

SULPHUROUS MIASMA

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It is all over earth's surface: across oceans and on terra firma, in dales, plateaus and what not. Felt that air temperature drops when leaving cities and towns towards villages and glassed buildings reflect and heat surroundings? Pollution and heat will not go away that easily. For as long as dregs of oil processing is left, and they can be used/have to be used for economic benefits, and for as long as internal combustion engines are around, we will have to learn to live with downsides while pursuing solutions for better tomorrows: for generations to come, sentients and environment.

For peak oil predicted for 2020 is passed without any impact as more oil (and gas) was discovered, old shut down wells were reactivated at better pricing margins, and fracking -even beneath cities- have driven up sweet usable oils at prices above say 60\$/b plus. Now that UN's IMO's MEPC's vision of '16 for

2020 deadline to implement a global sulphur limit of 0.50% m/m (mass/mass) is upon us, its bang is worth a visit. Significant reduction from the 3.5% m/m global limit to 0.5% is for beneficial effect on environment and on human health of those people living in port cities and coastal communities beyond existing offshore emission control areas (ECA) where in limits have been prevalent for a while on regional bases.

Shifting from sail to steam was a historic move, and steam to IC engines another. Along with developments in size and technology, economy of scale drove the process further, fuel oil aka furnace oil for main engines with longer strokes guzzling oils of worse viscosities over the decades and replacing diesel oil first as blends for power generation before going FO! Now that there is hue and cry about the effectiveness of 2020 deadline in compliance as well as in results, it is worth the revisit for alternate fuels as slow steaming/speeding is being called for.

First things first! Is sulphur emission avoidable at any cost? No and niet! Was 2020 in hindsight too early and optimistic? Nay is a fair answer. The industry, both the refiners and the technology developers -that owners/managers/investors are forced to use, had enough lead time to create, market and install. The problem as usual with very cost conscious shipping is payback time, mainly for oldies. Of course, one can't blame shipping for postponing decisions to suit -dry docking and themselves- as alternatives were hoped for. Was scrubber a good idea or a solution? Yes and no as per the rumblings that are heard. An extension was hoped for but didn't materialise. As for risks,

both commercial and operational -who is to be proceeded against for non-compliance: master, charterer, ship-manager or owner, or for that matter even the flag state that had approved?

Have the bunker suppliers and refiners made honest efforts? Certainly one can't blame and pin down intermediaries who trade -buy and sell- defined products, except when they mix and blend to create margins, in which case are local governments to be taken to task for administrative, licensing, and or supervisory failures? Refineries? That's a different kettle of fish. They don't waste a drop. Could they have done better with existing technologies like hydrodesulphurisation, catcracking or improved processes? This may remain unanswered for secrecy, costs, timeliness etc. They do have to refine and dispose of the worst crudes through its products, and where else but off shore at sea that the dirtiest oils can be burned off well away from out of sight and smell from shores and beaches? Like Coal is going to be with us, even without liquefaction, as it is cheap and energy demand is high and increasing for power generation from developing/less developed countries.

Next things next! What can shipping realistically pursue as alternatives? Let us not rule out any dislikable options to start with. Slow steam? Why not? What is the tearing hurry for most seaborne goods -inventory transit costs not omitted- except for perishable/seasonal consumer goods? 13-15kts has been a standard speed for bulkers both dry and wet. Why not reduce ship sizes against the conventional wisdom of economy of scale? Worth the results! It will help development along many a coast increasing the need for more ports along coasts -every 100miles apart in India- reducing dredging, generating employment for local communities -with macro and micro multiplier and trickle down economic benefits, negating urbanisation to start with, as ports and terminals have already reached their maximum size for commercial/technical and realistically insurable limits.

Regardless of ideologies and philosophies, for any idea to work, it must serve socio-economic fields and have political blessings through employment and growth potentials. As such, it is better to shift steel industries to new high volume consuming countries with Iron ore like India and Brazil from Japan and Korea that are heavily import dependent for all ores, coal etc, so that finished steel in smaller sizes need not be hauled back again. With current low interest cheap money and capital surplus -accumulated through import led industrialisation, it is worth relocating old steel mills itself, reducing tonne-miles of sea trade and its pollution. OPEC turning to refining for better returns is a case in point, for development too to meet socio-economic necessities as oil production drops.

The ballast leg of large bulkers over long distances is criminal from carbon footprint point of view. For Boxships it is ok, but not so for tankers too -not much alternatives though- as only very few can switch grades between import and export hauls like OBOs.

Apart from smaller slower ships per se, the derived benefit would be smaller engines/propulsion requirements enabling easier use of wind and solar -alone or combined, as and when possible- backed up by synchronised/alternative propulsion with LPG/LNG and Ammonia being pushed as a saviour. In such context the current cacophony -us and them sourness between developed and developing countries aside-in the media against any and all alternatives not excepting LNG, may be taken with tons of salt whilst pursuing alternatives like Hydrogen on war footing.

PS: Mariners can by networking with friends, families, neighbours, colleagues, housing estates and calling for flexi-working hours contribute to saving/preserving environment by minimising usage of natural resources causing pollution by turning electricity and water off when not really required.