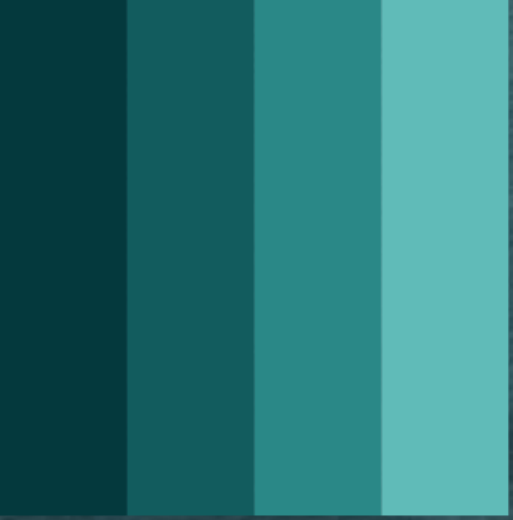




CLEAN SEA* SOLUTIONS

TAKE CONTROL OF YOUR WATERFRONT ENVIRONMENT



Winner Innovation Prize - Monaco Sustainable Smart Marina 2024



TREASURE

Interreg
Euro-MED



Co-funded by
the European Union

Selected for the TREASURE catalogue of innovative solutions for novel environmental quality measures in and around Euro-MED ports 2025



Aquapod in Trondheim, Norway

ABOUT CLEAN SEA SOLUTIONS

WATERFRONT AUTONOMY FROM NORWAY

OUR MISSION

Our mission is to revolutionize waterfront cleanup through autonomous technology, efficiently removing unsightly waste, microplastics, and oil spills/diesel films, while providing real-time reporting to ensure a cleaner, healthier environment for future generations.





Photo: NATIONAL GEOGRAPHIC

THERE IS A PROBLEM FOR THE ENVIRONMENT FOR PEOPLE AND FOR BUSINESS

FACT:

Marine pollution is the fastest growing environmental problem in the world.

Source: UNEP, 2016

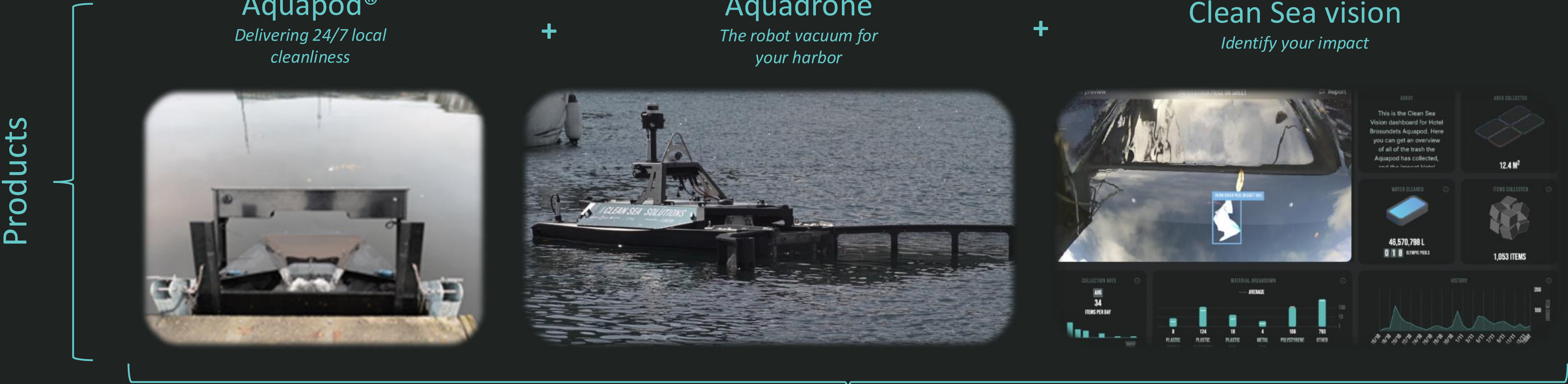
FACT:

Urban development in coastal areas puts increased strain on ecosystems.

Source: The Norwegian Ministry of Climate and Environment

OUR SOLUTIONS

THE CLEAN SEA ECOSYSTEM



Delivers for Our Customers



AQUAPOD® - A GAMECHANGER FOR WATERFRONT CLEANUP

- Invented by Clean Sea Solutions ,it is an advanced cleanup system reducing marine waste in real-time.
- With a 300-liter capacity and the ability to filter debris down to 1mm, it operates autonomously, cleaning water at a rate of 70 m³/hour.
- Cloud connected, it provides smart monitoring and data-driven insights with debris tracking
- Eco-friendly operation with zero emissions



Attaches to any jetty or marina solution



The Computer Vision model enable precise environmental monitoring and reporting.

Microplastics



Captures
1 M to 1 MM plastics

Noise



Silent operation

Daily cleaning



1,450,000 liters

Empty



Interchangeable
mesh bags

HOW IT WORKS



THE WATERFALL

Naturally attracts waste into Aquapod's basin



WASTE COLLECTION

The removable big-bag allows for for easy extraction of waste

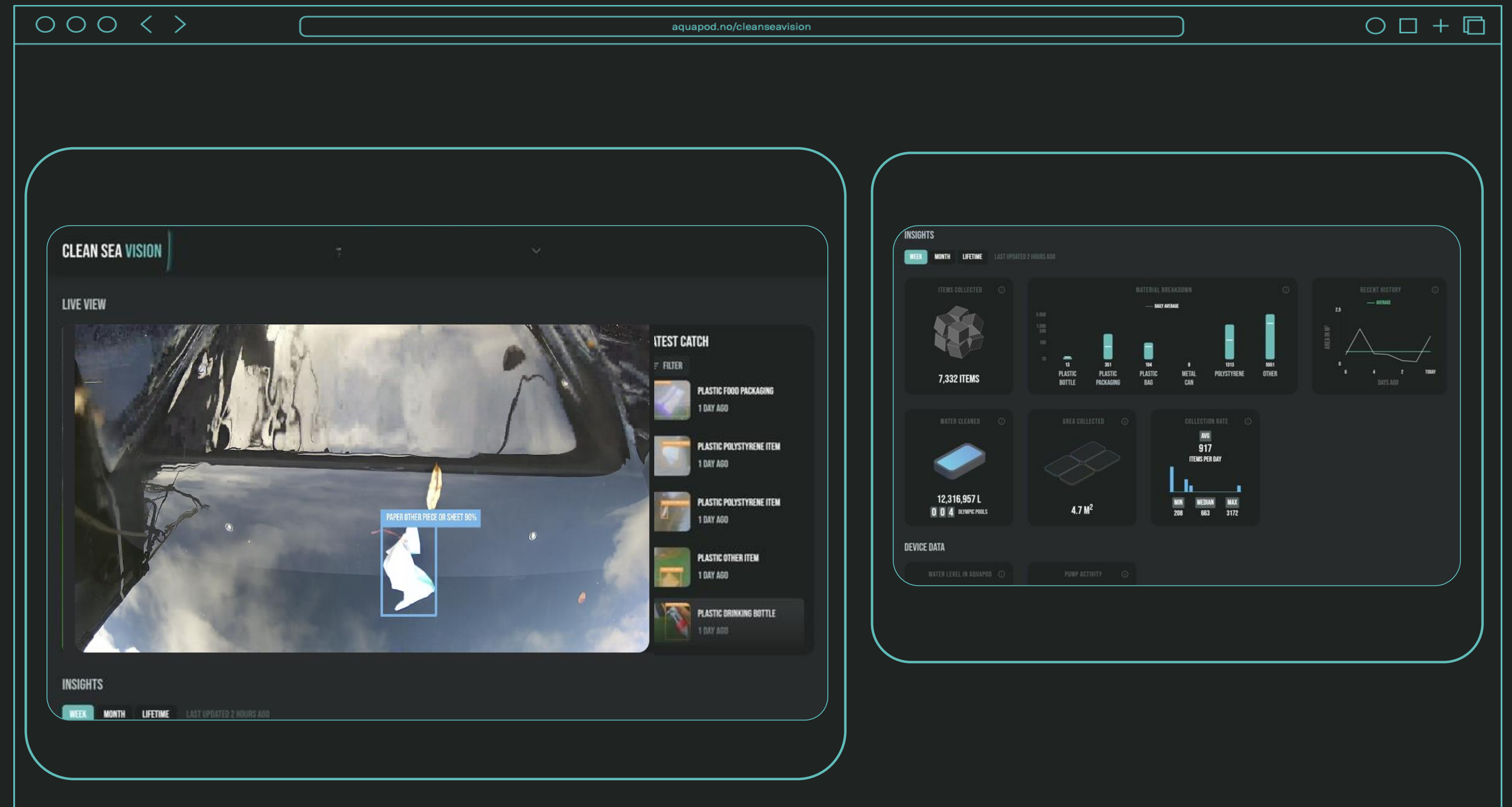


BALANCING SYSTEM

Aquapod balances like a seesaw, and and the flow is controlled by its pump. pump.

CLEAN SEA VISION

- Identify your **impact**
- Enables precise environmental monitoring and reporting
- Alignings with EU standards (CSRD) and (ESRS).



TURNING ENVIRONMENTAL DATA INTO REAL-TIME INSIGHTS



1

DATA COLLECTION

Computer Vision for accurate environmental monitoring.

2

DATA ANALYSIS

Powerful analytics capabilities to interpret and visualize environmental data.

3

COMPLIANCE

Ensures adherence to environmental regulations and standards through data-driven insights.



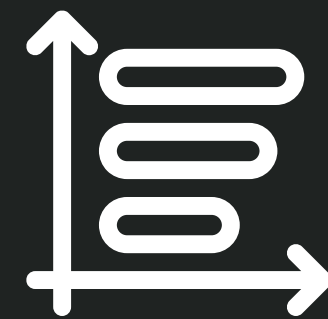
PREDICTABILITY AND CONTROL WITH MEASURABLE IMPACT

PAIN



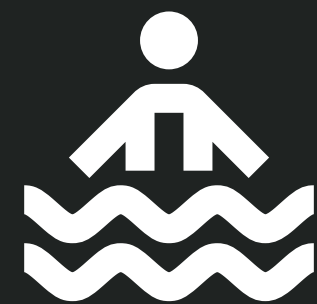
- Unpleasant and unsanitary water conditions
- Frequent user complaints about inefficiency and discomfort
- Manual removal of marine plastic pollution is labor-intensive, risky, and resource-draining

GAIN



- Leverage real-time data to optimize staffing levels, schedule work efficiently, and ensure safe operations.
- Plan work requirements and pinpoint areas that need immediate attention.
- Address health and safety concerns for staff working on waterfront and marine infrastructure

MEASURABLE IMPACT



- Empowering impactful decisions at the local level.
- Enhancing the local environment, a cause that is both vital and close to us.
- Collective local action drives meaningful progress in tackling global challenges



SHOWCASE IMPACT ACROSS CHANNELS



SUSTAINABILITY REPORTING

- Display quantifiable environmental impacts (e.g., water cleaned, plastic removed,).
- Integrate data visualizations to enhance transparency for stakeholders and regulatory bodies.



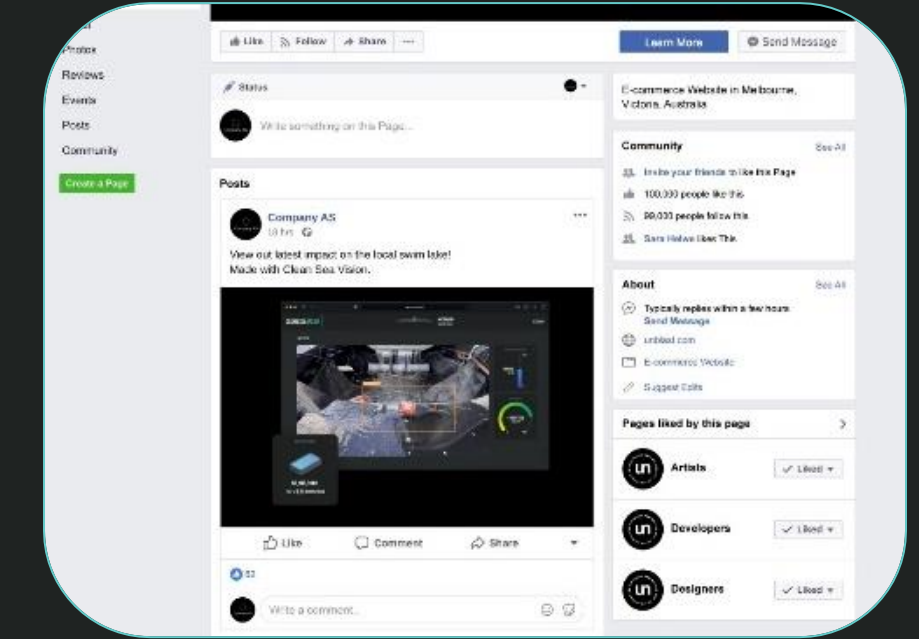
EXTERNAL & INTERNAL WEB PAGES

- Showcase real-time metrics on clean-up achievements to highlight the Aquapod's impact
- An interactive dashboard for visitors to explore environmental contributions.



SCREENS IN PUBLIC AND PROFESSIONAL SPACES

- Showcase real-time metrics on clean-up achievements to highlight the Aquapod's impact
- Engaging visuals demonstrating water quality improvements.



SOCIAL MEDIA

- Share milestones and environmental impact snapshots.
- Use engaging visuals or short videos to encourage community support and raise brand awareness.



THE AQUADRONE



MULTI-ROLE FUNCTIONALITY

- Surface Sweeping for Litter Collection
- Deposit collected waste to the Aquapod
- Absorbent Capabilities for Oil Spill & Diesel film Cleanup
- Pulls oil barriers
- Can be equipped with sonars for seabed mapping
- Real time data collection
- Safety, Surveillance and Control Capability

Primary specifications

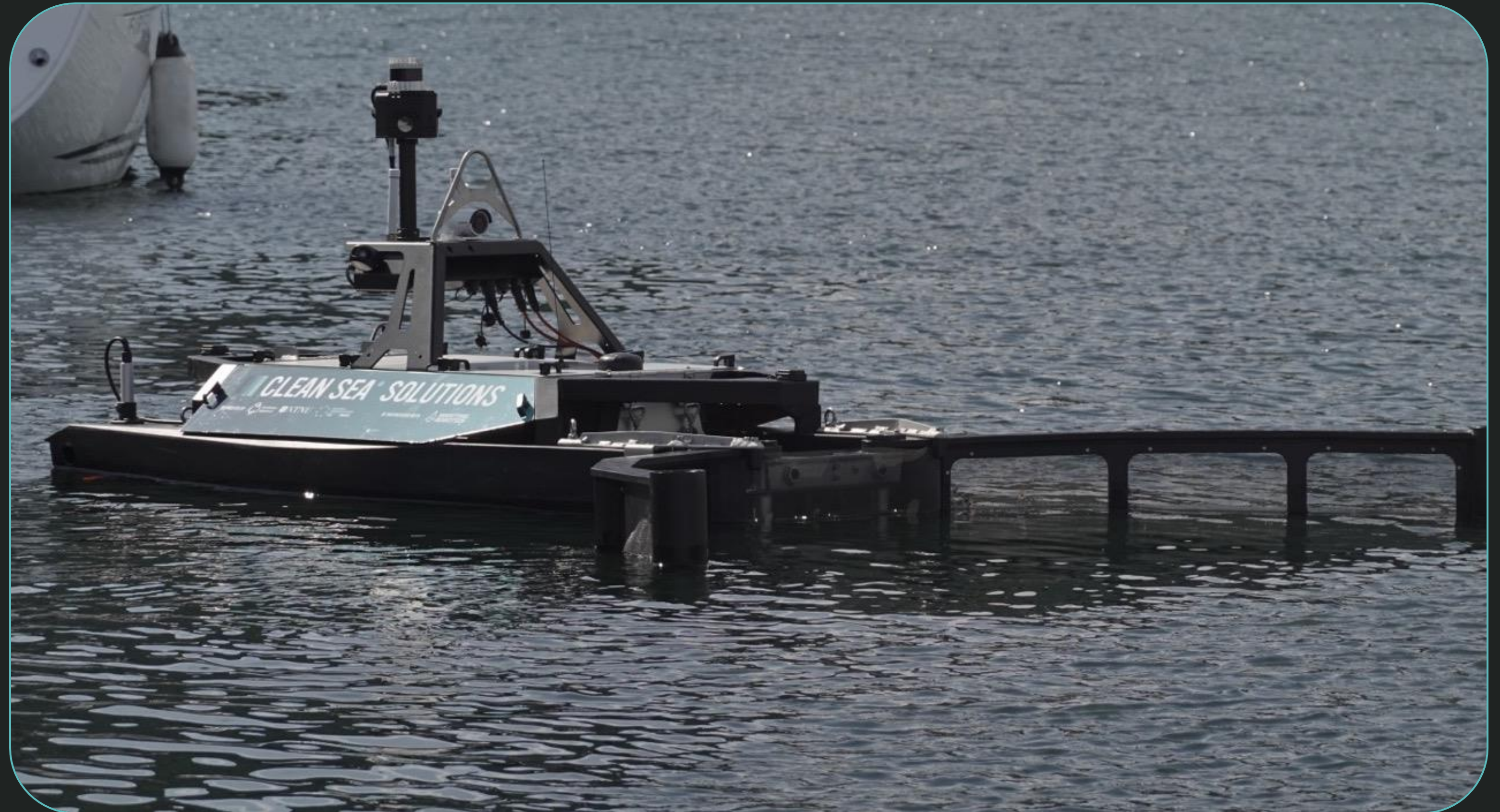
Dry weight
62 kg

Top Speed*
6 kts

Endurance
20 h

Payload capacity*
30 kg

* Depending on conditions and payload integrations.



AUTONOMOUS

SELF-EMPTYING

MULTI-ROLE

VALUE PROPOSITION

FOR THE CUSTOMERS

Cleanliness



We Collect:

- Microplastics
- Macroplastics
- Petroleum based liquids

FOR THE OPERATOR

Predictability
&
Control



We Provide:

- Defined collection points
- 24/7 waste collection
- Tools for scheduled work

FOR THE MANAGEMENT

Automation



We Enable:

- Costs standardization
- Smart ways of working
- Data driven decision making

FOR THE STAKEHOLDERS

Measurable
Impact



We Show:

- Environmental Data for impact reporting



USER FEEDBACK

Trondheim

“This represents the future: robots working tirelessly to keep the harbor clean around the clock”.

Bjørnar Hors, Maritime Manager, Port of Trondheim

Ålesund

“The Aquapod has made it noticeably cleaner. We are surprised at how much waste it actually captures”.

John Egil Jacobsen, Property Manager, Hotel Brosudet

Oslo

"The Aquapod has proven to be very effective and will make a significant difference for a cleaner and healthier Oslofjord. We need many more!"

Tomas Lars Hansson, Founder & CEO, Fjord CleanUP

Singapore



“We have a clear ambition to automate as many clean-up operations as possible”.

Thamodharan Krishnan, Director, IFM & Operations , CTM

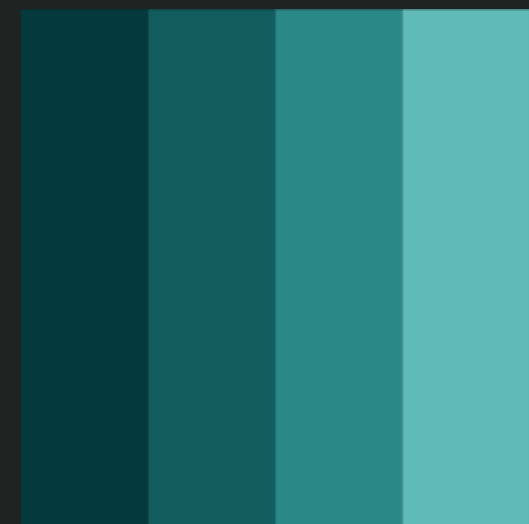
Rotterdam



“We collect smaller stuff with the Aquapod than we could do by hand”.

Frans Bakker, Managing Director, ASVZ





CLEAN SEA⁺ SOLUTIONS

Learn more at
www.cleanseasolutions.no

Contact:

Phone: +4794803288

Email: info@cleanseasolutions.no

