



# DECARBONISATION

## Your pathway to a sustainable future

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Accelerated by legislative changes, disruptive technologies and new fuels, the maritime industry is moving forward towards a low-carbon future. Industry actors are expected to commit to making their operations less carbon-intensive and more sustainable. VPS is a leader in data-driven decarbonisation solutions, fuels testing, and advisory services. We stand at the forefront of innovation, guiding our customers towards optimal business performance while minimising environmental impact.

VPS helps its customers to identify pathways towards more sustainable operations. We do this by providing insights, digital tools and advice along the entire marine fuels and emissions value chain. At VPS we develop and provide data-driven solutions that help vessel owners and other industry stakeholders to reduce their carbon footprint. In addition, we provide advisory services that build on smart use of data and extensive industry insight – all geared towards finding smart and cost effective ways of cutting emissions. Today, we build our 40 years experience and operate the largest global network of laboratories dedicated to testing fuel and oils for the maritime sector. With data collected from vessels, including data from more than 200 ports worldwide, VPS has the largest database on fuels quality in the industry.

We work with both segment leaders and companies that are about to embark on their decarbonisation journey.

**Moving Forward**  
Leading the way for sustainable solutions

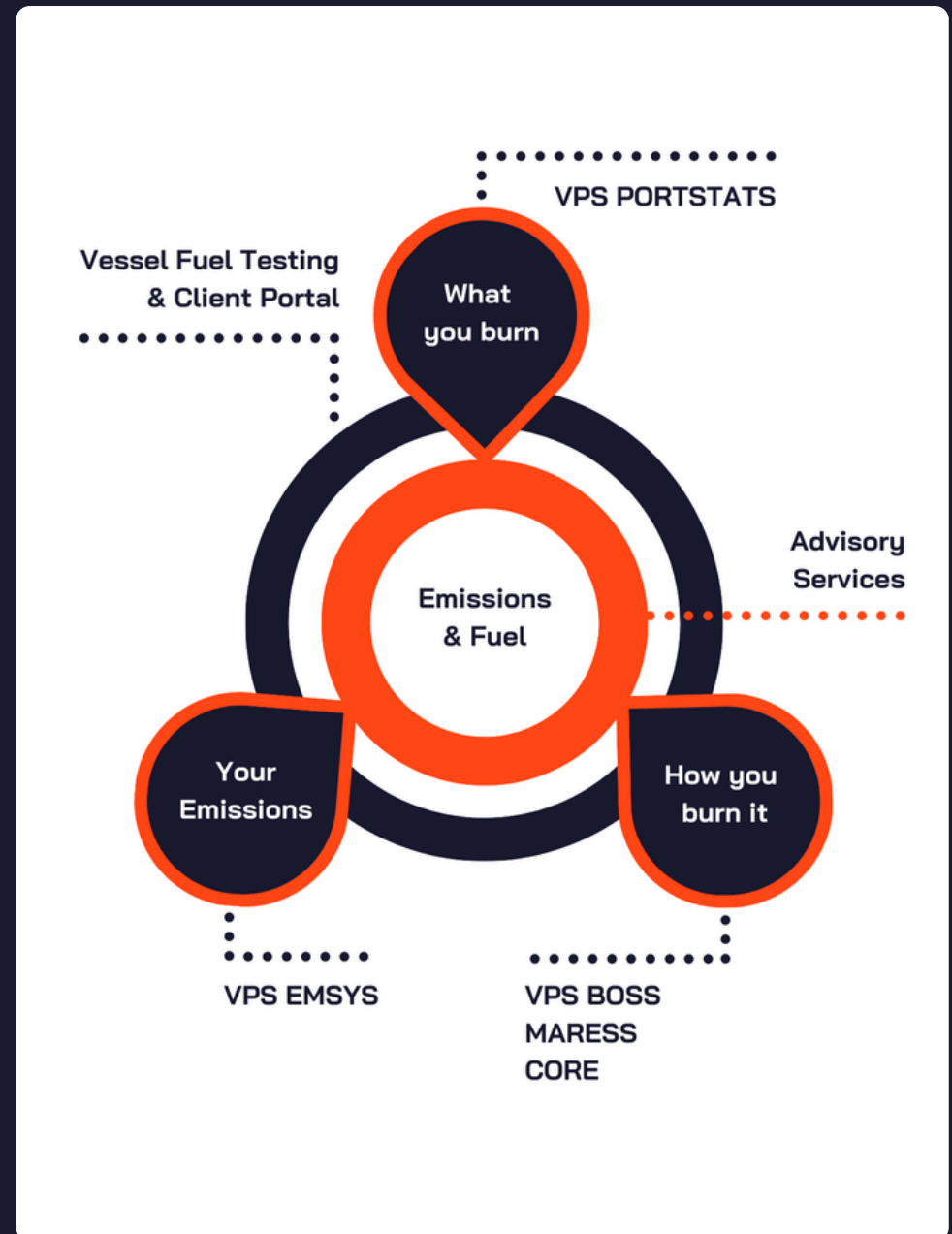


# VPS' data-driven decarbonisation services

The maritime industry is going through a transition. To meet 2030+ emission targets and to stay competitive, the industry needs collaborative tools that use data in smart ways to give the right information.

VPS develops a suite of emission-reducing softwares and executes advisory projects for reducing fuel consumption and emission footprints. We call it data-driven decarbonisation. Dive into each of the services to get an understanding of how they may be of use to you and your company on your journey towards more efficient and sustainable operations. Each service can be used stand-alone, or in combination. Our services provide real business value through functionality & insight.

- **Maress**
- **Emsys**
- **Core**
- **Advisory Services**
- **PortStats**
- **Vessel Fuel Testing (FQT) | Oil Condition Monitoring (OCM) | Customer Portal**



# Maress

Maress is a digital system for data-driven decarbonisation. With an up to date and realtime overview of the performance of each vessel -and the total fleet- Maress is a unique tool for fleet energy management and for building awareness around the company’s decarbonisation efforts.

## Fuel & emission reduction insights

Maress combines available data from the vessels with other relevant data sets to provide insight on how to reduce fuel and emissions. It is also easy to analyse the effect of energy saving initiatives. Our clients tell us that they appreciate how Maress supports a company culture focusing on efficient and climate robust operations.

## Enhancing marine energy efficiency & emissions transparency

We believe everyone involved with the operation of a vessel has aligned interests in reducing fuel consumption and emissions to air - the ship owner, the crew, contractors, and end client. By seamlessly providing the right information to all relevant decision makers involved in operations. Maress brings transparency and clarity to the dialogue on energy usage and emissions from operations.

## Effortless cloud-based connectivity for maritime data

The system is cloud based and there is no hardware installation. Maress seamlessly connects with leading providers of data collection and ship-to-shore technologies. This is an effective way of reusing data to create value, and not least saving the crew from extra work. Reducing fuel and energy consumption has an environmental-, monetary-, and not least a strategic effect. Maress provides real business value through functionality & insight.



*“The need to invest in tools that allow you to improve based on the data you already have is a no-brainer. Maress is one of those tools” -MD, global ship owner.*



Maress is used by vessel owners, contractors and charterers. To meet the requirements of tracking/planning emissions from larger offshore projects VPS has launched the Maress Projects module. Designed to give value to everyone involved in projects such as offshore wind park developments and handle the multi-stakeholder complexity of emissions allocation and reporting.

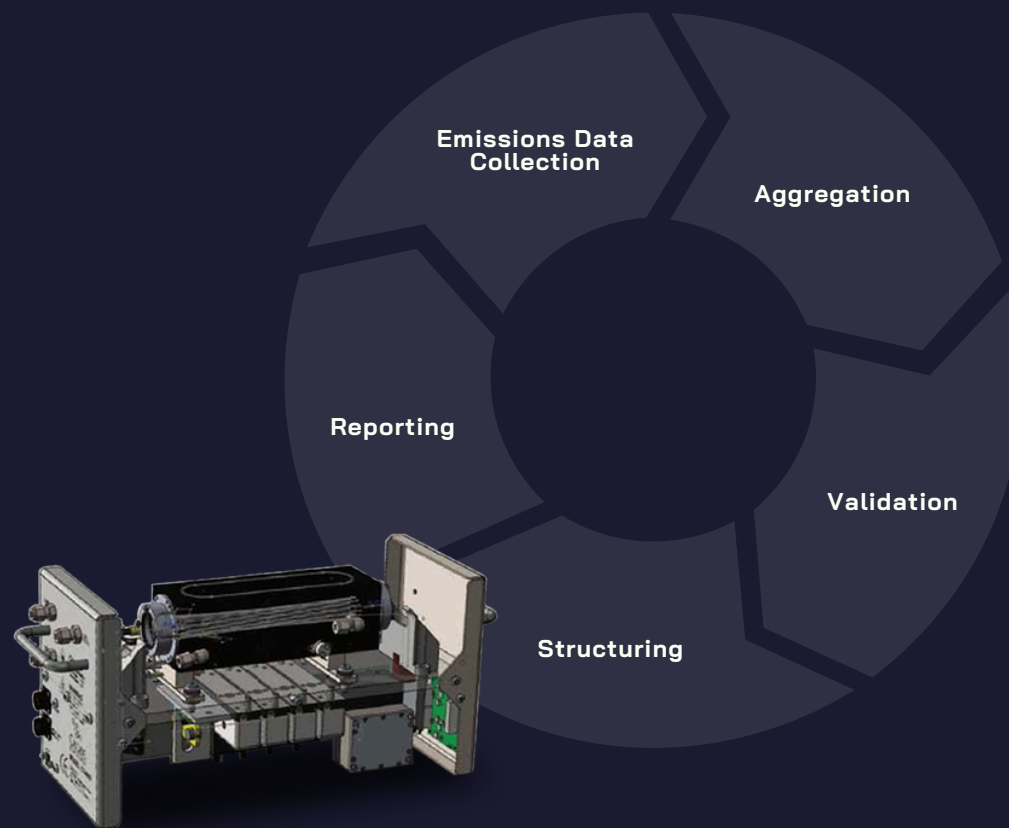
# Emsys

VPS Emsys offers an innovative measurement solution designed to help the maritime industry to precisely measure the emissions going through the smokestack of the vessel. VPS Emsys enables vessel owners and charterers to set up end-to-end management of methane slip and greenhouse gas emissions (GHG). Take control over methane slip levels measured in grams per kilowatt-hour, and connect data to VPS Maress to see emissions levels in various operational modes, load profiles and more for informed decision-making. The technology is proven and is designed for minimal maintenance and maximum reliability. VPS is uniquely positioned to assist vessel owners in providing a holistic solution for emissions measurement, and optimisation – getting vessel owners ready for precise and verified emissions reporting.

In short, VPS Emsys is the only class-approved solution capable of accurately measuring the full range of methane emissions often seen emitted.

## What are the actual emissions and methane slip for your vessels?

- ▶ Is it 1, 2, 6, 8 g/kWh, or something else entirely?
- ▶ What is your financial exposure related to CH4?
- ▶ Having the right facts is key to managing emissions.



The VPS Emsys solution is the only class approved, proven technology that provides full range (up to 20,000ppm) answers around methane slip. Used on more than 200 vessels today, such as LNG carriers, cruise vessels, shuttle tankers, other high complex segments and more.

# Core

Core is a forward-looking tool that makes it easy for vessel owners to plan for emission-reducing initiatives on their fleet, and do scenario planning to create a clear path towards company and industry emissions targets.

## Empowering maritime industry for emission reductions

Core enables users to handle complexity in an industry being disrupted by stakeholder expectations for emission cuts, and availability of data. Core is often used in combination with VPS' decarbonisation advisory services, and is a way to create momentum, and positive interaction and unlock new opportunities in the transition towards real emission reductions. Designed to meet the needs of a range of stakeholders in the maritime value chain. If you want to track your progress compared to the company plans and scenarios in Core, look no further, as Core can show actual progress by integrating to the Maress solution.



On a scale from 0 to 100, how emission free is your business? Create realistic plans for your fleet for how to achieve emission reduction targets.



Core used in combination with advisory to assist client in building a robust scenario to cut down operations emissions by 40% in 2030. Core was used to structure a pathway towards the emission goals, leveraging a blend of existing and emerging tech along with operational strides, and sustainable fuel adoption.

# Advisory Services

Feel overwhelmed by the complexities of decarbonisation? Struggling to keep up with evolving rules, regulations, and financial implications? Difficulty in crafting a clear decarbonisation strategy or evaluating your progress? Or simply looking for a first step to unlock immediate fuel and emission reductions? Whether you're grappling with big-picture strategies or simpler operational or technical improvements, VPS is rigged and ready to assist you on this journey.

## Navigating sustainable maritime operations

The VPS Decarbonisation Advisory team helps VPS customers to identify pathways towards more sustainable operations. We do this by providing insights, digital tools and advice along the entire marine fuels and emissions value chain. Our seasoned team of advisors perform projects on both operational and strategic level by combining a deep understanding of the maritime industry with insight gained from unparalleled data sets on fuels and vessel performance.

### Revolutionise your workflow:

Establish true digital decarbonisation with cutting-edge VPS software suites.

### Maximise efficiency, minimise costs:

Transform emission reduction with smart technical and operational solutions.

### Elevate your impact:

Empower ongoing initiatives through baselines and advanced data analytics.

### Effortless precision:

Streamline your DCS, MRV/ETS reporting with our seamless fuel and emission data collection system.

### Maximize savings, slash emissions:

Collaborate with teams across the organisation for cost-efficiency and emission reduction.

### Drive change:

Run campaigns on the fleet to create awareness and CO2 reductions.

### Unlocking sustainable success:

Achieve long-term emission targets with cost-effective scenario planning.

# PortStats

PortStats is a tool that provides actionable insights based on proprietary live data on fuel off-specs, calorific value and density differences in all major bunkering ports. It allows users to better anticipate risks and select the fuel with the best value and environmental footprint. It is your ultimate destination for real-time fuel quality statistics presented in an interactive and user-friendly dashboard. We offer you two indispensable value propositions that will revolutionise your decision-making and risk management processes.

## Cost saving

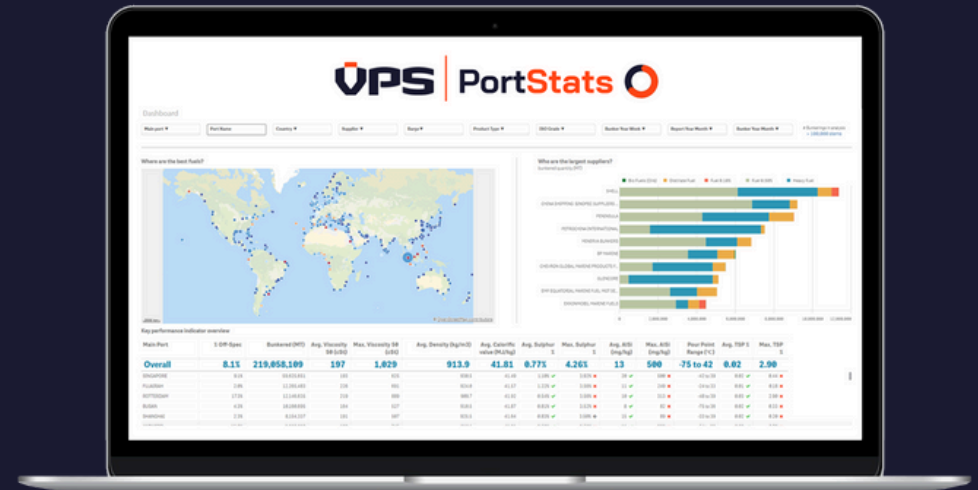
**Bunker sourcing & procurement:** PortStats helps you identify the most cost-effective fuel options, ensuring that every dollar spent generates maximum value in terms of energy.

**Trading, selling & distribution:** Use PortStats to identify fuels that provide superior energy output, ultimately increasing your profitability.

## Risk mitigation

**Quality assurance:** PortStats enables you to make well-informed decisions that protect your engines, reduce maintenance costs, and enhance operational efficiency.

**Fleet & crew safety:** PortStats equips you with the information you need to adapt your fuel treatment processes, minimising downtime and costly repairs.



Through PortStats, you have the tools you need to make informed, data-driven fuel procurement decisions. Our commitment to excellence as the global market leader in marine fuel quality testing has culminated into the development of the PortStats Platform, offering you access to the most reliable and comprehensive marine fuel quality database in the market.

# Benefits



## Cost reduction

Lower operational costs through fuel efficiency and optimized processes.



## Regulatory compliance

Navigate emissions regulations effortlessly, avoiding fines and ensuring eligibility for green incentives.



## Market competitiveness

Enhance your brand's eco-friendly image, appealing to environmentally conscious customers and partners.



## Data-driven decisions

Utilize accurate emissions and fuel data to make informed operational and strategic decisions.



## Sustainable future

Lay the foundation for a sustainable maritime operation, aligning with global decarbonisation goals.



## Value Testing

Fuel testing and oil condition monitoring enable you to protect your assets, people and our environment, and provide a better understanding on what you are burning.

# Case studies & Success stories

## Decarbonisation roadmap

Aided a client in envisioning a robust scenario to cut down operations emissions by 40% come 2030, leveraging a blend of existing and futuristic tech along with operational strides, encompassing innovative newbuilds, sustainable fuel adoption, and hybridisation.

## Fuel efficiency campaign

Spearheaded a fuel campaign that propelled more than 20% fuel and emissions curtailment, tuning onboard battery utilization to its zenith by refining work processes and software adjustments.

## Battery optimisation and power generation tuning

We revamped a client's power generation strategy by optimising battery implementation and tuning power systems for various modes of operation. This meticulous tuning orchestrated a symphony of savings, drastically slashing fuel consumption and carving a path towards a sustainable operational rhythm.



# Join us on this journey

Join us in the journey towards a greener, more sustainable maritime industry. At VPS, we are committed to accelerating the shift towards a low-carbon future, and we invite you to be part of this transformative change.

Are you a vessel owner or a stakeholder in the maritime industry? Let's collaborate to reduce your carbon footprint and make your operations more eco-friendly. With VPS, you will gain access to data-driven solutions, expert advice, and digital tools that guide you along the path to sustainability. Together, we can create a more environmentally responsible and economically efficient maritime sector.

Contact us today and let's pave the way to a cleaner, greener future for the maritime industry.

## Contact

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