Invitation



We would like to invite you to our Environmental Day, covering topics around Scrubber Systems, Ballast Water Treatment Systems and finally future Hybrid Fuels.

The event will take place on the:

14th of November 2018 at the

JUFA Hotel Hamburg HafenCity

Versmannstraße 12/14 20457 Hamburg

Starting at 13:30 pm with the first presentation and will

End at around 17:30 pm o'clock

Refreshments will be served during the event.

All participants will be entered into a prize draw



with the luck winner receiving dinner for two in a nice location in Hamburg!

Please let us know about your attendance by answering this email (<u>veranstaltung@wartsila.com</u>) until 06st of November 2018. Or register by phone: 040-75 190 268 (Mrs Regina Krause).

Any of your colleagues who are interested too are very much welcome, indeed. In this case we ask them to register by name as well. For any further questions do not hesitate to contact us.

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AGENDA



13:00 Welcome & Coffee

13:30 Low	Sulphur	Cap 2020	(1h)
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Lloyd Register – Luke Shu & Sören Skive – 20 minutes

- Introduction of applicable Statutory and regulatory rules
- Available Alternatives for Compliance
- Decision Criteria to identify best suitable solution

Wärtsilä – Toni Stojcevski – 30 minutes

- Scrubber basics
- Criteria to consider impact on maintenance
- Acceptance of Scrubber operation in port areas

Lloyd Register – Luke Shu & Sören Skive – 10 minutes

- Requirements towards Scrubber retrofits, e.g. Scrubber System, Vessel
- 30 minutes
- Questions & Answers time
- · Short break & Coffee

15:00 New Fuels - Hybrid Fuels (1h)

SHELL - Marcus Schaerer - 40 minutes

- Fuel availability from 2020 on: HSFO, LSOFO (blends vs distillates), MGO
- Alternative fuels (LNG, LPG, methanol, biofuel, hydrogen...) and market news
- Fuel Cost
- · Blended fuel quality impact on engines
- Environmental benefits

20 minutes

- Questions & Answers time
- Short break & Coffee

16:00 Ballast Water Treatment Systems (1h)

Lloyd Register - Luke Shu & Sören Skive - 30 minutes

- Introduction of applicable Statutory and regulatory rules and its timeline
- · Available Alternatives for Compliance, e.g. de- harmonizing of IOPP
- On board Test methods to proof compliance
- UV Filter versus EC systems, e.g. specifics to be considered

Wärtsilä – Lars Bo Kirkegaard – 30 minutes

- Requirements on Retrofits and new BWT Systems by IMO, Class, USCG
- 30 minutes Questions & Answers & Announcement of winner "dinner for two"



