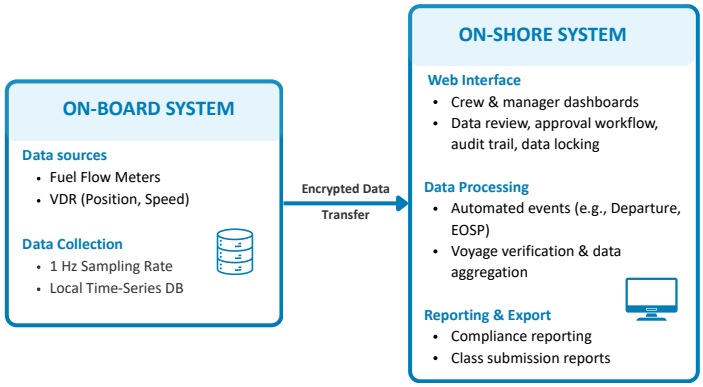
EcoReport — Maritime Compliance Reporting

Qtagg SEEMP Report provides digital support for compliance with IMO SEEMP Part II and Part III requirements. The tool enables structured handling of fuel consumption and operational data from ship to shore.

Overview

Qtagg SEEMP tool is a comprehensive digital reporting solution designed to help ship operators meet the mandatory requirements of the IMO Ship Energy Efficiency Management Plan (SEEMP) Part II and Part III. It delivers a reliable, transparent, and fully auditable workflow for collecting, validating, and reporting of fuel consumption and operational data — from vessel to shore — and is capable of directly generating reports in formats commonly used by recognized organizations.

By combining automated data capture with structured manual input, Qtagg SEEMP supports fleets with varying levels of instrumentation while ensuring accuracy, traceability, and full regulatory compliance.



SEEMP Reporting System Overview (ship-to-shore data flow)

Key Features

- **Data Sources & Manual Entry:**

Collects real-time data from fuel monitoring and navigation systems, while supporting manual entries — ensuring uninterrupted reporting even if sensors are unavailable.

- **Sampling & Voyage Segmentation:**

Records data at 1 Hz and automatically segments voyages into events detected by geofences.

- **End-to-End Data Traceability:**

Ensures secure data flow from onboard systems to shore-based reporting, with clear approval workflows, data locking, and complete audit trails, providing full confidence during audits and verification.

- **Reporting & Analytics:**

Provides web-based dashboards for event validation, CII analytics, and export for operational and regulatory monitoring.

EcoReport

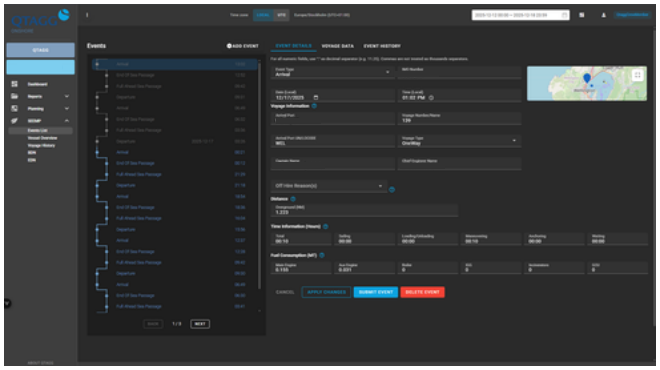
The system provides a modern, user-friendly, role-based web interface designed to streamline SEEMP reporting and voyage data management. Workflows and features are tailored to the distinct needs of onboard crew and onshore managers, ensuring accurate, consistent, and largely automated reporting across the fleet. All data changes are fully traceable, with time-stamped records of user actions, supporting transparent review, controlled approvals, and audit-ready compliance.

- **Onboard Crew**

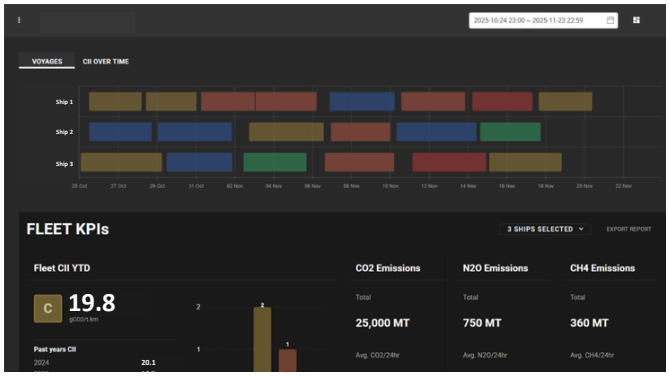
Onboard users benefit from an intuitive interface that automatically generates sea passage events using geofencing. Crew can review, correct, complete, and add events, register fuel data and bunker delivery notes (BDNs), and monitor voyage status. This design minimizes manual effort while ensuring that all data is accurate and ready for synchronization.

- **Onshore Users**

Onshore managers gain full visibility through a secure dashboard, enabling comprehensive data review and analysis. They can monitor fleet-wide performance, track CII ratings and compliance, perform detailed performance analysis, and submit reports directly to Class portals.



Event List Web Interface



Fleet Overview Interface

Manager Views

Onshore managers access verified voyage data through a secure dashboard designed for direct comparison across vessels, voyages, and crews. A comprehensive fleet overview enables side-by-side monitoring of fleet-wide performance, CII ratings, and regulatory compliance, while vessel-specific views reflect each vessel's configuration, operational profile, and trading pattern.

Advanced analytics support comparative performance analysis, trend identification, and benchmarking between ships, routes, and crews, enabling data-driven operational and managerial decisions. Users can export datasets and analytical results to Excel for deeper analysis, reporting, and internal sharing. The interface ensures accountability, transparency, and a fully traceable data flow from vessel to shore.

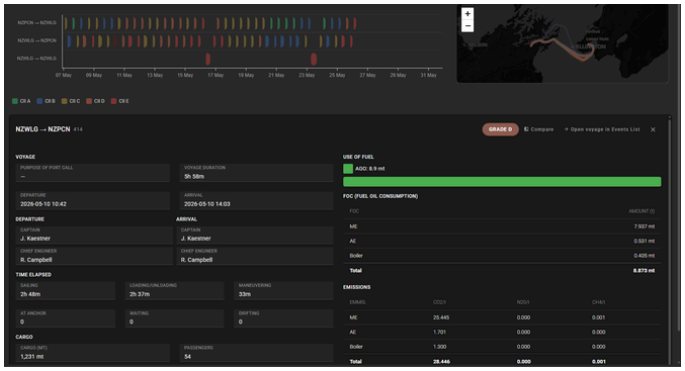
Event and Voyage Structure

Operational reporting within the SEEMP tool is based on a structured event and voyage model, forming the foundation for SEEMP Part III and CII calculations. Events are either:

- Automatically generated using geofencing and onboard system data, or
- Manually created when required by onboard or onshore users

Each event progresses through defined states (draft, submitted, and validated), providing clear visibility of data status and responsibility.

Voyage-level views aggregate event data to present a consolidated overview of each voyage, including ports, time and distance sailed, fuel consumption by fuel type, and operational performance indicators. This ensures consistency between individual events and voyage reporting.



Vessel Overview interface

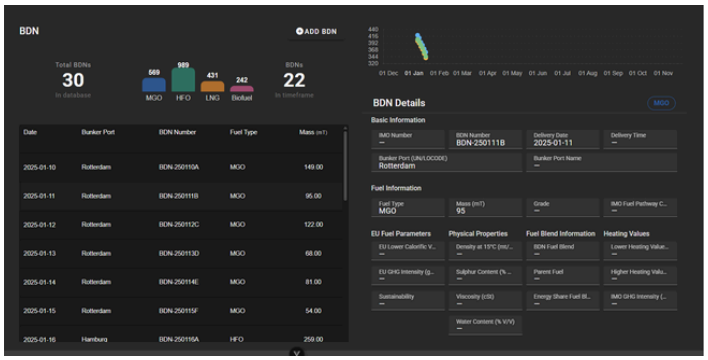
Fuel and Bunkering Management

The SEEMP Reporting Tool includes dedicated functionality for managing bunkering operations and BDNs. Each fuel delivery is registered with details such as date, port, fuel type, quantity, and BDN reference number.

Fuel data is directly linked to event and voyage records, enabling:

- Verification of reported fuel consumption
- Accurate allocation of fuel use across voyages
- Reliable CII calculations
- Compliance with fuel documentation requirements

The system supports multiple fuel types, allowing operators to monitor fuel mix and environmental performance over time.



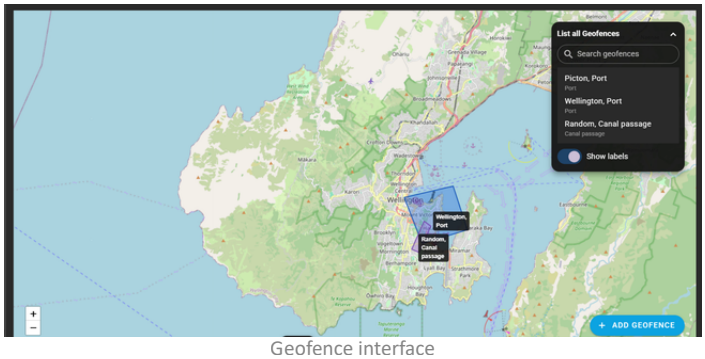
Bunker Delivery Notes interface

Automation Through Geofencing

Geofencing enables automatic detection of vessel movements by defining geographical zones such as ports, anchorages, canals, and special areas. When a vessel enters or exits a defined zone, the system automatically generates corresponding operational events. Automation reduces manual workload while increasing data reliability.

This functionality is used to:

- Detect arrivals and departures
- Start and stop voyage measurements
- Distinguish port stays from sea passages
- Improve timestamp accuracy and reporting consistency



Geofence interface