



Capital Link Shipping Weekly Markets Report



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IN THE NEWS

Many abbreviations, much confusion

In the upcoming week, the Marine Environmental Protection Committee (MEPC), part of the International Maritime Organization (IMO), in turn part of the United Nations, will be meeting in London, UK. The finer points of IMO deliberations are the stuff of shipping geeks, rather than investors, but once the IMO finally agrees on something- the result will be an addition (or an amendment) to international diplomatic conventions that set down the legal framework for shipping. Then it's up to each shipping register (sometimes called the "Flag State", examples are Panama, Liberia or the Marshall Islands) to implement the IMO's dictates. The MEPC's work has led to double hulled tankers, ballast water treatment, and- through IMO guidelines on energy efficiency (which comes down to reduced emission of "greenhouse gasses"- CO₂), to eco-vessels. Restrictions on sulfur and nitrogen oxides are also the result of measures (a polite way of saying "rules") agreed by the IMO.

Energy efficiency is on the agenda this week in London, as the IMO grapples with the practicalities of actually monitoring fuel consumption, and reporting it to regulators. An important part of the discussion will concern the Energy Efficiency Design Index (EEDI), which has been the mandatory benchmark, since 2013, for measuring energy efficiency obtained through a combination of hull design and propulsion system measures- mainly designing vessels to run on lower speeds. Since 2010 to 2013 was a time of oil prices at or near \$100/barrel (and intermediate fuel prices somewhere around \$600/ton) and a time of overcapacity in most if not all of the deepsea shipping sectors, slowing down vessels (a way of lowering the deliverability and therefore making oversupply more palatable) and, in the process, burning less fuel made economic sense. The lower fuel price environment in early 2015 brought about a re-thinking of slower steaming- especially in the tanker trades where quicker ballast treks mean more days earning \$60K /day or more. In April, with rising oil prices and hence rising prices for vessel fuel, owners were talking less about speeding up their vessels.

The rules surrounding the EEDI and the analog for pre-2013 built vessels- the Ship Energy Efficiency Management Plan (or SEEMP) are up for discussion at the IMO meetings. According to the rules currently in effect, ships are meant to get more efficient, over time. The exact pathways towards greater efficiency, along with protocols for actually measuring improvements, are on the agenda for this week's meetings. From client work that I've done on these subjects, I can tell the readers what they probably already know- the whole area is full of inconsistencies and confusion. At present, the European Union is at odds with the shipping industry, as proxied by leading trade associations, over the path towards monitoring and enforcement. Part of the discussions will include methods for measuring actual fuel consumption (which begets emissions of CO₂).

There are two tracks for analyzing efficiency data- in efforts to lower the industry's overall emissions of CO₂ one coming from the IMO, and one coming from a segment of the industry. In presenting its recommendations to the various governmental reps at the IMO (who actually vote on "measures"), its MEPC has engaged a team of academic experts and maritime consultants to prepare a "bottoms up" estimate of actual greenhouse gas emissions. The availability of Automated Information Systems (AIS) ship position data, on a massive scale (because its use is mandatory for all deepsea ships), makes it possible to build up an approximation of how much fuel is used, ship by ship (hence bottoms up) on a worldwide basis. Using a concept called the Energy Efficiency Operational Index (EEOI), which seeks to consider whether a vessel is hauling cargo or empty ("in ballast"), the experts' report seeks to aggregate estimates of fuel consumption (which is then used to derive an estimate of CO₂ emitted by vessels) on a global scale.

A group of large industrial cargo interests (not regulators) have come up with a different measure, the Existing Vessel Design Index (EVDI)- with the term actually trademarked! This measure looks at individual vessels' theoretical

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fuel consumption (then tied to the CO₂ emission), but does not look at actually trading patterns. The raw data is then crunched in statistical sausage mill (which includes a logarithmic transformation, sort of like grading on a curve) to arrive at grades ranging from "A" (the best), to "G" (the worst) with the broad middle of the normal distribution (after fermentation with logarithms) tagged with "D". According to the scheme's promoters, shipowners do have the ability to refute or qualify their ratings. The large charterers behind the EVDI can then aim to charter the "A" vessels- those with the lowest emissions of CO₂.

As is often the case with such matters, the technology exists to monitor fuel consumed (and to report back on it) but industry paranoia about reporting "commercially sensitive information" has been an impediment. As the European Union seeks to impose its own dictates on vessels calling at its ports, real monitoring of real vessels (which moves from the abstract, albeit with robust methodologies, to the more exact) is but one component of its plan.

With possible IMO adjustment of the EEDI timeline in the offing, there has been some sniping between the diverse stakeholders. In a paper prepared by a Netherlands-based university, supported by "Seas at Risk" and "Transport & Environment" (in turn, both tied a group called "Clean Shipping Coalition"), with support from the "European Climate Foundation", the suggestion was made that vessels design efficiency (another complicated measure) peaked in the early 1990s, and went retrograde in the decade 1990 to 2000, as vessel designs emphasized greater cargo intakes. These groups pointed out that certain ships, with good designs, are already meeting the 2020 standards.

The big shipping trade associations (who do not want tightened standards from this week's IMO meeting) labeled this report- actually based on the same data sources as the IMO's studies of Greenhouse Gasses (or GHG), as "fanciful." Indeed, the university's methodology does not adjust fuel consumption for various engine types, nor does it recognize that certain vessel fuels produce less CO₂ than others.

The paranoia alluded to above contributes to measurement difficulties that are mirrored in the real marketplace. In a perfect world, owners' investments in "efficiencies" should be rewarded, dollar per dollar, by charterers. But real life is not perfect. In time charter trades (where charterers pay the fuel bills), vessels consuming less fuel are often observed to earn more in \$/day- but differentials are not consistent. In the voyage charter market (the domain of the "A, B and C" crowd, or the Worldscale crowd that charters tankers), owners with poor fuel consumption can't extract a little extra -rates are determined by pure supply and demand for a particular cargo. In oversupplied markets, the rate pressure goes in one direction- downward. But, with a grading scheme- at least in drybulk (so far), vessels best able to provide the most attractive \$/ton freight are readily identified.

It's always interesting to see how freight market strength, or not, impacts owner and charter behavior- with important implications for energy efficiency (and CO₂ emissions). The Seas at Risk group, mentioned above, authored a 2012 study on the feasibility of Compulsory Slow Steaming- which is a frightening prospect. Likewise, drybulk charterers are blessed, at this juncture, with their ability to choose the most efficient (consuming least fuel) vessels. But, when the tables turn, as they will at some point (apologies here to Goldman Sachs who see the drybulk upturn in 2020), what then?