

BioLNG

Liquefaction of biogas as a viable step towards emission reduction

How clean can become even cleaner...

- Recent independent studies show that LNG is reducing CO2 emissions
- **But... LNG is still a fossil fuel**
- Blending bioLNG/ liquid biogas into the LNG will decrease the CO2 footprint and emissions
- bioLNG, produced out of waste, enables a circular economy
- Technology for upgrading and liquefaction of biogas is available and proven

Demand for cleaner fuels; climate agreements and directives touch all industries

- bioLNG is considered as an advanced biofuel (compliant with RED II)
- Blendable with LNG in different ratios to fulfill specific demands and supply
- Wärtsilä has a proven technology for biogas upgrading and liquefaction
- bioLNG as fuel is suitable for different applications:



REMOTE POWER PLANTS & INDUSTRY



SHIPPING

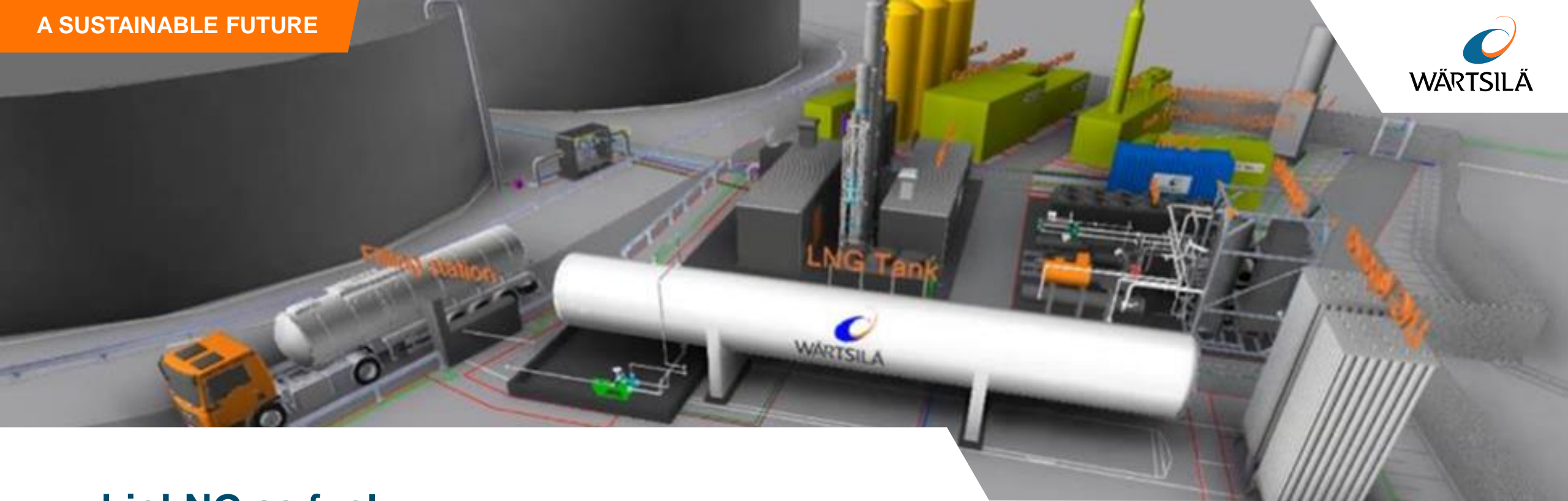


ROAD TRANSPORTATION

Wärtsilä Biogas Upgrade and Liquefaction

- Proven Technology
 - Upgrading
 - MR Liquefaction
 - Integration upgrading and liquefaction
- Lowest OPEX in the market
- Fully automated and unmanned operation
- Short delivery time
- Complete modules to site
 - Easy installation
- Weather protected
 - Service friendly





bioLNG as fuel

- By going for LNG as fuel today, emissions will already be reduced
- LNG as fuel today will enable the use of bioLNG in the future, **without modifications on engines and infrastructure**
- Technology for production of bioLNG is available
- bioLNG enables a circular economy



THANK YOU FOR YOUR ATTENTION



WÄRTSILÄ

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