SCANSHIP
Sustainable Solutions

Brief Company Introduction

- Scanship is a clean tech company with solutions for wastewater treatment, garbage handling and foodwaste processing
- Scanship has supplied 60 cruise newbuilds in the passed, executed 31 turn-key retrofits and holds a orderbook with supplies to 28 newbuilds until 2021
- Scanship AWP (Wastewater) systems is on every second cruise newbuild launched from 2014 (≈56% share)
- Scanship is developing game changing technology to produce energy from waste

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40 Years of Maritime Regulatory Evolution

Wastewater Treatment

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Cruise Industry Response to Regulatory Evolution

Wastewater Treatment

- 100% (63 vessels) to enter market between 2014 – 2019 with AWP treating all grey and black water
- 59% (37 vessels) equipped with AWP to meet IMO Marpol MEPC 227(64) with nutrient removal (chapter 4.2)
- The Cruise Industry has since 2010 deployed technology that exceeds any maritime international treatment standard

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Industry Response to Environmental Sustainability

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Waste to Energy with Microwaves

MAP mockup at test facility in Norway

- Carbon based waste is heated with high microwave power
- Rapid heating without air converts the waste to flammable syngas and solid carbon (charcoal) by fast pyrolysis
- Syngas is scrubbed and used directly by a boiler or gas engine replacing liquid fossil fuel, while charcoal offloaded for soil enhancement Tera Preta (Carbon Capture)
- Zero emissions to air and discharges to the sea allows for 24/7/365 operations