

## Flash Analysis

Credit Analysis

# Maritime Industries

## >>> Will tightening regulations provide a silver lining for the merchant shipping sector?

January 2017

Changing regulations in the maritime industry will not only put cost pressure on shipping companies, it might also ease supply-demand imbalances and could open new business opportunities for maritime lending institutions.

### IMO regulation 1: Ballast water treatment

In September 2017 the International Maritime Organization's (IMO) Convention for the Control and Management of Ships' Ballast Water and Sediments will come into effect. Twelve years after its adoption in 2004, the requirements of the ballast water convention were fulfilled. 30 IMO member states representing 35 % of the global merchant fleet had to ratify the convention which was a time-consuming effort. From September 2017 on all ship-owning companies must comply with the following requirements:

- 1) The ballast water and its sediments must be treated according to a ship-specific ballast water management plan. For this purpose a ballast water management system (BWMS) needs to be installed on each ship. Investment costs amount up to USD 2.5 Mio. per vessel.
- 2) The BWMS has to be installed once the international oil pollution prevention certificate (IOPP) has expired. The certificate is novated every five years, usually within the class renewal of the respective ship. Thus, in September 2022 the latest, each vessel has to have a ballast water treatment system on board.

### IMO regulation 2: Marine sulphur emissions implementation

In October 2016, the IMO decided to reduce global permissible sulphur oxide emissions by 2020, requiring a reduction of the sulphur content of marine bunker fuel from 3.5% to 0.5% or the installation of emission reducing equipment.

Ship owners have essentially two options on dealing with the emissions cap:

- 1) burning low sulphur fuel, either lighter gas oil or low sulphur heavy fuel oil (with a maximum of 0.5% sulphur), or
- 2) installing Exhaust Gas Cleaning Systems (a.k.a. scrubbers).

The use of LNG is also an option but is subject to extensive changes to existing vessels, making it only a feasible alternative for newbuildings. Limited readiness of global LNG bunkering facilities is currently also a prohibitive factor.

The emissions cap forces ship owners to decide whether to install scrubbers at an estimated cost of USD 3 to 6 Mio., or to burn higher cost low sulphur fuel at incremental fuel costs of currently USD 150 per ton. Assuming 30 metric tons per day of fuel consumption, the scrubber investment costs would amortize over up to four years. This payback period for a scrubber investment would justify the investment for many vessels.

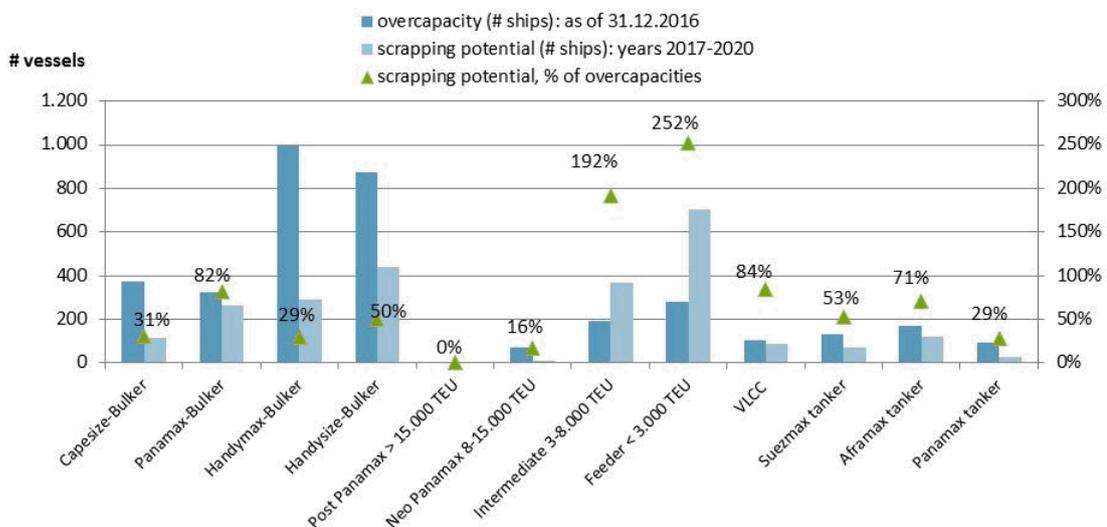
Relatively few scrubbers have been installed so far, and most owners will likely wait to see how scrubber prices and price differentials between high

sulphur and e.g. Marine Gas Oil (MGO) develop before they decide to retrofit and invest or to sell and scrap.

**IMO decisions could drive record scrapping**

To comply with the new regulations, ship owners must decide whether to incur investment costs for ballast water treatment systems, scrubber technology and class renewals of approximately USD 7 Mio. to USD 11 Mio. per vessel or to ultimately scrap the vessel from the end of 2017 onwards. We expect merchant ships turning 20 and 25 years to be scrapped. This is due to their low remaining economic life, the required high investment costs for their fourth or fifth class renewal and the new equipment to be installed.

Our research indicates that on average 13 % of the current global merchant fleet (dry bulkers, container, oil tankers) might be scrapped in the years 2017-2020 when the ships need to be upgraded to comply with the new regulations during their upcoming special surveys. That represents 59 % of total 2016 overcapacities of the world merchant fleet. We identified the biggest scrapping potential in terms of volume for the container feeder <3.000 TEU- and Handysize bulkers (see below).



Source: Clarksons, own calculations and illustration

**Good news for the shipping sectors, equipment makers and banks**

As we estimate current global fleet overcapacities to be around 10 % to 35 % of the existing fleet, depending on segment, scrapping has the potential to ease the overcapacity problems of entire segments. Precondition is that no excessive ordering takes place in the meantime. Furthermore, shipping experts estimate the global cost impact of the new regulations to be between USD 40 billion and USD 70 billion, which is good news for European equipment makers such as MAN and Wärtsilä. In addition, this would provide new business opportunities for banks offering package financings preferably for strong corporates.

**Adoption delays are likely**

In discussions with ship owners, the decision for installing scrubbers and BWMS may be to wait as long as possible to comply due to improving technology and declining investment costs. In addition, ship owners may receive support from ship registry countries such as Marshall Islands that are supporting proposals for delaying the BWMS installation by up to five years to harmonize the contrasting IMO and US ballast water regulations. If approved, the respective registries will allow an early renewal of the IOPP before the regulation comes into effect in September 2017. This would give ship owners five more years to comply with the BWMS regulation.