

# ITML Maritime Solutions

## The power of Big Data Analytics for the seafaring economy

### Marine by Design

ITML MAERVE software includes specialized, marine-oriented solutions, co-developed with seafaring professionals to address the needs of maritime business

### Driven by Machine Learning and Big Data Analytics

MAERVE software takes advantage of ITML's Machine Learning expertise to leverage Big Data and extract value for onboard and onshore operations

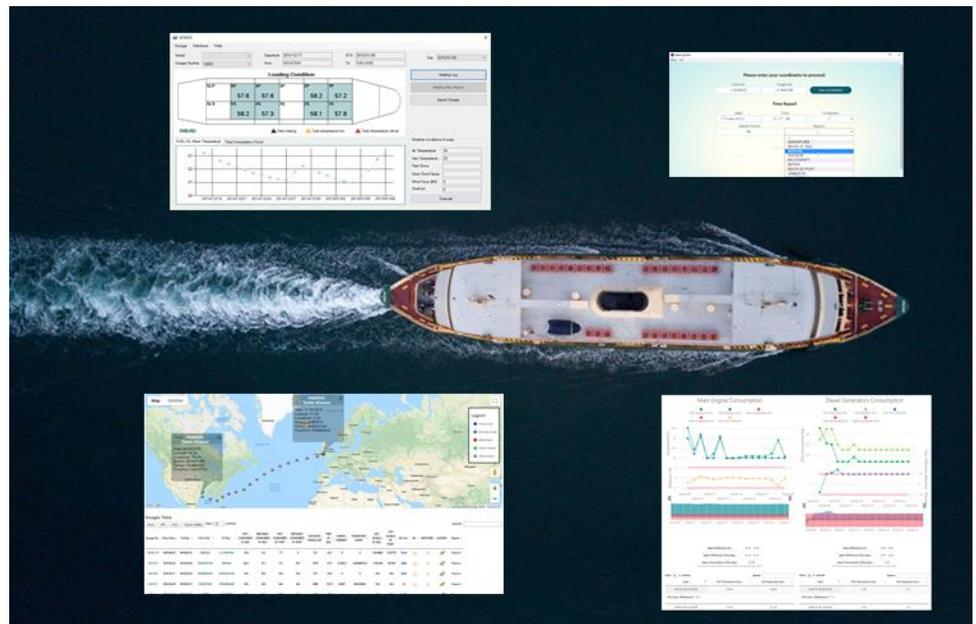
### A Focused Portfolio

Energy and Environment go hand to hand in today's business at sea. MAERVE suite provides software that addresses modern efficiency and compliance requirements:

- MRV application
- Vessels Energy Monitoring
- Tankers' Heating Models

### Precision in User Experience

Marine professionals and especially seafaring personnel face multiple challenges on a daily basis. MAERVE software provides all necessary information in a straight and precise manner, assisting operators to take the right decisions in a timely manner



### Digital Maritime Industry

The rise of the digital economy and the ensuing digital transformation is a polar point for the circular economy of the maritime industry, leading to a number of disrupting technologies that all depend on software to run.

Traditionally slow adoption of new technologies in the maritime sector, especially on its onboard world, has not prevented maritime software to grow. New business opportunities are rising as the value of the vessel is constantly reassessed. Concepts such as sharing economy platforms and novel business models adopted from other industries are growing.

### Environment and Efficiency

Marine traffic is increasingly dictated by international and regional regulatory frameworks, all oriented towards environmental protection, commanding fuel consumption, emissions management and thus energy efficiency. Modern maritime applications have to address these challenges without overlooking the sensitive fiscal equilibrium that makes this industry run.

### Automation, Big Data and Analytics

As new onboard technologies are applied, new, massive streams of data are being created. This influx of mainly machine-oriented (i.e. sensors) big data calls for appropriate practices that will extract the added value contained, a road that leads to analytics.

## MRV Reporting Software

Since Jan. 2018, ship owners and operators have to monitor and report to the European Commission CO2 emissions of their vessels (larger 5.000 GT) for all voyages conducted into, between and out of EU ports

### Modules:

- Ship Data Acquisition Methods (Mail Based, DB Adapter).
- Type of Stored Data (Daily Metrics, ROBs, Bunkering)
- Data Integrity & Auditing
- Trip Calculation & Data Validation
- Ship Data Exports
- CO2 Emission Calculation & Exports

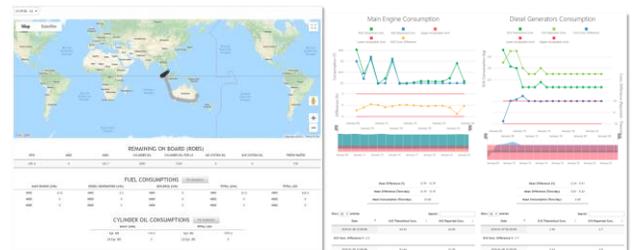
### Subsystems:

- Desktop app for reporting
- Web app for monitoring fleet status



## Software Monitoring of Vessels' Energy Efficiency

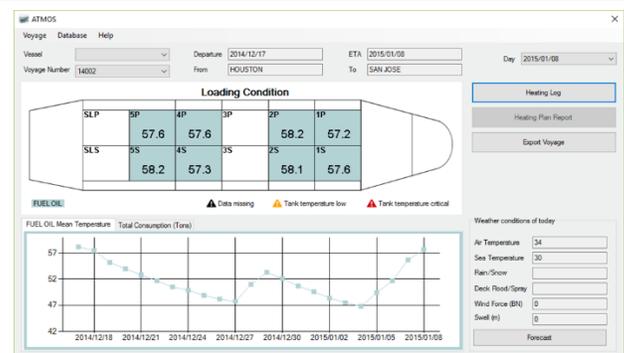
A web-based application for the monitoring of the energy efficiency of the fleet, meeting at the same time the IMO recommendations for the Energy Efficiency Operational Indicator (EEOI) measurement



## ATMOS

Atmos is a desktop application for Cargo Heating Monitoring. The service is based on the consideration that a comprehensive voyage-specific cargo heating plan could reduce emissions and heating costs.

Combination of ship specific thermodynamic model and ML techniques for the prediction of the heat losses of each tank as well as of the heat transfer via the heating coils



**Get more:** Contact ITML to obtain more information about Maritime Software Solutions with the power of Big Data Analytics. Let our consultants assist you in designing a winning solution!

[www.itml.gr/atmos-application](http://www.itml.gr/atmos-application)

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