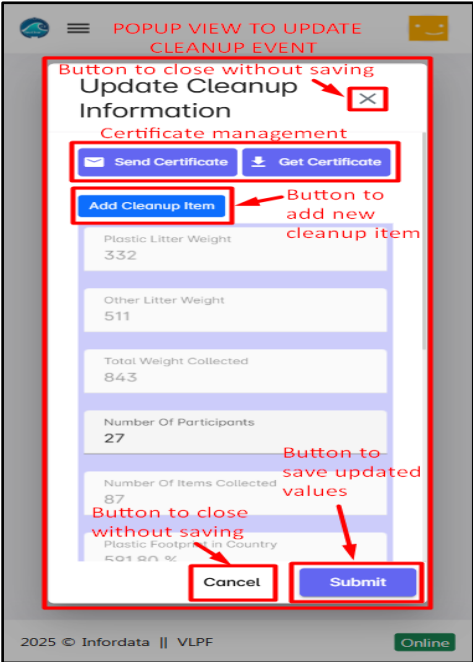
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Picture 54: Create cleanup form page

5.2.3.3. Cleanup update form

The form for updating the previously created cleanup event consists of several actions:

- Certificate management
- Add Cleanup Item
- Updating basic data



POPUP VIEW TO UPDATE CLEANUP EVENT

Update Cleanup Information

Certificate management

Send Certificate Get Certificate

Add Cleanup Item

Plastic Litter Weight 332

Other Litter Weight 511

Total Weight Collected 843

Number Of Participants 27

Number Of Items Collected 87

Plastic Footprint in Country 501 20 %

Button to close without saving

Button to add new cleanup item

Button to save updated values

Cancel Submit

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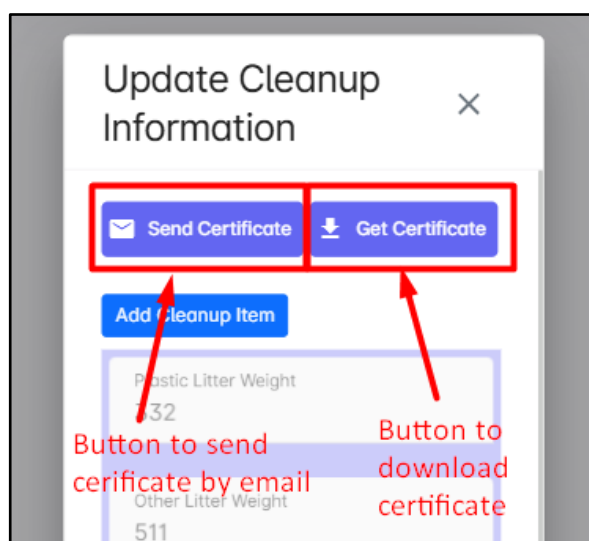
Picture 55: Cleanup update form page



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	Author(s): Poletto – Toso – Le Nouvel	Level: C-UE/EU-C

Certificate management involves sending or downloading certificates.

The certificate is sent using the **Send Certificate** button, after which the certificate is sent to the contact email of the selected event partner. Downloading the certificate can be done with the **Get Certificate** button, after which the certificate opens in a form where it can be downloaded to the device on which the application is used.



Picture 56: Update cleanup Information page

Information about the found item for a specific event can be entered after selecting the **Add Cleanup Item** button. After selecting, a popup window opens with a form in which the following fields can be filled in:

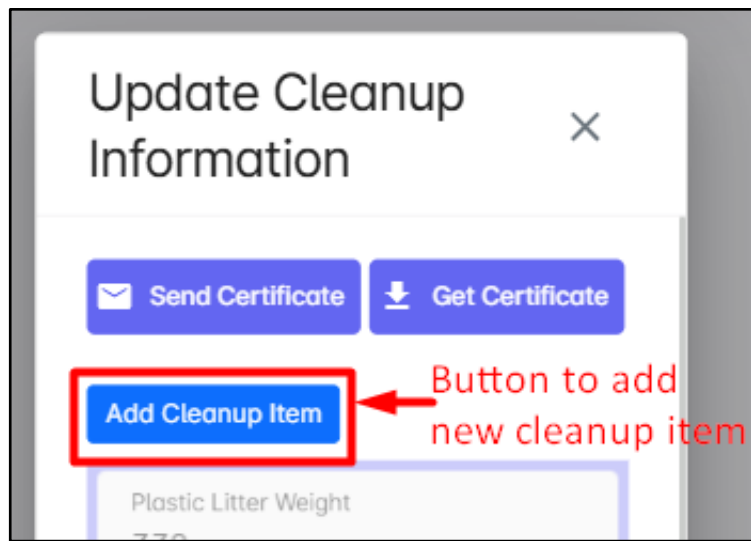
- Plastic Litter Weight
- Other Litter Weight
- Total Weight Collected
- Number Of Items Collected

To save the data, click the **Submit** button in the left down part of the popup, and to close without saving, click the **Close** button located in the right down part or **X** button in the upper right part of the popup.

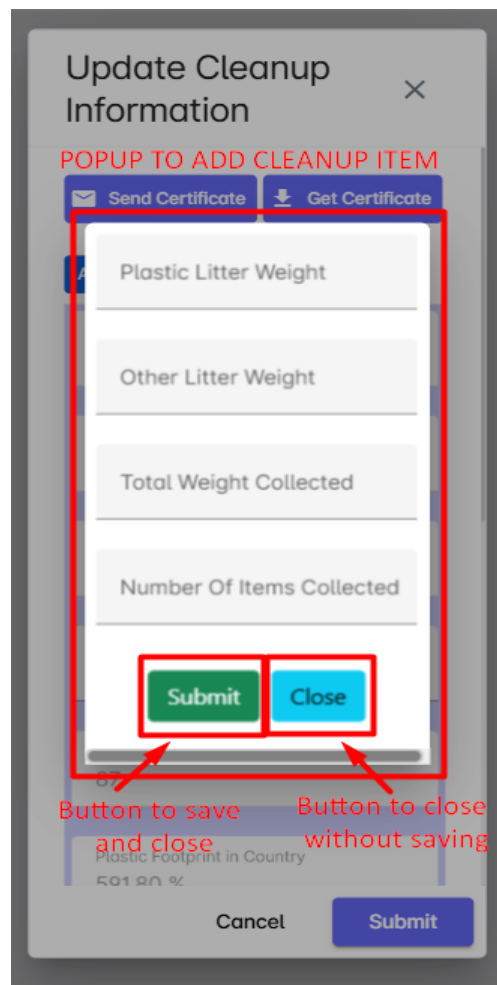
If any cleanup item data is entered and saved, it will be aggregated with existing litter event data (Plastic Litter Weight, Other Litter Weight, Total Weight Collected and Number of Items Collected) and will be used to calculate Plastic Footprint in Country and Plastic Footprint in EU. The mentioned existing data cannot be entered manually and these fields are disabled in the form.



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Picture 57: Button to add new cleanup item screenshot



Picture 58: To add new cleanup item page

The fields that can be updated in the form are as follows:



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- Number Of Participants
- Event name
- Location Type
- Location
- Partner
- Date

5.2.4. Game Overview

Opening the “Game” module gives us the following options:

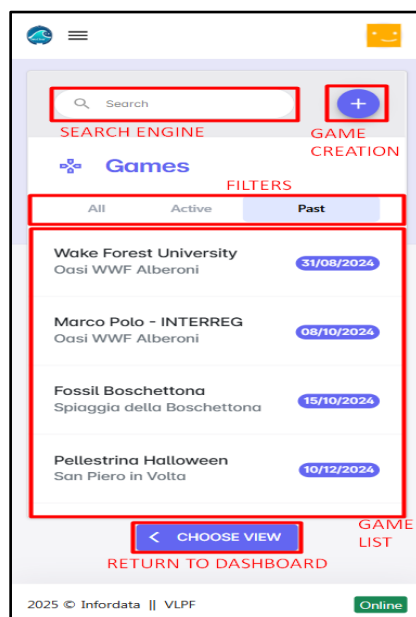
- Display of all cleanups
- Creating a new cleanup
- Updating existing cleanups

Initially, after selecting this module, a list of games is displayed, and this view will be described in the next subsection.

5.2.4.1. Game list

The cleanup list view contains the following options:

- Search for games
- Filter game events by “All”, “Active” and “Past”
- Create a new game
- Update an existing game
- Return to Dashboard view

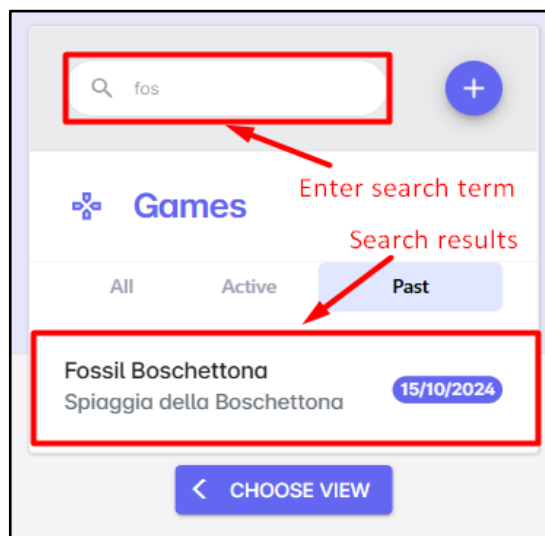


Picture 59: Game list page



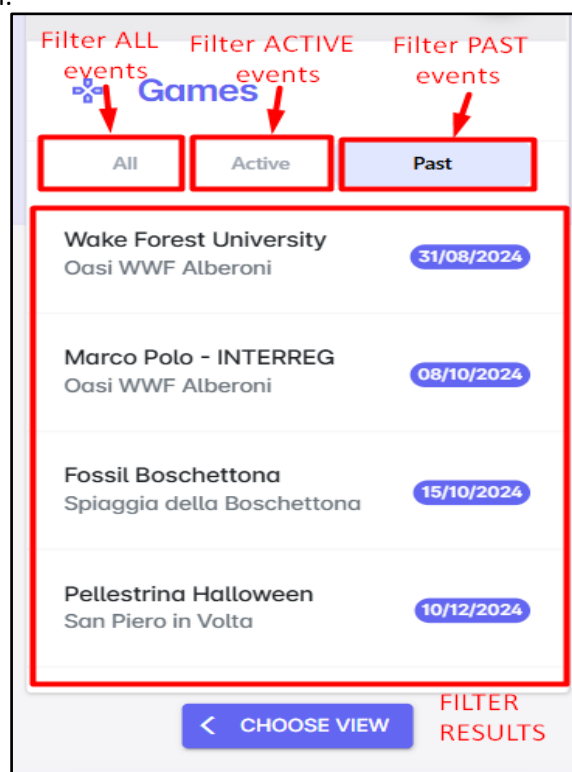
 101093822	D: 6.4 Report on SeaClear2.0 app and portal, with validation	
	WP: 6	Version: 1.9
	Author(s): Poletto – Toso – Le Nouvel	Level: C-UE/EU-C

The search is performed using the input field labeled  **Search** . You need to enter the name or the first few letters/characters of the event you are looking for, and the results are automatically and dynamically changed and displayed in the table below depending on the characters entered in the search engine.



Picture 60: “Do a search’ page

Filter options “All”, “Active” and “Past” above the game event table are used to filter all, current or past cleanup events. The currently active filter will be highlighted so that its name will be bold and will have a light purple background. In the example in the image below, the currently active filter is “Past” and the results are shown.

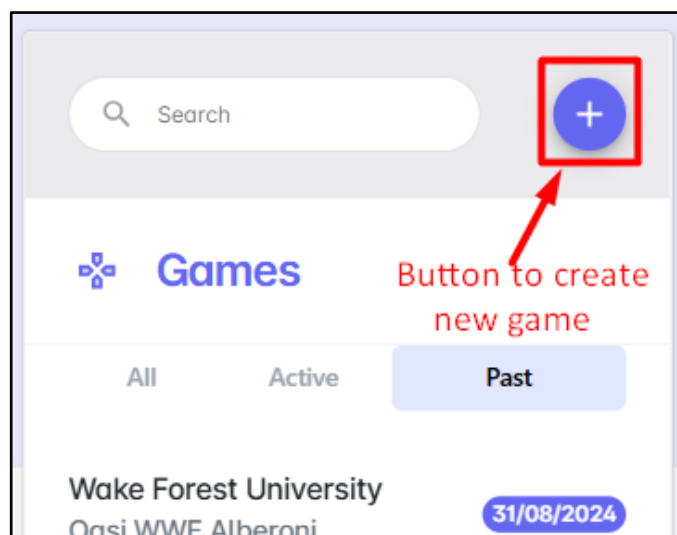


Picture 61: Filter options “All”, “Active” and “Past” page



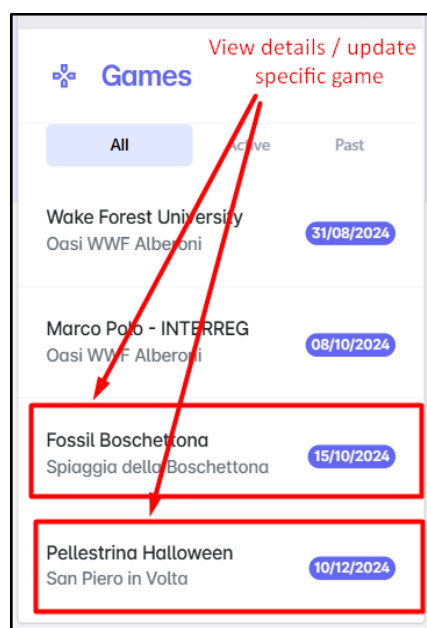
 101093822	D: 6.4 Report on SeaClear2.0 app and portal, with validation	
	WP: 6	Version: 1.9
	Author(s): Poletto – Toso – Le Nouvel	Level: C-UE/EU-C

The creation of a new game event is enabled by clicking on the **+** button located to the right of the game browser. After clicking, a popup window opens, which will be described in more detail in chapter 3.2.4.2.



Picture 62: Button to create a new game screenshot

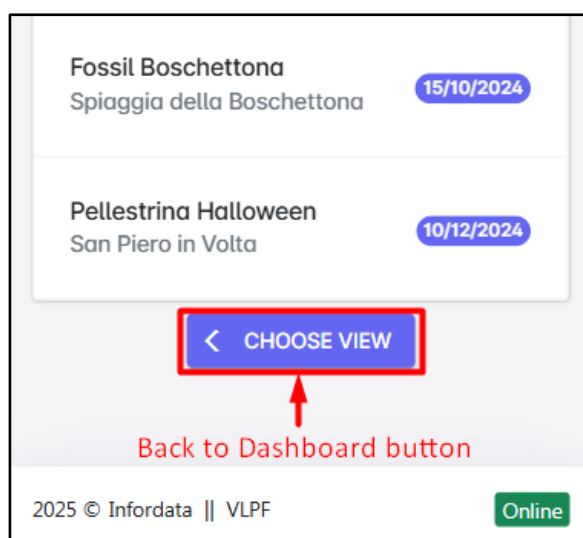
To update the game, select and click/press the event from the list of game events for which you want to change the data or just view the details. After selecting, a popup opens with an update form, which will be described in more detail in chapter 3.2.4.3.



Picture 63: Update the game page

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	WP: 6	Version: 1.9
	Author(s): Poletto – Toso – Le Nouvel	Level: C-UE/EU-C

To return to the Dashboard view, use the **< CHOOSE VIEW** button at the bottom of the cleanup list view.



Picture 64: 'Choose view' page

5.2.4.2. Game create form

The form for creating a game in the window contains several fields that can be divided into two categories: fields for entering arbitrary data and fields for selecting data.

Fields for entering arbitrary data include:

- Event name

Data selection fields include:

- Date
- Location
- Winning factor

It is necessary to enter/select the required information and press the **Submit** button to save the entered data. After saving and creating a new game, the editing window automatically opens (will be described in details in next chapter) to update the data of the created event.

An additional action that can be taken in this view is to create a new location if the location is not already entered into the system by selecting the **+** button next to the location selection field. After selection, a popup window for creating a location opens with 4 fields that need to be filled in about the details of the location:

- Name
- Country Code
- Latitude
- Longitude



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There is another additional field that can be used to search for a typical address and if it is found, after selecting it from the select options, *Country Code*, *Latitude* and *Longitude* are automatically filled in based on the searched address. This field is marked with the *Enter an address here* label.

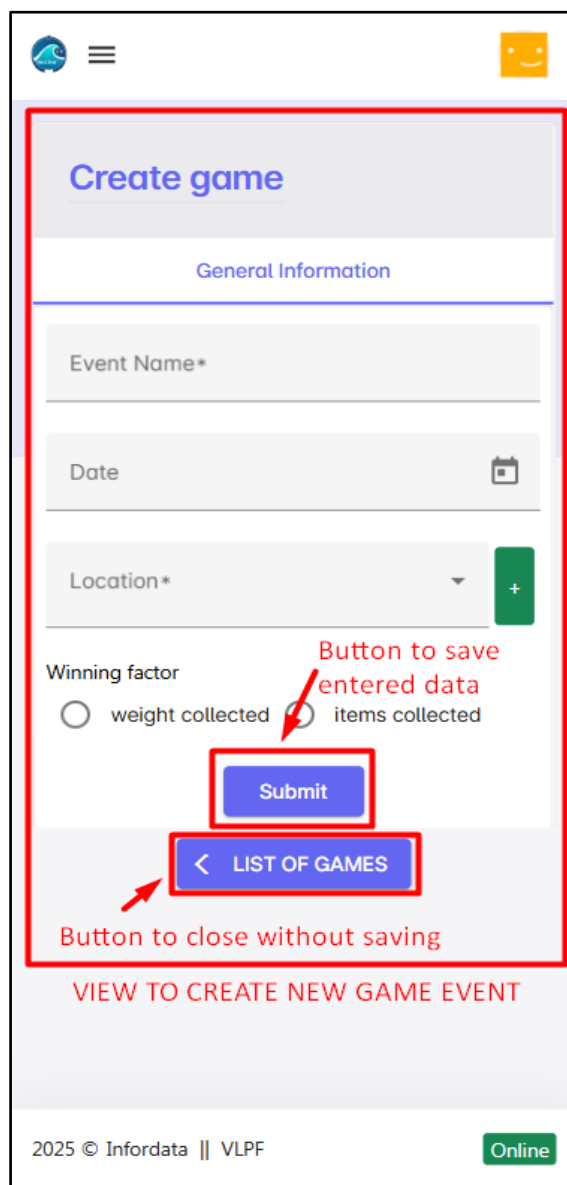
Another way to prepopulate coordinates is by using the **Use current position** button. After clicking on that button (if the application has permission to use the location), the *Latitude* and *Longitude* fields will be filled with the coordinates of the current position.

To save the data, click the **Submit** button in the right down part of the popup, and to close without saving, click the **Cancel** button located in the down part or **X** button in the upper right part of the popup.

Picture 65: Add location page

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	WP: 6	Version: 1.9
	Author(s): Poletto – Toso – Le Nouvel	Level: C-UE/EU-C

To close the game creation window without saving and creating a new game event, select the  **CHOOSE VIEW** below list of games.



Create game

General Information

Event Name*

Date

Location*

Winning factor

☐ weight collected ☒ items collected

Submit

< LIST OF GAMES

VIEW TO CREATE NEW GAME EVENT

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Picture 66: 'Create a new game event' page



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	WP: 6	Version: 1.9
	Author(s): Poletto – Toso – Le Nouvel	Level: C-UE/EU-C

5.2.4.3. Game update form

The form for updating the previously created game event consists of two main actions:

- Updating basic data
- Updating Team/s data

In the **“General Information”** tab, it is possible to update the following data:

- Plastic Litter Weight
- Other Litter Weight
- Event Name
- Location
- Date
- Winning factor

Once the changes have been made, the **Submit** button at the bottom of the form is used to save them.

The second tab **“Teams”** in this view serves to add, delete or update information about the team or teams participating in the current game. To add a new team to this game, use the circular **+** button. After adding, you need to select a team name, and if it does not exist, it can be added using the **+** button located next to/below the team’s name selection field. Performing this action opens a popup window with two fields:

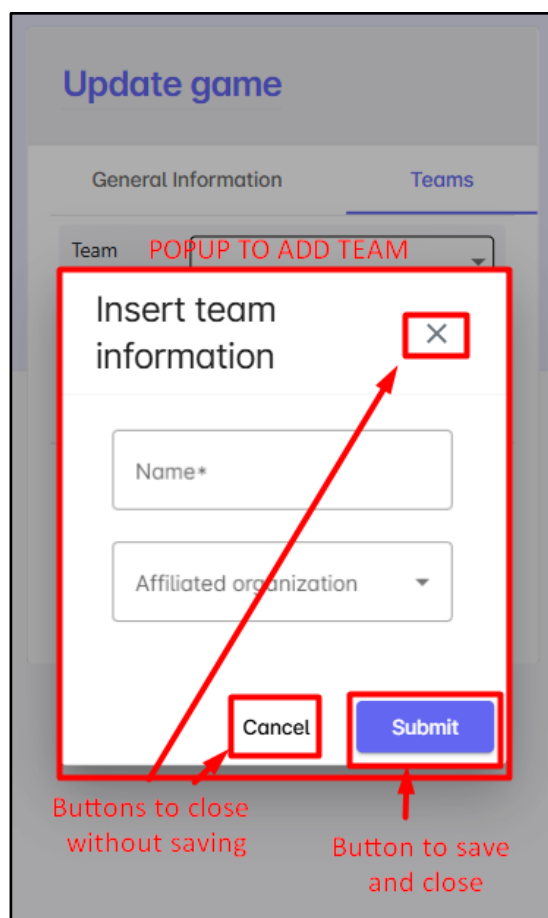
- Name
- Affiliated organization

In the *Name* field, you can enter anything, while the *Affiliated organization* should be selected from the list in this field.

To save the data, click the **Submit** button in the right down part of the popup, and to close without saving, click the **Cancel** button located in the down part or **X** button in the upper right part of the popup. If we create a new team after saving and closing the popup window, its name will be auto-selected as the team’s name in the **“Teams”** tab.



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Picture 67: To add team page

To enter details for an individual team, select the  button at the bottom of the team card, after which the details for that team are displayed and it is possible to change the following data:

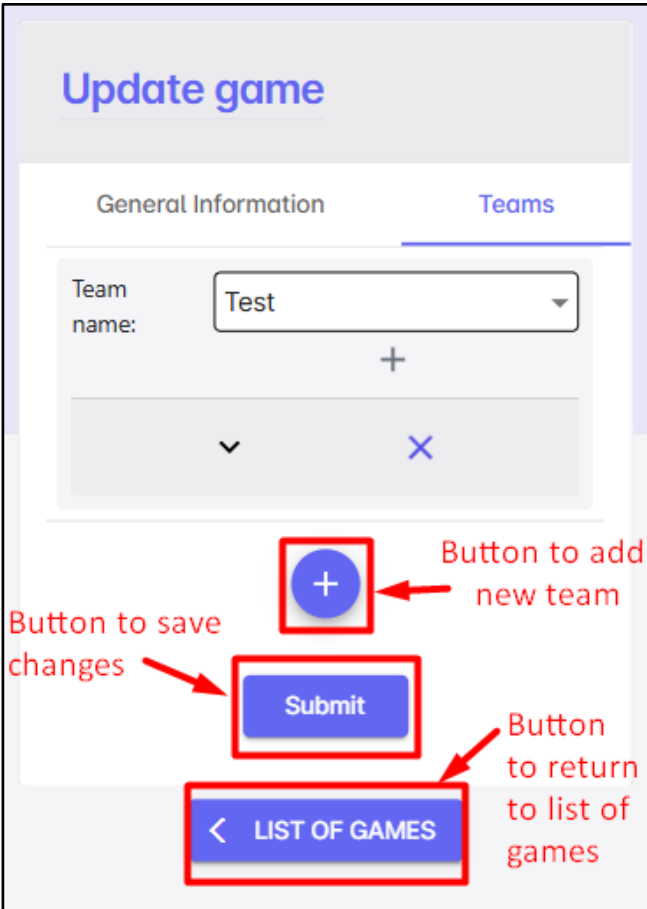
- Number of participants
- Number of items collected
- Plastic Litter Weight
- Other Litter Weight

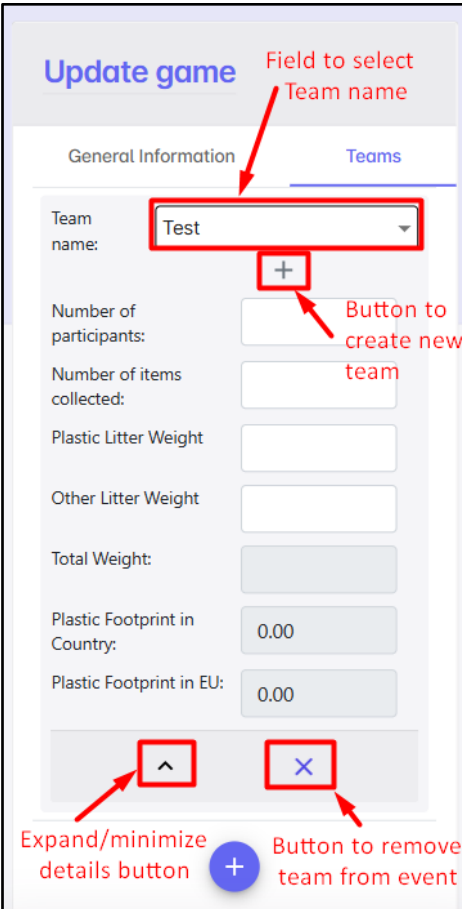
If data has been entered and/or changed, we can minimize the team details for better visibility using the  button.

There is an  button to remove a specific team as a participant in the selected game. When all necessary modifications of the team or teams of the selected game have been made, they are saved with the **Submit** button located below the button for adding a new team.



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Pictures 68-69: Update game – general information page

Below the tabs is the **< LIST OF GAMES** button, which must be selected if you want to exit the update view and return to the view with the list of all games.

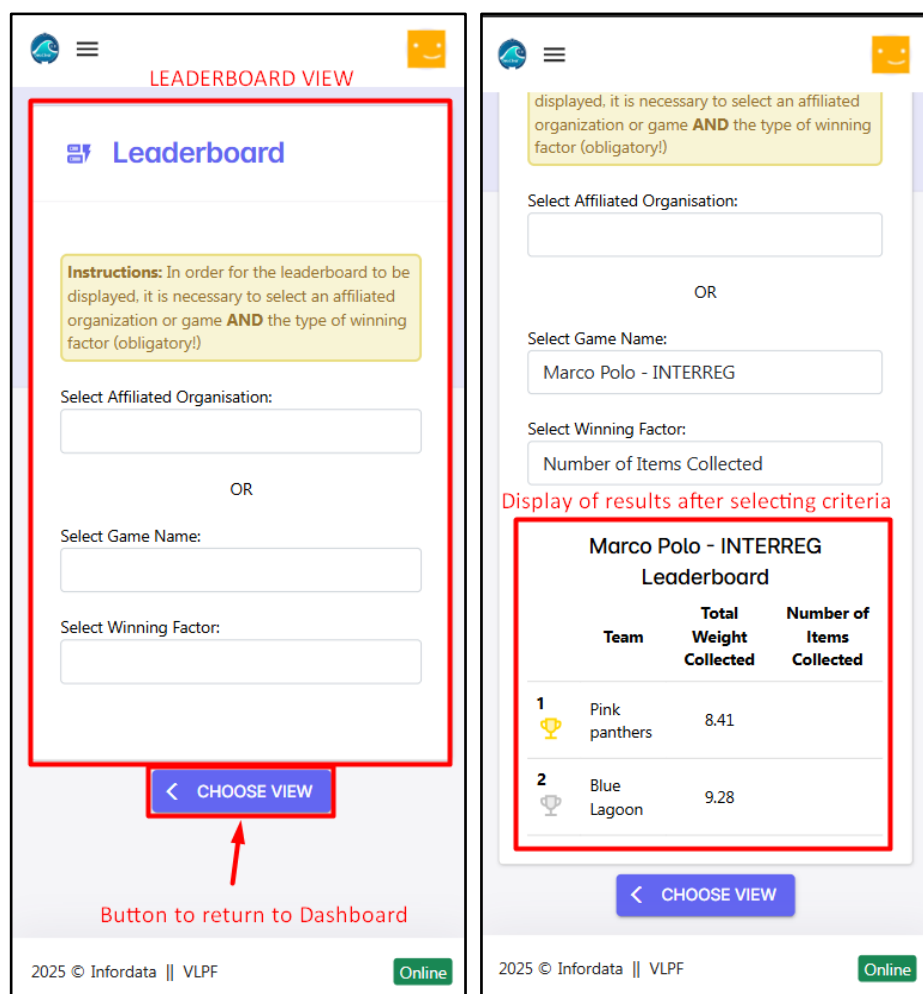
5.2.5. Leaderboard Overview

If the *Leaderboard* item is selected from the vertical menu, a module opens where we can view game results. Below the view title are the instructions that must be followed to reach the final performance view. To view the results, you need to select the following parameters:

- Affiliated Organization OR Game Name
- Winning Factor

When the conditions are met, the table below appears with the final results.

To return to the Dashboard view, use the **< CHOOSE VIEW** button at the bottom of the view.



LEADERBOARD VIEW

Leaderboard

Instructions: In order for the leaderboard to be displayed, it is necessary to select an affiliated organization or game **AND** the type of winning factor (obligatory!)

Select Affiliated Organisation:

OR

Select Game Name:

Select Winning Factor:

< CHOOSE VIEW

Button to return to Dashboard

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displayed, it is necessary to select an affiliated organization or game **AND** the type of winning factor (obligatory!)

Select Affiliated Organisation:

OR

Select Game Name:

Marco Polo - INTERREG

Select Winning Factor:

Number of Items Collected

Display of results after selecting criteria

Marco Polo - INTERREG Leaderboard

	Team	Total Weight Collected	Number of Items Collected
1	 Pink panthers	8.41	
2	 Blue Lagoon	9.28	

< CHOOSE VIEW

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Pictures 70-71: Leaderboard view page