

# Fuel savings and emission reductions in the Subsea Construction Vessel Fleet by application of Energy Storage Systems

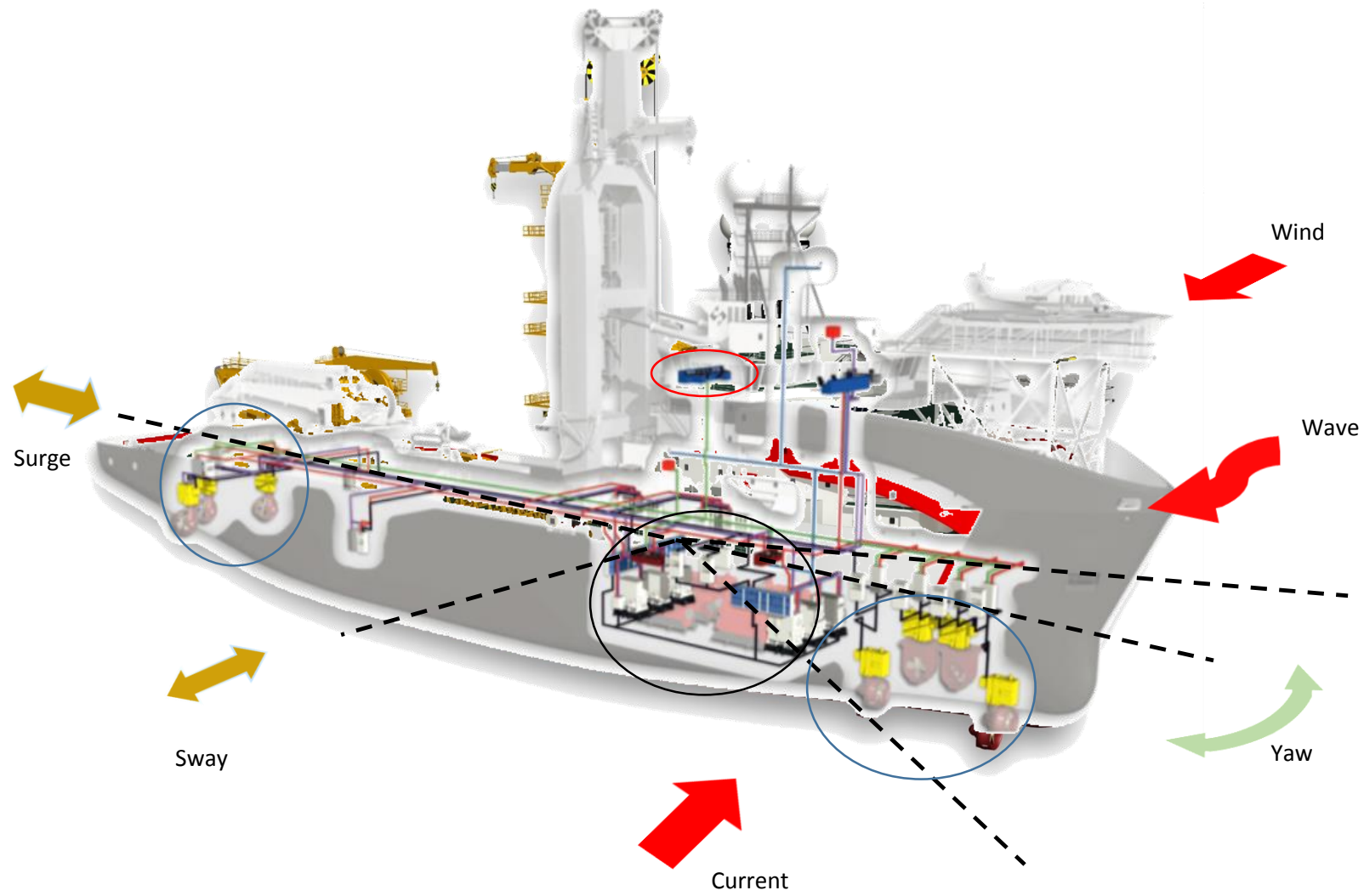
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**THE TECHNOLOGY  
INNOVATOR.**

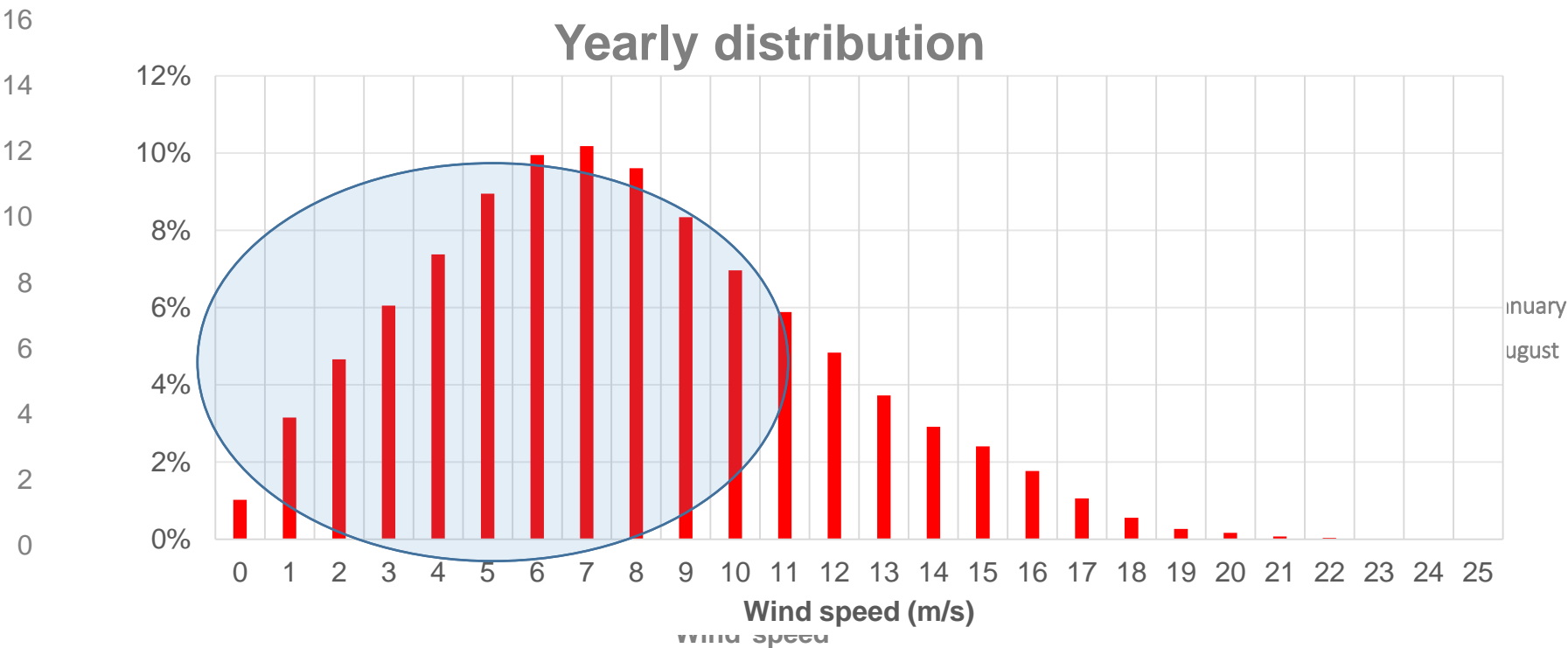


# Dynamic Positioning = Inefficiency





# Wind speed distribution







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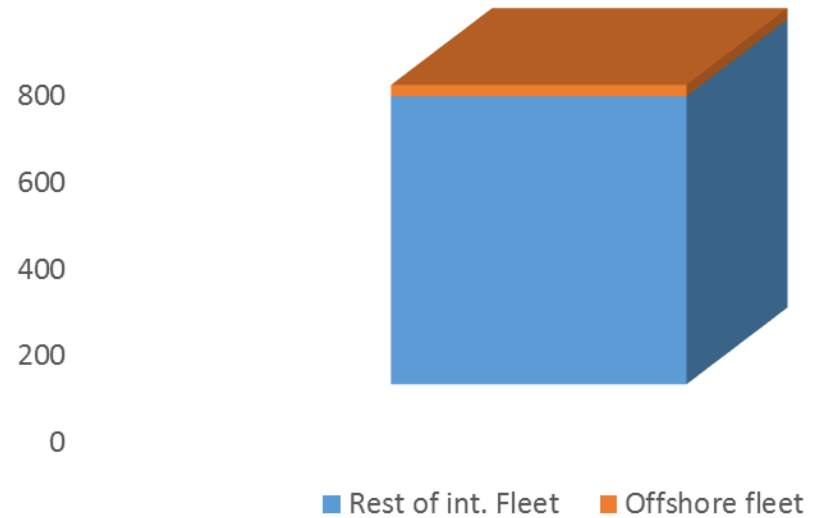
CO<sub>2</sub>

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# Co2 Emissions Offshore Fleet

Units: Mln tonnes Co<sub>2</sub>



\*S.B. Dalsoren et al.: Emissions and impacts international fleet

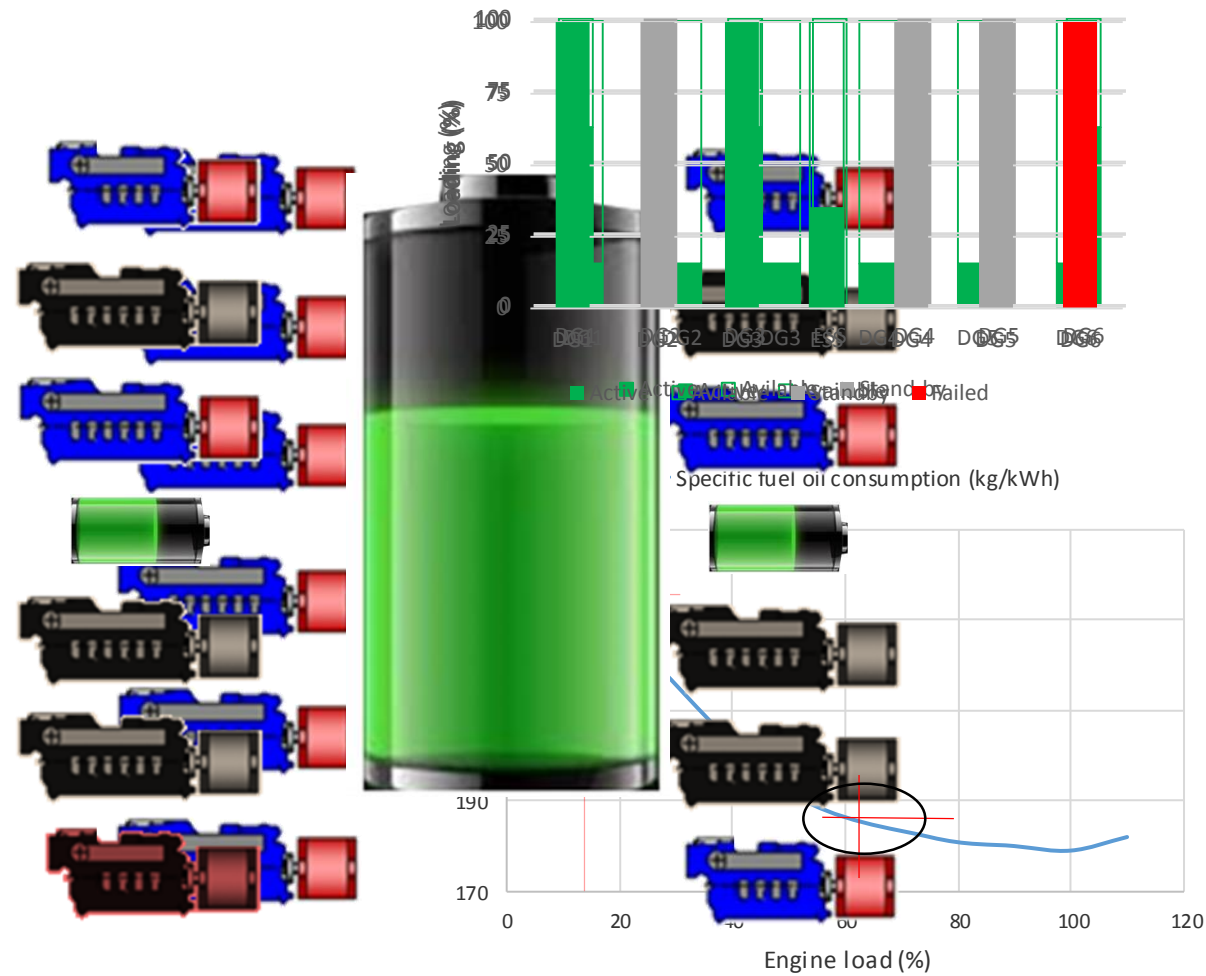
Offshore contribution is 3.8% (**26 mln tonnes!**)

5 x

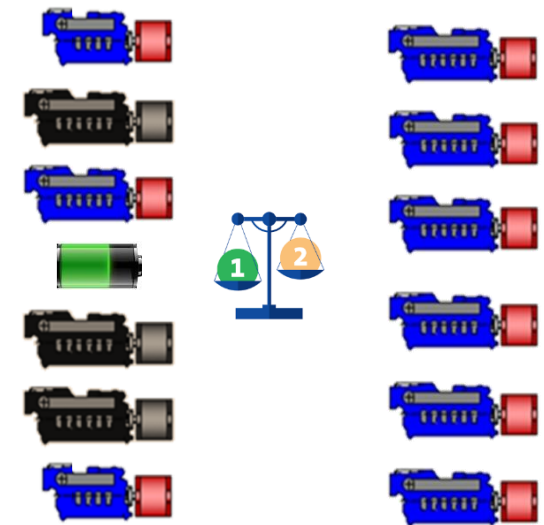
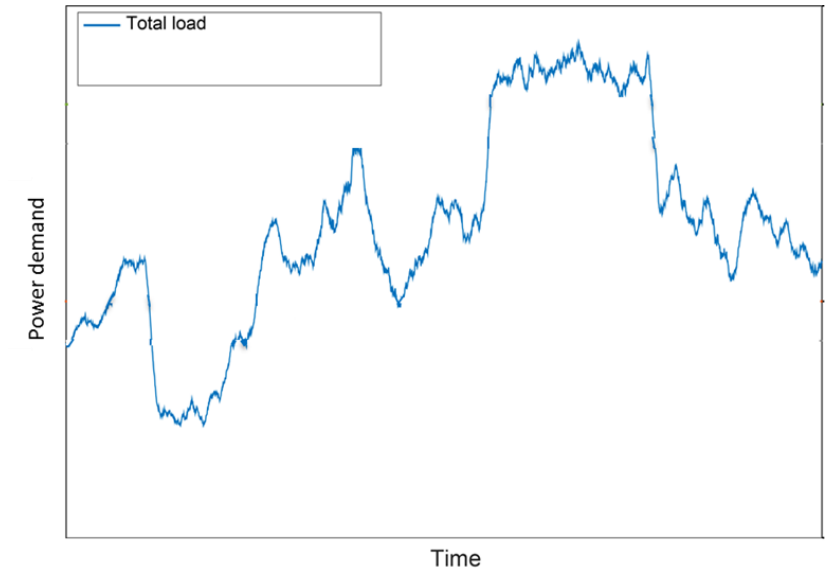
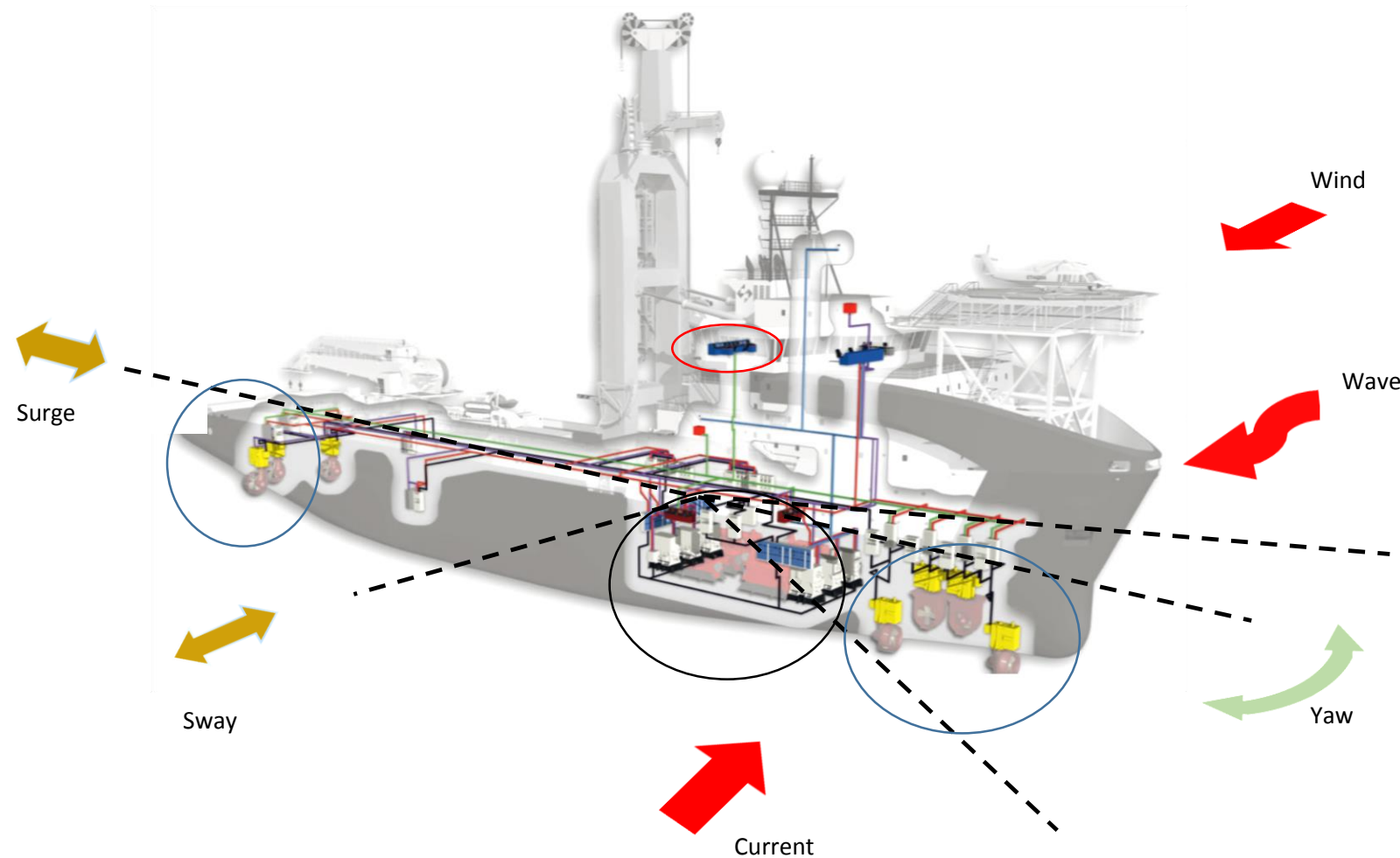




# Energy Storage Systems

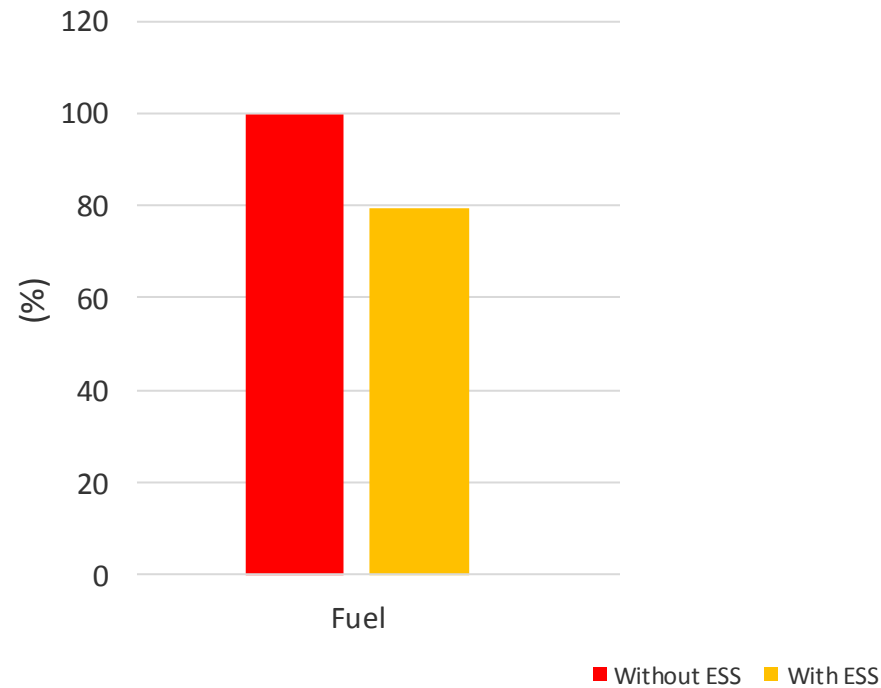
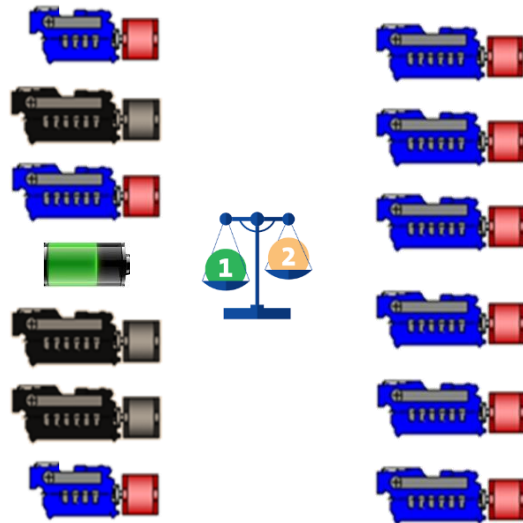


# Simulation Tool: Design Optimizattion





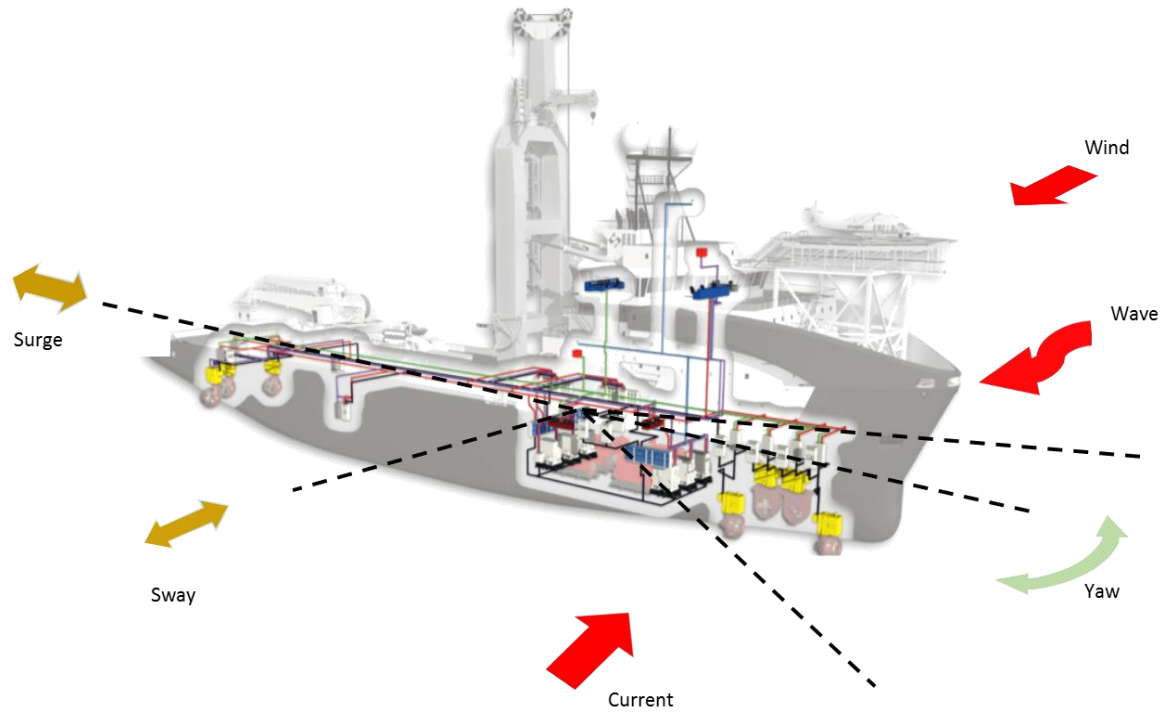
# Simulation Results: Added Value Energy Storage Systems





$\leq 1$  Year

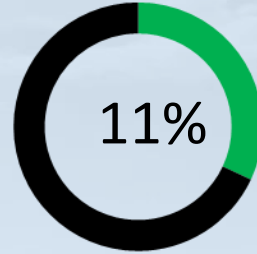
# Operation Planning Phase



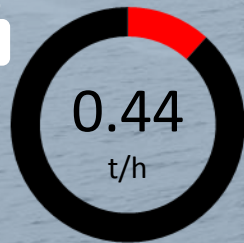
# Advisory Tool Onboard



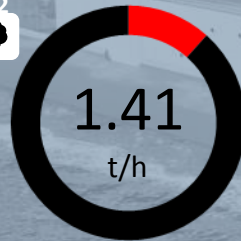
SAVE FUEL !



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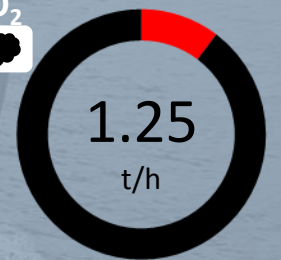
CO<sub>2</sub>  
☁️



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Questions?