VPS TALKS:

DATA

Creating global fuel quality transparency

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Following the introduction of the IMO2020 regulations aimed at reducing sulphur oxide emissions in shipping (the global sulphur cap), VPS has observed a substantial change in the way that compliant fuels are being produced.

These very low sulphur fuel oils (VLSFOs) differ from traditional high sulphur fuel oils (HSFOs) in that they are produced as blends containing varying degrees of residual and distillate fuel components.

As a result of the implementation of IMO2020, the sulphur content of the majority of fuels available on the global market has been significantly reduced. This is great news for global environmental health, as emissions from the burning of marine fuels can be directly attributed to numerous human health hazards.

By lowering ship-related pollution through the global sulphur cap, ship-related premature mortality can be reduced (J. Ji, The Lancet, 2020)

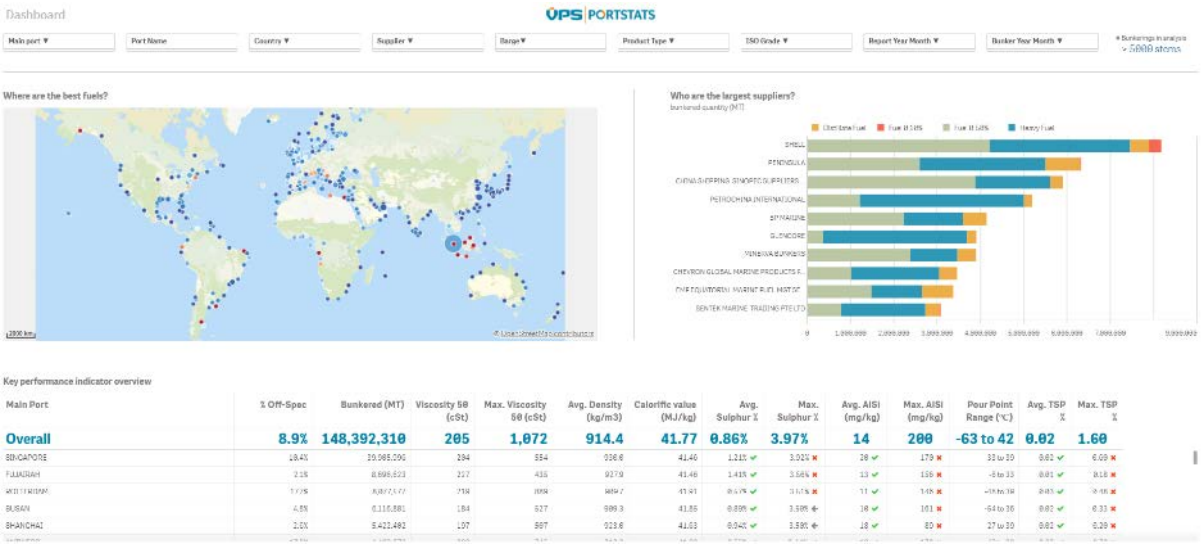
Following the introduction of VLSFOs, the number and type of fuel off-specs have also changed significantly. With traditional HSFO, the majority were due to commercial parameters such as density, viscosity and water content. However, with VLSFO, we have observed a surge in off-specs due to operational parameters, such as pour point (PP), total sediment potential (TSP) and catalytic fines (AlSi).

These off-specs can lead to serious operational problems onboard vessels, such as damage to the fuel treatment system, and sometimes even to the engine itself. Some of the operational issues that VPS has encountered include abnormal purifier operation, blockage of filters and of auto-clean backwash filters. In the

worst-case scenario, a vessel can even lose propulsion and risk the safety of life at sea (SOLAS).

In order to help prevent these issues, VPS provides transparency regarding the quality of the marine fuels that are delivered and tested by us on a daily basis. This is achieved through our recently launched online data analytics platform, PortStats.

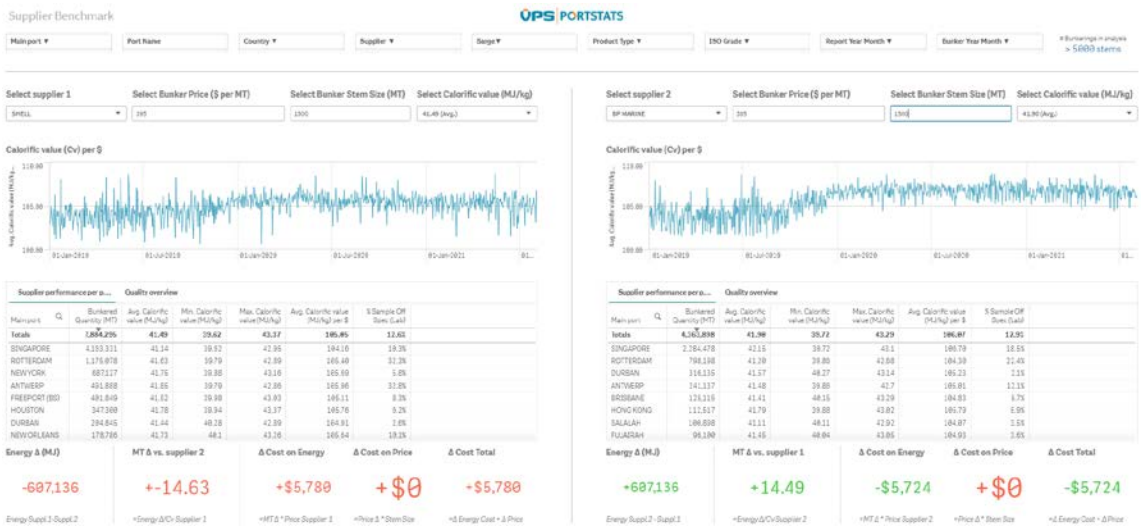
PortStats draws data from the extensive VPS marine fuel quality database – the world's largest of its type.



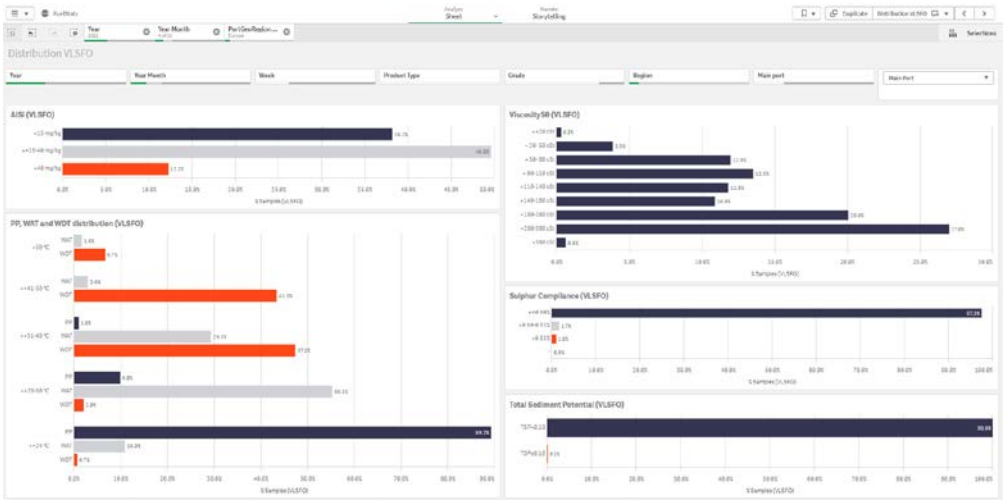
The PortStats platform also offers fleet managers, technical managers and fuel procurement managers the tools they need to assess the quality and value of marine fuels in any port, from any supplier, anywhere in the world.

As long as VPS has tested bunker samples in a certain port, the data is included in the platform. This data is updated daily so our customers always have access to the very latest fuel quality information.

PortStats is extensively used to anticipate fuel quality issues, as well as to compare various fuel suppliers. Bunker buyers use this service to optimise their fuel procurement process by looking at more than just fuel price, but also the off-spec rate of the fuel supplier in a certain port. PortStats also enables customers to benchmark the calorific value (energy content) of various fuels from suppliers, in order to make the best 'bang-for-the-buck' decisions.



For technical managers, the PortStats platform allows tracking of all ISO8217 quality parameters, and in near real-time. Furthermore, the platform offers tracking of proprietary VPS quality parameters, such as the Wax Appearance Temperature (WAT).



Other users also benefit from this platform. P&I Clubs, in particular, have been fervent supporters of feeding data from PortStats into their own digital platforms to assist their members' claim process. Additional customers include governmental organisations and supranational organisations (e.g. the IMO, BIMCO).

Some non-governmental organisations and institutions have also subscribed to PortStats to monitor emissions from shipping in different areas.

VPS has developed PortStats to help support our customers in making better data-driven decisions.

We have seen for ourselves there are many areas outside our industry that can benefit from the data delivered through PortStats. This is especially true when fuel quality data is combined with voyage and fuel consumption data.

At VPS, we are continuously expanding our digital platform by collaborating with specific partners within our digital ecosystem. Capabilities currently under development include live bunker fuel pricing, machine learning and emission monitoring – and there is much more on the horizon.

If this article has piqued your interest, please feel free to contact us for a live demonstration of the PortStats platform so you can experience its power for yourself.

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