

# SECOND HALF YEAR 2023 PRESENTATION

Oslo, 29 February 2024  
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# VOW

Photo: Henrik Badin

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# LOOKING BACK AT 2023

## Taking stock, forging ahead



Significant revenue growth offset by negative adjustments

Inflation, cost increase in projects, supply chain constraints, high tender and business development activity and balance sheet clean up at year end

Long list of projects successfully delivered to customers  
Reassessed forward backlog with robust margins

Equipment deliveries to 18 cruise ships, commissioning on 12, record high activity in aftersales and near doubling of activity in heat solutions sub-segment

Milestone contracts confirmed, securing basis for increased profits in years ahead

Contracts confirmed include Rhode Island biochar project, Follum Phase 2 biocarbon factory, clean ship solutions for world largest cruise ship and equipment for electrification of heat intensive industries

Rich list of potential projects in pipeline

Years of significant investments in technology now expected to soon pay off, with final investment decisions now imminent on several projects

On track to getting fit for 15 from 25

Comprehensive cost savings and synergy programme in place, targeting 15 % EBITDA margins by end of 2024

# RECORD HIGH PROJECT ACTIVITY

18 system deliveries to cruise new builds and 12 in commissioning during 2023

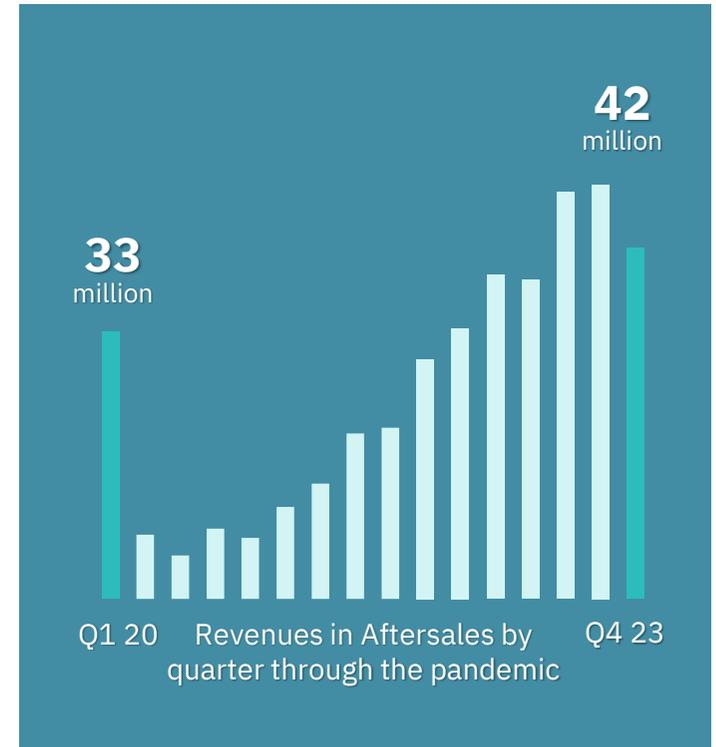
- Total of 12 ships in commissioning and handed over to owner ready for their respective inaugural cruise
- Scanship deliveries includes systems for wastewater purification, food waste processing, waste management and clean energy production



# HIGH ACTIVITY IN AFTERSALES

## Strong rebound in Aftersales after pandemic

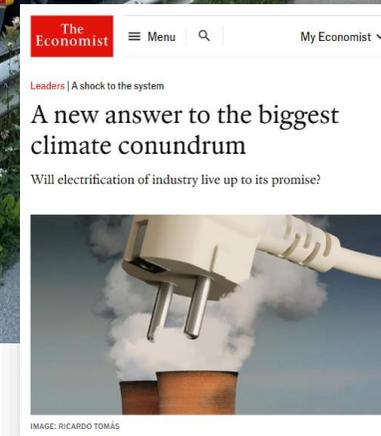
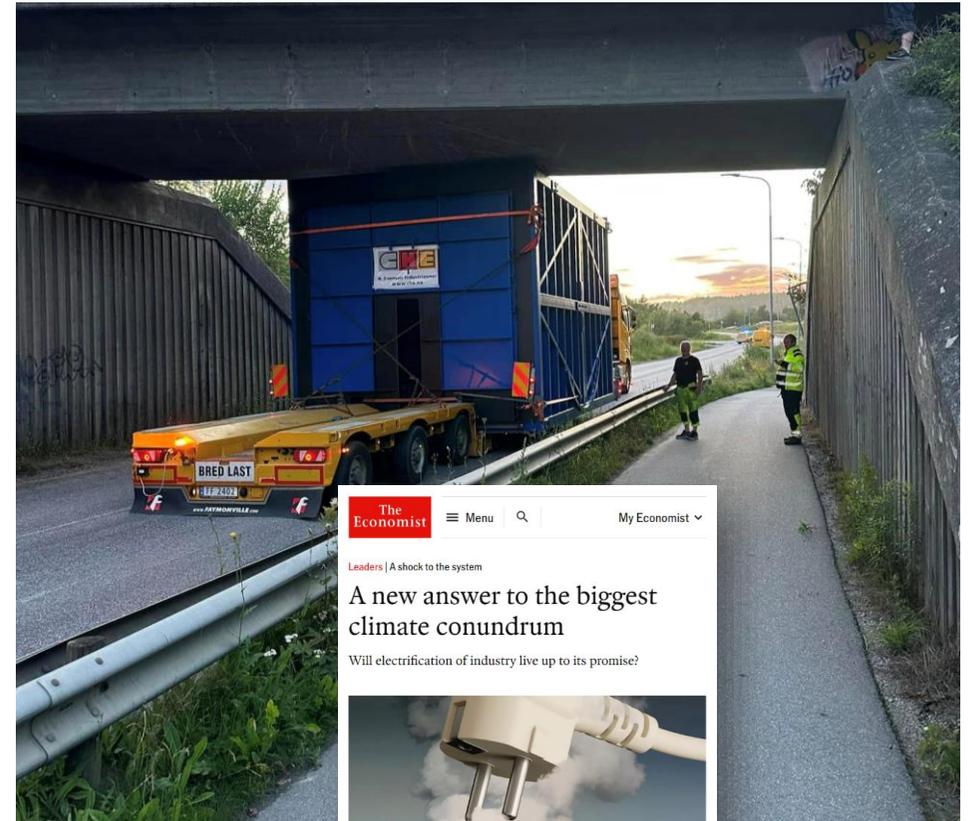
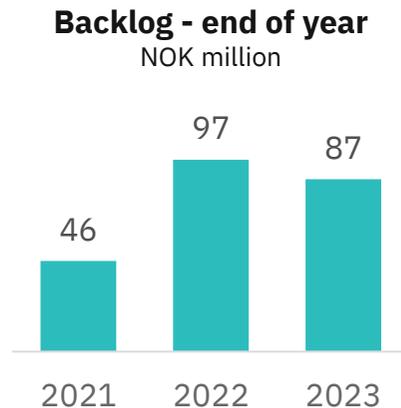
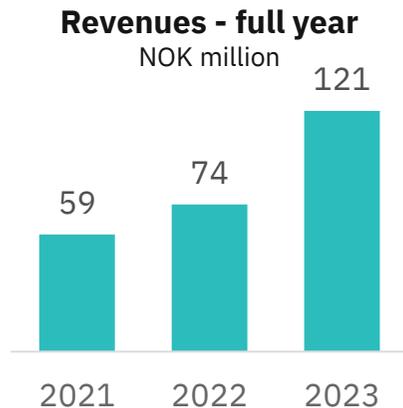
- Aftersales business has grown to around 180 million in annual recurring revenue in 2023
- Enjoying favourable position with leading cruise operators and large installed base of Scanship systems
- Delivering spare parts, consumable chemicals and operation assistance, with Florida as base
- Scanship's high market share in system deliveries to newbuilds and retrofits is also attributed to high service level in Aftersales
- 2H 2023 up 29% from 2H previous year, FY 2023 up 49% from FY 2022



# HIGH PROJECT ACTIVITY

## Revenues in heat solutions more than doubled

- Faced with high energy costs and cost of emissions, heat intensive industries intensify their efforts to decarbonise and electrify
- C.H. Evensen technology has secured Vow a leading position with blue chip industry players across Europe



# IMPORTANT WINS

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## Rhode Island project confirmed, and well underway

- › USD 27 million contract to deliver complete biochar and renewable energy system
- › Detailed engineering including process equipment, piping and electrical is wrapping up with major deliverables well underway
- › Main equipment deliveries to the site scheduled primo 2025
- › Facility construction underway with civil works scheduled for completion by end of Q3 2024
- › Commissioning of the up to 6,000-tonnes per year biochar production plant is anticipated in early 2026



# IMPORTANT WINS

## Vow Green Metals confirmed Phase II, total scope expanded to 332 million

- Additional agreement for the delivery of pyrolysis technology signed. New total contract value is NOK 332 million
- Large C.H. Evensen reactor part of scope to double production capacity at Hønefoss plant (Follum) to 20,000 tonnes
- First biocarbon successfully produced in the early production line in November. Biogreen equipment from Vow performing well
- Also important for Vow as shareholder: VGM confirmed partnerships with and funding from energy producer Vardar and governmental enterprise Siva



# IMPORTANT WINS

## Several cruise newbuild and retrofit contracts awarded

August 2023  
USD 5 million retrofit

- › Wastewater purification system on cruise ship with 6,000 people on board
- › Delivery in 2024
- › IMO Marpol MEPC 227(64) compliant

October 2023  
EUR 3.7 + 4.2 million

- › Wastewater purification system + waste handling systems for two cruise newbuilds
- › Delivery scheduled for 2025 and 2026
- › Baltic Sea and Alaska standard

February 2024  
EUR 19.3 million 1+1

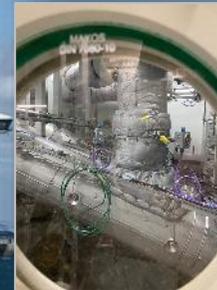
- › Wastewater treatment and total waste treatment system
- › Dewatering, homogenisation, thermal hydrolysis, drying, and pyrolysis
- › Baltic Sea and Alaska standard

# IMPORTANT CONTRACT WINS

Cruise operators are increasingly keen to invest in Vow's zero-emission technologies

## Trendsetter

- › Vow technology is setting a new standard for onboard waste and wastewater treatment
- › Residues from wastewater and food waste are valorised into biochar and steam (heat)
- › The process includes dewatering, drying, thermal hydrolysis and pyrolysis



# FINANCIALS



# INCOME STATEMENT

## Key figures

NOK million	FY 2023	FY 2022
<b>Revenue</b>	<b>918.5</b>	<b>782.8</b>
<b>Gross profit</b>	<b>258.3</b>	<b>295.6</b>
<i>Gross margin %</i>	<i>28.1%</i>	<i>37.8%</i>
Operating expenses	281.7	203.4
<b>EBITDA before non-recurring</b>	<b>-23.4</b>	<b>92.2</b>
<i>EBITDA margin %</i>	<i>-2.5%</i>	<i>11.8%</i>
Non-recurring cost	31.3	6.7
<b>EBITDA</b>	<b>-54.7</b>	<b>85.5</b>
<b>EBIT</b>	<b>-106.9</b>	<b>53.3</b>
Net financial items	-41.8	-31.1
<b>Result before tax</b>	<b>-148.7</b>	<b>22.3</b>

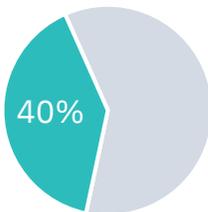
- Financial performance affected by increased cost prognosis in projects
  - Adjustments in recognised cost and total cost prognosis affect the current reporting period by reversing revenue (POC) and increasing cost
  - While this adjustment led to a reduced margin in the current reporting period, it has established a normalized margin for future periods
- Increase in operating expenses driven by capacity build-up for future growth possibilities in Industrial solutions
- Non-recurring items mainly relate to balance sheet clean up in contract accruals (non-cash effect)
- Comprehensive cost cutting program initiated

2023 figures unaudited

# SEGMENT INFORMATION

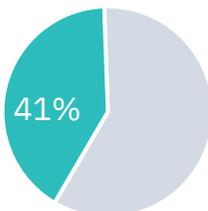
## INDUSTRIAL SOLUTIONS

Share of total revenues



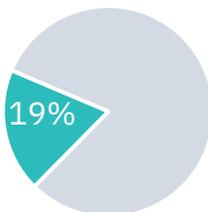
## MARITIME SOLUTIONS

Share of total revenues



## AFTERSALES

Share of total revenues



NOK million	FY 2023	FY 2022
Revenues	<b>364.5</b>	304.3
EBITDA before non-recurring	<b>-12.5</b>	37.7
EBITDA margin (%)	<b>-3.4%</b>	12.4%
Backlog (end of period)	<b>450</b>	441
Revenues	<b>375.5</b>	358.6
EBITDA before non-recurring	<b>11.8</b>	76.9
EBITDA margin (%)	<b>3.1%</b>	21.4%
Backlog (end of period)	<b>584</b>	749
Revenues	<b>178.5</b>	119.9
EBITDA before non-recurring	<b>22.2</b>	14.0
EBITDA margin (%)	<b>12.5%</b>	11.7%

2023 figures unaudited

# BALANCE SHEET

## Key figures

NOK million	31.12.23	31.12.22
Intangible assets and goodwill	588.1	512.1
Accounts receivable	361.4	293.6
Contracts in progress	270.3	339.2
Other assets	266.8	265.0
Cash and cash equivalents	57.5	42.5
<b>Total assets</b>	<b>1 544.1</b>	<b>1 452.4</b>
Total equity	387.2	530.6
Interest-bearing debt	639.1	445.3
Contract accruals	171.0	141.0
Accounts payable	155.9	177.8
Other liabilities	190.9	157.7
<b>Total equity and liabilities</b>	<b>1 544.1</b>	<b>1 452.4</b>

- › Increase in intangible assets relate to investments in new technology for future growth
- › Reduced working capital at year-end following working capital release in Q4 and deconsolidation of Ascodero
- › Loan agreement has been amended with updated covenants
- › Equity ratio at 25.1% at end Q4 2023, compared with 36.5% at year-end 2022

2023 figures unaudited

# CASH FLOW

## Key figures

NOK million	FY 2023	FY 2022
<b>Cash and cash equivalents at start of period</b>	<b>42.5</b>	<b>141.1</b>
Net cash flow from operating activities	(0.6)	(72.2)
Net cash flow from investing activities	(99.9)	(142.2)
Net cash from financing activities	115.2	137.5
<b>Cash and cash equivalents at end of period</b>	<b>57.5</b>	<b>42.5</b>

2023 figures unaudited

- › Neutral operating cash flow for the year following working capital release during the fourth quarter
- › Investments for the period mainly relate to new technology within Industrial Solutions
- › Ascodero sold at year-end. Net proceeds following the transaction (NOK 20m) used to repay debt in January 2024
- › Cash flow from financing activities relate to proceeds from the refinancing secured during the summer, leasing and interest payments
- › Available liquidity for the group above NOK 100 million as of year-end

# COMPREHENSIVE PROGRAM FOR CONTROLLED AND PROFITABLE GROWTH

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## Comprehensive cost saving programme for 2024

- › Complete mapping of work processes, resulting in streamlined and simplified procedures, improved operational setup and increased efficiency in the delivery model
- › Project reviews intensified with focus on risks, supply chain management, cost control, and reducing working capital
- › Divestment of Ascodero has freed up management capacity and other resources
- › Aligning capacity with actual demand



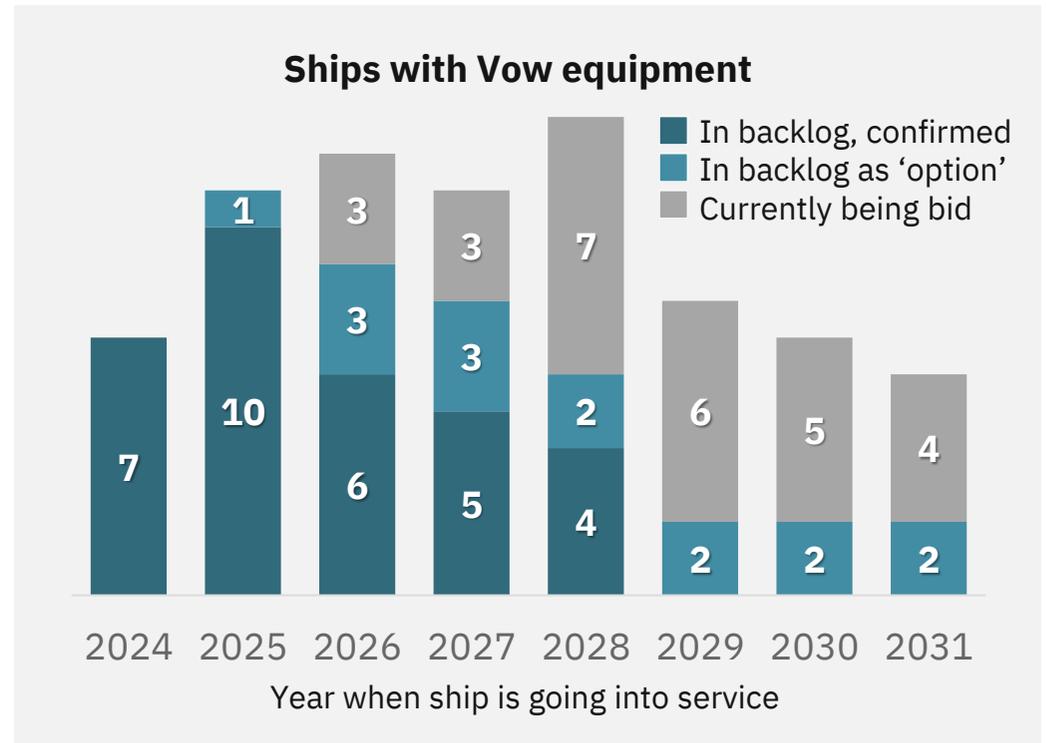
# **MARKETS, OUTLOOK AND CONCLUDING REMARKS**

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# STRONG BACKLOG AND PIPELINE IN CRUISE

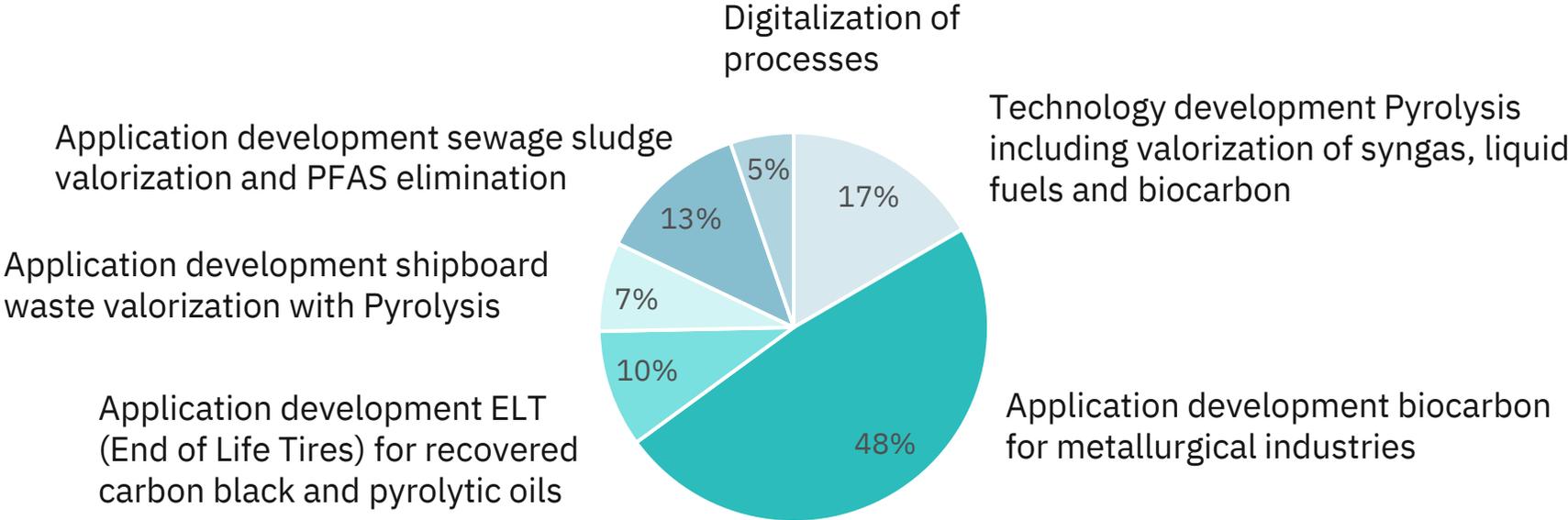
## Significant and growing interest for pyrolysis solutions for newbuilds

- Current backlog comprises 32 confirmed orders for cruise ships under construction and options for another 15
- Scanship's share of addressable market (2024-28) is currently 71%
- Tendering is ongoing or underway for an additional 28 ships
- Pyrolysis has been confirmed or is being considered for 18 of the 28 ships currently being bid
- In addition, 3 cruise ships are currently being retrofitted with Scanship AWP



# INVESTMENTS

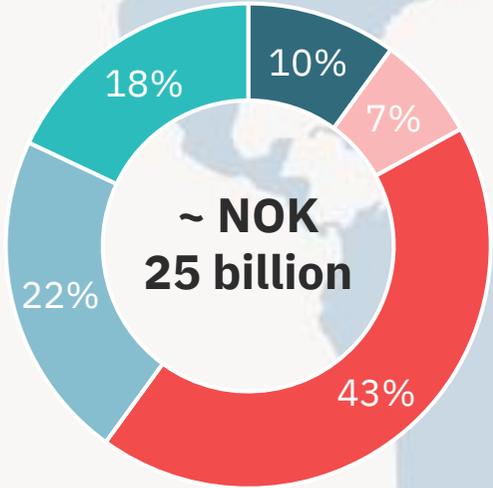
NOK 300 million invested to position Vow in relation to powerful industry trends



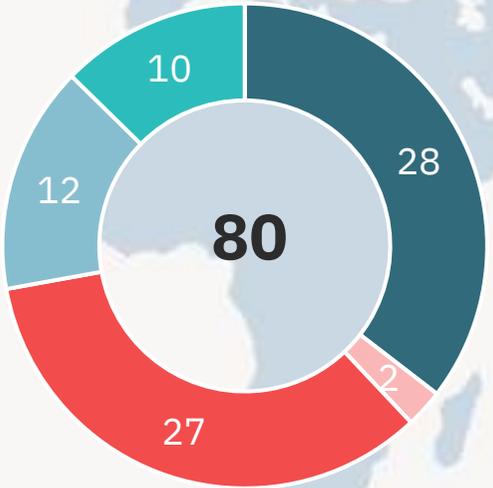
# INDUSTRIAL SOLUTIONS BID PIPELINE LARGEST EVER WINDOW OF OPPORTUNITY

With potential final investment decision towards 2029

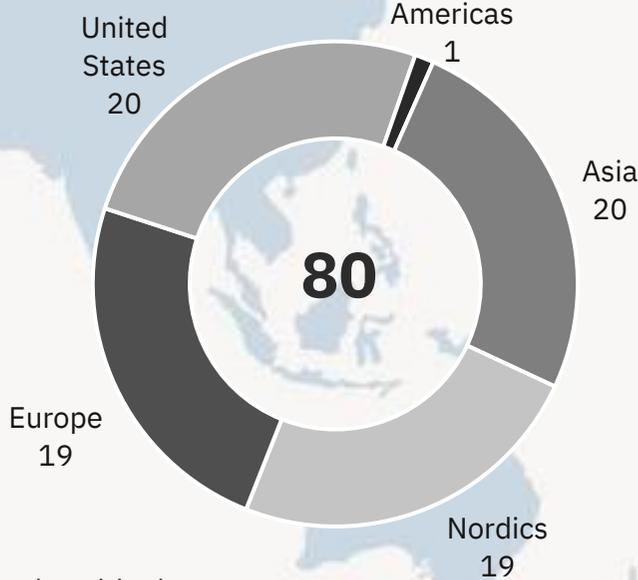
By application  
*in equipment value*



By application  
*# of projects*



By region  
*# of projects*



- Sewage sludge valorisation
- Biocarbon to metallurgy
- ELT to recovered carbon black (rCB) and pyrolysis oil (TPO)
- Waste valorisation
- Biomass valorisation

# TRENDSETTERS STEPPING UP

Major industrial players are now taking decisive steps

## Outokumpu



- Committing to extensive use of **biocoke** in its ferrochrome production facility in Tornio, Finland
- Acquiring equity stake in Swedish Envigas to drive further expansion of biocoke production capacity
- Envigas already use Vow technology and plans to expand production capacity to 25,000 tonnes

## Elkem



- Confirming long-term supply agreement for **biocarbon** produced by Vow Green Metals in Norway
- Agreement covers annual delivery of 15,000 tonnes
- Elkem states that it aims to increase its share of biocarbon to 50 percent by 2030, as a key element in its efforts to decarbonise production

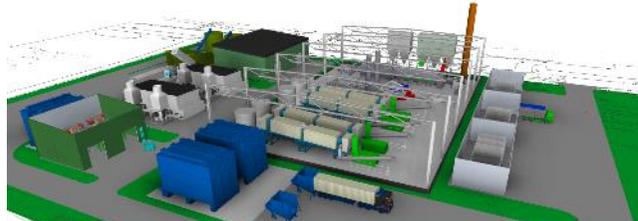
# FOCUSED BUSINESS DEVELOPMENT

Activity remains high in concrete opportunities with investment decisions imminent



## End-of-life tires

- Currently designing first ELT plants, likely to be in the UK
- Test facility in Lakenheath continues to qualify recovered carbon black for the big tire manufacturers



## Sewage plant FEED

- NOK 10 million FEED for a major project, deploying pyrolysis for treatment of sewage sludge and PFAS elimination
- Engineering and design of plant is underway, providing basis for customer's investment decision



## Caribbean Carbon Refinery®

- Co-operation agreement signed with CirCon Energy in November 2023
- Full scale plant would deploy 19 lines of Vow equipment
- Investment decision pending customer's investment decision

# CONCLUDING REMARKS

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- › High activity and significant revenue growth in 2023, with long list of projects successfully delivered to customers
- › Hit by inflation, cost escalation in projects, higher cost in commissioning from past years supply chain constraints, combined with record high project activity
- › Milestone contracts confirmed, securing basis for increased profits in years ahead
- › Investments in technology has positioned Vow well for rich pipeline of potential projects
- › Focusing business and operations on profitable growth



**BELIEVING IN A FUTURE WHERE  
INDUSTRY IS HARMONIZED  
WITH NATURE**



**VOW**