

AS ONE, WE CAN.

**ONE**  
OCEAN NETWORK EXPRESS

# MARPOL 2020 Global Sulphur Limit

From Jan 2020, regulation for sulphur content in fuel oil will be tightened by MARPOL 2020 Global Sulphur Limit to reduce the amount of sulphur oxide emitting from ships. Details from ONE is now available, to strengthen the understanding of this regulation and further information on ONE's stance.

# ONE'S ACTION AND STANCE

## What is “MARPOL 2020 Global Sulphur Limit”?

2020 Global Sulphur Limit is to be implemented to improve major health and environmental benefits for the world, particularly for populations living close to ports and coasts, by drastically reducing the amount of sulphur oxide emitting from ships.

IMO has set regulation to limit sulphur content in fuel oil to less than 0.5%, which will take effect from 1 January 2020. Current global limit for sulphur content in fuel oil is 3.5%.

In specific ECA (Emission Control Areas) defined by IMO or other government, the limit is already 0.1%, which remains unchanged.



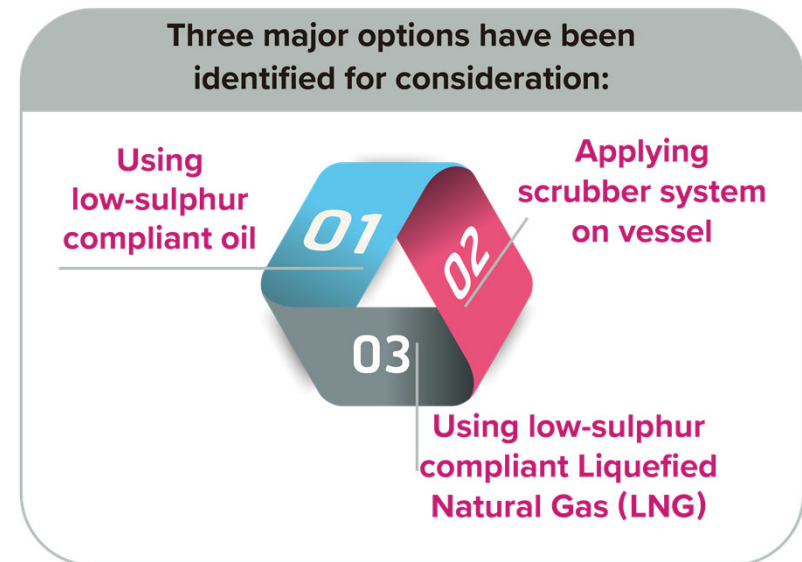
## How will the industry deal with “MARPOL 2020 Global Sulphur Limit”?

Various business partners of shipping companies such as shipyards, manufacturers, bunker suppliers and refineries are fully aware of this regulation and are preparing and developing compliant equipment and oil.

# ONE'S ACTION AND STANCE

## What is ONE's stance on "MARPOL 2020 Global Sulphur Limit"?

We, Ocean Network Express (ONE), are fully aware of the environmental impact by our ships' emission, and with commitment to our sustainable business model, we are well prepared and ready to comply with this regulation. We have launched a cross-functional task force to evaluate from technical aspect and established ONE's stance on 2020 Global Sulphur Limit. Several options have been researched to identify the possible best and most cost-efficient method to comply with the regulation.



### 01. Using low-sulphur compliant oil.

At current, we identified low-sulphur compliant oil as one of the most realistic and cost-efficient solutions, to enable ONE to be compliant ready by 1 January 2020. ONE's container vessels are equipped to adopt this oil without requiring special modification.

# ONE'S ACTION AND STANCE

## 02. Exhaust Gas Scrubber Installation.

Marine exhaust gas cleaning systems (often referred to as scrubbers) can be installed on ships to comply with international maritime regulations and standards regarding sulphur content.

ONE will continue to explore the use of scrubber technology and use of this type of solution remains under study and consideration for more widespread possible future use.

Three ways can be considered for applying scrubber system on vessel.



## 03. Using LNG (Liquefied Natural Gas).

LNG is another category of compliant oil being considered as one of the solutions and vessels must be specifically equipped with LNG powered engine. Similarly to building of new vessel with scrubber, it takes 2 - 3 years to build a new LNG powered engine ship, which this approach would not be in time for ONE to be compliant by January 2020.

Services where ONE can deploy LNG powered vessel are also limited as there are constraints on availability of LNG bunkering facility. Although our LNG powered vessel deployment plan is not concrete at this moment, evaluation is underway where development of LNG bunkering environment is being further analysed.



# WHAT IS THE IMPACT FOR CUSTOMER ?

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## IMPLEMENT A REVISED MECHANISM FOR NEW REGULATION

The expected increase in fuel costs associated with the migration to the lower Sulphur content fuel mandated for use by the IMO from 2020 has required us to roll out a new Bunker Surcharge mechanism called OBS.

OBS is a fair cost recovery formula which calculates using 3 components.



# ONE'S ACTION AND STANCE

## KEY HIGHLIGHTS OF OBS MECHANISM

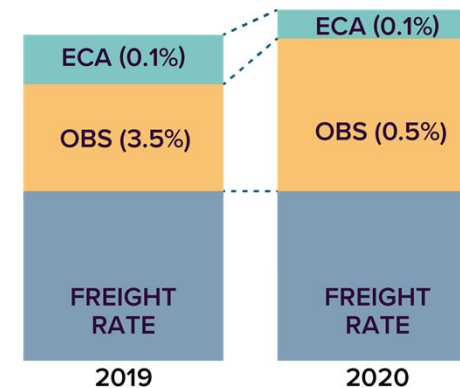
- The fuel price component of OBS will be calculated based on the past 3 months average bunker price at selected, key bunkering ports respective to each trade lane.
- Price source for OBS calculation is PLATTS.
- The OBS tariff will be calculated based on the fuel price for 0.5% very low-sulphur fuel oil "VLSFO" from 1<sup>st</sup> April 2020.
- ECA surcharges will still exist and require bespoke calculation relevant to each scenario.

### How is Trigger Fuel Price calculated ?

Example: Jan 2020 effective OBS calculation



### How will it be changed ?



\* Pictures shown are for illustration purpose only.

# ONE'S ACTION AND STANCE

MARPOL 2020 Global Sulphur Limit

	Bound - EB						Bound - WB						
	OBS (DRY)   40'			OBS (RFR)   40'			OBS (DRY)   40'			OBS (RFR)   40'			
	USD / MT			USD / MT			USD / MT			USD / MT			
<b>Bunker Price Assumption</b>	\$500	\$600	\$700	\$500	\$600	\$700	\$500	\$600	\$700	\$500	\$600	\$700	
<b>Trans Pacific</b>													
Asia / US and Canada West Coast (Local)	\$180	\$270	\$358	\$254	\$380	\$502	\$92	\$136	\$182	\$166	\$246	\$326	
Asia / US and Canada East Coast (Local)	\$300	\$444	\$588	\$476	\$704	\$932	\$144	\$212	\$282	\$320	\$472	\$626	
Asia / Hawaii	\$340	\$506	\$672	\$404	\$602	\$800	\$240	\$358	\$474	\$304	\$454	\$602	
<b>Trans Atlantic</b>													
North Europe / US and Canada East Coast	\$118	\$170	\$224	\$212	\$306	\$404	\$226	\$328	\$428	\$320	\$464	\$608	
Mediterranean / US and Canada East Coast	\$128	\$184	\$240	\$224	\$322	\$420	\$170	\$244	\$320	\$266	\$382	\$500	
North Europe / US and Canada West Coast	\$284	\$416	\$548	\$444	\$650	\$856	\$386	\$564	\$742	\$546	\$798	\$1,050	
<b>Europe</b>													
Asia / North Europe	\$200	\$288	\$376	\$400	\$576	\$754	\$250	\$360	\$472	\$450	\$648	\$850	
Asia / Mediterranean	\$138	\$202	\$266	\$298	\$436	\$574	\$182	\$264	\$348	\$342	\$498	\$656	
<b>Latin America</b>													
Asia / Latin West Coast	\$204	\$324	\$446	\$346	\$550	\$756	\$172	\$276	\$378	\$314	\$502	\$688	
Asia / Latin East Coast	\$216	\$316	\$416	\$400	\$584	\$768	\$308	\$450	\$592	\$492	\$718	\$944	
<b>Africa</b>													
Asia / South Africa	\$186	\$274	\$360	\$278	\$408	\$536	\$212	\$310	\$408	\$304	\$444	\$584	
Asia / East Africa	\$218	\$320	\$420	\$310	\$454	\$596	\$192	\$282	\$370	\$284	\$416	\$546	
Asia / West Africa	\$304	\$446	\$586	\$396	\$580	\$762	\$368	\$538	\$706	\$460	\$672	\$882	
<b>Intra Asia</b>													
East Asia / West Asia (Middle East / Indian Sub Conti / Red Sea)	\$18	\$48	\$78	\$40	\$108	\$176	\$80	\$214	\$346	\$102	\$274	\$444	
Intra East Asia				<b>Bound - SB / NB</b>	\$38	\$102	\$164						
<b>Oceania</b>													
Asia / Oceania (Australia / New Zealand / South Pacific)				<b>Bound - SB / NB</b>	\$288	\$432	\$574						

Above matrix is just for reference, actual OBS quantum shall be calculated by \$1/MT