

AMT



Advanced
Maritime
Transports

IMO 2020

Advanced Maritime Transports
A Matter of Trust

2020 Low Sulphur Cap

New Low Sulphur Regulation

The new Low Sulphur Regulation, will be effective from January 1st 2020.

Objectives :

- Human health and environmental benefits by decreasing air and sea pollution
- Reduction of risks of erosion

How :

- Reduction of the Sulphur Oxides gas emission by 85%.
- Reduction of Sulphur in marine fuel from 3.5% to 0.5%

Who :

All the ships are concerned
(tankers, containers ships, cruise ships, bulk ships, etc.)

Annual cost of the compliance

estimated at **\$15b** for the liner industry
(eg extra cost for a round trip ASIA/NEUR: **\$1M**)

CONSEQUENCES

Important increase of the Bunker costs and/or huge scrubbers investments for the carriers.

Introduction of a Bunker Adjustment Factor from 01/01/2019.

2020 Low Sulphur Cap

Different Solutions for the shipping Industry


- **Use LSFO Low Sulphur Fuel Oil**
(cost+ around 40/50% v/s HFO)
- **Installation of scrubbers**
(cost \$5 to 10 m per ship)
- **Use LNG Liquefied Natural Gas**
(possible on new vessels)



2020 Low Sulphur Cap

LSFO

- Allow to be compliant with the new regulations
- No need to invest on any equipment
- Adapted to all the ships, whatever the age
- Ships tanks have to be empty and clean before the loading of the LSFO, so during Q4 2019
- Carriers have to secure the supply of the LSFO
- Long term solution
- LSFO price: <https://shipandbunker.com/prices>



The LSFO will be the main solution to be compliant with the 2020 Low Sulphur Cap, but there will have a significant impact on freight rates due to the increase of the fuel costs around 40 to 50 %

2020 Low Sulphur Cap - Scrubbers

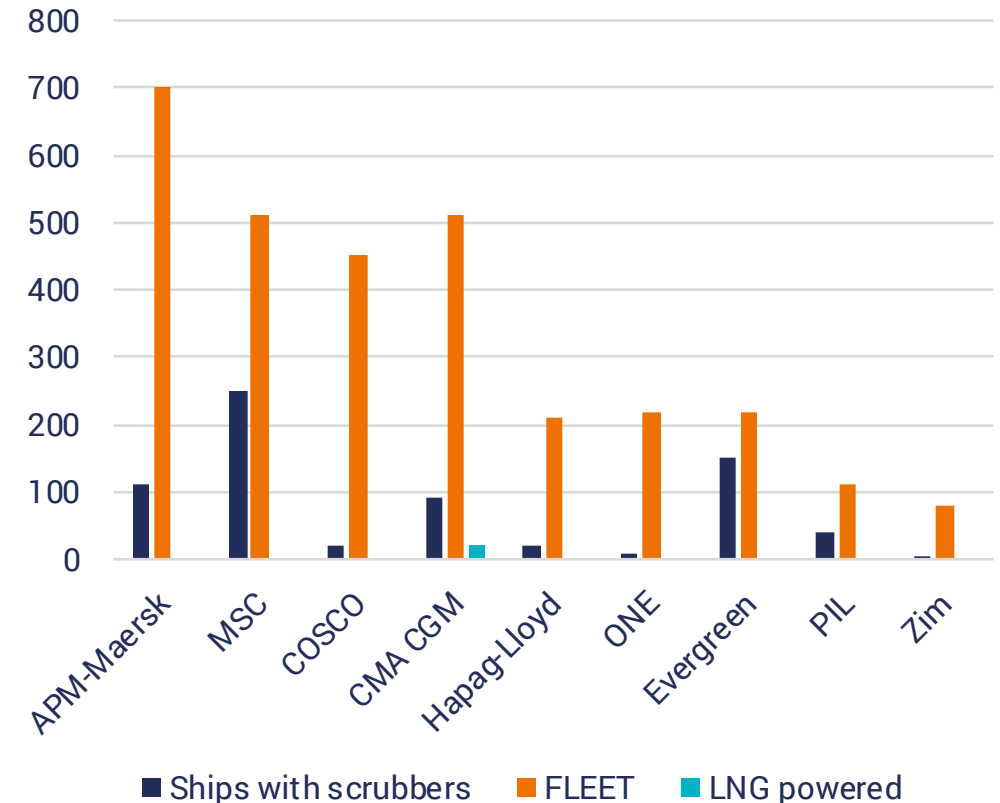
A small percentage of the containerships fleet already equipped

- **Cost savings** as allow to continue to burn HFO, cheaper than LFSO
- **Important investment** (around USD 6/7 M per ship, falling rapidly to 3/5 M per ship)
- **Adapted to recent vessels** only
- Need to **stop the ships during 7 to 8 weeks**
- **Reduce the capacity of the vessel** by 200 to 300 teus
- **Limited by the capacity** of the shipyards to equip an important number of vessels
- Could be a **short or mid term solution** in case of new environment regulations in the future
- Currently **660 containerships retrofitted or planned to be retrofitted** with scrubbers, **+180 newbuilt ships** ; around **16%** of the fleet

Most of the major carriers have decided to partially use scrubbers to be compliant with the 2020 Low Sulphur Cap, but it remains a small part of the total fleet:

MSC, Evergreen, HMM, CMA CGM, Hapag Lloyd, and recently Maersk, COSCO.

So far ONE, ZIM would prefer to burn LSFO.



2020 Low Sulphur Cap

LNG – Liquefied Natural Gas

The most involved in LNG propulsion carrier is currently CMA CGM, the company ordered 9 ships of 22000 teus in November 2017 + another recent order of 5 x 15000 teus (+5 x 15000 teus with scrubbers).



Adapted to the newbuilt vessels only

Allow to be compliant with the new regulation

Green and friendly environment solution

Cost saving on a **long term vision**

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