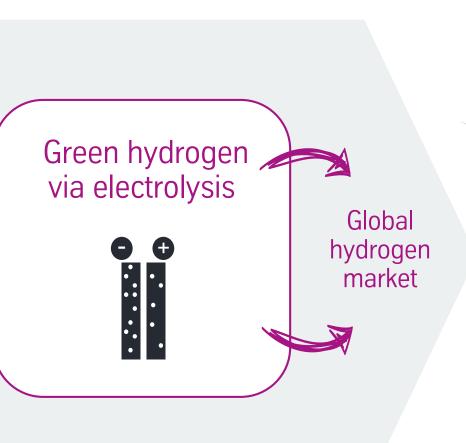
### thyssenkrupp nucera

A technology leader in hydrogen

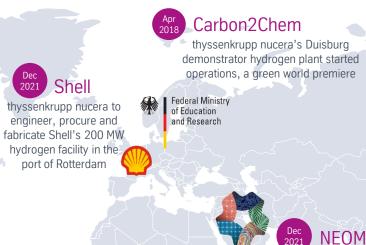
25 Nov 2022 | Dr. Werner Ponikwar



## Powering a cleaner future: Solidifying position as an industry leader for hydrogen technology









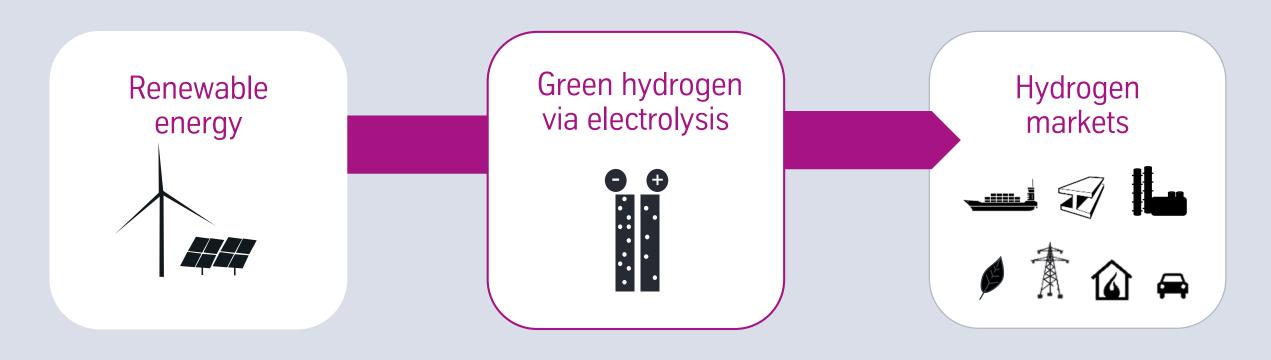
Lol with Unigel
60 MW for Unigel's industrial
scale green hydrogen facility
in Camaçari Industrial

Complex, Brazil

**UNIGEL** 

### Electrolysis connects the renewable energy sector with a wide

### range of industries and enables industry decarbonization



Green hydrogen economy drivers

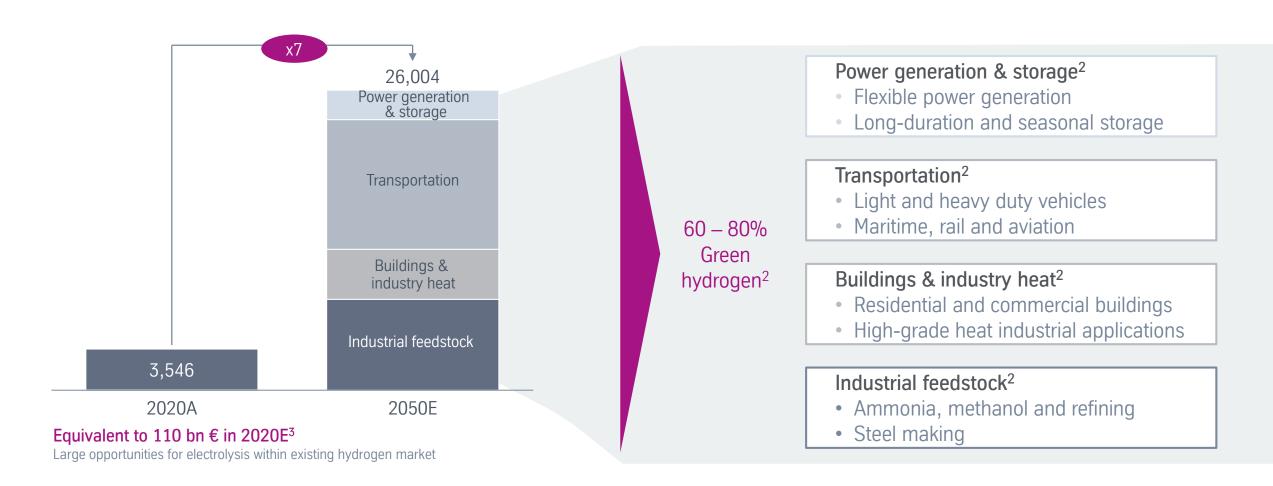
Climate & environmental protection

Growing renewable energy sector at low cost

Appropriate legal frameworks

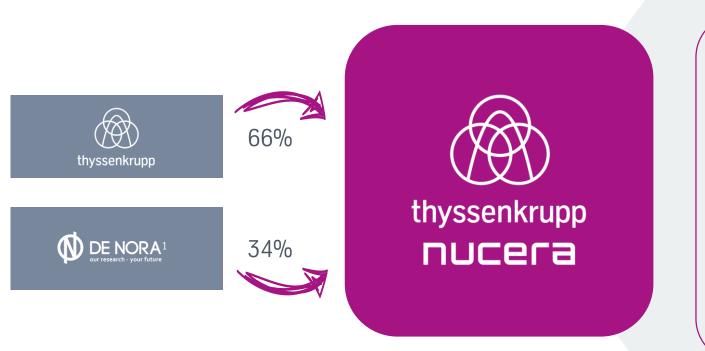
#### Large and high growth hydrogen market will further accelerate

Estimated global hydrogen demand by segment by 2050 (TWh<sup>1</sup> p.a.)<sup>2</sup>

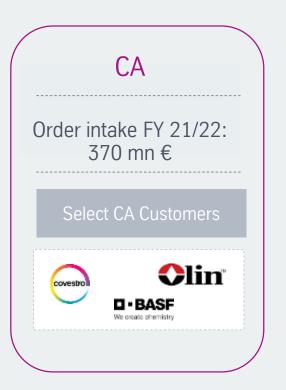


Energy content of 1kg of hydrogen equal to 141.9 MJ (HHV) = 39.4 KWh 2. Source: Hydrogen Council in collaboration with McKinsey & Company, Hydrogen for Net Zero Report, November 2021 3. Source: Bloomberg News, Hydrogen Generation Market Worth \$201 Billion by 2025, February 16, 2021

## We are the Alkaline Water Electrolysis (AWE) and Chlor-Alkali (CA) technology provider globally







<sup>1.</sup> De Nora shareholding structure – De Nora Family (54.8%), Snam (25.8%), Cordusio Fiduciary (Board Members and Management) 1.8%, Free float (17.6%)

<sup>2.</sup> Letter of Intent has been signed

### Creating the global leader of Alkaline Water Electrolysis





Enabler for industries to decarbonize



High growth water electrolysis market



A technology leader in the industrial scale electrolysis



Global organization with reputable partners



Highly experienced management team



High value-add aftermarket and life cycle service offering



Fast growing AWE order backlog proves validity

## Our proven experience in CA business provides a strong technology basis for AWE scale-up



CA: Over 600 projects, 240,000 cell elements, >10 GW of capacity installed



AWE: Building on CA leadership

#### Market Readiness

- Industrial-scale installations
- Quality proven supply chain of 1 GW cell manufacturing capacity p.a.

- Industrial-scale hydrogen plants
- Expand to a 5 GW supply chain

#### **Product**

- A technology leader for electrolysis
- Handling of hydrogen as a by-product

- Standardized AWE product with leading TCO1
- Hydrogen as the main product

### Organization & Network

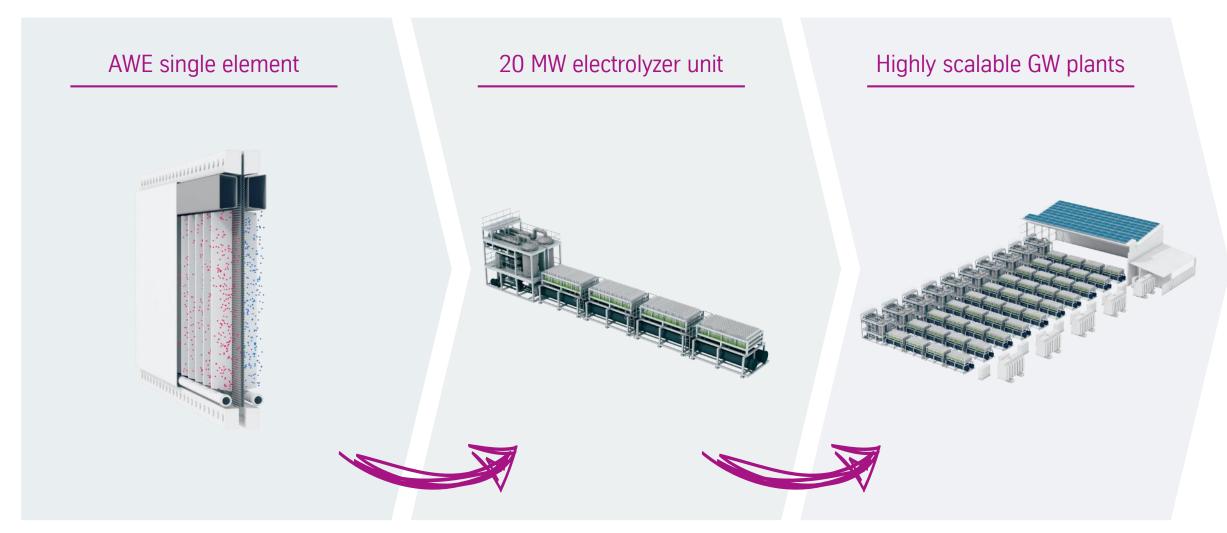
- · Holistic life cycle services
- Global network with partners

- · Successful service model
- Automation and digitalization

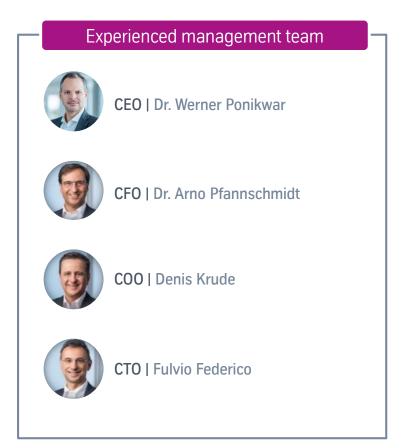
Key enabler of hydrogen production

1. Total cost of ownership

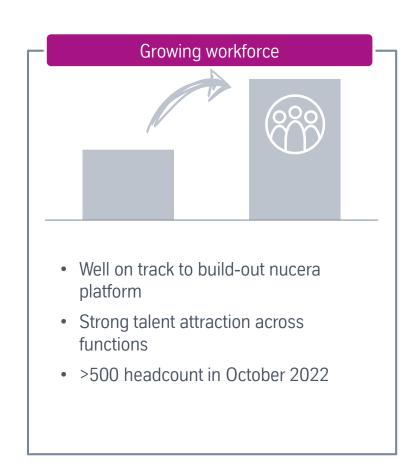
# thyssenkrupp nucera offers an efficient and highly scalable module concept to match highest market demands



## Experienced management team is building on a leading global organization with a network close to customers



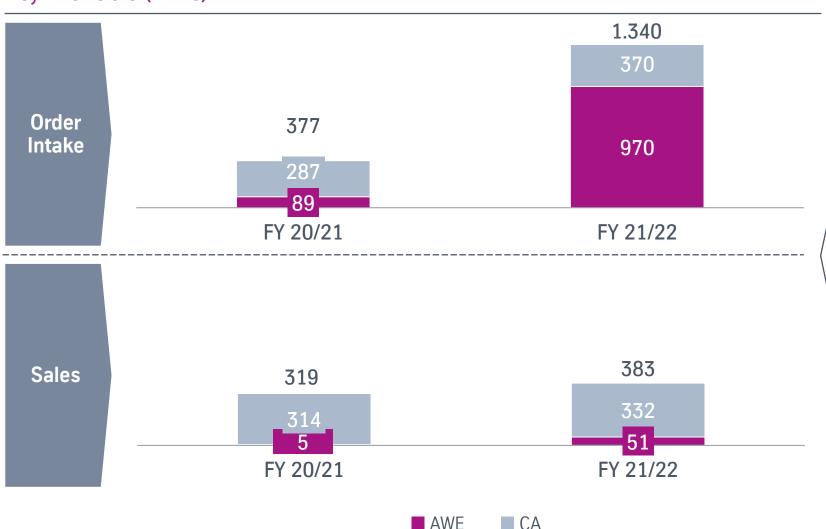




thyssenkrupp nucera is well prepared for the future of rapid growth

#### 12M 21/22 has recorded a strong top-line performance

#### Key financials (mn €)



#### Order Intake

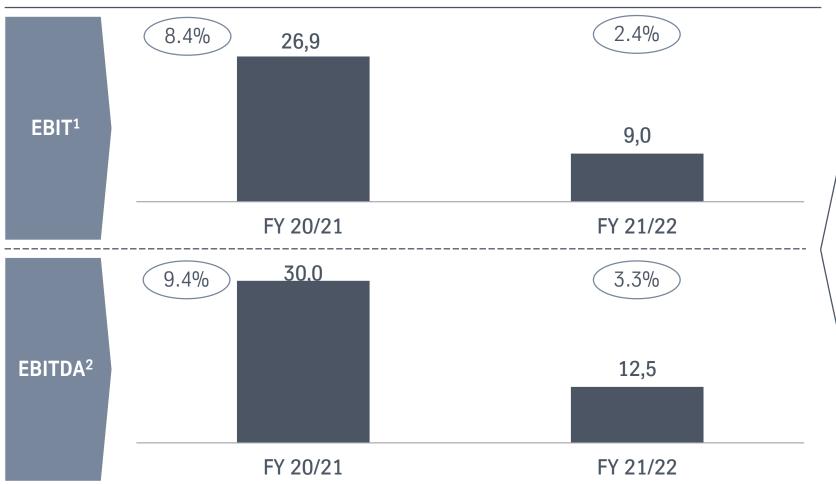
- 12M 21/22 mainly driven by AWE projects with NEOM, Shell and Air Products
- Strong CA order intake driven by several new build projects
- 12M 21/22 backlog of ~1.5bn € thereof ~1.0bn € AWF

#### Sales

- CA sales driven by strong service business
- AWE continues to ramp-up in line with expectations

### Positive 12M EBIT reflects high resilience in uncertain market conditions

Key financials (mn €)



### EBIT margin for 12M 21/22 impacted by:

- Base effect from higher margin in previous year which benefitted from large CA new build project realizations
- Growth investments to capitalize on the promising sales funnel with growing R&D and SG&A expense in 12M 21/22
- Mid-single digit Euro million amount of non-recurring IPO preparation costs (SG&A)



<sup>1.</sup> Refers to income from operations 2. Income from operations plus depreciation, amortization and impairment of non current assets

## Key messages | thyssenkrupp nucera, a global leader in Alkaline Water Electrolysis



High growth hydrogen market will drive growth in AWE technology demand



A leading organization with a global network close to customers



Proven know-how in Chlor-Alkali provides a strong basis for the scale-up of AWE



Modular 20 MW electrolyzer specifically designed for industrial-scale projects



Secured hydrogen projects with a total of more than >2 GW and working on further multi-100 MW opportunities