

EXECUTIVE SUMMARY

Electrode Technologies

2025



DE NORA
Dare. Develop. Deliver.

DE NORA: three divisions, one soul.

100 Years of Electrochemistry, to provide Sustainable Techno.



Electrode Technologies

Anodes, Cathodes, Catalytic Coatings Gas Diffusion Electrodes, Cell Manufacturing

Markets & Leadership



Chlor-alkali, Electronics, Nickel & Cobalt Electrowinning
> 50% market share



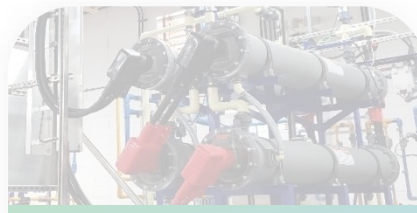
Energy transition

Electrodes for Alkaline Water Electrolysis (AWE), Electrolysis Cells, and Electrodes for Fuel Cells, Small Scale Electrolyzers

Markets & Leadership



Green Hydrogen Production AWE Technology



Water technologies

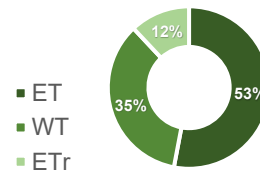
Electrochlorination, Disinfection and Filtration Technologies, Water Treatment Technologies, Electrodes for Pools

Markets & Leadership

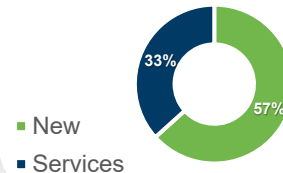


Pools (**> 80% Mkt share**) & Industrial Electrochlorination; Within **the top 5** in municipal disinfection & filtration

FY 2024 Revenues
By Business Units



FY 2024 Revenues
New Installations
vs Services



Consolidating our Global Leading Position.

Market Evolution

Chlor-Alkali

Stable to low single-digit growth in 2024-2027. Growth's driver: Technological upgrades, Aftermarket

Electronics

Recovery expected in 2025 driven by technological trends and electrification incentives.

Electrowinning

Stable installed capacity for Nickel and Cobalt.

Competitive Scenario

- China remains a competitive market, with local players providing lower-performing techs
- Limited competition in the US and EU

Strategic Guidance

- Innovative and Sustainable Electrodes
- Optimizing Noble Metal Usage
- Maintaining Customer and Partner Relationships
- Focus on Aftermarket development

De Nora's Strengths

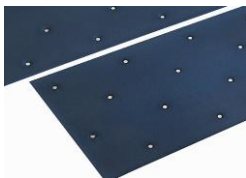
- Undisputed industry leadership
- Global and balanced geographic footprint
- Proprietary technologies, continuous R&D
- Long-term customer relationship
- Strategic Partnerships
- Growing Aftermarket business

OUR SDGs COMMITMENT



Addressing multiple industrial applications with a wide range of products.

Key Products



ANODES



CATHODES



CATALYTIC
COATINGS
GDE¹

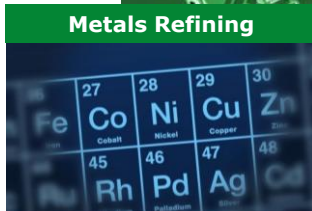
Main Addressed Industries



Chlor-alkali



Electronics



Metals Refining

Other Industries



Pulp & paper



Steel galvanizing



Automotive
Chrome plating



Plumbing & furniture
Surface finishing



Steel & concrete
Corrosion protection

¹ GDE: Gas Diffusion Electrodes



Flagship ongoing Projects.



Sadara, Saudi Arabia
Hydrochloric Acid Solutions
 First project 2013/2014
 Recoating Services 2022-2025

Next recoating cycle 2028 c



NanYa (Formosa Plastic Corporation)
Copper foil production for PCB & LiB

Supply and maintenance services for the electrodes equipping for Cu foil production
 Delivery by 2026



OxyChem, US
Chlor Alkali Plants environmental compliance and performance improvement

- PMX separators for Diaphragm Ongoing
- Converting to membrane tech. Delivery by 2026



Market Analysis & Positioning: Leadership & Balanced End-market Exposure.

DE NORA EXPOSURE*

Chlor-alkali

71%

Electronics

14%

Metals Refining & Specialties

15%

POSITIONING**



>50% mkt share



>50% mkt share



~50% mkt share

END MARKET

- Chlorine
- Plastics/Chemicals

- Printed Circuit Board
- Lithium Batteries

- Nickel - Cobalt

MARKET CAGR 2024-2027



0%-2%

High Single digit

GROWTH DRIVERS

- Aftermarket services
- Tech Upgrade, GDP growth

- Tech Trend
- Electrification incentives

- Aftermarket services
- Tech Upgrade, ESG

KEY GEOGRAPHIES

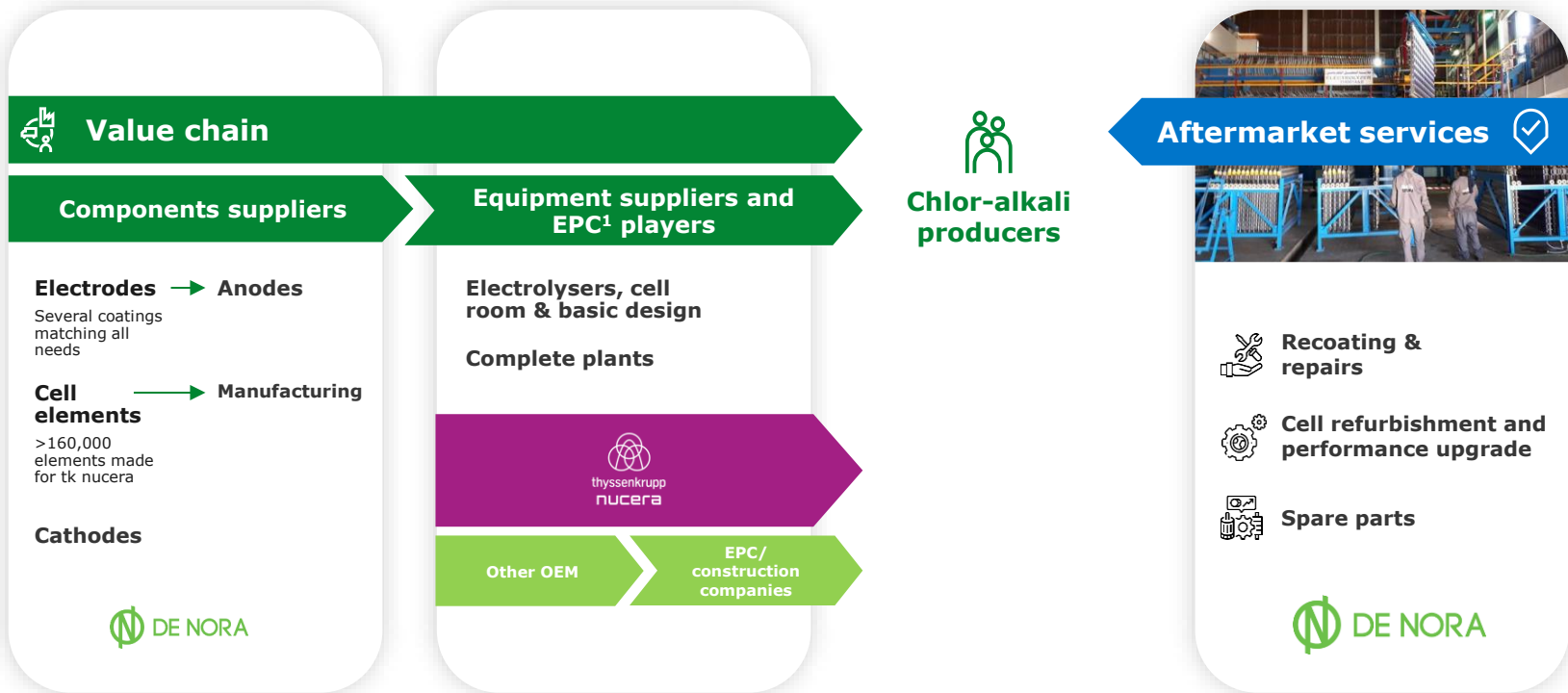


*% on FY2024 Electrode Technologies Business revenues. ** Market Shares are global



Chlor-alkali.

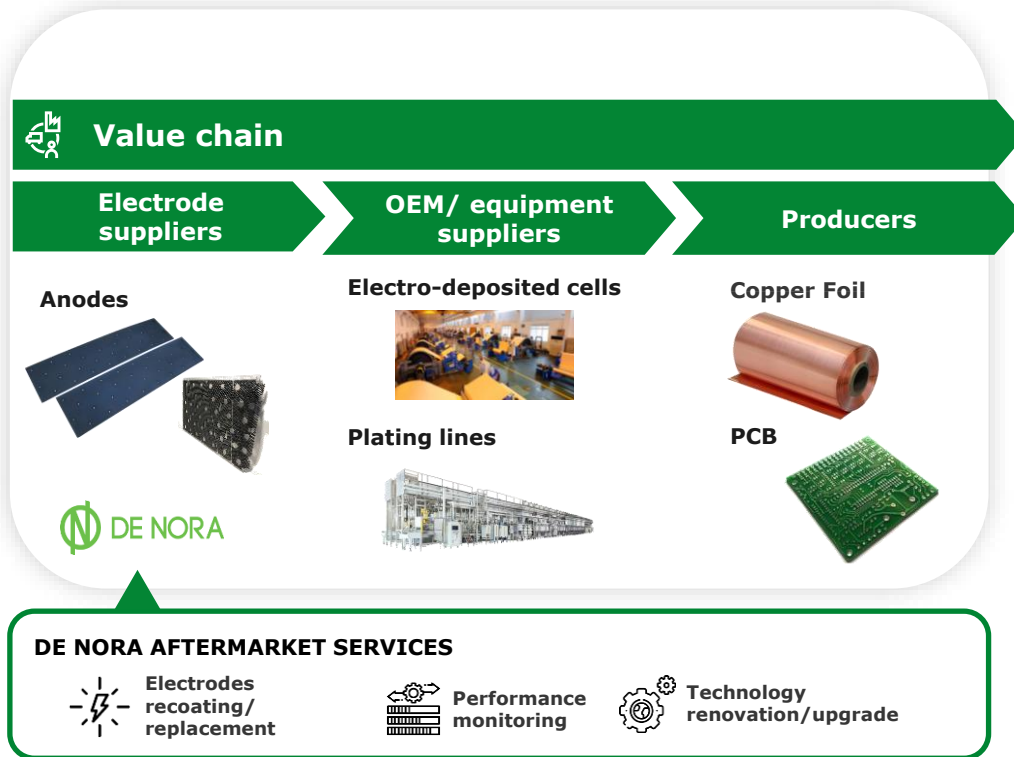
Electrodes at the core of the value chain with bespoke mission-critical solutions matching customers' needs.



¹ Engineering, Procurement, and Construction.

Electronics.

Electrodes at the core of the value chain with bespoke mission-critical solutions matching customers' needs.



Lithium Batteries



Rigid PCB



Flexible PCB



Semiconductors

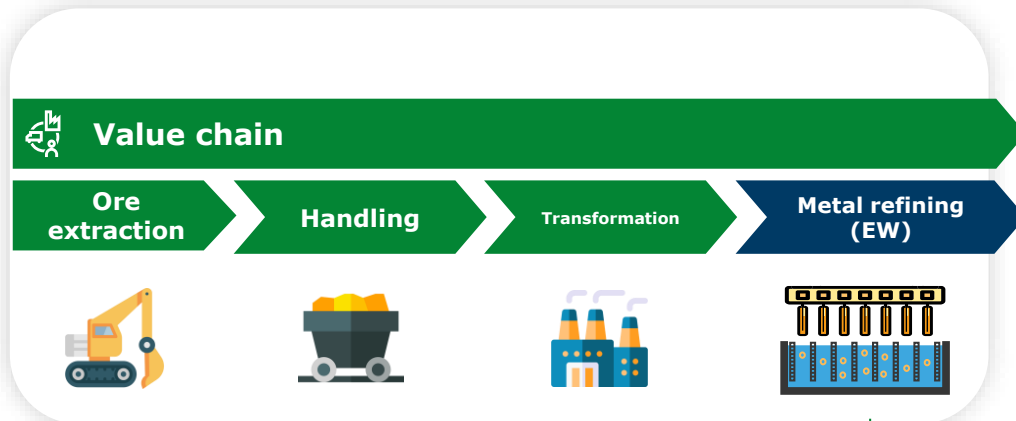


HDI

¹ Electrodes for copper foil manufactured in 2021.

Electrowinning.

Electrodes at the core of the value chain with bespoke mission-critical solutions matching customers' needs.



DSA® anodes



Nickel (Ni)



Cobalt (Co)



Copper (Cu)¹

¹ De Nora is testing a technology to penetrate the copper electrowinning market.

What makes De Nora's electrodes different?



More than one century of investments and technological breakthrough



Best-in-class manufacturing capacity in place



Superior performance in terms of energy consumption, efficiency, and durability



Outperforming for quality and range of aftermarket services



Demand for electrodes is being driven by well-established mega-trends.

CLIMATE CHANGE

Demand for high-efficiency and reliable products that contribute to reducing CO₂ emissions

Carbon footprint reduction

Clean water

URBANISATION

~30% urban population growth by 2040¹ Strong demand for infrastructure

Reduction of water consumption

High-performance materials

Infrastructure

DIGITALISATION

~50% 5G infrastructure market global revenues 20-25 CAGR²

Production of critical raw materials

High-quality plating for PCB contacts

Chlor-alkali



Electronics



Mining



¹ The World Bank website as of 21 February 2022.

² Mordor Intelligence (Global 5G Infrastructure Market).

Distinctive Production Footprint.

Capacity in Place first wave of expansion completed, ongoing Gigafactory Project.

AMS

PRODUCTION FACILITIES for Electrodes, Water Technologies and Energy Transition

New Energy Innovation Center inaugurated in 2025

EMEIA

PRODUCTION FACILITIES for Electrodes, Water Technologies and Energy Transition

Enhanced Germany facility in 2024

Ongoing Gigafactory (ITA) up 2GW

ASIA

PRODUCTION FACILITIES for Electrodes, Water Technologies and Energy Transition

Suzhou's expansion 2023: 3x coating line

Okayama expansion 2024



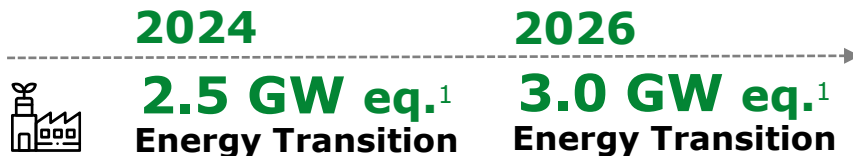
Italian Gigafactory

Smart and Sustainable Factory

Italian **Production Hub** for all the BUS

IPCEI Funds (€63m allocated), economic and financial flows, under review in light of evolving H₂ mkt conditions. Interactions with local authorities started.

Set to **start in 2026** with an initial 0.5 GW capacity



1. Elements Equivalents



Thanks.



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