

WÄRTSILÄ 31SG PURE GAS ENGINE FOR MARINE 瓦锡兰船用纯气体发动机

MARINTEC CHINA 2019

Huang Wen Bin

Area Manager Sales Engineering

Marine Business

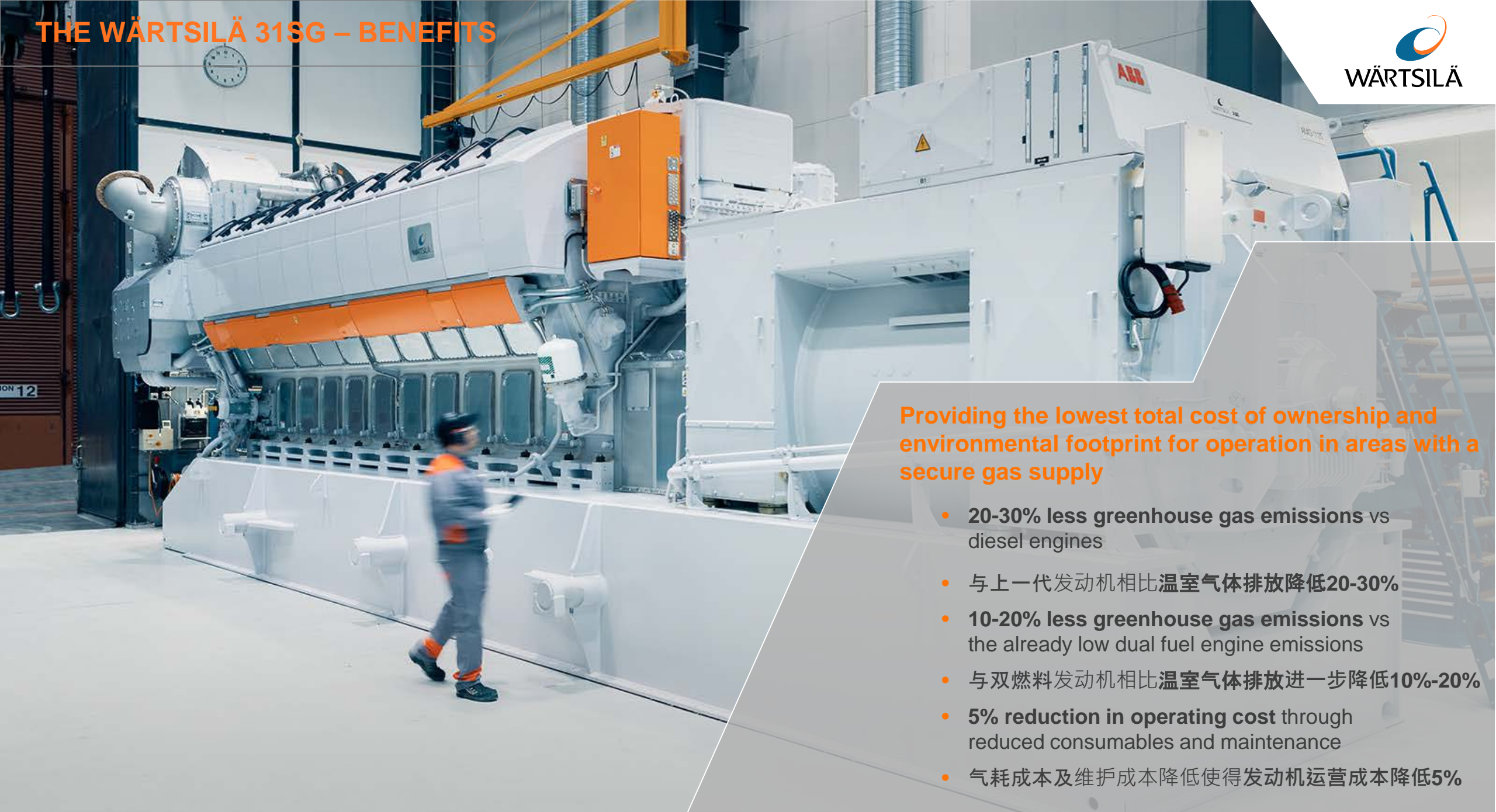
Award-winning efficiency and design in pure gas format!

The Wärtsilä 31SG builds on our unmatched **25-year pure gas engine pedigree** and the **2,000 pure gas engines delivered** by Wärtsilä.

瓦锡兰W31SG的研发基于25年纯气体发动机血统以及超过2000台气体发动机的交付经验

The Wärtsilä 31SG is based on the successful Wärtsilä 31 product platform which includes the **world's most efficient 4-stroke diesel engine** – as recognised by Guinness World Records.

瓦锡兰W31SG的研发基于瓦锡兰W31发动机平台，一款获得世界吉尼斯纪录效率最高的发动机



Providing the lowest total cost of ownership and environmental footprint for operation in areas with a secure gas supply

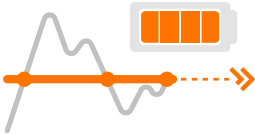
- **20-30% less greenhouse gas emissions vs diesel engines**
- 与上一代发动机相比温室气体排放降低20-30%
- **10-20% less greenhouse gas emissions vs the already low dual fuel engine emissions**
- 与双燃料发动机相比温室气体排放进一步降低10%-20%
- **5% reduction in operating cost through reduced consumables and maintenance**
- 气耗成本及维护成本降低使得发动机运营成本降低5%



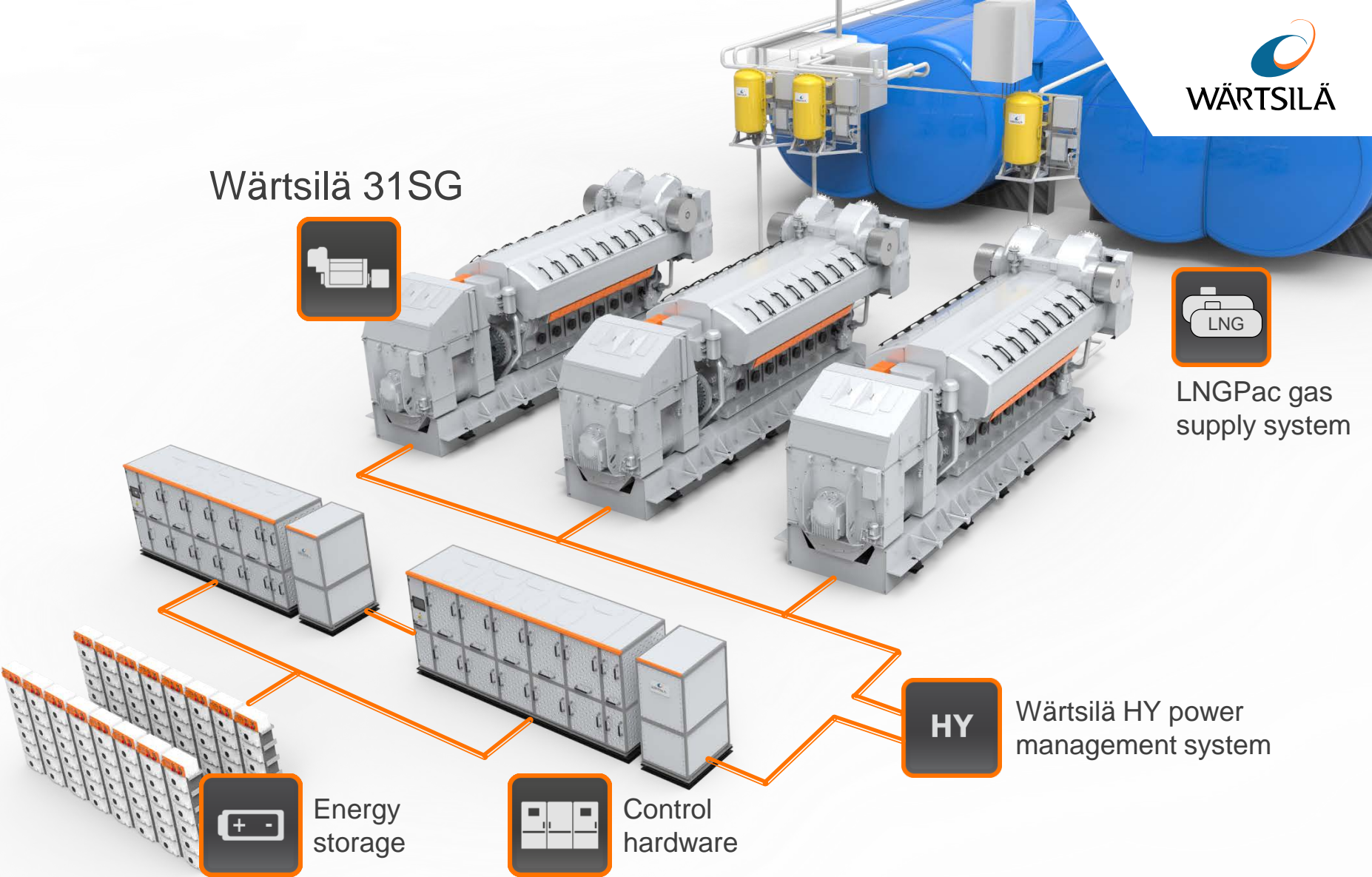
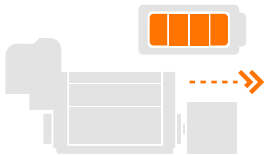
Cylinder configurations	8V, 10V, 12V, 14V, 16V
Output, mechanical	4240 – 8800 kW
Cylinder output (60/50Hz)	530/550 kW
Genset application	Yes
Variable speed propulsion	Model year 2022
Hybrid integration	Yes

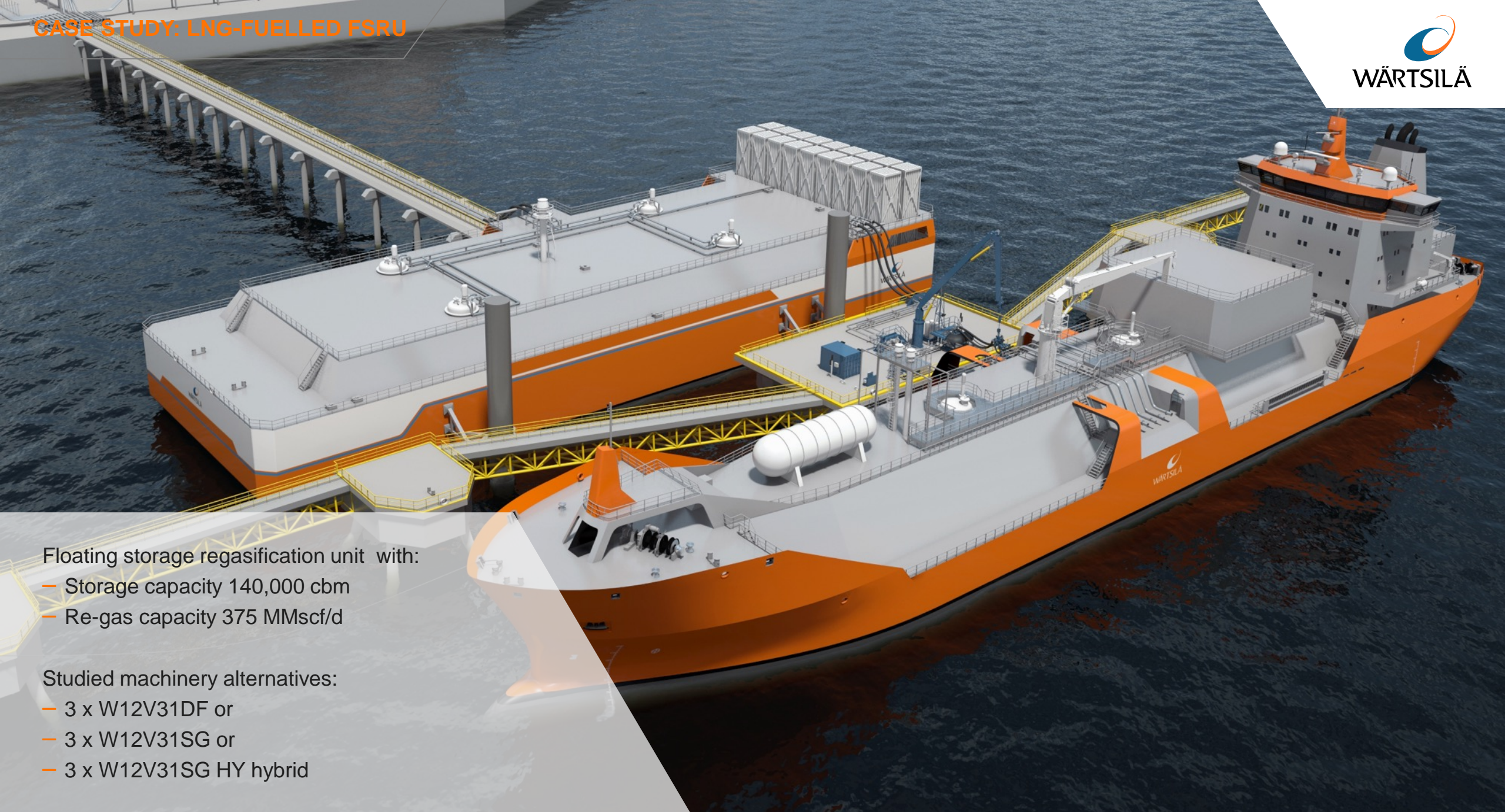


Optimize operating load,
minimize running hours
with peak shaving



Secure redundancy while
still operating efficiently
with instant backup





Floating storage regasification unit with:

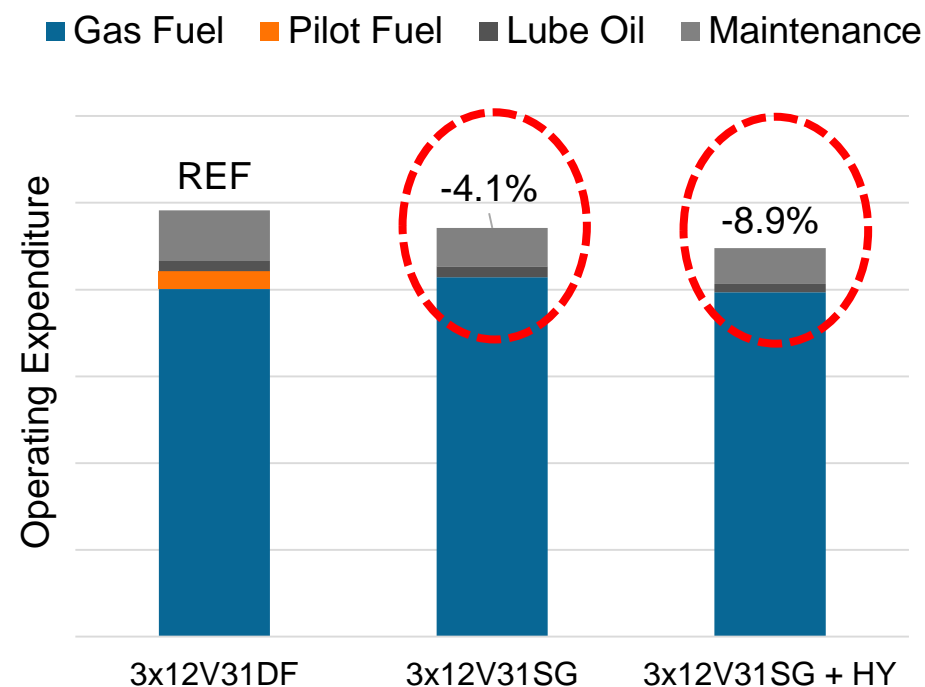
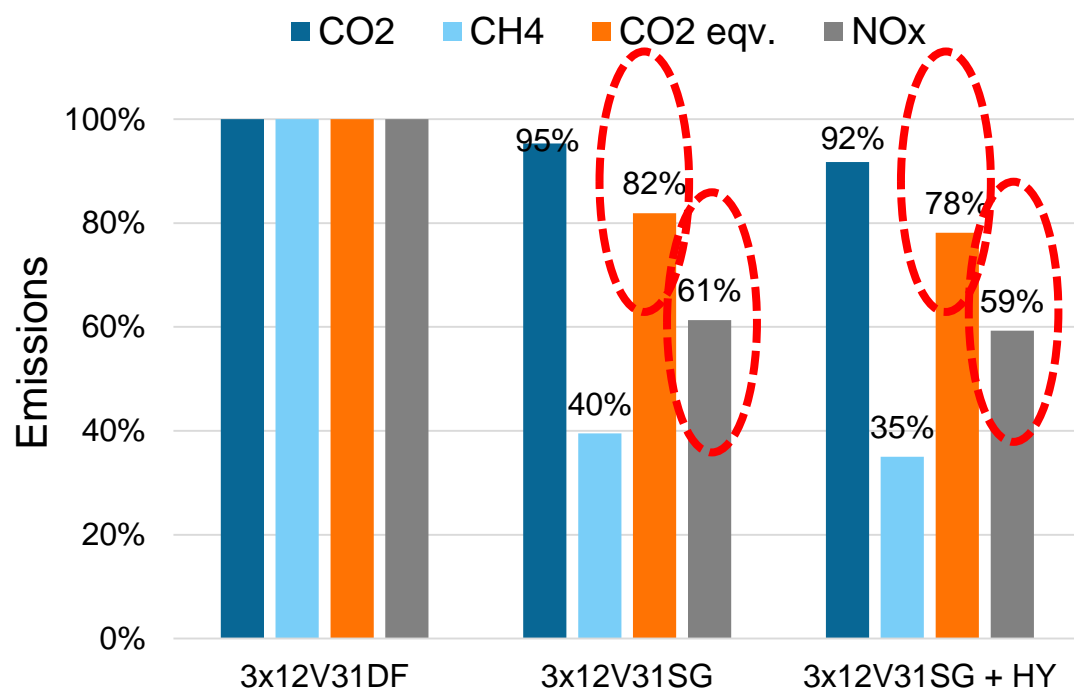
- Storage capacity 140,000 cbm
- Re-gas capacity 375 MMscf/d


Studied machinery alternatives:

- 3 x W12V31DF or
- 3 x W12V31SG or
- 3 x W12V31SG HY hybrid

RESULTS 分析结论：

- 18% lower greenhouse gas emissions with SG, 22% lower when including hybrid solution
- 纯气体发动机方案温室气体排放降低18%，混合动力系统配置下温室气体排放降低高达22%
- 40% lower NOx emissions / 氮氧化物排放降低40%
- 4% lower OPEX with SG (red. fuel bill and maintenance), 9% lower when including hybrid solution
- 运营成本降低4%（含耗油及维护成本），混合动力系统配置下运营成本降低可达9%





Wärtsilä 31SG - providing the lowest total cost of ownership and environmental footprint for operation in areas with a secure gas supply
瓦锡兰W31SG纯气体发动机，提供给供气充沛地区客户经济性最优的环保产品

For additional product information please visit:

<https://www.wartsila.com/marine/build/engines-and-generating-sets>

