



# Pareto Securities

Renewable Energy & Clean Tech Conference  
Stockholm, October 3

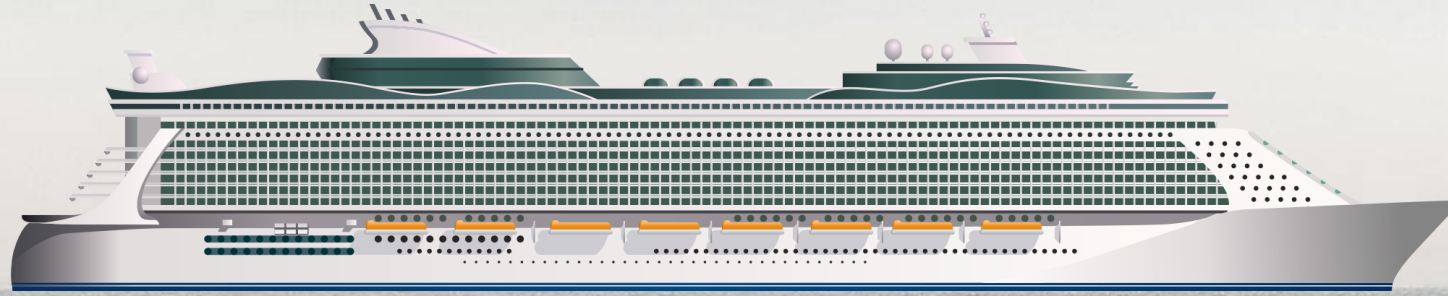
Henrik Badin CEO

## about us

- provider of technology that prevents pollution to sea, enabling recovery of valuable resources in waste and converting waste to energy
- listed on Oslo Stock Exchange with ticker SSHIP
- NOK 330 million of revenues with NOK 39 million in EBITDA (11.9%) in 2018
- market leading position in the cruise industry, equipped 116 cruise ships, and forward orderbook for 39 newbuilds
- low financial and operational gearing, scalable business with revenues from systems sales (2/3) and recurring life cycle services (1/3)



## strong cruise industry track record



### Scanship **Waste Handling**

Waste handling systems with recycling and waste incinerators

**61** implemented systems

### Scanship **Foodwaste**

Foodwaste conveying and processing solution

**62** implemented systems

### Scanship **Bio-Sludge**

Sludge handling including thermal treatment, dewatering and drying

**47** implemented systems

### Scanship **AWP**

Advanced wastewater purification systems for sewage, grey and black water

**82** implemented systems

### Scanship **MAP**

Microwave assisted pyrolysis for clean energy, waste valorization and carbon capture

**1** full scale test facility

250+ systems for processing waste and purifying wastewater



# delivering to demanding industries



## Delivering high quality technologies

Our solutions are based on the highest standards and provide results expected in the industry



## Leading the field through innovation

We deliver innovative solutions for the leading-edge application



## Long-term business relationships

We are a credible partner with long lasting customer relations, providing recurring life cycle services to installed base



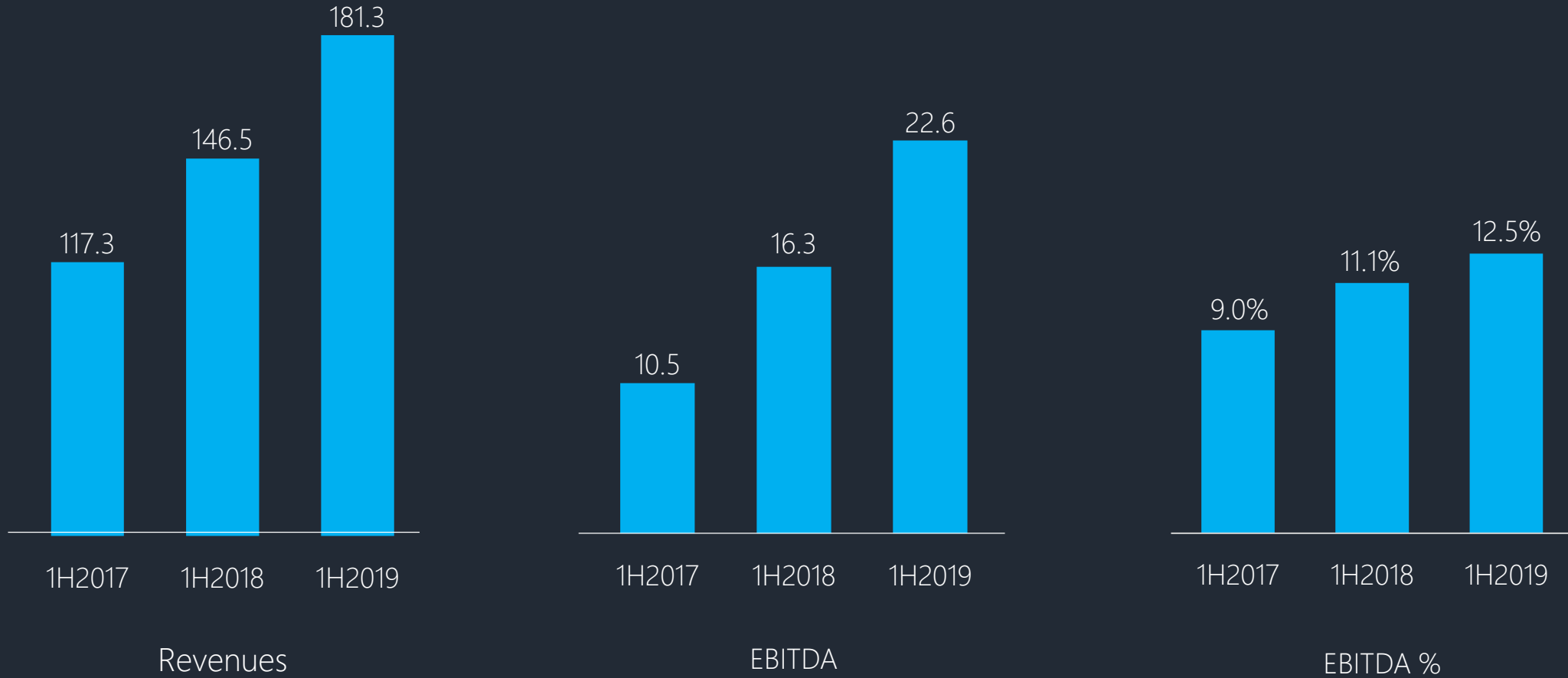
## Sustainable solutions for circular economy

Our approach is driven by responsibility for the environment and safety of society

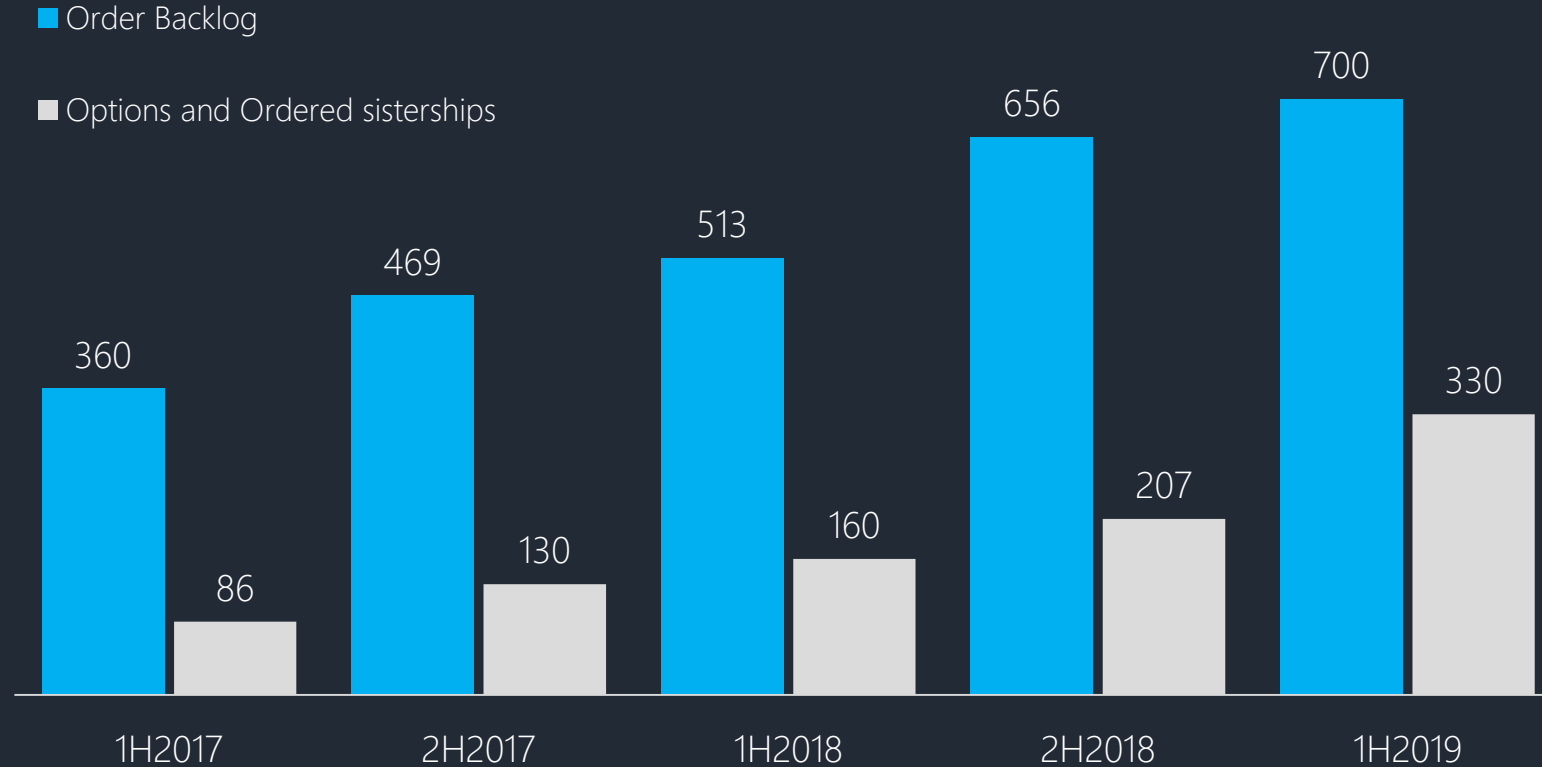


long term partnership

## profitable growth continues in 1H2019



# new all-time high order backlog



Lifecycle Services (Aftersales) not included in Order Backlog

## growth within core cruise

- cruise industry growth has translated to 120 cruise ships on order, and to maintain historical passenger growth will require additional 100 newbuilds to enter service until 2030
- environmental sustainability scrutiny drives cruise retrofit market within wastewater purification and waste management
- increased focus on plastic pollution, zero discharge, and CO<sub>2</sub> emissions drives demand for Scanship technology



1,2 €Bn  
addressable  
market



## from ship to fish

- proven technology offering to prevent pollution and to recover nutrients
- delivered eight prestigious projects on smolt, landbased and seabased closed cage
- substantial growth opportunity with landbased and closed cage

320 €M  
addressable  
market



## acquisition ETIA


- to deliver on multiple opportunities within decarbonising of industries and waste valorization
- accelerated access to more markets with ETIA as "engine"
- will leverage on Scanship's scalable business model
- ETIA purchase price EV 19.7 €M fully financed
- 23 % of the shares owned by financial investors paid though cash distribution and 24 months lock-up on founders and key management rolling 80% of shares



**E T I A**  
ECOTECHNOLOGIES

**Head of the group**


Design and build of industrial equipment, innovation and development, process engineering, marketing and sales, service after sales




**ASCODERO**  
PRODUCTIQUE

**ETIA subsidiary**


Mechanical preparation, integration, automation and robotics, complex equipment (...)




**10.7 m€**  
ETIA GROUP  
TURNOVER 2018



One of the most innovative enterprises in France since 2010



National Award 2018  
"Industry of the future"



Award for Bioeconomy (2019)

**40**  
people

**90%**  
export  
39 countries

**10**  
patents

**150**  
installed units

**20**  
years REX

# multiple ETIA applications developed



## Minerals treatment

Heat for variety of applications: calcination, dehydration of minerals, catalyst regeneration, devolatilization, debacterisation of inorganic powders and many more



## Biocoal

Replacing fossil coal in power plants by biocoal coming from biomass  
First industrial demonstration unit in Japan to produce biocoal from wastewater treatment plant sludges



## Biocoke

Replace the fossil coal by biogenic fuels (biocoke) in metallurgy industry as a reducing agent  
First pilot plant implemented in Sweden, another two machines under production



## Biochar

Creation of a circular economy with biomass and agriculture residues while keeping carbon in soil (carbon capture)  
Industrial equipment in operation producing first certified biochar in France for water retention (Hydrochar WB1)



## Bio-oil

Producing biooil to create liquid flavours and food aromas. Industrial machines in operation with the first implementation done in 2003  
Wood vinegar under development



## Bio-methane and hydrogen

Producing biomethane or/and hydrogen from biomass that cannot be used directly in the digesters  
First pilot plant under evaluation



## Plastics to molecules (CH<sub>4</sub> + H<sub>2</sub>)

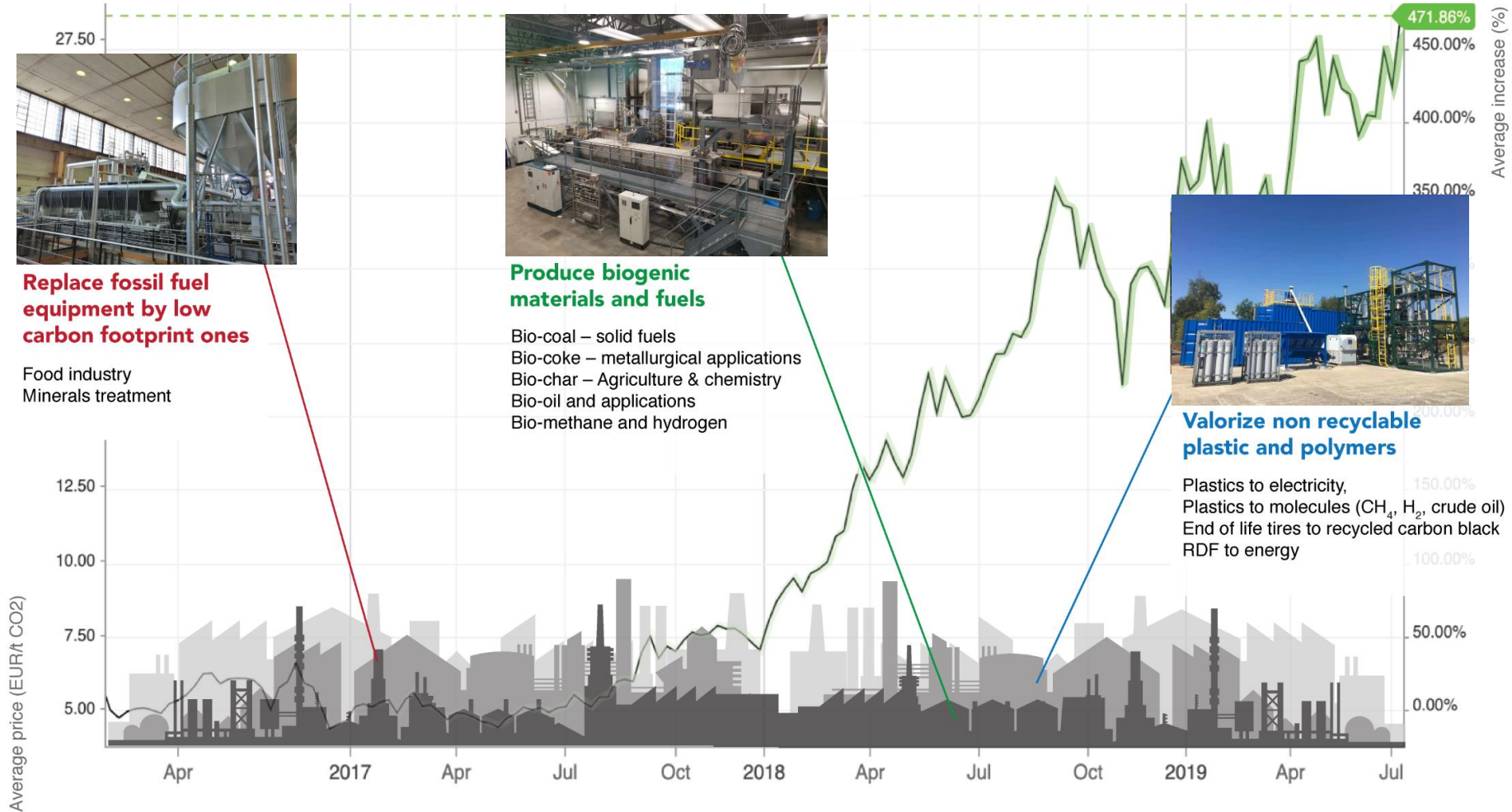
Conversion of plastics into gas molecules like methane or hydrogen  
First pilot (R&D) under development and evaluation



## End of Life Tire to Recycled Carbon Black

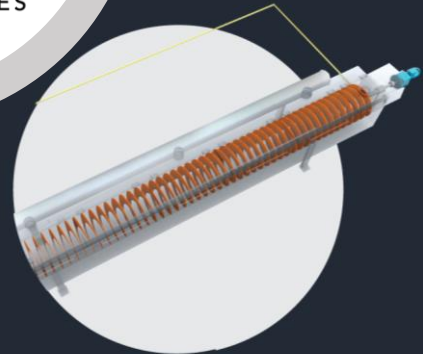
First pilot (proof of concept) realized and successful  
First industrial plant under construction

# ETIA relevant in fast growing decarbonization markets





case studies



*envigas*

RACE FOR  
WATER



## European biogas market plan

- industry growth from current 16.000+ plants to 24.000+ plants by 2025 with EU 2030/2050 targets
- strong drivers for Scanship technology in place with high focus on conversion to biomethane, increasing cost of digestate disposal (5-8% profitability loss) combined with growing plastic problem and regulatory constraints on reuse
- Scanship technology to valorise digestate, increase plant capacity and increase energy output
- project VOW participation with key technology at Lindum in Norway with VEAS, SINTEF and NGL
- already defined target towards ~50 Biogas operation specialists and agribusinesses with 100+ plants



# forward growth strategies in several markets





Thank you for the attention !

[www.scanship.no](http://www.scanship.no)