



Concello da Coruña

SAIL TRAINING INTERNATIONAL CONFERENCE 2024

Tall Ships and the Environment: Practical approaches and developments in Tall Ships design, build and operation



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CLIPPER STAD AMSTERDAM
Sustainable developments

STAD AMSTERDAM



Preparations refit 2020

In 2019 a 'GO GREEN' workgroup was established to investigate the options for a more sustainable future of the Stad Amsterdam. Renewals/changes to be carried out in a refit late 2019/2020

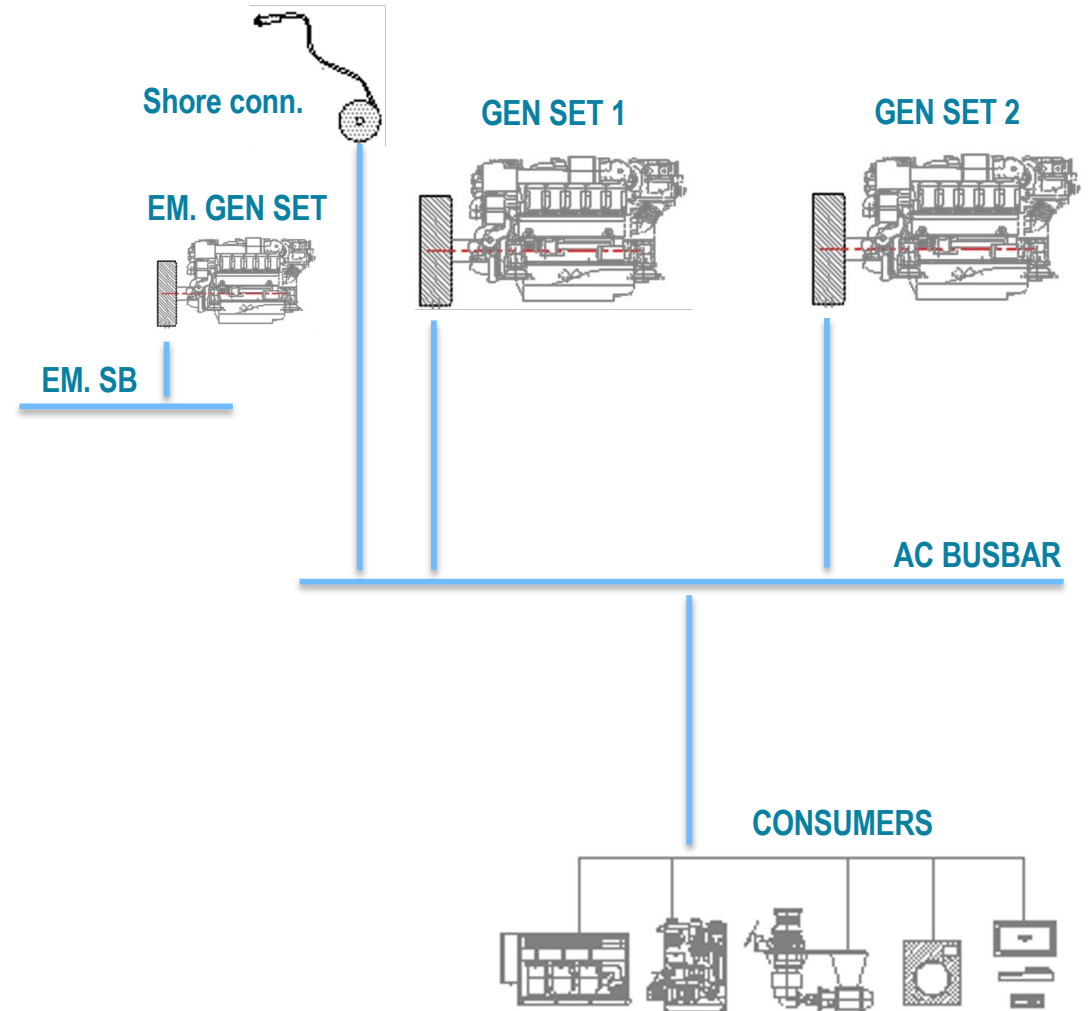
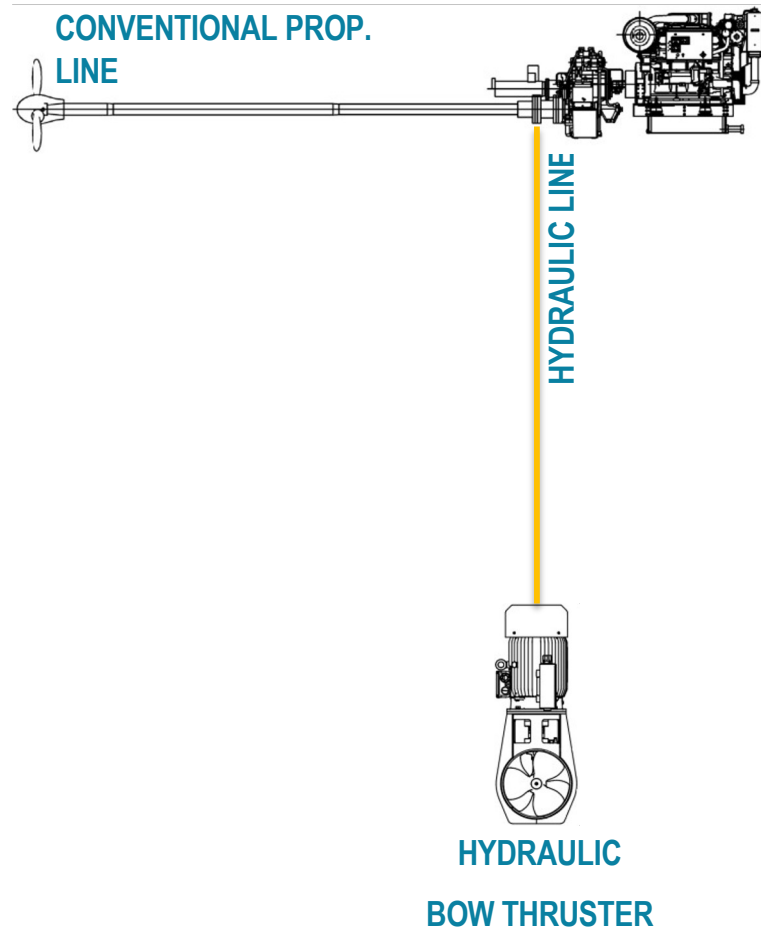


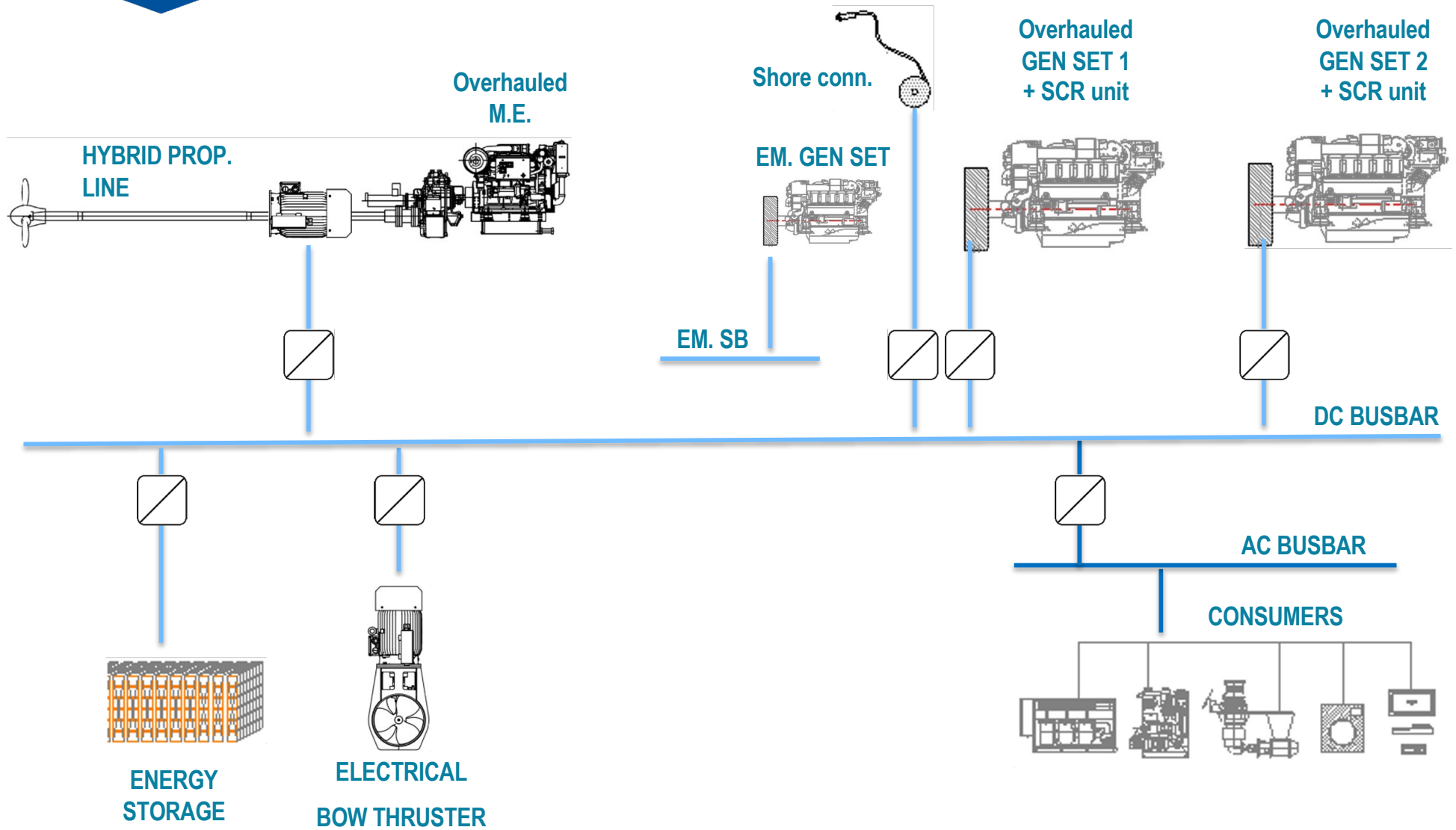
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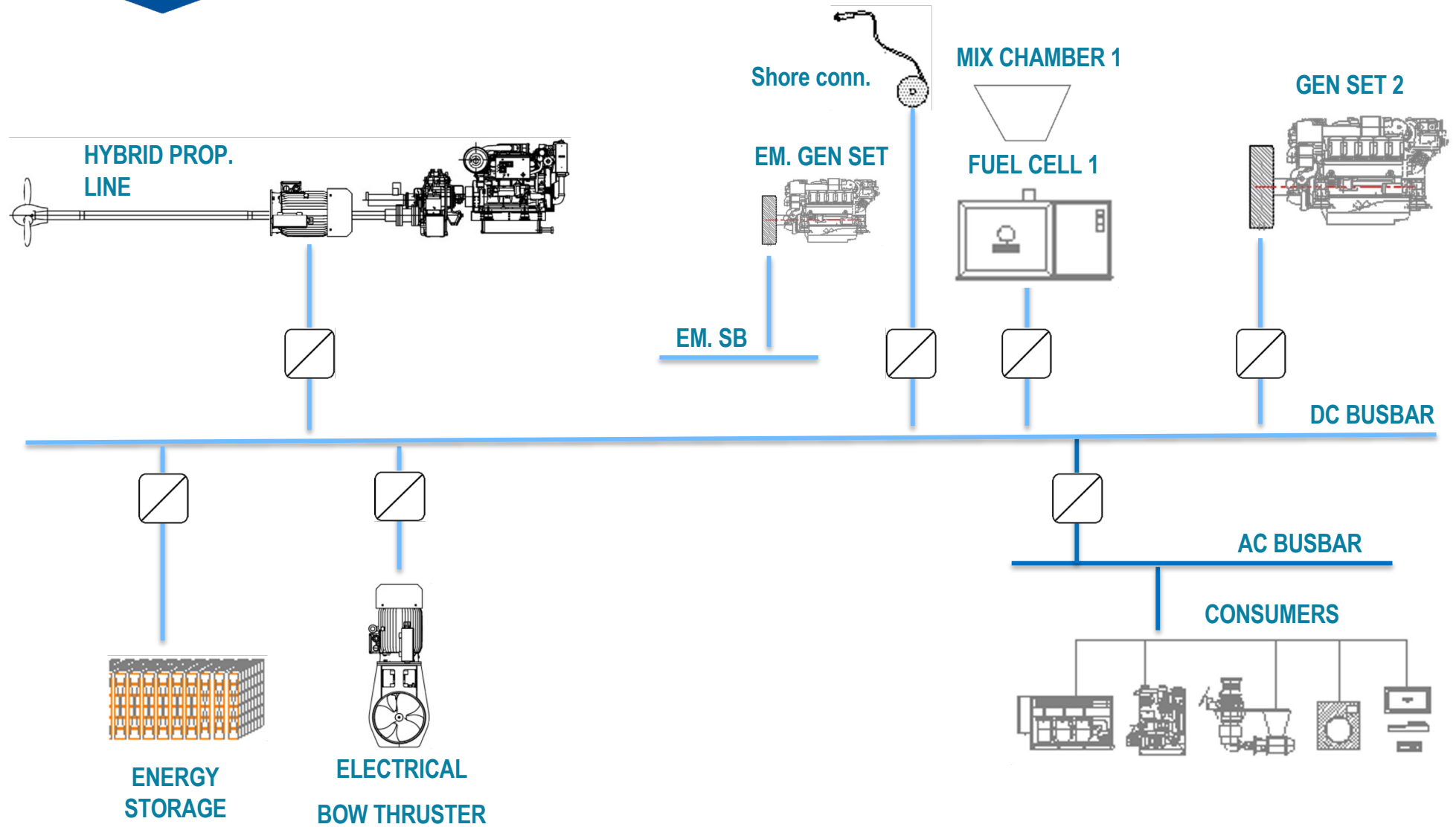
Goals

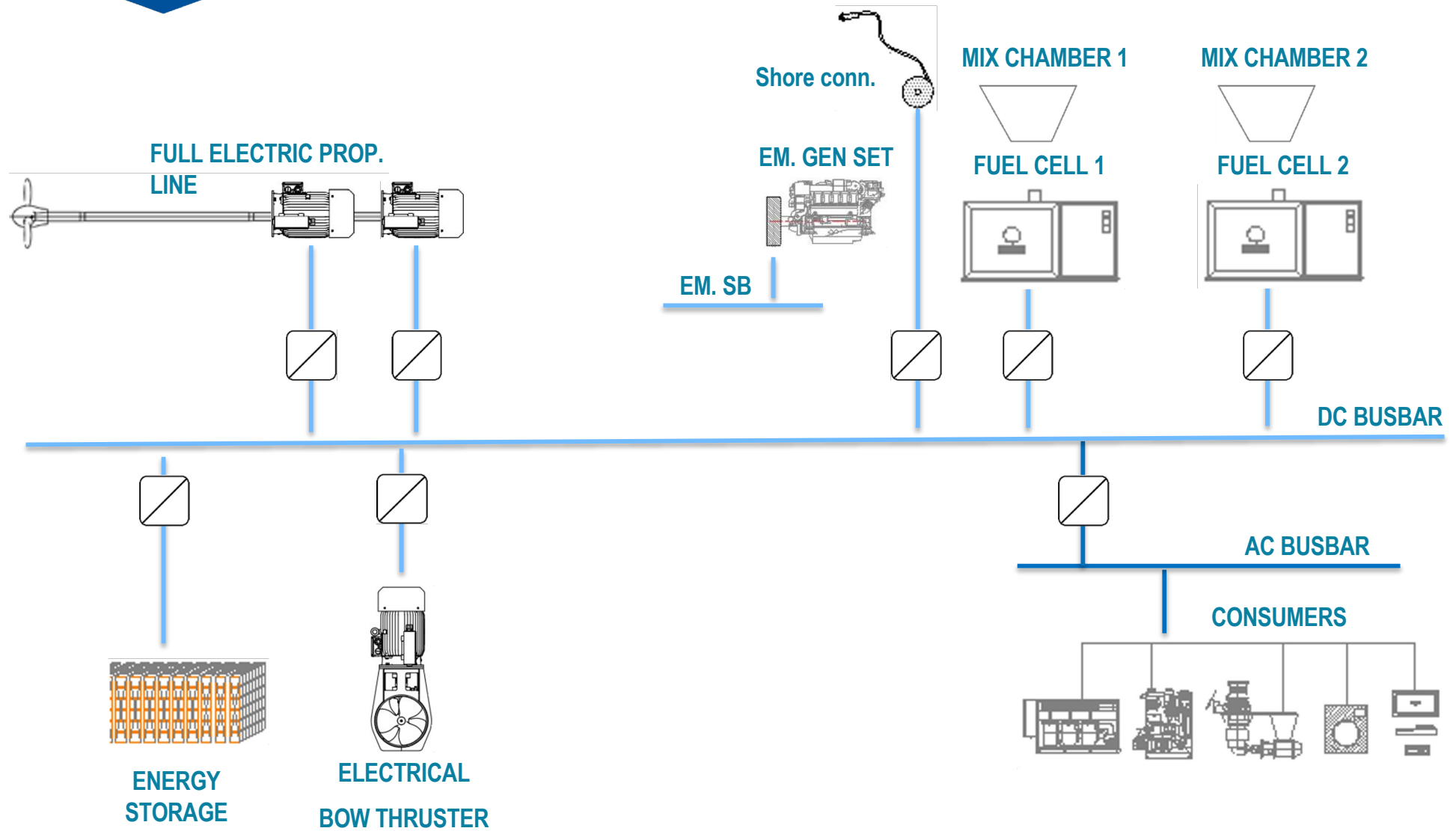
- NOX reduction
- Soot Reduction
- Less fuel consumption
- Higher efficiency
- Clean waste water
- Long Term maintenance

ENERGY CONCEPT'S Present Situation









Conclusion

1. It was too early to seriously consider hydrogen power.
2. It was also determined that the vessel would need a lot more storage room for hydrogen power (Even enlarging the hull was considered).
3. Legislation for hydrogen powered SOLAS passenger vessels was an issue.
4. Even a more conservative approach was required due to lack of space below deck because of the fine shape of the hull.



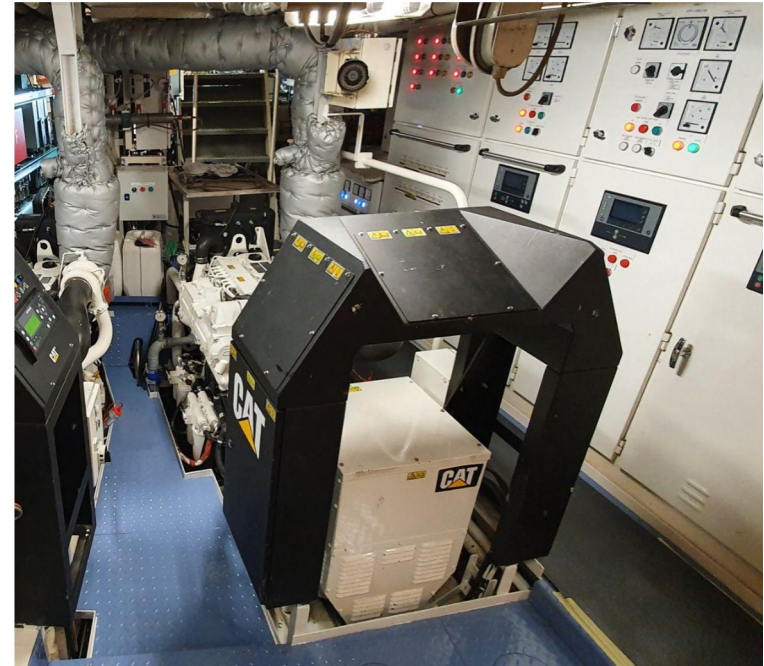


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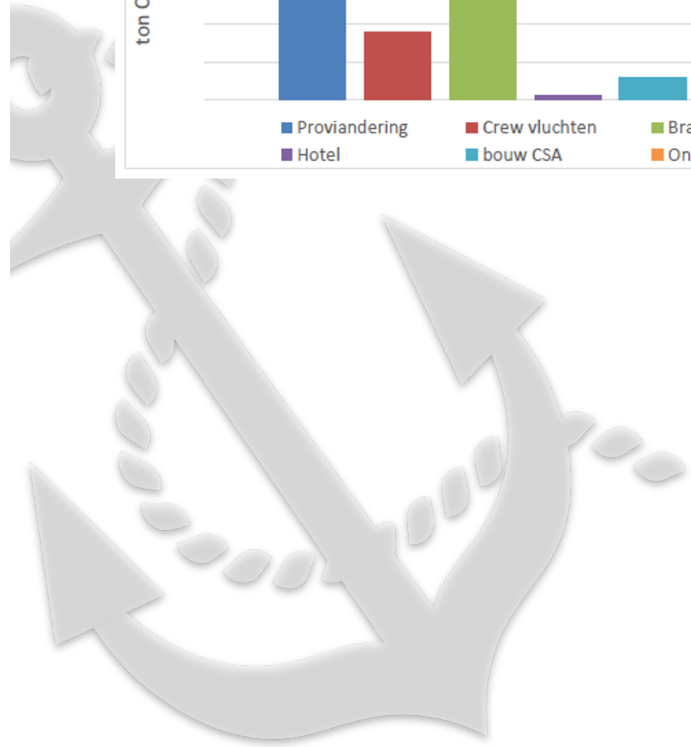
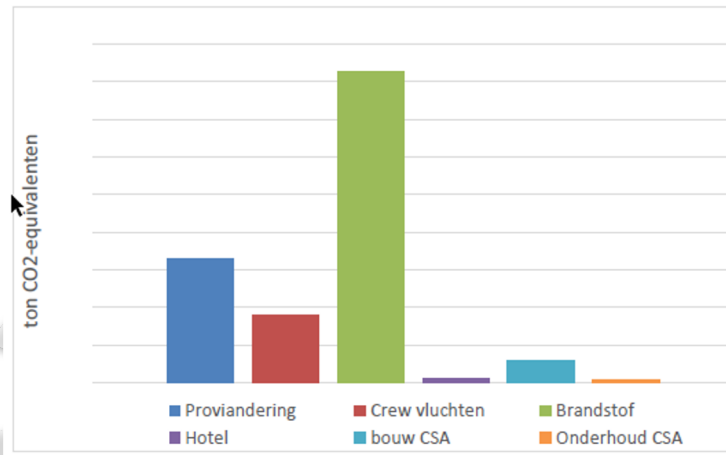
Refit 2020

- New efficient main engine with exhaust gas cleaning
- New smaller generators (110 => 90 Kw)
- Peak shaving (Battery pack)
- Improving shore power connection for worldwide voltages/frequencies
- Biological sewage treatment plant (MEPC.227 (64) (a)/Marpol annex IV 9.1.1. & 9.2.1. as amended)



Sustainability Studies

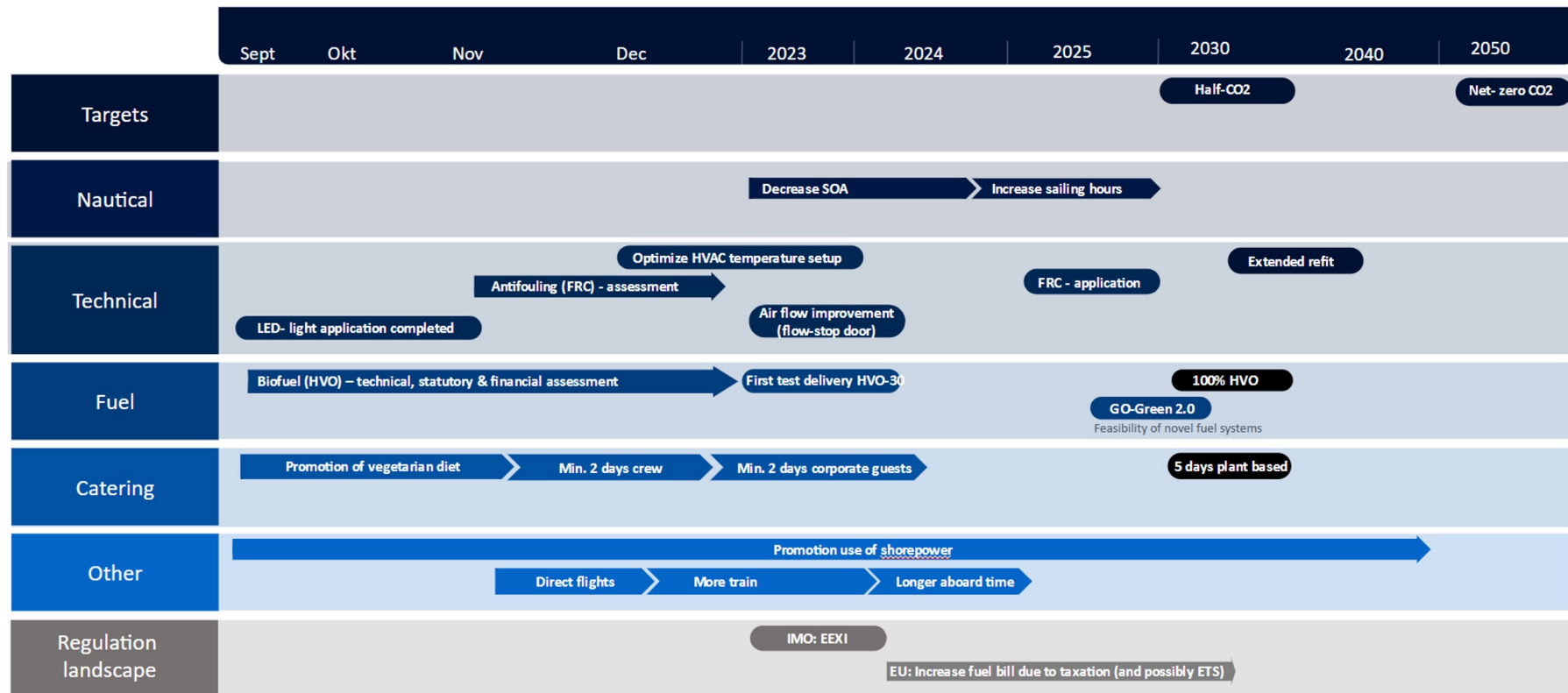
‘development in progress’



- Bio fuels
- HVO-30
- HVO-100
- Shore Power
- Power management
- Catering/food
- Travel awareness
- Anti Fouling
- Waste water treatment
- Timeline 2023-2030-2050



Sustainability 'development in progress'



Data Collection



19-nov-2024 19h30 LT



Results so far

- 2315 hours of shore power in 2022/2023/2024
- Obtained permission to load HVO 100
- 27000 ltr of HVO-30 & 17500 ltr of HVO 100 bunkered
- 27 % of catering options are plant based
- Supply of HVO during world tour in most ports not available or very expensive.
- Battery pack / peak shaving with smaller gen sets partly do the job.
- Wastewater treatment plant working in ports (if allowed).



Baseblue cooperates with Stad Amsterdam on renewable biodiesel bunkering operation

in International Shipping News © 20/12/2023



Baseblue, the marine energy solutions provider, has successfully delivered renewable biodiesel to the Clipper Stad Amsterdam, a three-masted clipper recognised for its design, marking a significant step towards decarbonisation and contributing to a more sustainable maritime industry.

The delivery made by Baseblue is an HVO30 blend of fuel consisting of 10PPM gasoil mixed with HVO100. HVO, meaning Hydrotreated Vegetable Oil, represents a renewable diesel fuel produced from vegetable oils through an advanced hydrotreating process.

The operation's success between Baseblue and Stad Amsterdam highlights the flexibility and efficiency of both parties, affirming their joint commitment to ensuring ensure a smooth bunkering process amidst the ongoing energy transition.



Baseblue and Stad Amsterdam's renewable biodiesel bunkering delivery

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Next steps

- Focus on Bio Fuels
- Increase of plant based catering
- More shore power berths
- Power management improvements
- Routing



2023

- AUG 18** | Netherlands | Amsterdam
- AUG 23-30** | Belgium | Ostend
- AUG 30 - SEP 15** | Netherlands | Rotterdam
- SEP 17-28** | Germany | Hamburg
- OCT 1-11** | United Kingdom | London
- OCT 13-19** | Netherlands | Amsterdam
- OCT 27 - DEC 6** | Portugal | Lisbon
- DEC 10-13** | Canary Islands | Las Palmas
- DEC 29-31** | Caribbean | Martinique

2024

- JAN 1-24** | Caribbean | St. Maarten
- FEB 7-11** | Panama
- MAR 6-23** | USA | San Francisco
- APR 6-10** | Hawaii | Honolulu
- MAY 5-31** | Japan | Yokohama/Kobe
- JUN 3 - JUL 3** | China | Shanghai | Hong Kong
- JUL 17-21** | Indonesia | Sorong
- AUG 11 - 3 SEP** | Australia | Sydney | Brisbane
- SEP 24-28** | Indonesia | Denpasar
- OCT 5 - NOV 9** | Singapore
- NOV 21 - 24 DEC** | India | Chennai | Mumbai

2025

- JAN 5 - JAN 9** | Maldives/Male
- JAN 18 - JAN 22** | Mauritius
- FEB 21 - MAR 3** | South Africa | Cape Town
- MAR 30 - APR 3** | Brazil | Recife
- MAY 7-22** | Caribbean | Martinique | St. Maarten
- MAY 29 - JUN 9** | USA | Miami
- JUN 15 - JUL 13** | USA | Baltimore | New York | Boston
- AUG 6-10** | France | Brest
- AUG 16-24** | Netherlands | Amsterdam