

# Grønt skifte



*Hva med det indre miljø!*



Medlemskonferansen  
Ålesund 26 - 27. oktober

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*Det norske maskinistforbund*  
Norwegian Union of Marine Engineers

Nautico Maskino Rodius Dieselos

# MÅL



DNMF skal gjennom sine fagpolitiske mål sørge for at den **menneskelige faktor** til enhver tid settes øverst på dagsorden

Sustainable Development Goals (SDG) ble vedtatt av FN i 2015 og er en felles arbeidsplan og oppfordring til handling for å beskytte planeten, sikre et verdig liv for alle mennesker, og oppnå inkluderende økonomisk vekst, fred og velstand.

Havet gir mat til milliarder av mennesker. Havbunnen inneholder store mengder **mineraler og metaller**. På havet finner man også avansert **medisin**. Offshore olje og gass leverer i dag en tredjedel av verdens etterspørsel etter **olje og gass**. Ny teknologi gjør det også mulig å utnytte mer fornybar, utslippsfri energi fra offshore **vind, bølger, strøm og tidevann**.

Det grønne skiftet handler om hvordan Norge skal bli et lavutslippsland innen **2050**. For å få til dette må vi omstille oss til et samfunn hvor vekst og utvikling skjer innenfor **naturens tålegrenser**.

Skipsfarten frakter over **90 prosent** av verdenshandelen. Allerede i dag er skipsfart den mest energieffektive transportform.

I maritim sektor vil det være muligheter for grønn verdiskaping både innenfor og utenfor landets grenser. Regjeringen vil legge til rette for at vi får fram norske vinnere i skipsfartens grønne skifte.

Våren 2019 ble det lagt fram en ny handlingsplan for grønn skipsfart, en plan for hvordan Norge kan bidra til en mer **bærekraftig sjøfart** for det 21. århundre.





# 14,5 LIFE ON WATER





# VISJONER



## Initial IMO strategy on reduction of GHG emissions: Vision and ambitions



# Environment and issues affecting seafarer safety

**Only the design of the hull has changed**



Pesse Dugout Canoe  
~ 8,000 BCE  
Found in Holland

**Only the design of propellers has changed**



New types of energy source for ship's propulsion, maneuvering and operation with innovative engine technologies to enhance protection of marine environment. New environmental regulations have been developed but Human Element SAFETY aspects have been overlooked. The regulatory regime must fully take into consideration the safety aspects for maritime workers and its practical viability for shipboard working and living ecosystems.

- [Flash Point](#)
- Chemicals/ Plastic - Very Low Sulfur Fuel Oil = [Frankenstein Fuel](#)
- [Fire and explosion hazard](#)
- [Ballas water \(Chemicals\)](#)
- [Criminalisation \(MARPOL\)](#)

New fuels and  
seafarers' competences



DECEMBER 2019  
International Transportation Workers' Federation



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# International Convention for the Prevention of Pollution from Ships - MARPOL

Protokoll I - Bestemmelser om rapporter om hendelser som involverer skadelige stoffer (i samsvar med artikkel 8 i konvensjonen)

## Artikkel I **Meldingsplikt**

1. Skipsføreren eller en annen person som har ansvar for ethvert skip som er involvert i en hendelse nevnt i artikkel II i denne protokoll, skal rapportere opplysningene om denne hendelsen uten forsinkelse og i størst mulig utstrekning i samsvar med bestemmelsene i denne protokoll.
2. I tilfelle skipet nevnt i nr. 1 i denne artikkelen blir forlatt, eller hvis en rapport fra et slikt skip er ufullstendig eller uoppnåelig, eieren, befrakteren, sjefen eller operatøren av skipet, eller deres agent skal i størst mulig grad påta seg de forpliktelser som er pålagt Skipsføreren i henhold til bestemmelsene i denne protokoll.

## MASKINSJEFENS ROLLE I IMPLEMENTERING AV MARPOL 73/78

MARPOL 73/78 har seks annekser som omhandler forurensning forårsaket av handelsfartøyer. Alle vedlegg har kapitler, og hvert kapittel har forskrifter som omhandler forebygging av forurensning forårsaket av handelsfartøyer. Maskinsjef har stort ansvar for at fartøyet overholder alle MARPOLs forskrifter, spesielt:

- SERTIFISERING: IOPPC, IPPC, ISPPC og IAPPC
- DAGBØKER: ORB, CRB og GRB.
- INSPEKSJON og UNDERSØKELSER
- KONTROLL AV OPERASJONELL FORURENSNING: ODS, NOx, SOx, VOC etc.
- MOTTAKSFASILITETER
- NØD PROSSESYRER

<https://www.imo.org/en/OurWork/Environment/Pages/Air-Pollution.aspx>

“A Civilian’s mistake is a  
mistake but a Seafarer’s  
mistake is a crime.”

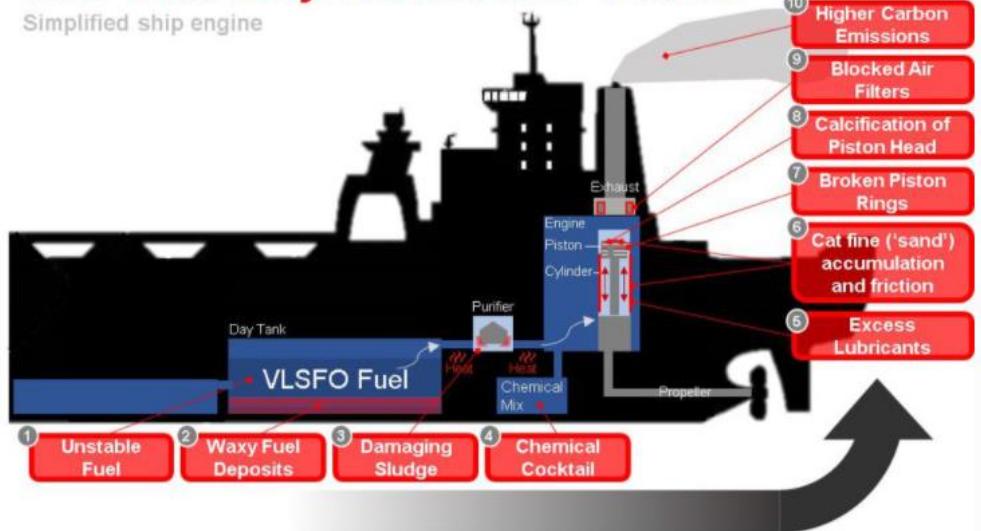


# FOBES Explosive Documents Reveal BP Behind Toxic Mauritius Oil Spill



## The 10 deadly issues with VLSFO

Simplified ship engine



The 10 biggest risks with VLSFO in large ocean-bound vessels DEGNARAIN



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Both BP and MOL were taking a **gamble with the lives of the crew** and the coastline of surrounding countries by allowing the vessel to sail with Very Low Sulfur Fuel Oil or VLSFO on board.

VLSFO - is an **experimental mixture** of jet fuel and heavy ship oil that is causing engine failures around the world on large ocean-bound vessels. It was rushed through for approval by the United Nations shipping agency (the IMO) in January 2020 **without proper safety testing**. This fuel currently powers 70% of all large ships around the world, and at least 6% of these vessels (3600 ships) are at risk of engine failure at any one moment. There has been a 20% spike in major shipping incidents in 2020, that the shipping regulator, **the IMO, has failed to properly investigate**.

## Have your members been mentioning any additional workload pressure due to the introduction of VLSFO?

“Since sulphur content was lowered in gas oil fuel, seafarers have experienced problems with breakdowns. The ITF has been vocal for many years about the environmental and workplace concerns we have with the use of ‘low-sulphur’ fuels.”

“An increased frequency of breakdowns naturally puts an extra burden on crew to constantly change or overhaul pumps and replace engine equipment, which is often compounded by ships drifting without propulsion and the navigation challenges and dangers that this presents.”

“What we are most concerned about are the **chemicals** that are substituted or should be added to new blended fuels to replace the lubricating effect of sulphur. Many of these chemicals are in fact life-threatening and pose serious risks for crews that come in contact with or breathe them in. We also know that these kind of fuels also require higher **pressures and temperatures**, which pose an additional risk to seafarers’ safety.”

# Maritime Autonomous Surface Ships MASS

Employment  
Opportunities  
Education/Training



Safety  
Security

New Energy  
Effectiveness

Smart Ships



Intelligent Human



Ship-shore interface

Marine environment

Pilotage

Interactions with ports

Just Transition

Relocation



# Utfordringer

***Ytre miljø er i fokus - indre miljø glemt,  
spesielt for maskin besetningen og beredskaps personell som skal operere og behandle alle typer av grønn energi.***

- Sikkerhetskultur og Risikoforståelse er fokusområde i 2021
- Nye energi kilder
- GHG
- Kompetanse
- Sertifisering
- Bemanning
- Fatigue, mental Helse
- Design, Vekt, Sikker lagring, Stabilitet, Brann & Eksplosjonsbarrierer
- Generell Drift og Skrubbere
  - Indre luft og kontakt forurensing
  - Utvidet vedlikehold
  - Trykk & Temperatur
- Havari
- Brann bekjempelse systemer - Evakueringssystemer
- Bunkring – Ladning
- Derating
- Kriminalisering



ITF MSC policy statement  
Human Element  
Manning  
Environment and issues  
affecting seafarers safety  
STCW/STCW-F  
Ships Automation

ITF  
Sustainable  
Maritime  
Shipping  
Policy

ITF Mexico City  
Policy

Flag Of Convenience (FOC)  
Second register vessels  
National flag vessels  
Bareboat chartering  
Dual or parallel registered vessels  
Cabotage  
Regional standards  
Manning  
Agreements



Flaggstat  
Kyststat  
Regjering



# Sustainable Shipping Action Plan

August 2021 – December 2023 (2 years) leading up to:

- IMO General Assembly 2023
- COP28 in 2023

## Goals – overall

Build a strong voice for the ITF as a key supporter for alignment with Paris Agreement targets in the build-up to the **IMO 2023 Assembly**

Establish representation for the ITF, and just transition principles, in key **regulatory** structures and initiatives on shipping decarbonisation, in both the public and private sector

## Communications goals

- **Educate** seafarers and their unions bout the issues in sustainable shipping and the ITF's position
- **Mobilise** seafarers and their unions to take action to influence public and private decision-makers to adopt the ITF position on the issues in sustainable shipping
- **Connect** seafarers and union reps who are passionate about these issues so that they can drive the campaign and give it an authenticity rooted in real workers' stories
- **Demonstrate that seafarers care** about issues in sustainable shipping (e.g. climate change) with compelling reasons from their own personal or industrial perspective – workers' stories
- **Establish a workers' voice** in the sustainable shipping public debate in the media
- **Secure** the ITF's reputational association as a credible authority on sustainable shipping issues and on 'change' generally in the transport, logistics and shipping industries
- **Pressure** public and private decision-makers to adopt the ITF position on the issues in sustainable shipping through direct and indirect communications initiatives



- ✓ 700 affiliated trade unions
- ✓ 150 countries
- ✓ 20 million transport workers
- ✓ 600000 deep sea
- ✓ 560000 inland /fish
- ✓ 350000 port workers





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