

Proposed IAPH GHG performance indicator

GHG points are out of 40 and are scored by using fuel with a lower well-to-wake greenhouse gas intensity than the 2020 average from the MRV, this baseline will be updated to be in line with the IMO global fuel standard when it is launched. For fossil fuels, default fuel intensity values will be used for the whole well-to-wake calculation. For bio or RFNBO fuels the well-to-tank fuel intensity values can be found in the certificate of sustainability provided on purchase of the fuel, the tank-to-wake values are standard values which are based on engine type and the chemistry of the fuel burnt.

The intensity is measured in gCO₂eq/MJ, meaning the well-to-wake grams of greenhouse gases in CO₂ equivalent units per mega joule of fuel. This means that the warming effect of emission of other non-CO₂ greenhouse gases, namely N₂O and CH₄, are included in the calculation in terms of their impact relative to CO₂. The standard IPCC 100-year global warming potential conversions are used.

The calculation is performed as follows:

$$ESIGHG = 100 \times [(\text{Energyfuel} \times (1 - (\text{weight avg GHG} / 91.16))) + \text{Energyelec}]$$

where:

weighted avg GHG - the mass weighted average CO₂e fuel intensity of all bunkered fuels minus any CO₂ captures when the verification process for carbon capture is sufficient to include its input in the calculation, g CO₂e/MJ

Energyelec - the proportion of energy used from all OPS & solar, unitless.

Note that if the Fuel Intensity > 91.16, then 91.16 is used. That is to say that bunker delivery notes where fuel intensity is over 91.16 gCO₂eq/MJ are not penalized with a negative score.

As of September 2024