Freight Impacts of IMO 2020

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Eden Roc Hotel, Miami, September 2019

What can we expect on the first of January?







S&P Global Platts Shipping

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- Hands-on expertise in freight markets through daily engagement with a wide variety of sources, including brokers, charterers, shipowners, traders, agents etc.
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Daily Publications

We publish three daily reports: Dirty Tankerwire, Clean Tankerwire and Dry Freight Wire with a recent addition of **Platts Container Rates** (PCR) and **Platts Bunker Charges** (PBC)

S&P Global Platts

DRY FREIGHT WIRE Volume 5 / Issue 83 / April 30, 2018

	ARTER EQUIVALENTS, AP				1200	2000	TODAY IN DRY FREIGHT WIRE	
Route	Vessel Delivery	Load port	Discharge port	Platts symbol	Close	Change	Time charter equivalents	
Capesize							Capesize	3
PCTCES	China-Japan range	Port Hedland, Western Australia	Qingdao, China	MEVILLOO	12,682	-2030	Panamax: Asia-Pacific	
PCTOEs	China-Japan range	Saldanha Bay, South Africa	Qingdao, China	PRYBADD	16,359	+138	Panamax: Atlantic	
PCTCE3A	China-Japan range	Tubarao, Brazil	Qingdao, China	MEYCARP	15,968	+144	Supramax	3
PCTCEaB	ARA range passing Passero	Tubarao, Brazil	Qingdao, China	P3Y2400	26,765	+1.40	Handymax	3
PCTCE7	ARA rangelpassing Passero	Puerto Bolivar, Colombia	Rotterdam, Netherlands	CRYANDO	18,996	+49	Handysize	1
Panamax							Freight heards	8
PPTCEBe	South China	South Kalimantan, Indonesia	Paradio, India	CEVELOR	10.981	+348	Markets News	
PPTCES	South China	South Kalimantan, Indonesia	Mundra, India	CRYCLER	10,799	+225	Latest market fixtures	
PPTCE44	South China	East Kalimantan, Indonesia	Quangzhou	CEVACOR	10.523	+012	Platts container assessments	\$
PPTCEae	East coast india	Richards Bay, South Africa	Parado, India	CRYDDAR	11.683	-122	PCTCE19: PORT HEDLAND-OINGDAO TCE	
PPTCE2	East coast India	Richards Bay, South Africa	Mundra, India	CRYEARD	11,678	-134	PUTCET9: PURT HEULAND-UINGDAU TCE	
PPTCE8	North China	Hay Point, Australia	Paradio, India	MAYE200	10,459	+788	20000 (\$idey)	
PPTCE7	North China	Hay Point, Australia	Ginodao, China	MEYFARE	10,127	+2.35	2000	
PPTCE10	Rotterdam	Hampton Roads, Virginia	Rotterdam, Netherlands	0018100	5,413	+22	15000	
PPTCE26	Singapore	Santos, Brazil	Bingdao, China	0580600	10,985	+81		
PPTCE261	Olbraitar	Santos, Brazil	Qingdao, China	01800000	15,459	+21	Nuch	
Ultremex								
PUTCE01	Singapore	South Kalimantan, Indonesia	Paradip, India	CSEPDOD	14,568	+292	5000	
PUTCE02	Singapore	South Kalimantan, Indonesia	Navlakhi, india	COMBRE	13,296	+261		
PUTCEOS	East coast India	Richards Bay, South Africa	Paradip, India	CEROPOR	10,033	-121		
PUTCE04	East coast India	Richards Bay, South Africa	Kandia, India	C884800	9,942	-121	01-Feb 15-Feb 02-Mar 16-Mar 02-Apr 16-Apr 30-Apr	
Supramax							Source: SEP Global Platts	
PSTCE22	Singapore	South Kalimentan, Indonesia	Paradip, India	CRYTANN	13,156	+283	SUBSCRIBER NOTES	-
PSTCE23	Singapore	South Kalimantan, Indonesia	Navlakhi, India	CEYGADD	11,751	+263		
PSTCE24	South China	East Kalimantan, Indonesia	Guangzhou	CRYADOO	9,361	+17	No East of Suez tanker assessments, Dry Freight Wire on May 1	
PSTCE21	East coast India	Richards Bay, South Africa	Paradip, India	CRYNADO	8,030	-127	Platts proposes to amend Capesize Yuzhny to Dingdao assessmen	it i
PSTCE20	East coast India	Richards Bay, South Africa	Navlakhi, India	CRYILDO	7,937	-127	Platts to launch Panamax implied freight rate	1
PSTCE19	West coast India	Mina Sagr, UAE	Paradip, India	HEYGLOO	11,097	+2	Platts to amend description of US-Turkey petcoke freight assessmen	t i
PSTCE12	SWP	New Orleans, Louisiana	Kashima, Japan	GROLAGO	23,070	-265	Platts to add 12 new container bunker cost assessments	
PSTCE121	Gibraltar	New Orleans, Louisiana	Kashima, Japan	GNOLENE	15,117	-286	Platts to discontinue LIK Cont/Med container assessments	4
PSTCE17	SWP	Houston, Texas	Krisnapatnam, India	67172-00	22,200	-33	Platts to change description of two container freight assessments	
PSTCE171	Gibraltar	Houston, Texas	Krisnapatnam, India	OPHTERR	14,893	-24	Platts to change description or two container relight assessments Platts to change cargo sizes on two grains freight	1
							Platts to change cargo sizes on two grains freight assessments to China	- 12



VLCC (PGT page 2980)								-			
From	То	Ca	rgo size (kt)		Worldscale		\$/mt	East of Sue	-		
Persian Gulf	Japan	AASEYSZ	265	AASEYRO	66.25	A456280	13.92	cast of Sue	Z		
Persian Gulf	West Coast India	TDAF052	265	TDAFDOB	73.25	TDAFH00	4,39				1000
Persian Gulf	China	AASLESZ .	270	AASL800	67.00	AASLCOO	12.61			999) Sentiment i	
Persian Gulf	FarEast	PEADCSZ	270	PFAOCOO	64.00	TDAADOO	12.81	VLCC market w	as turning bu	Ilish due to the t	firming US
Persian Gulf	Singapore	PFA005Z	270	PF ADD60	67.50	TDAA300	8.40	Gulf Coast man	ket oeooolitie	cal uncertainty i	n PG and
Persian Gulf	Red Sea	FFADESZ	270	PEAGE00	72.25	TDAAH00	6.96			urces said. SPC v	
Persian Gulf	South Korea	AASFASZ	270	AASFA00	64.50	AASFBBB	12.62				
Persian Gulf	US Gulf Coast	PFA065Z	280	PFA0600	31.50	TDAANOO	11.87	to have provision	onally taken ti	he Sea Leopard	on subjects
Persian Gulf	US West Coast	PEBACSZ	280	PEBACOO	47.50	TDADGOD	16.26	as a replaceme	nt shioment	for crude for Se	otember 28
Persian Gulf	UK Continent	FFADISZ	280	PEADING	33.50	TDAADOO	7.30			e at w53, with Cl	
Persian Gulf	Mediterranean	FFANKSZ	280	PF ARCERO	40.50	TDACHOO	6.42				
										he rate they earl	
SUEZMEX (POT page 297	09							 according to th 	e shipbroker'	's report. Afterw	ard, Unipec
From	То	Ca	rgo size (kt)		Worldscale		\$/mt	put Karbala for	October 5 cm	ude loading on t	he PG-China
Persian Gulf	Eest	FFACKSZ	130	PFASE10	74.00	TDAAA00	14.20	route at w62.5	and wes was	a paid by the san	ne charterer
Persian Gulf	Red Sea	PFA605Z	130	PFA5018	79.00	TDAAGOO	7.62			and Hirado for ti	
Persian Gulf	US Gulf Coast	FFASLSZ	140	PFA6L18	37.50	TDAAP900	14.13				
Persian Guif	UK Continent	FFAGNSZ	140	PFASN18	35.00	TDAADNO	10.56	29-October 3 la	ycan on the F	PG-China route,	sources said.
Persian Gulf	Mediterranean	FFAGREZ	140	PFAGR10	35.00	TD&CY00	9.70	Meanwhile, the	Leonidas wa	s also reported t	to have been
Red Sea	China	TDAFCSZ	135	TDAFCOD	73.50	TDAFG00	15.67			for October 6 lo	
Aframax (PGI page 2070	n									ec was heard se	
From	To	63	rgo size (kt)		Worldscale		\$/mt	for October 6 lo	adino on the	PG-China route.	source
Persian Gulf	East	PFA1052	80	PFA3019	102.00	TDAACOO	17.73			ake any lower n	
Persian Gulf	Red Sea	PEA1NS7	80	PFA7#10	107.00	TRAATING	10.95			bring owners of	
Red Sea	China	TDAF857	80	TRAFFIC	113.50	TOAFFOR	24.20				
Indonesia	Japan	1541052	80	PFALC18	82.50	TDARONO	9.89	a VLCC shipow	ner said, addi	ng that the firmi	ing Atlantic
Indonesia	Korea	FFAL057	80	PFALO18	82.50	TDARFING	8.73	market the inc	reased hunke	er orices and und	certainties in
Indonesia	Australia	PEALPSZ	80	PFALP10	84.50	Thencing	12.73			ind the firming i	
Australia	North Asia	TDAFASZ	80	TDAFADO	93.50	TDAFEOO	11.61				
					Lumosum					calculation, the 1	
Indonesia	Singapore	FEBAGSZ	80	PERASOO	200	TDADOOR	2.50	Equivalent on t	he PG-China I	route was aroun	d \$35,000/
Kozmino	North China	TIDKAS2	100	TIDOKREE	530	TODKANN	5.30				
NULTING	Horar Chino							FUTUDED AT F		KET ON CLOSE	
Medium Range (PGT pa	ge 2970]									IKET ON CLUSE	
From	То		rgo size (kt)		Lumpsum		\$/mt	16:30 London time			
Singapore	Japan	TDAFQ5Z	40	TDAFQ00	560	TDAFROD	14.00	ICE Brent	MT	AAYES00	65.45
Singapore	Chittagong	TDAF55Z	30	TDAF500	360	TDAFTOO	12.00	NYMEX WTI	M1	AASCREE	59.72
East Coast India	Singapore	TDAFUSZ	40	TEAFURE	310	TD4FWM	7.75				



_EAN TANKERWIRE

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EAST OF SUEZ N	Pirco (Por page 2620)							MARKET COMMENTARY
from	То		Cargo size (kt)		Worldscale		\$/mt	East of Suez
Red Sea	India	PFANCSZ	35	PFAMCOO	195.00	TCABIOO	18.06	2031 01 0402
led Sea	Singapore	PEAMOSZ	35	PFANDOO	180.00	TCAENOO	25.38	Market analysis: (PGT page 2949) The East of Suez Long
led Sea	Japan	PFAMESZ	35	PFAREOD	140.00	TCA8300	31.81	Range tankers were little changed Tuesday, shrugging off
led Sea	South Korea	PFAMFSZ	35	PFAMF00	145.00	TCAEL00	30.84	
led Sea	East Africa	PFAMRSZ	35	PFARROD	180.00	TCAEHOO	14.09	news of Saturday's attack over key Saudi oil installations a
rab Gulf	India	PEABRSZ	35	PFABR10	195.00	TCAAF00	13.53	loading at various ports was continuing on schedule. There
rab Gulf	Singapore	PFABQSZ	35	PFABQ00	180.00	TCAANOO	22.68	has not been any delay so far in loading on LR1s due to the
rab Gulf	Japan	PEADNSZ	35	PFABN10	140.00	TCAAHOO	29.65	Saudi facility attack, said a source with one of the owners.
rab Gulf	South Korea	PFAKPSZ	35	PFAKP10	145.00	TCAAK00	28.62	
rab Gulf	East Africa	PFAMSSZ	35	PFARSOO	180.00	TCME00	16.74	"There was a list of possible cancellations but none has
rab Gulf	South Africa	TCASXSZ	35	TCASX00	175.00	TCASW00	27.76	been reported so far," another source said. It was business
ingapore	Japan	PFAEBSZ	30	PFAE810	141.00	TCAEPOO	14.73	as usual as far as shipments of clean products was
ingapore	South Korea	PFAKVSZ	30	PFAKV10	146.00	TCAEROO	13.17	concerned, the source said. However, several market
ingapore	Australia	AAJLPSZ	30	AA3LP00	210.00	AA3PV00	27.74	
ingapore	Australia	TCCSASZ	35	TCCSB00	180.00	TCCSA00	23.78	participants said that it could be a lull before the storm.
outh Korea		TOSKASZ		TOSKAGO	193.00	TOSEDOO	30.84	Typically, the impact of such developments on the
dia	Singapore	TCAED5Z	35	TCAED00	180.00	TCAECOO	14.76	downstream clean products and their shipments comes
da	Japan	TCAEFSZ	35	TCAEFOO	140.00	TCAEE00	23.42	with a lag because the crude being imported at the
idia Jest Coast India	South Korea	TCAEHSZ	35	TCAEH00	145.00	TCAEGOO	22.19	
lest coast India	South Africa	TCAIVSZ	35	TCAIV00	175.00	TCAIU00	26.36	moment will be refined a few months down the line.
					Lumpsum			"Chartering activity will first increase in other regions," sai
ed Sea	UK Continent	PFARXSZ	40	PFARXING	950	TCACHOR	23.75	a source with an LR1 owner. There were a lot of inquiries for
ed Sea	Mediterranean	PFAM252	40	PFAR200	850	TCACK00	21.25	moving cargoes from the West to East and from North Asia
ed Sea	Arab Gulf	PFANASZ	35	PEANADO	510	TCACY00	14.57	to the Middle East, the source said. Among the LR1 fixtures
ed Sea	US West Coast	PFANBSZ	35	PFANBOO	1550	TCAC200	44.29	
ed Sea	US Atlantic Coast	PEANPSZ	35	PEANPOO	1350	TCADAGO	38.57	heard, the Leader was placed on subjects by ATC at
rab Gulf	UK Continent	PFA8PSZ	40	PFA8P10	1400	TCADOOO	35.00	\$310,000 for September 20 loading on the Yanbu-Jeddah
rab Gulf	Mediterranean	PFABOSZ	40	PFAB010	1300	TCADCOO	32.50	route, sources said. Among the outstanding LR1 cargoes.
rab Gulf	Arab Gulf	PFABKSZ	30	PFABKDO	270	TCAEDOO	9.00	ATC was seeking tonnage for September 24 gasoline
rab Gulf	US West Coast	PFABRSZ	30	PFABROO	1900	TCADE00	63.33	
rab Guif	US Atlantic Coast/Gulf Coast	PFANQSZ	30	PFANQOO	1700	TCAEF00	56.67	loading on the Ruwais-Persian Gulf route, with an option to
ingapore	India	PFAEASZ	30	PFAEA10	370	TCADGOO	12.33	discharge the cargo in the Red Sea region, they said.
ingapore	Singapore	PFAEESZ	30	PFAEE00	140	TCADHINO	4.67	Among the LR2s. Total was seeking tonnage for October 1
ingapore	Hong Kong	PFAMISZ	30	PFAXN10	325	TCADIOO	10.83	Among the crisis, rotar was seeking torinage for october r
ngapore	US West Coast	PFAEFSZ	30	PFAEF00	1400	TCAD300	46.67	
outh Korea	Singapore	PFANFSZ	30	PFANFOO	500	TCAEK00	16.67	SUBSCRIBER NOTES
outh Korea	Japan	PEANOSZ	30	PEANODO	330	TCADL:00	11.00	Platts to discontinue West of Suez clean barge rates
outh Korea	Hong Kong	PFANHSZ	30	PFANHOO	430	TCADMINI	14.33	Platts to launch USGC-Brazil LR1 freight assessment
South Korea	US West Coast	PFANESZ	30	PFANIDO	1300	TCAENOO	43.33	
South Korea	US Atlantic Coast/Gulf Coast	PFAN25Z	30	PFAN200	1500	TCADODO	50.00	Platts to change MR USGC-North Brazil flat rate freight basket

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Agenda

What am I going to talk about today?

- IMO 2020 Compliance Strategies
 - Fuel prices: Supply & Demand
- **3** Shipping in 2020 and beyond
 - Case Study: Indonesia

"From 1 January 2020, the limit for sulphur in fuel oil used on board ships operating outside designated emission control areas will be reduced to 0.50%"

International Maritime Organization



How can you comply with IMO 2020?

You can burn 0.5% LSFO or MGO

- Lower emissions
- Limited operational difficulty
- Guaranteed compliance
- · Low capital expenditure
- Fuel costs more
- Can increase maintenance costs
- Cleaning costs

You can install a "scrubber"

- Exhaust Gas Cleaning System
- Can continue burning HSFO
- Lower fuel costs
- HSFO widely available
- High capital expenditure
- · Complicated to install
- Risk of banning, non-compliance
- Sludge handling and disposal
- Failure risk

You can burn another fuel entirely

- LNG, Electric, Wind Power
- Nuclear?
- New build
- Lower CO₂ emissions
- Very high capital expenditure
- Long lead times

Option 1: Burn Low Sulphur Fuel Oil or Marine Gas Oil



"KPC and Ardmore Shipping will be using low sulphur fuels in their ships from next month, said sources involved in the task. Ardmore has 19 MR tankers."

S&P Global Platts, September 23, 2019



Bunker Wire 0.5% Assessments

APAC/Middle East	Europe
Singapore	Algeciras
Fujairah	Durban
Japan	Gibraltar
South Korea	Malta
Hong Kong	Piraeus
Shanghai	Rotterdam
Zhoushan	

Americas Houston New York Los Angeles Balboa

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	Middle East			Europe				Americas			
Delivered		Mid	Change	Delivered	1	Mid	Change	Delivered		Mid	Chang
Singapore	MFSPD00	600.000	+66.000	Algeoiras	MFAGD00	610.000	+30.000	Houston	MFHODBB	580.000	-16.00
Fujairah	MFF3D00	620.000	+66.000	Durban	MFDBD00	644.000	+10.000	New York	MENYDOO	583.000	-20.00
Japan	MF3PD00	595.000	+35.000	Gibraltar	MFGBD00	610.000	+30.000	Los Angeles	MFLADOO	550.000	-6.00
South Korea	MESKDOO	635.000	+76.000	Malta	MFMLD00	575.000	+20.000				
Hong Kong	MFHKD00	590.000	+40.000	Piraeus	MEPRDee	550.000	+6.000				
Shanghai	MESHDOO	620.000	+80.000	Rotterdar	m MFRDD00	575.000	+20.000				
Zhoushan	MFZSD00	610.000	+66.000								
Ex-Wharf								Ex-Wharf			
Singapore	MFSPE00	585.000	+80.000					Houston	MFHOE00	555.000	-16.00
								New York	MENYEOO	565,000	-20.00
Fujairah	MFF3E00	600.000	+66.000								
Fujairah	MFFJE00	600.000	+66.000					Balboa	MFBAE00	575.000	
Fujairah MARINE I			+66.000	\$/mt	Channe	vs F0 380 I	40PS strip	Balboa			
MARINE	FUEL (PGB	page 30)	466.000	\$/mt 527.160	Change +27.880	VS FO 380 P	10PS strip 70.180				
MARINE I	FUEL (PGB)	page 30)						Balboa			
MARINE I 0.5% FOB Sir 0.5% FOB FU	FUEL (PGB) ngapore carg jairah cargo	page 30) o	AMF SAGG AMF FAGG	527.160 513.790	+27.880 +28.820			Balboa			
MARINE I 0.5% FOB Sil 0.5% FOB FU 0.5% FOB RO	FUEL (PGB ngapore carg jairah cargo otterdam barg	page 30) o ge	AMFSA00	527.160	+27.880			Balboa			
MARINE I 0.5% FOB Sir 0.5% FOB FU	FUEL (PGB) ngapore carg jairah cargo otterdam barg 3 Gulf Coast to	page 30) p ge parge	AMF SAGE AMF FAGE PUMF DOG	527.160 513.790 553.000	+27.880 +28.820 -6.760			Balboa			
MARINE I 0.5% FOB Si 0.5% FOB FO 0.5% FOB RC 0.5% FOB US	FUEL (PGB) ngapore carg jairah cargo otterdam barg 3 Gulf Coast to	page 30) p ge parge	AMESA66 AMEEA66 PUNED66 AUGM866	527.160 513.790 553.000 464.750 492.750	+27.680 +28.820 -6.760 -18.260			Balboa			
MARINE I 0.5% FOB Si 0.5% FOB FO 0.5% FOB RC 0.5% FOB US	FUEL (PGB) ngapore carg jairah cargo itterdam barg S Guif Coast to S Atlantic Coa	page 30) o ge aarge ast barge	AMESA66 AMEEA66 PUNED66 AUGM866	527.160 513.790 553.000 464.750	+27.680 +28.820 -6.760 -18.260			Balboa			-17.50

Chanoe

NANA

NANA

NANA

FOFF001

AMRAMO1

AUSAMO

AUSBMOS

Month 1 Change

Oct

\$/mt

530,500

195.000

\$/barrel

73.150

21.300

527.750 +17.760

512.700 +17.760

+7.260

-2.800

-1.660

Balance^{*}

Sep

\$/mt

\$/barrel

FOFSeee

FOFFeee

AMRABOO

AMREBON

AUSABOO

AUSBBOO

NA

NA NANA

NA NANA

NA

NA NANA

Balance month swaps are assessed from 1st through the 1sth of the month; Asia swaps are assessed through the 14th of February

Prices		News
Arab Guir (\$/mt) East Asia (\$/mt) Northern Europe (\$/mt) Mediterranean, Black Sea and Artina (\$/mt) US and Canada (\$/mt) South America (\$/mt) Posted Prices (\$/mt) Cargo prices (\$/mt) Market commentary	2 2 3 4 5 6	Crude ends lower as Saudis say able to restore production by November Platts container rates, Septembe Tr (3/FEU ⁻) Platts bunker charges, Septembe Tr (3/FEU ⁻) Platts bunker excluded container rates, September Tr (3/FEU ⁻) SK Energy to start selling 0.5% suffur bunker in S Korea
Asia, Middle East	2	ANALYSIS: Saudi crude
North Asia Northwest Europe	3 5	outages could pose quandary ahead of IMO 2020 S Pompeo to meet with
Mediterranean, Africa US	6 7	Saudi crown prince Wednesday on oil attacks 10
Latin America	7	

GLOBAL FUEL OIL CRACKS

Month 2

Nov

\$/mt

530.750

514,500

512.250

232,250

\$/barrel

74.850

31.000

F0F5082

FOFF002

AMRAM02

AMREM02

AUSAM02

AUSBM02

Chanor

+18.660

+18.660

+7.260

-0.800

(\$/b) - Cash 380 CST S'pore - 3.5% FOB R'Dam Barge - USGC HSFO



20-Jun 03-Jul 16-Jul 29-Jul 09-Aug 22-Aug 04-Sep 17-Sep Source: S&P Global Platts

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0.5% FOB Singapore cargo

0.5% FOB Rotterdam barge

0.5% FOB US Gulf Coast barge

0.5% vs. 3.5% FOB Rotterdam baro

0.5% vs US Gulf Coast HSFO barge

0.5% FOB Fujairah cargo

MARINE FUEL 0.5% DERIVATIVES, SEP 17

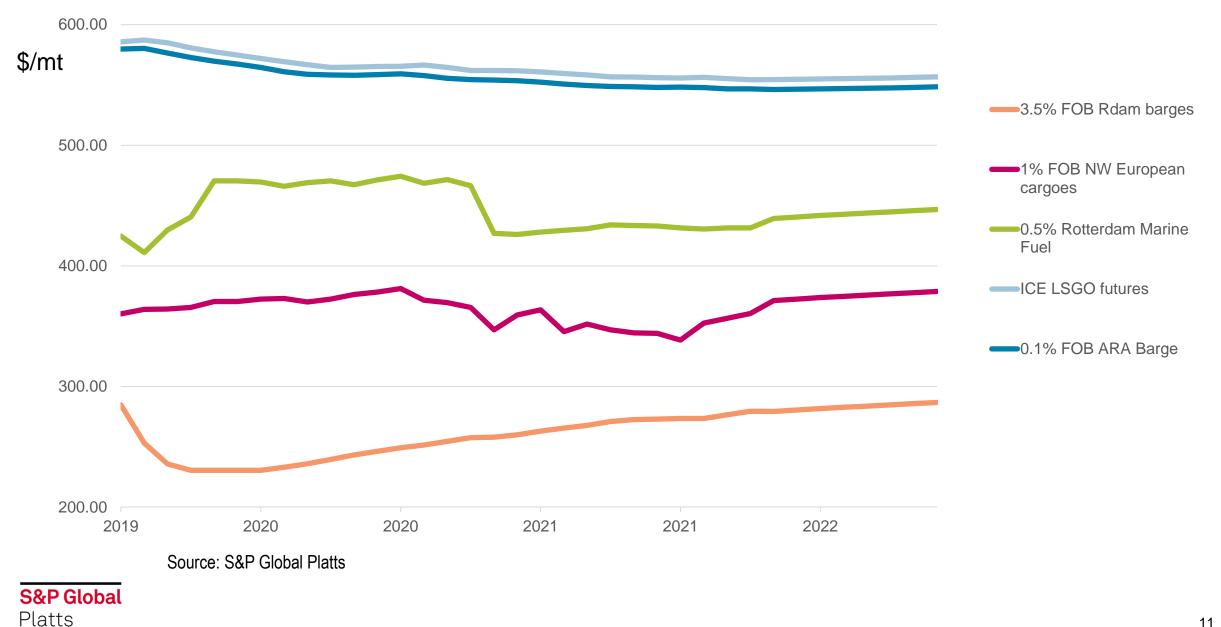


Some refiners already have 0.5% available

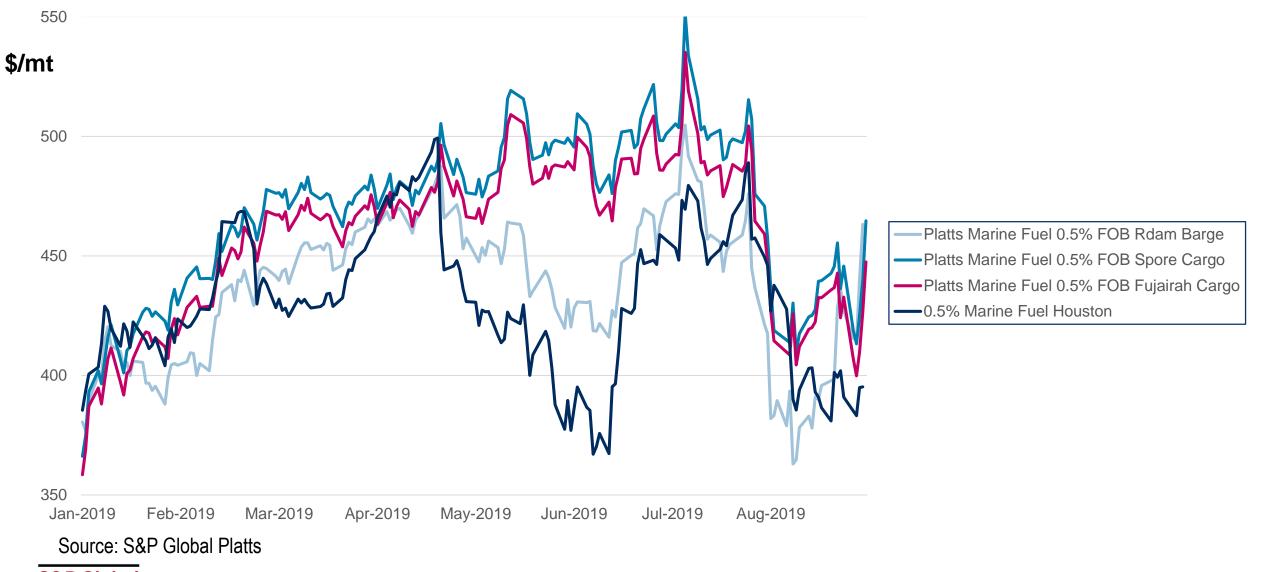


Source: S&P Global Platts

Wide flat price spread remains on the European forward curve



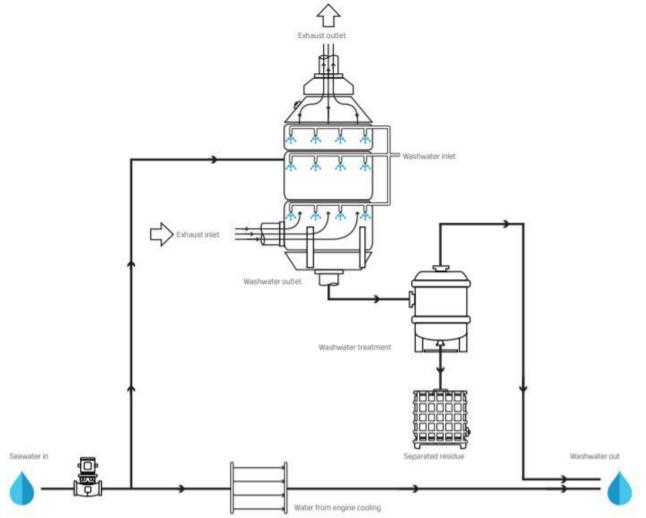
Global 0.5% marine fuel assessments



Option 2: Fit a scrubber



A common* open-loop scrubber design



- *70% of all scrubber installed or on order are open-loop
- Open-loop banned in Singapore, China, Fujairah

Source: S&P Global Platts Analytics & Exhaust Gas Cleaning Systems Association

Scrubber uptake

- Pace of scrubber additions has increased
- We expect 2,400 ships to have scrubbers installed on January 1, 2020.
- Total consumption: 600 MB/day HSFO

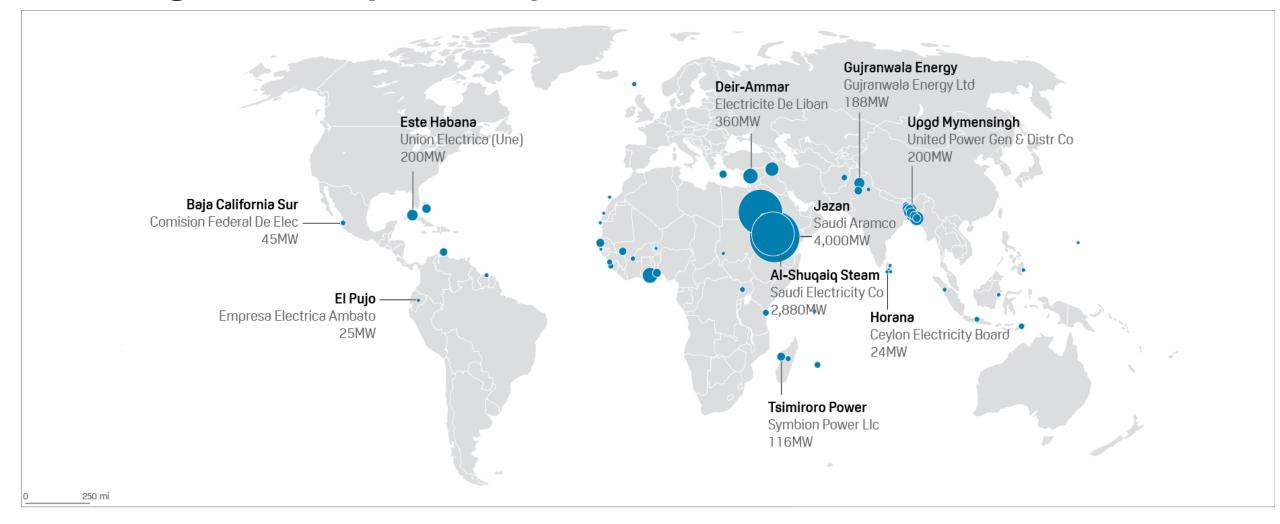
Source: Platts Analytics: "Making Waves Supplement IV: August"

Scrubber uptake

- Scrubbers increase to over 3,500 installations by December 2020
- Over 4,500 by December 2021
- Including 54 of 79 VLCCs currently on order

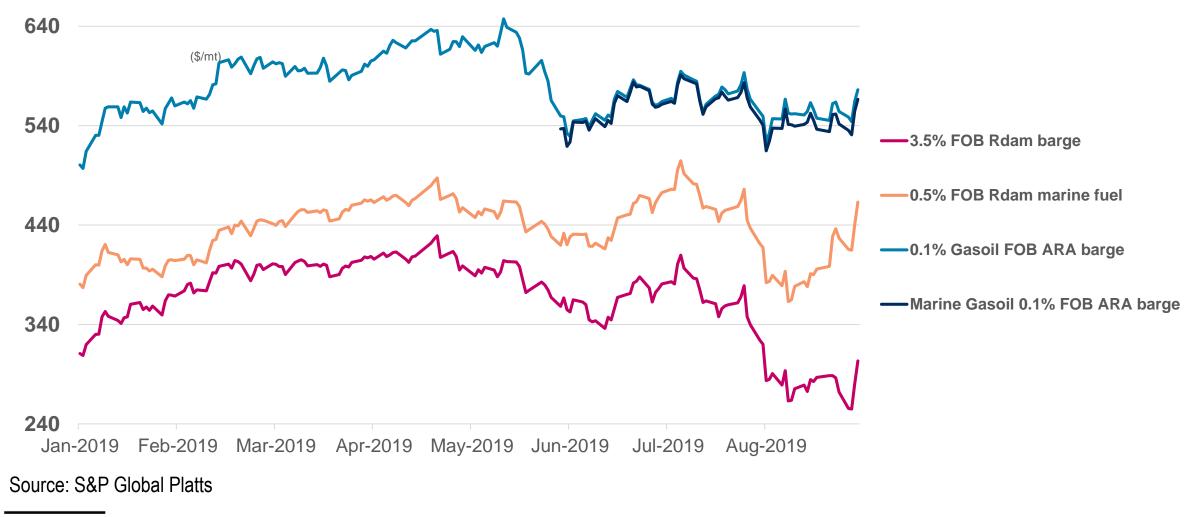
Source: Platts Analytics: "Making Waves Supplement IV: August"

Fuel oil's new buyers – power generation demand **Power generation plants expected to come online**



Source: S&P Global Platts Analytics

Platts European marine fuel assessments in 2019 (\$/mt)



Scrubber reliability

Scrubbers were not invented in 2019

- "Ferry operator DFDS has just celebrated 10 years of continued scrubber operation on *Ficaria Seaways...*"
- "During this period the scrubber exceeded 55,000 working hours.
- For the 12 months ending June 30, 2019, results show a downtime of 0.0012%"



Source: Lloyd's List, VesselFinder, Clean Shipping Alliance

Worst Case Scenario: Failure



Option 3: Build new ships



ESL Shipping's Viikki & Haaga: LNG-powered Handysizes

- Sinotrans & CSC Jinling Shipyard 2018
- 25,600 dwt
- LNG-powered
- 57% reduction in CO₂
- 92% reduction in SO₂
- 25% for Nox
- Price: ~\$30m each



Source: ESL Shipping

The Oshima Ultramax 2030



- LNG Fuel
- Battery, with shaft generator
- Solar panels
- Hard sail
- Claims to have a 50% better EEDI (Energy Efficiency Design Index) than comparable vessels
- Price: not listed

Case Study: Indonesia

"Indonesia needs more time to comply with global rules requiring low-sulphur marine fuels... The national interest should be put forward before the implementation."

Ministry of Transportation (Indonesia), July 2019



"Indonesia will enforce the 0.5% sulphur cap regulations from January 1 2020 on all Indonesian-flagged vessels both for domestic and foreign shipping."

Ministry of Transportation (Indonesia), August 2019



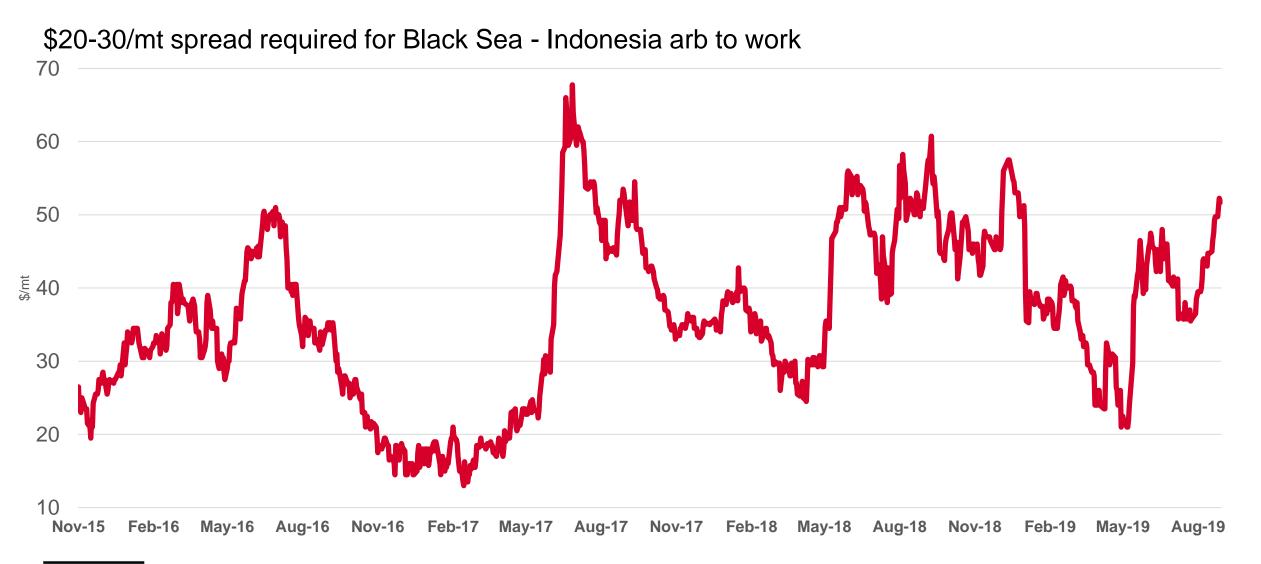
Indonesia

- Largest importer of wheat in the world in 2019
- Imports from Australia, Argentina, and the Black Sea
- Australian wheat will have difficulties retaining competitiveness over Black Sea above the \$25/mt FOB price spread

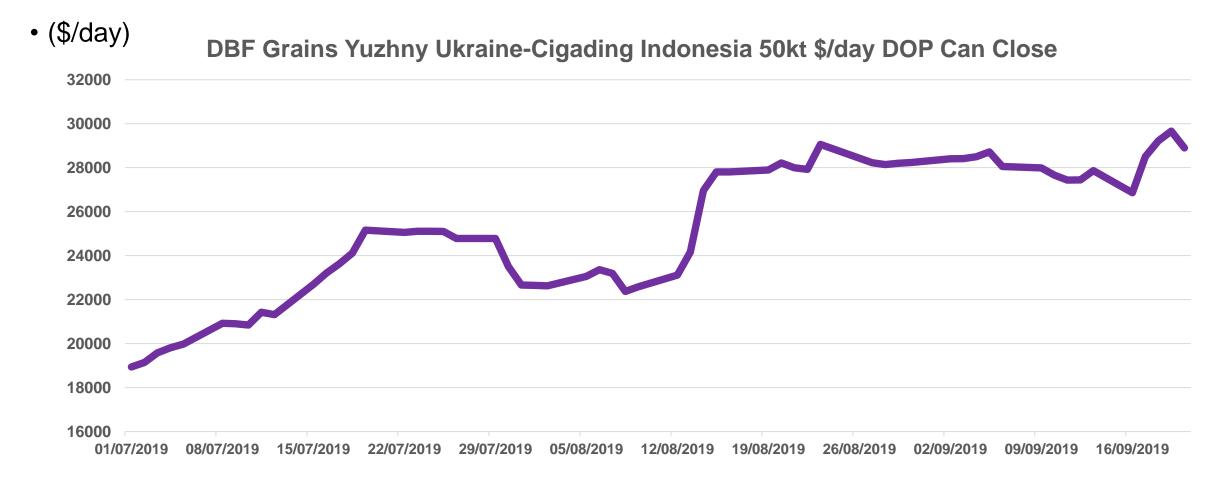




FOB price spreads: Russian Wheat 12.5% vs APW Wheat

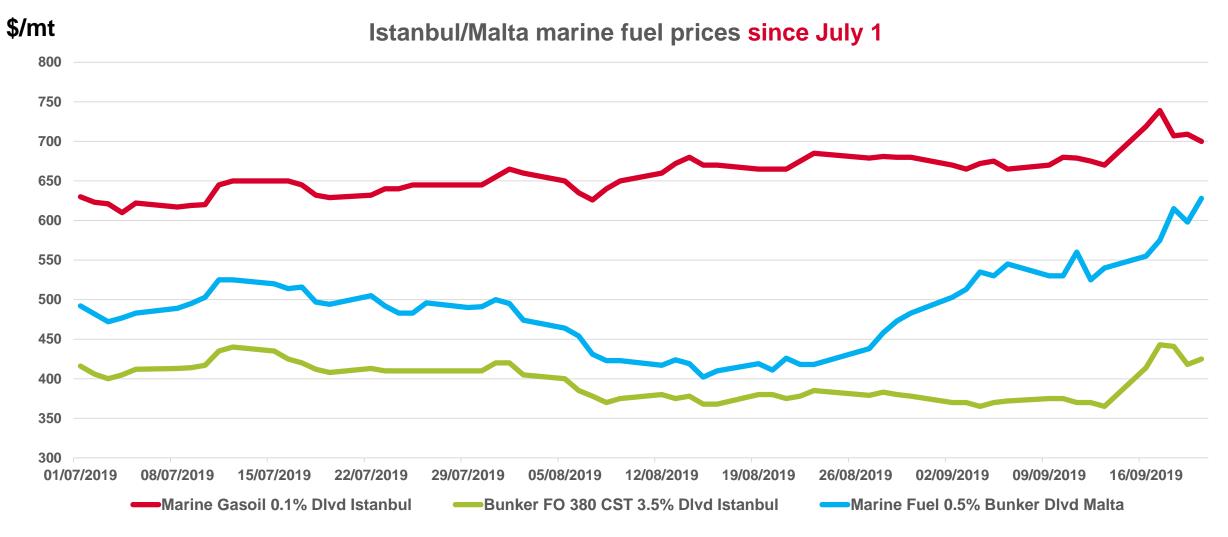


Yuzhny to Cigading, 50,000 mt grains time charter equivalent



Source: Platts

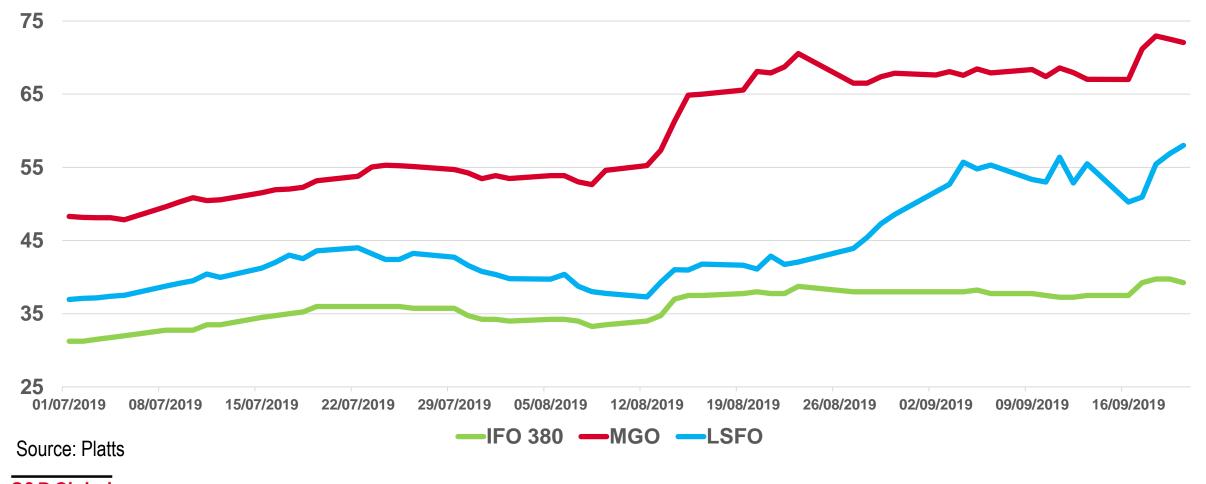
Marine Gasoil vs IFO 380 vs LSFO 0.5%



Source: Platts

Yuzhny to Cigading, 50,000 mt grains freight

\$/mt Voyage rates (\$/mt) using different fuels



How will IMO 2020 impact Black Sea grains?

- Freight will rise significantly, favouring shorthaul voyages
- Increase in 'locally-sourced' grains for SE Asia market, such as APW wheat
- Disruption: Russia and Ukraine increasing cultivated area means more grains for export: lower FOB values can offset the freight increase
- Emerging trade flow from Argentina could be cut short, but given their dominance on wheat supply, Russia and Ukraine here to stay



Contact & Further Reading



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http://plts.co/xzfm30pB3BJ

fuel bill	ll shipping cope with s from IMO 2020?
Shipping special re May 2019	port
Lead author Alex Younevitch, Ma	inaging Editor, Freight Markets
Editor Alisdair Bowles	

S&P Global Internet Shipping

http://plts.co/3ctM30pB3EW

