



AVANTIS

The Challenge of Green Compliance



AVANTIS

Our vision at the Avantis Group is to be the foremost global contributor to smart and environmental engineering, specifically supplying Clean Technology, Power Solutions and Asset Optimisation services.

Our team are experts in providing advanced technological solutions, particularly in retrofitting of new environmentally friendly clean technology and reengineering current assets to have a greener and more efficient yield. Our experience, innovative approach and continued research enables us to add value for our clients by being specialists in the planning, design, construction and management of such projects.



Technical and commercial evaluation of the different technologies is challenging as some of the new technologies are so pioneering that have not had a traditional step change integration process and have not had the luxury of developing over time with continuous small improvements which enhance the product on a continuous basis. This of course also minimises the risk both technically and commercially.

Investment raising capital

IRR and ROI is difficult to accurately quantify which is difficult for owners and operators to raise investment for the capital investment if required. The reality can be very different than that stated by the OEM and owner and managers need to exercise prudence which may cause issues with regard to raising external capital for the investment if of course it is required.



OPEX costs

Certain OEM manufacturers will offer some guidance however owners and operators need to be aware that it is likely the reality will be different than that stated as part of a sales pitch presented by the OEM.
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Service life and overhaul schedules

The running hours and or service life of the capital equipment before major service upgrade or renewal can be very different than that stated by the OEM and owner and managers need to exercise prudence and fully vet and audit any claims that are made by the OEM.



Startup companies

Some of the start up technology companies will struggle to support owners and managers with regard to the engineering required to integrate their equipment into vessels, which will mean most retrofits will rely heavily on 3rd party engineering houses or owners and managers will have to create their own in house engineering design department.



After Sales Technical Support

It is clear that a lot of the startup technology companies will struggle to support the ship owners and managers in the event the products face any problems with the equipment due to them not having a mature supply chain and after sales support team.

A global after sales support team would be essential with critical stock being available at each support centre to ensure the vessels are not left stranded and unable to trade in the event of failures of equipment .



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Warranty or Guarantees

It is known some of the startup business that sprang up after the ballast water legislation was announced have since demised.

Therefore great care must be taken to thoroughly evaluate any guaranties or warranties and fully understand what is guaranteed and or warranted to minimise the risk for the owner or operator.

The balance sheet and audited accounts for these companies also need to be interrogated for the same reason.

Alternatively the owners or managers could possibly buy insurance from the market however there is a risk that this might not be commercially viable or available for new technologies.



Hidden costs

Some of the new technologies require additional power to operate them, however the vessels that are having retrofits carried out were designed with the existing equipment and have not factored in major additional electrical load requirements. This may mean the vessel will have to run another generator to operate the equipment, of course as an example having two generators running at relatively low load is not as efficient as having one generator running at high load.

The ships crew will also need to be trained on the operation and maintenance of the new equipment the costs of this training can be fairly substantial and need to be considered.



