



Energy Efficiency & Shipping Sustainability

EMSA's Role

Manuela Tomassini

Head of Department - Safety & Standards

Green Shipping Summit

Naples, 27- 28 September 2018



Energy Efficiency & Sustainability

EMSA in support of Green Shipping

EE (CO₂)

Energy Efficient (EE) & Alternative-Fuelled Ships - Already a reality!



CO₂ emission reductions towards a progressive shipping sector decarbonisation & sustainability



Energy Efficiency & Sustainability

EMSA in support of Green Shipping

Sustainability

Sustainability, Safety & Standardisation - Triple "S" approach

Sustainability

- Availability
- Environmental Life-Cycle benefit
- Economical, Social & Cultural benefit
- Political/Law Support

Safety

Challenges:

- Risk & Safety
- Rules/Codes development
Ship Design & Operation
(typically) Low Flashpoint
- Training & Competencies

Standardisation

Towards:

- Legal Certainty
- Fair & Harmonised implementation
- Level playing-field
- Improved business case



© EIDESVIK

Energy Efficiency & Sustainability

EMSA in support of Green Shipping

EMSA's role

EMSA support to both Regional (EU) & International (IMO) debate



- **Participation in IMO** discussions including WG and CG
- **EMSA Studies** assist in the IMO GHG discussions & **IGF Code** developments

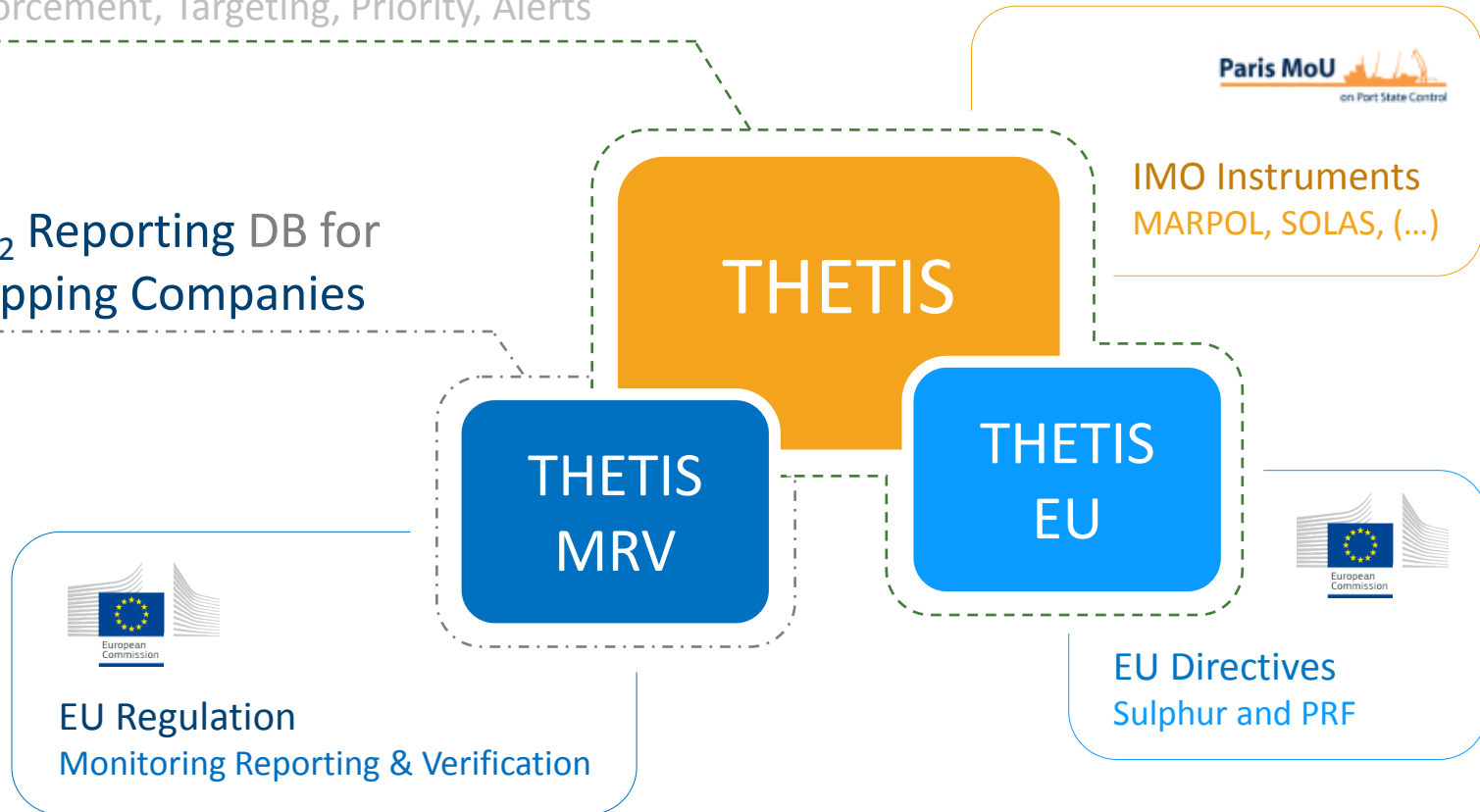
- **EMSA Studies & Guidance**
- In-house **Workshops & Trainings**
- Participation in **Conferences & Workshops**

- **Providing Scientific & Technical** support
 - Regulatory Framework
 - EU Studies
 - Evaluation of EU Co-Financed Projects
 - Technical Experts Consultation - **ESSF** (LNG, EGCS, MRV, PRF, Air Emissions...)

Inspection DB for Member States

Enforcement, Targeting, Priority, Alerts

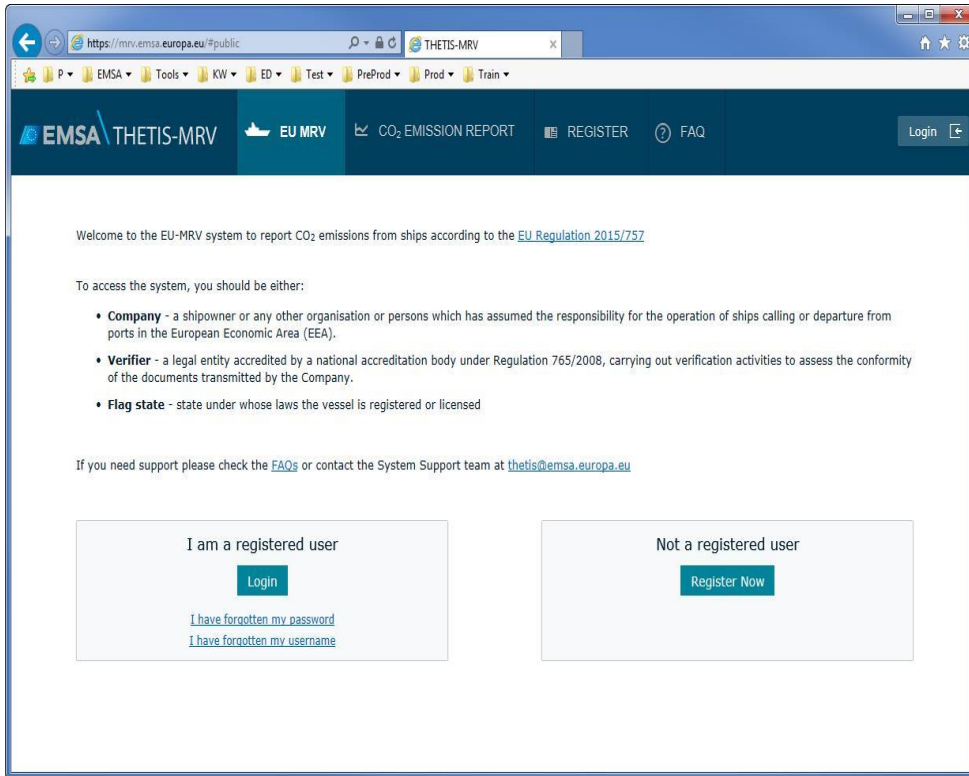
CO₂ Reporting DB for Shipping Companies



Energy Efficiency & Sustainability

EMSA in support of Green Shipping

Main Projects



The screenshot shows the THETIS-MRV web application interface. The browser address bar displays <https://mrv.emsa.europa.eu/#public>. The navigation menu includes 'EMSA THETIS-MRV', 'EU MRV', 'CO2 EMISSION REPORT', 'REGISTER', 'FAQ', and a 'Login' button. The main content area contains the following text:

Welcome to the EU-MRV system to report CO₂ emissions from ships according to the [EU Regulation 2015/757](#).

To access the system, you should be either:

- **Company** - a shipowner or any other organisation or persons which has assumed the responsibility for the operation of ships calling or departure from ports in the European Economic Area (EEA).
- **Verifier** - a legal entity accredited by a national accreditation body under Regulation 765/2008, carrying out verification activities to assess the conformity of the documents transmitted by the Company.
- **Flag state** - state under whose laws the vessel is registered or licensed

If you need support please check the [FAQs](#) or contact the System Support team at thetis@emsa.europa.eu

There are two main sections for user access:

- I am a registered user**: Includes a 'Login' button and links for 'I have forgotten my password' and 'I have forgotten my username'.
- Not a registered user**: Includes a 'Register Now' button.



The image features the GMN logo, which consists of a green globe with white lines and a white ship silhouette. To the right of the logo, the text reads 'GMN | The Global MTCC Network' and 'A global network for energy-efficient shipping'. Below the logo is a large green ship with a white superstructure, set against a blue sky. At the bottom of the image, there are logos for the European Union and the International Maritime Organization (IMO). Text at the bottom left states 'Project funded by the EUROPEAN UNION'.

THETIS-MRV at: <https://mrv.emsa.europa.eu>

Energy Efficiency & Sustainability

EMSA in support of Green Shipping

THETIS-MRV

- Legal** Regulation **2015/757** on Monitoring, Reporting and Verification of CO₂ Emissions and other relevant information from Maritime Transport
- Users** Shipping Companies, Verifiers and Flag states Worldwide
- Features** Generations of **Monitoring Plans** (Voluntary) an **Emission Reports** (Mandatory) along with management of the workflow between Companies and Verifiers, leading to the issuance of **Documents of Compliance**.



EU Regulation
Monitoring Reporting & Verification

THETIS
MRV

Publication Emission Reports ship specific from April 2019 onwards.



Ships 4317

Flags 62

Companies 625

Accredited Verifiers 26

Users 1110

Companies 941

Verifiers 113

Flag State 56

Both EU and non-EU MS (Flag States)

Energy Efficiency & Sustainability

EMSA in support of Green Shipping

THETIS-EU

https://portal.emsa.europa.eu/web/thetis-eu/compliance

Suggested Sites Web Slice Gallery THETIS-MRV



THETIS-EU at: <https://portal.emsa.europa.eu/web/thetis-eu/home>

Home Compliance Documents

THETIS-EU Public Site Compliance Portlet(2.5.0@23.02.2018_12:33)

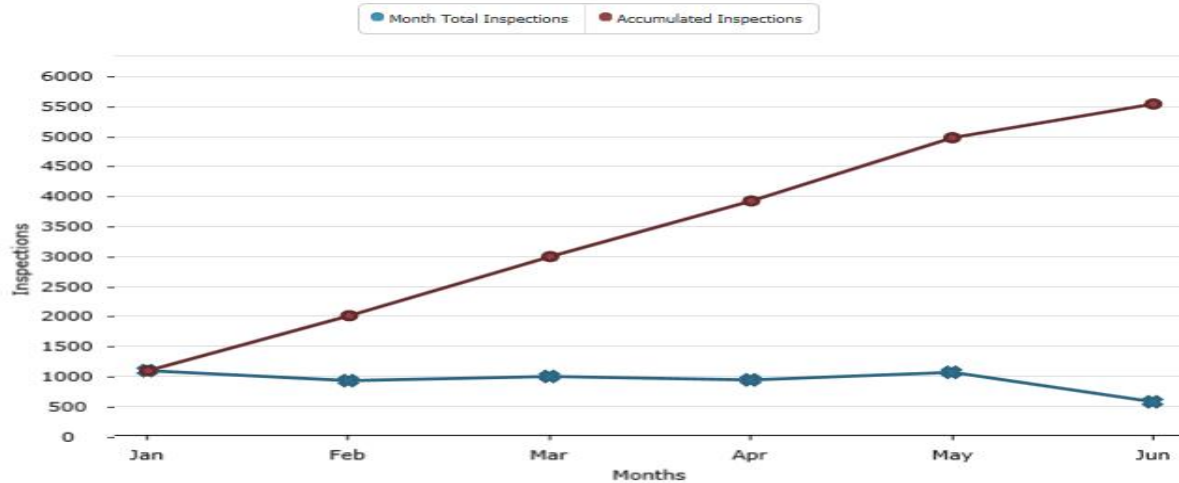
Accumulated and Monthly Distribution of Inspections

Total Accumulated and Yearly Distribution of Inspections

Document Verifications and Non-Compliances

Non-Compliance of analysed fuel samples

Year 2018



Month Total Inspections

1084 917 987 929 1056 563

Accumulated Inspections

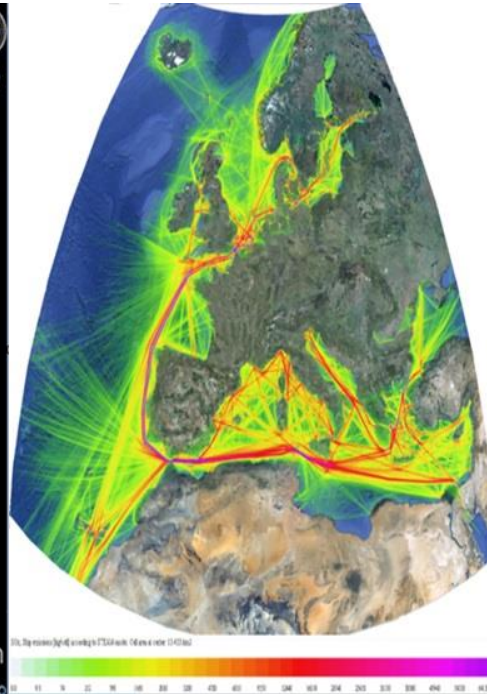
1084 2001 2988 3917 4973 5536

The information displayed in this page corresponds to the accumulated inspection and the respective distribution of total inspections per month in a given year.

Energy Efficiency & Sustainability

EMSA in support of Green Shipping

Emissions



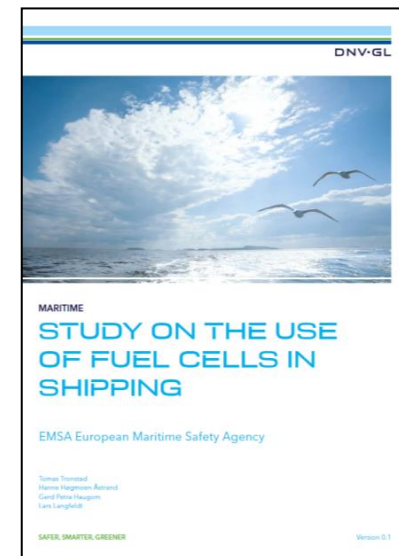
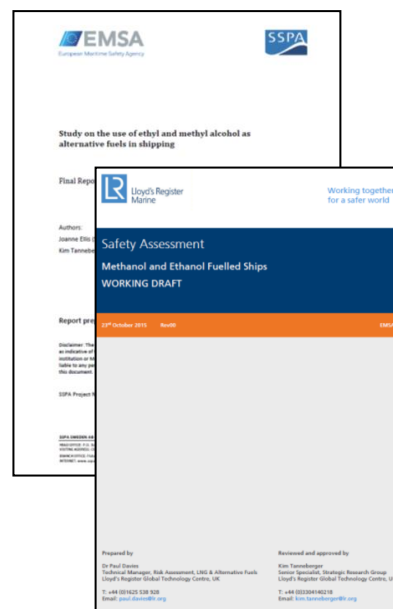
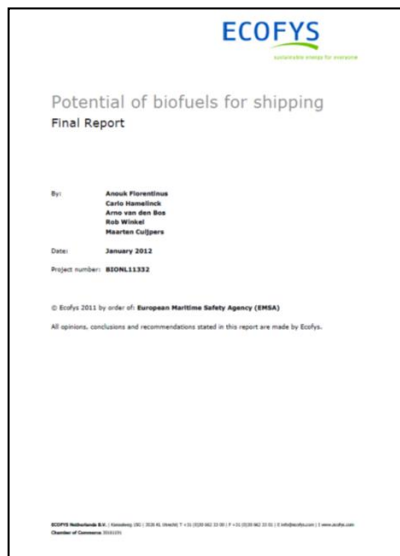
Source EMSA&FMI Cooperation - Exhaust emissions from ship traffic in the SafeSeaNet area
(From left to right - CO₂, SO_x and NO_x)

EMSA's Air Emissions Calculator developed for the EC and EU Member States

Energy Efficiency & Sustainability

EMSA in support of Green Shipping

Studies



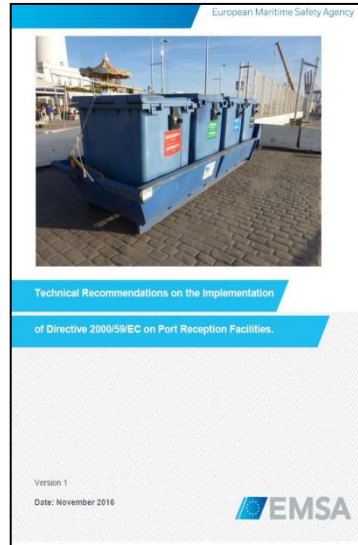
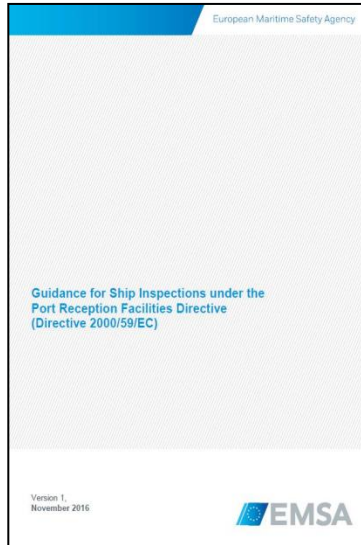
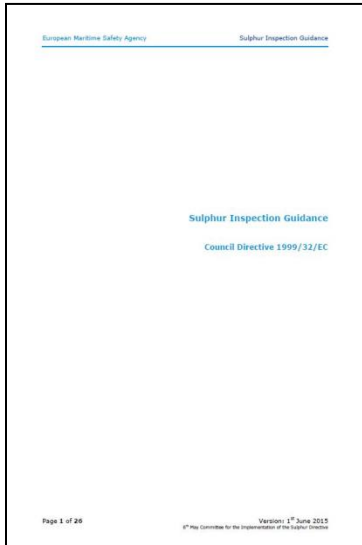
The **Future** will be shaped by a co-existence of **ALTERNATIVE FUELS** and **CLEAN POWER Technologies** into...*Alternative Energy Sources Concept!*

All EMSA Studies available at:
<http://emsa.europa.eu/implementation-tasks/environment.html>

Energy Efficiency & Sustainability

EMSA in support of Green Shipping

Guidance



EMSA's **Guidance & Recommendations** towards *Shipping Sustainability*

All EMSA Guidance available at:

<http://emsa.europa.eu/implementation-tasks/environment.html>

**Thank you
for your attention!**



emsa.europa.eu

 [twitter@emsa_lisbon](https://twitter.com/emsa_lisbon)

 [facebook@emsa.lisbon](https://facebook.com/emsa.lisbon)

