



# **SOLUTIONS FOR A SUSTAINABLE CARBON ECONOMY**

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**VOW**



# ABOUT US

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- › Provider of world leading technologies to **eliminate pollution**, enhance **circular economy** and mitigate **climate change**
- › Offering **patented unique solutions** that turn waste and biomass into **CO2 neutral** energy, **decarbonised** energy, **low-carbon** fuels and **biocarbon**
- › **Proven ability** to continually **develop and deliver** technology and equipment for complex **industry scale solutions** and applications, in close **co-operation with customers**
- › **Strong backlog** of orders and **large installed base** for leading players in a wide range of industries, providing **recurring business**

## VOW

Our brands



# KEY FEATURES

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**117**

**patents**  
within 17 families  
of patents

**450+**

**systems**  
installed<sup>1</sup>

**120**

**systems in backlog**  
to be delivered  
over the next 3-5 years

**35**

**proprietary technologies**  
and 25 proprietary technology  
applications

**181**

**employees**

**6**

**countries with operations**  
Norway, France, Poland, US,  
Canada and Italy

<sup>1</sup> Of which 290 systems are installed on 130 cruise ships, 60 systems within landbased waste and biomass valorisation and 100 systems with food processing

# DRIVERS



Industry  
push for  
decarbonising



Economic  
realities

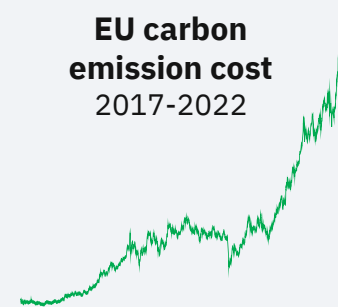


Circular  
economy



Policies and  
regulation

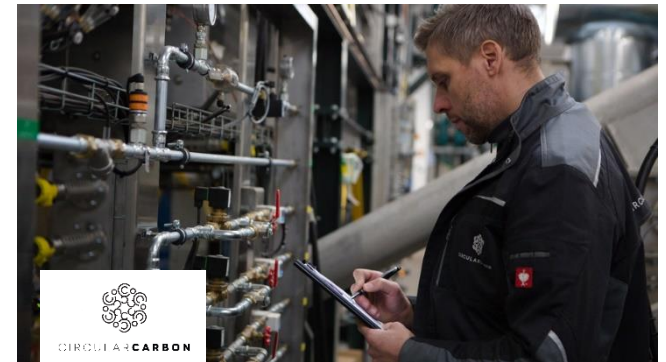
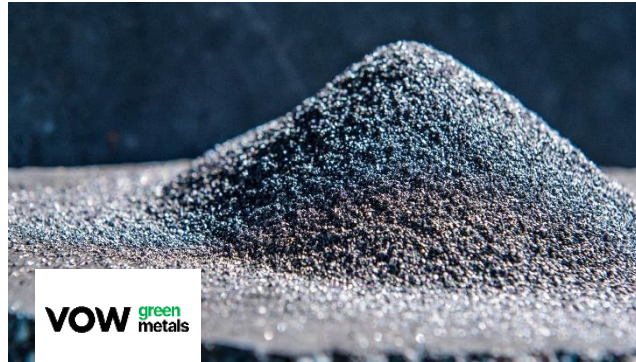
EU carbon  
emission cost  
2017-2022



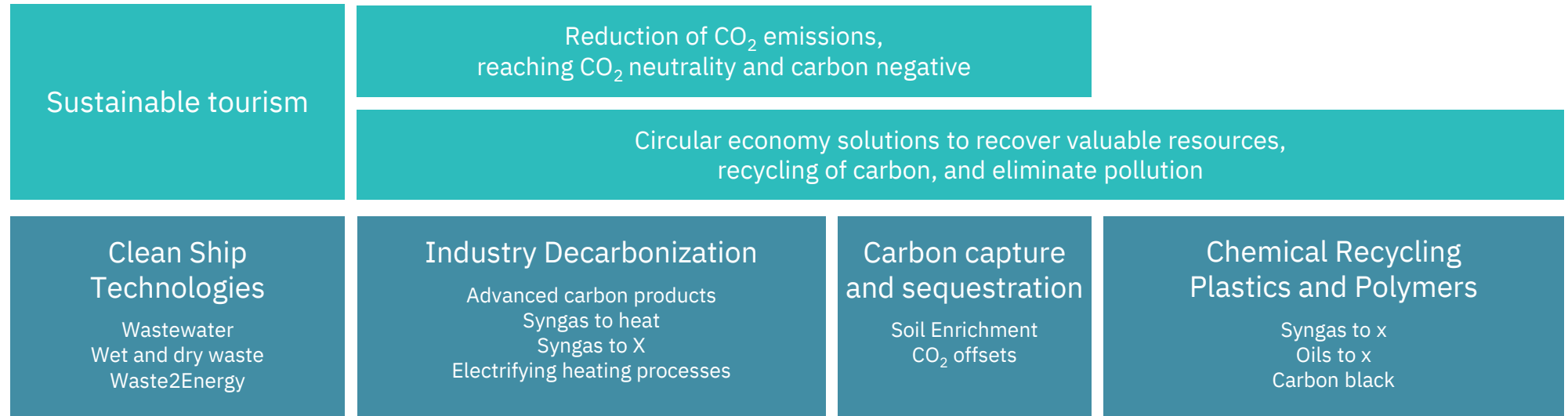
**“Decarbonise  
or die!”**

Larry Fink  
CEO Blackrock

# INDUSTRY RESPONSE



# STRONG PULL FOR VOW SOLUTIONS

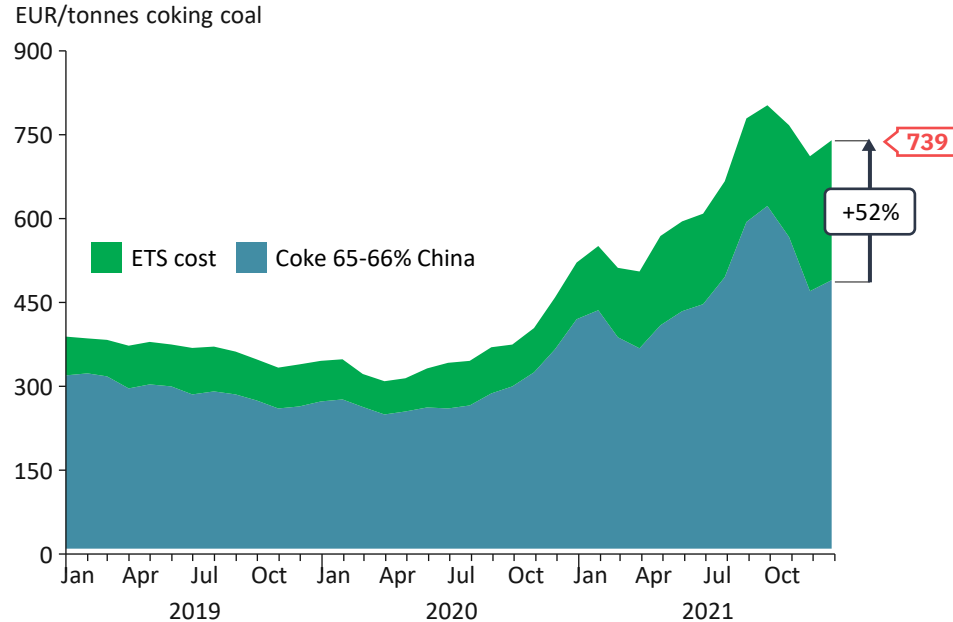




# RISING COSTS AND CARBON TAX

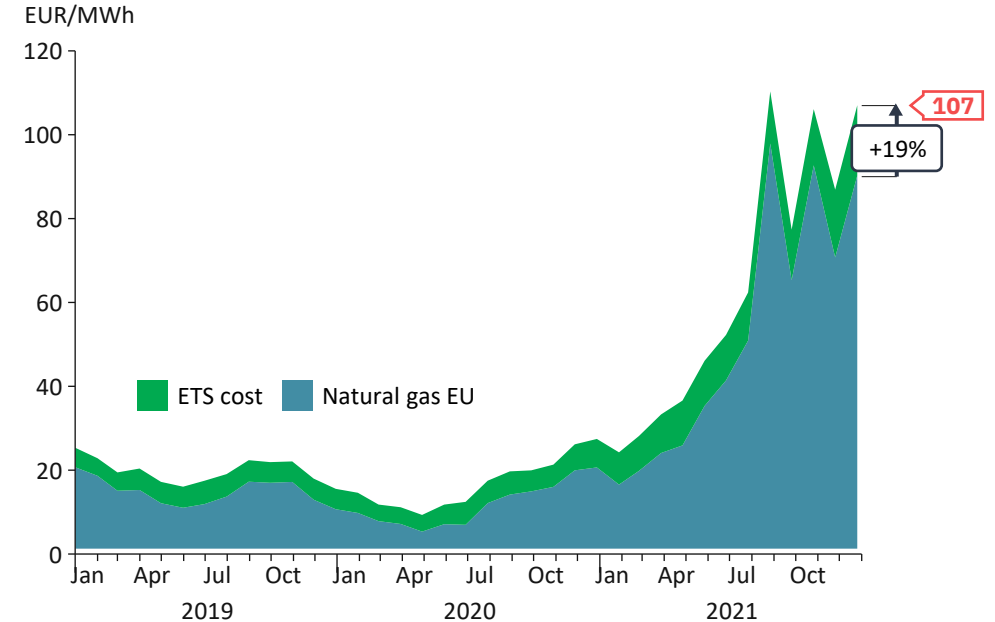
## Price for metallurgical coking coal<sup>1</sup>

Price for coking coal used in metallurgical industry. Included EU CO2 emission cost.



## Price for natural gas in EU for heating<sup>2</sup>

Price for natural gas in EU first day every month. Included EU CO2 emission cost.

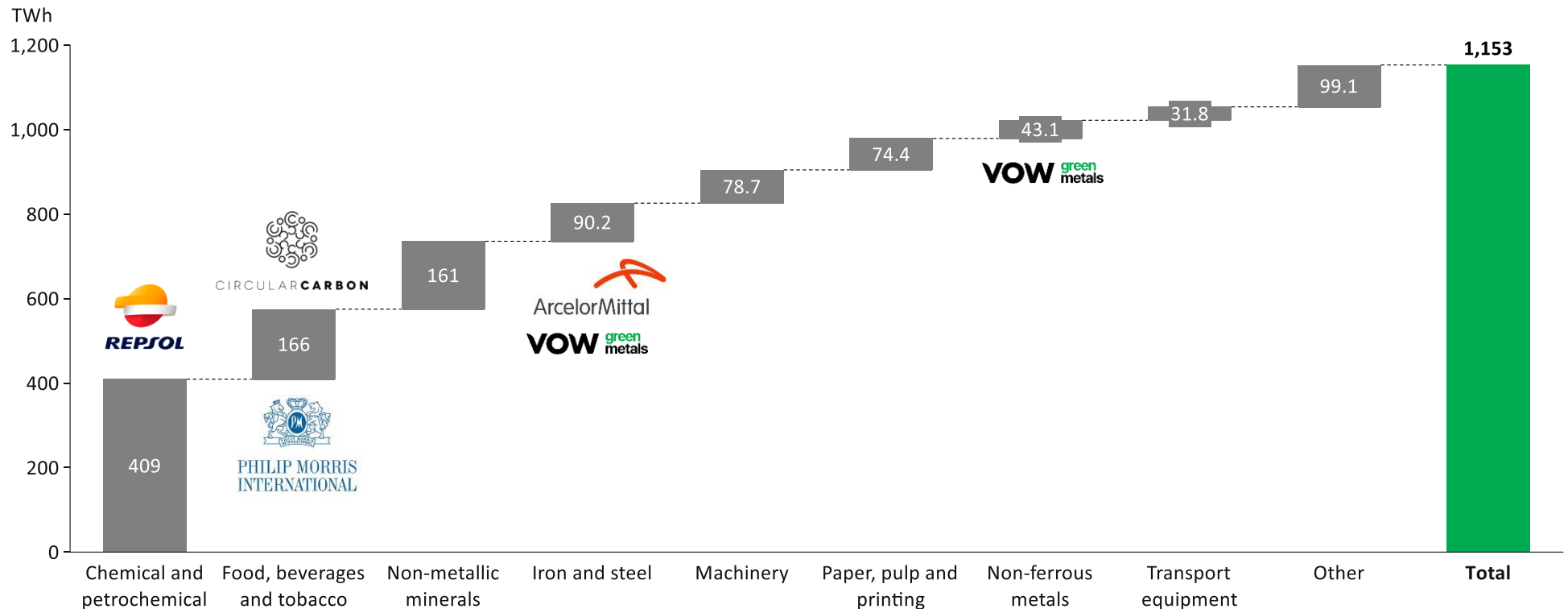


<sup>1</sup> S&P Global Platts 2022, >3 tonnes CO2 is emitted from 1 ton carbon;

<sup>2</sup> Eurostat, 200 g CO2/kWh natural gas for energy (>400 g CO2/kWh for electricity production)

# INDUSTRY IN USE MORE THAN 1,000 TWH NATURAL GAS TODAY

Pyrolysis gas is available as a solution for the industry today



Source: Eurostat - Supply, transformation and consumption of gas, EU 2019, 279 kWh/GJ



# THE 50,000-TONNES<sup>1</sup> PROJECT

Feeding a large European non-ferrous metal producer, LOI announced February 2, 2022

## Sustainable feedstock

- Forestry wood mass
- Biomass waste streams
- Wood materials



**50,000 tonnes**

CO<sub>2</sub> neutral biocarbon,  
replacing the equivalent of

**EUR 37 million**  
of fossil coking coke

**300 GWh**

CO<sub>2</sub> neutral syngas,  
replacing the equivalent of

**EUR 32 million**  
in fossil natural gas

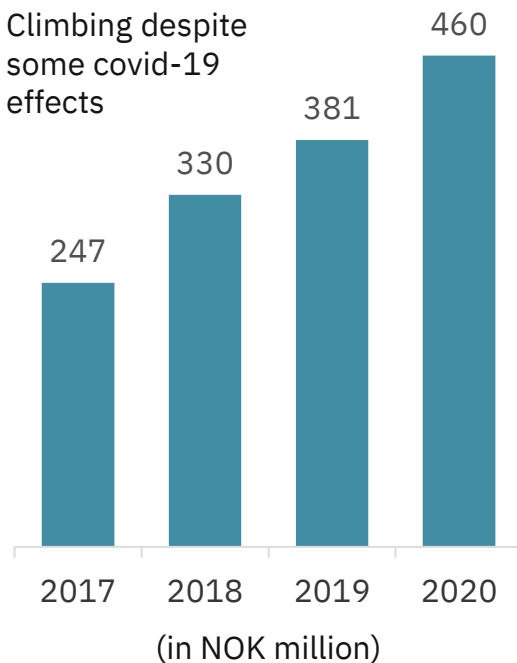
<sup>1</sup> Equivalent to 5 x initial production capacity at Follum project and EUR 85-100 million worth of Vow technology

# CHANGE IS COMING

The proof is in the numbers

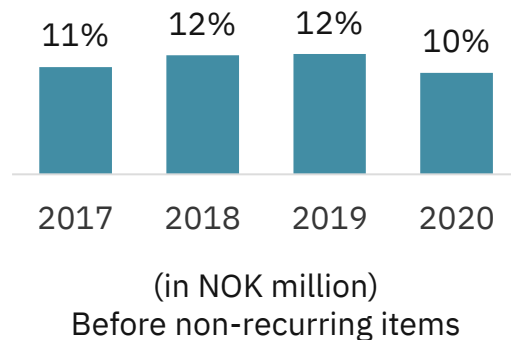
## Revenues

Climbing despite some covid-19 effects



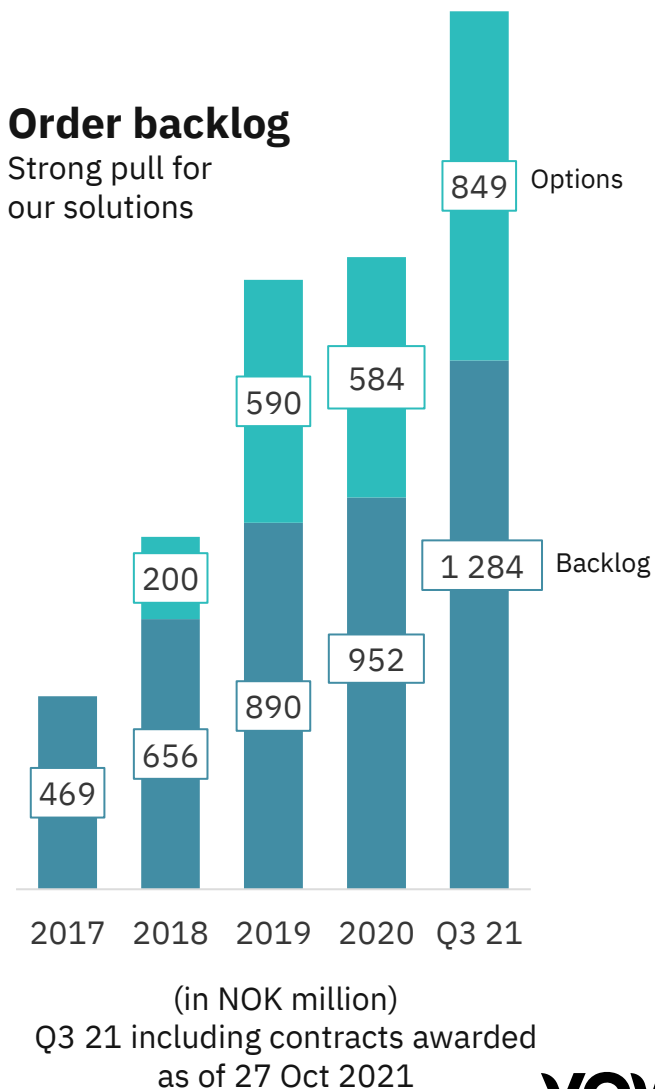
## EBITDA margin

Stable and strong through rapid growth



## Order backlog

Strong pull for our solutions





An aerial photograph of a dense forest. A dirt road winds through the trees. A single dead, white tree stands out among the green foliage. The text is overlaid on the image, framed by white L-shaped brackets.

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