Università Ca'Foscari Venezia

2025 CFA Institute Research Challenge
February 21th 2025

DE NORA

RECOMMENDATION

Target Price
€11.5

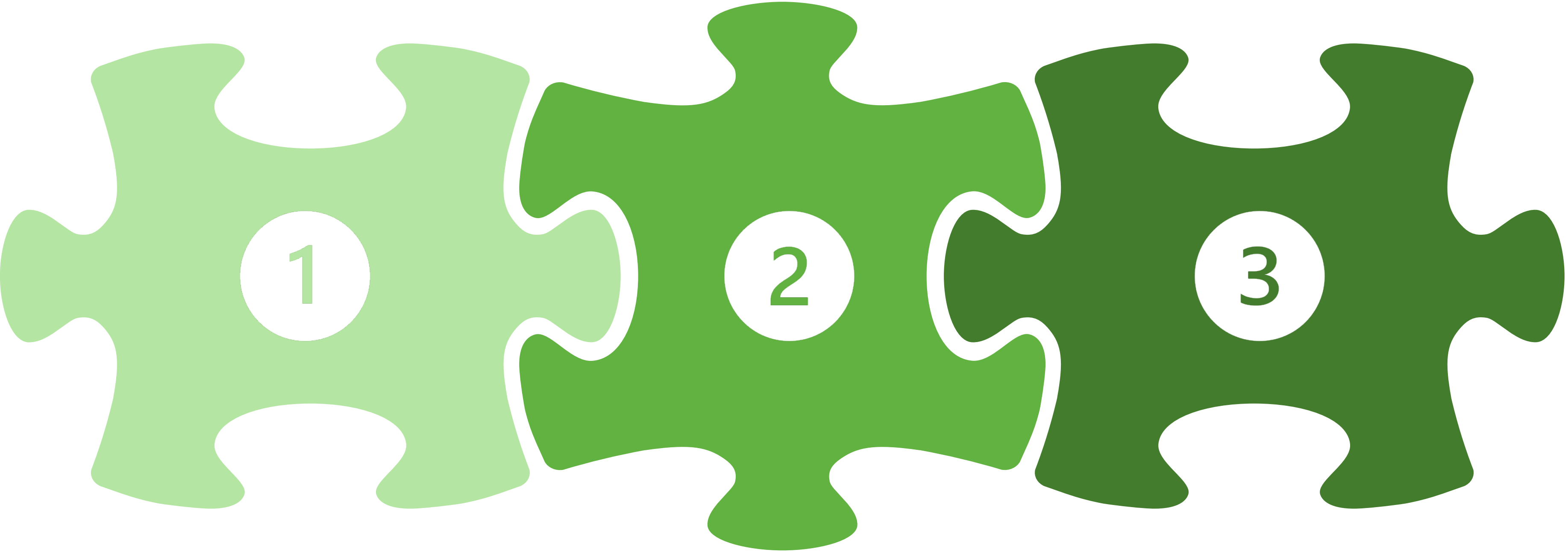
BUY
Ticker DNR.MI

Current Price
€7.2
31/01/2025

"Shaping the future of green hydrogen"

+60.6% Upside

PILLARS



Leading Market Position

Solid Financial Structure

Free Option on Green Hydrogen

BUSINESS UNITS

Electrode Technologies, Water Technologies and Energy Transition

Portfolio

De Nora Foundation

1923

DSA Anodes

1960s

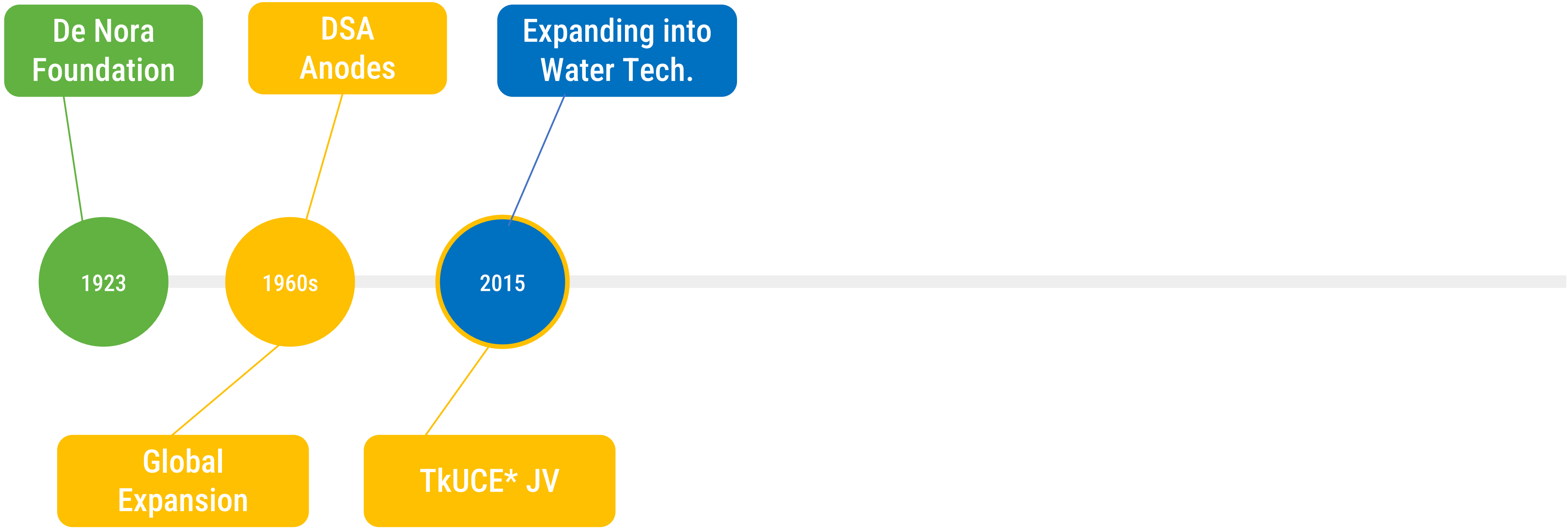
Global Expansion

Strategy

BUSINESS UNITS

Electrode Technologies, Water Technologies and Energy Transition

Portfolio



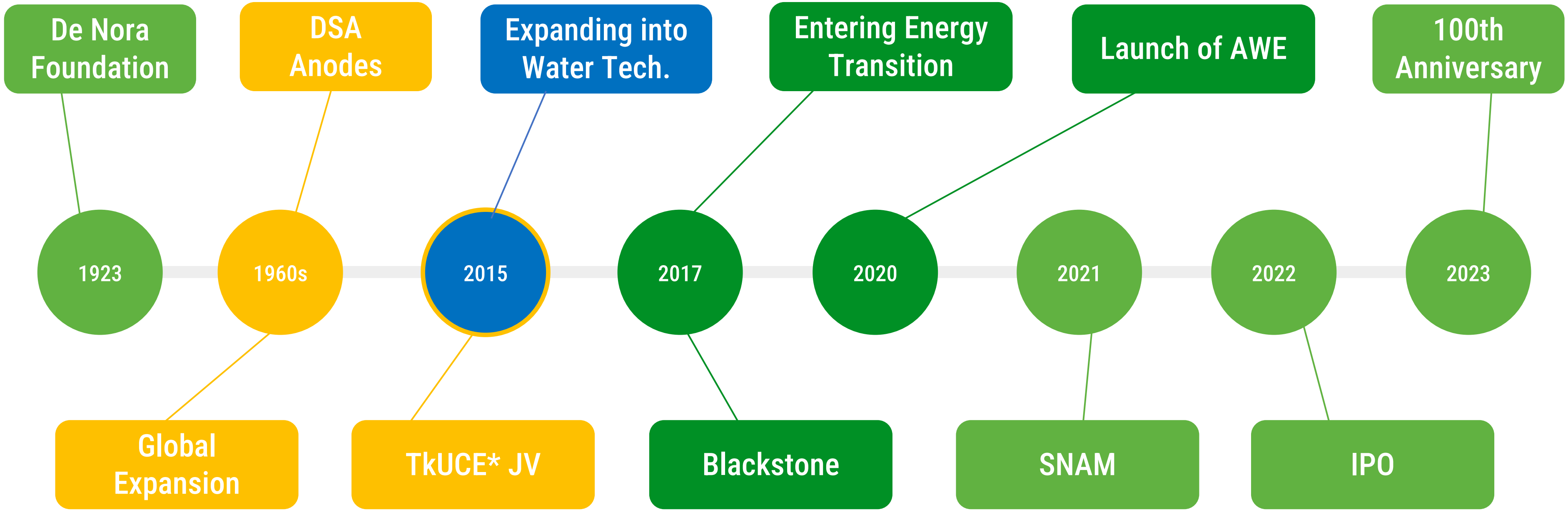
Strategy

*First Joint Venture with thyssenkrupp Uhde Chlorine Engineers ("tkUCE") was set up in 2001, renamed tk nucera in 2022.

BUSINESS UNITS

Electrode Technologies, Water Technologies and Energy Transition

Portfolio



Strategy

*First Joint Venture with thyssenkrupp Uhde Chlorine Engineers ("tkUCE") was set up in 2001, renamed tk nucera in 2022.

THYSSENKRUPP NUCERA

De Nora's Main Customer

thyssenkrupp
(50.2%)

(25.9%)

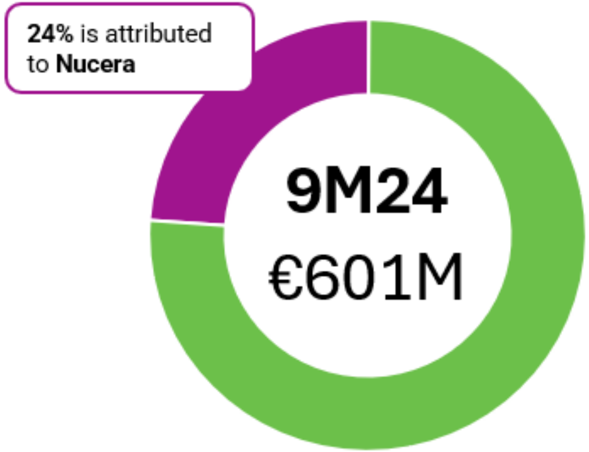
Energy Solutions Company
(6.0%)

Free Float
(17.9%)

thyssenkrupp nucera
€1.04B Market Cap

CA
Order Backlog
Dec '23:
€0.5B

AWE
Order Backlog
Dec '23:
€0.9B



The relationship is regulated by the **TMA** Agreement until 2038 **De Nora has to supply** these products exclusively to **Nucera** which Is obbliged to buy electrodes and electrochemical cells

GIGAFACTORY

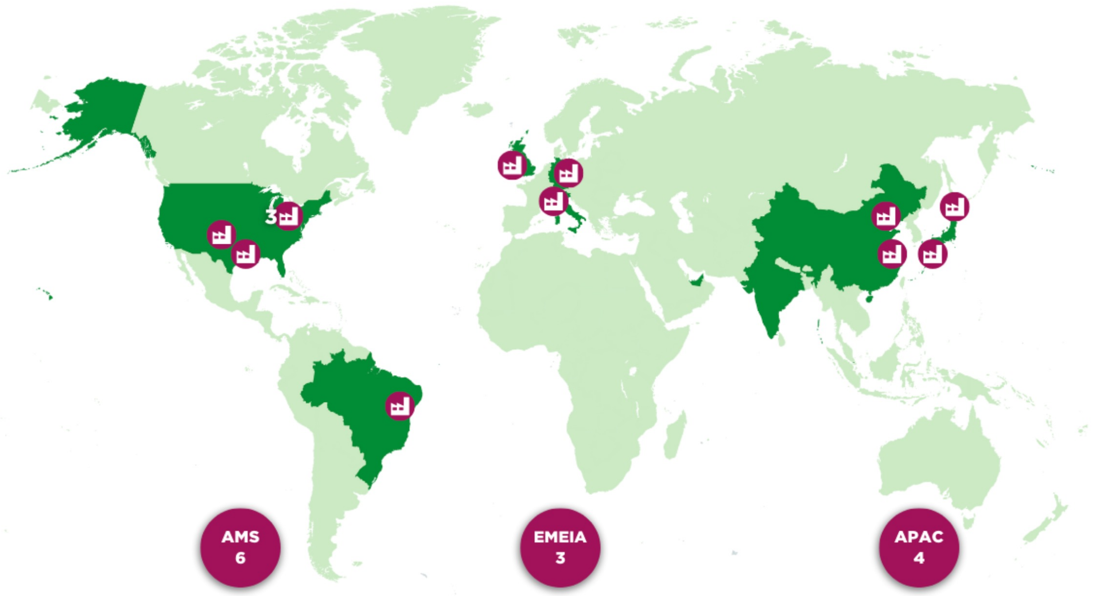
To Build the Future

2022	2024	2025E	2030E
Creation of De Nora Italy Hydrogen Technologies	Beginning of the construction	Beginning of ramp-up of around 1GW	Full capacity of 2GW

- Financed with **€63M in public funds**
- Designed to scale up the production of **Dragonfly electrolyzers**

REVENUES BREAKDOWN

Global Footprint

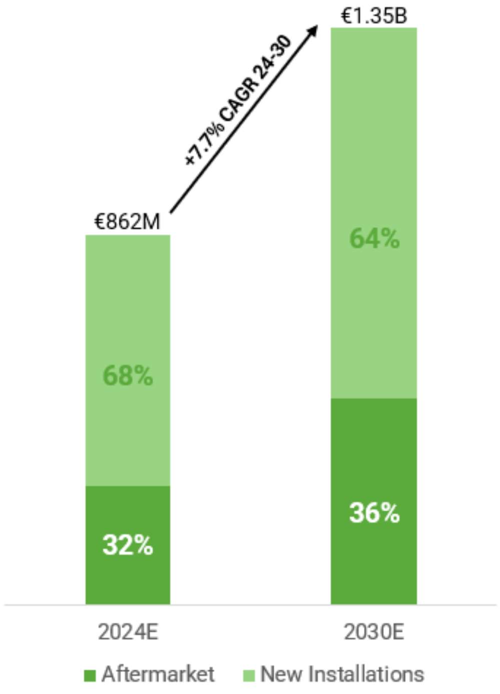


AMS
30%

EMEIA
36%

APAC
36%

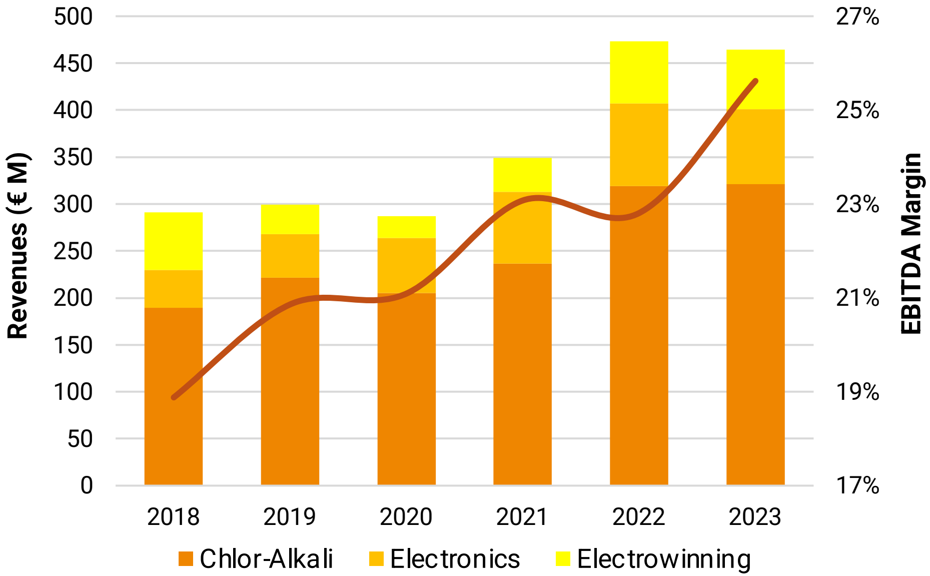
Building & Maintaining



ELECTRODE TECHNOLOGIES

54.2%
Of Total Revenues

INDUSTRY DRIVERS:
Economic Cycles, AI Development, Sustainability in Mineral Extractions

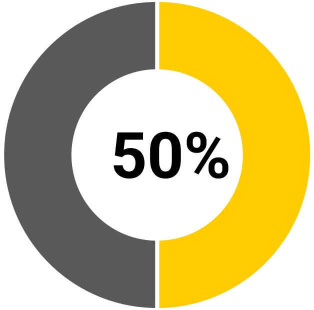


STRENGTHS

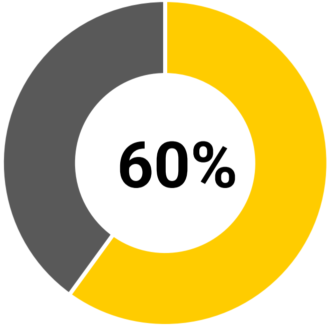
- Increasing Margins
- Strong Cash Flows

THE BACKBONE OF INDUSTRIAL SUPPLY CHAIN

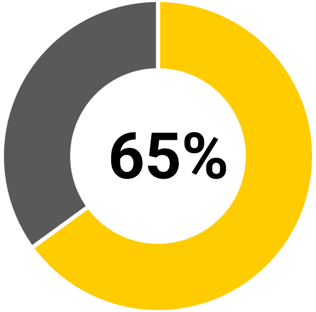
De Nora Market Share



Electrodes for Chlor-Alkali Processes



Anodes for Nickel and Cobalt Electrowinning



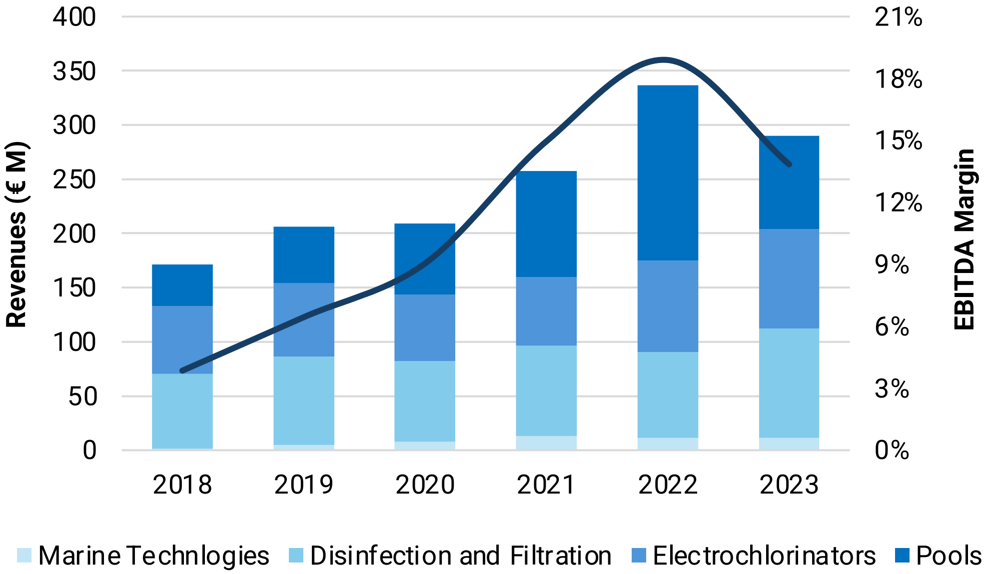
Anodes for Printed Circuit Board Production

Company	Sector
PERMASCAND	Electrodes, Catalytic Coating
Magneto Special Anodes	Anodes, Cathodic Protection
AsahiKASEI	Electrochemicals

WATER TECHNOLOGIES

33.9%
Of Total Revenues

INDUSTRY DRIVERS:
PFAS Regulamentation, Safe Water Demand, Residential Construction Growth



STRENGTHS

- Increasing Revenues
- Strong Cash Flows

RIDING THE REGULATORY WAVE

De Nora Market Positioning

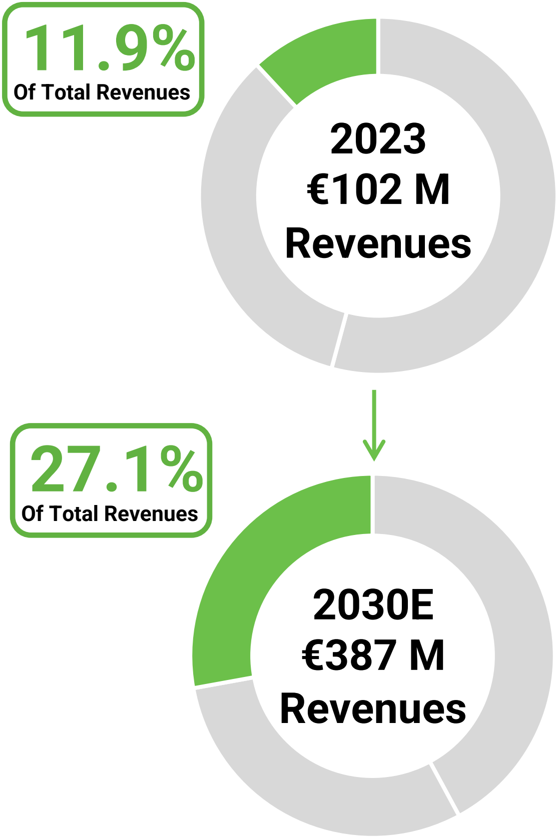
1 Electrochlorinators for Pools

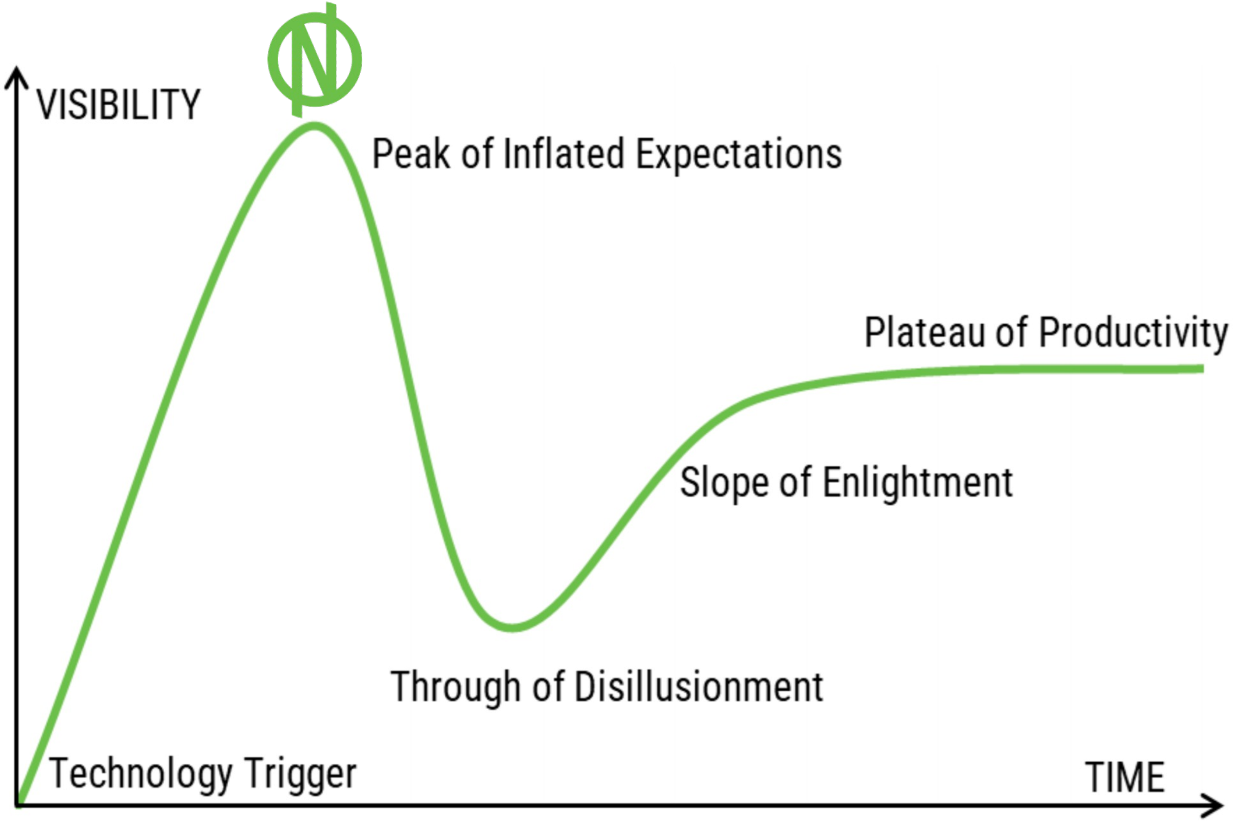
3 Municipal Water Disinfection

5 Municipal Water Filtration

Company	Sector
Veolia	Water Treatment, Waste Management
Xylem	Water Treatment, Energy Solutions
Ecolab	Water Treatment and Purification
Pentair	Water Treatment, Waste Management

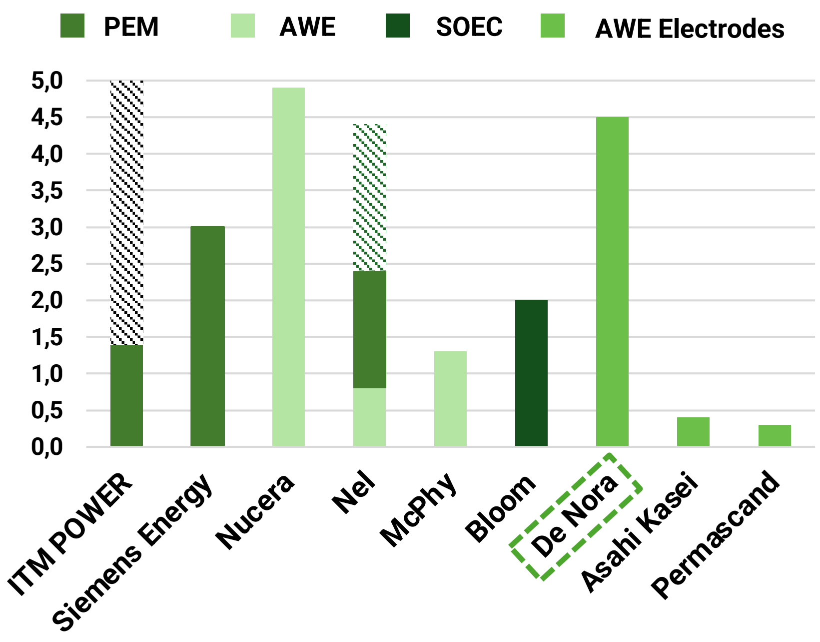
ENERGY TRANSITION: HYPE CYCLE





THE PROFITABLE OUTLIER

Electrolyser/electrodes manufacturing capacity incorporating announced capacity expansions (GW)



Companies	Technology	EBITDA FY23 (€ M)	Net Debt / Total Equity
plug	PEM	-899.9	21.3%
ceres	PEM	-62.1	-76.1%
nel	PEM, AWE	-29.9	-50.5%
BALLARD	PEM	-137.9	-74.2%
McPhy	AWE	-48.5	-65.8%
ITM POWER Energy Storage | Clean Fuel	PEM	-36.9	-81.3%
Bloomenergy	SOEC	-135.3	148%
thyssenkrupp nucera	**AWE**	**23.9**	**-89.5%**
	AWE, PEM	**11.9 (En Tr)**	**-7.54%**

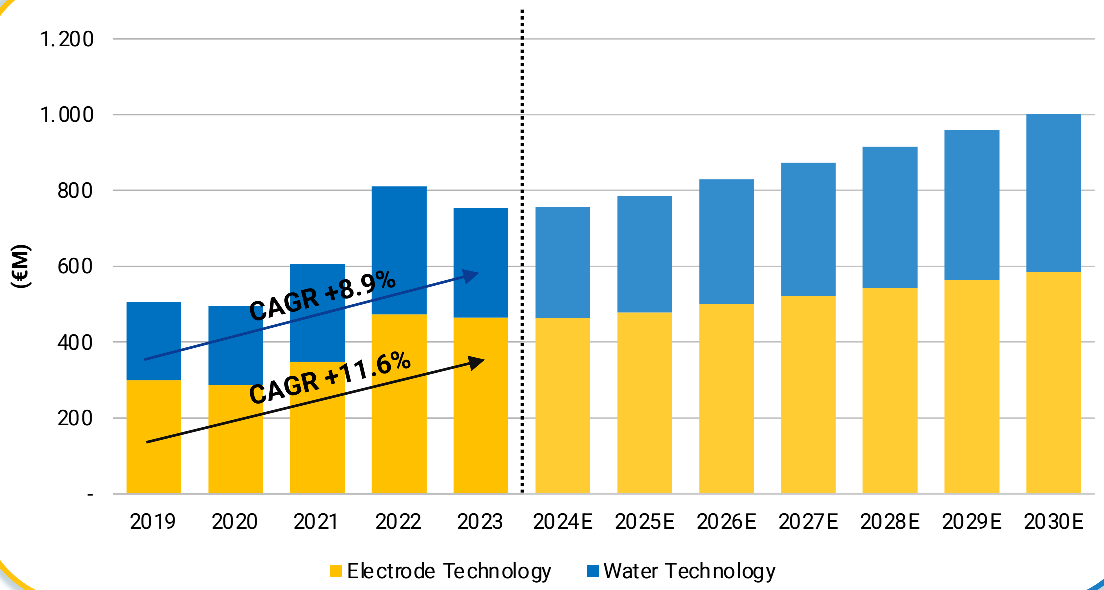
ELECTRODES & WATER TECHNOLOGY

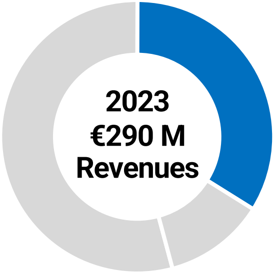
The Core Strength of De Nora

Electrode Technology

Water Technology

Strong historical growth ....



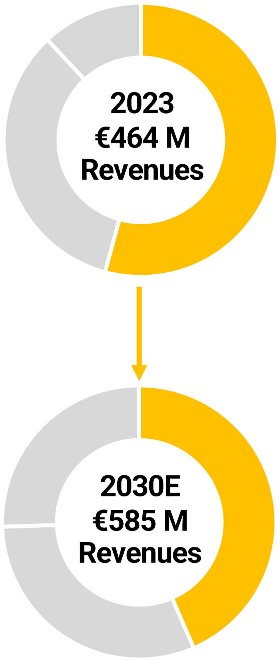


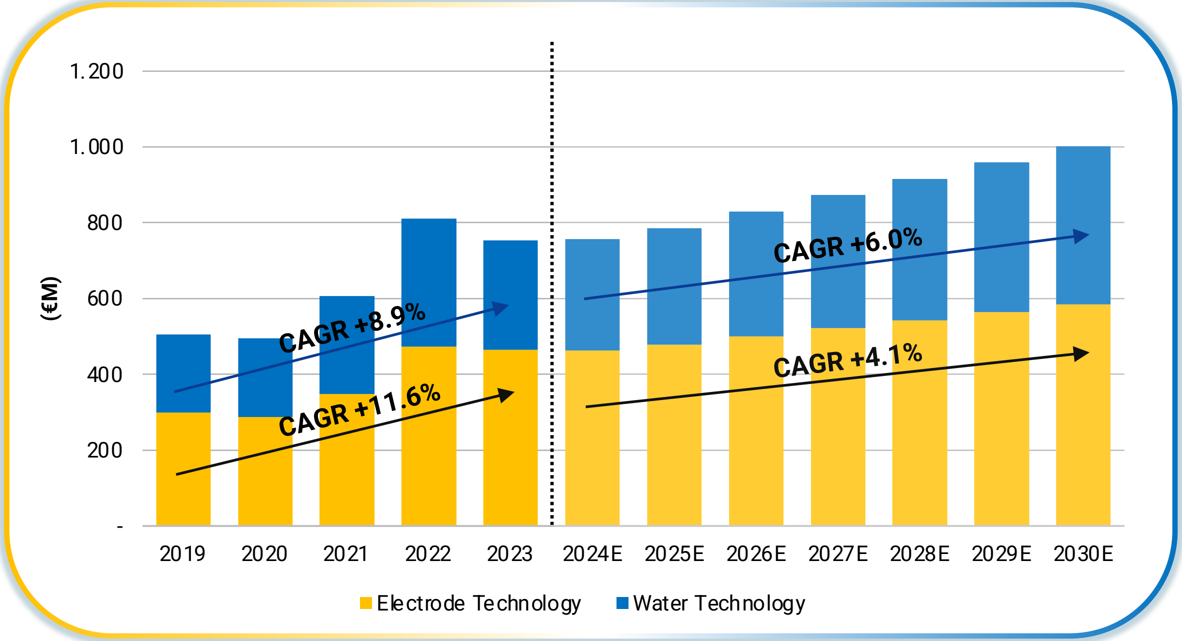
ELECTRODES & WATER TECHNOLOGY

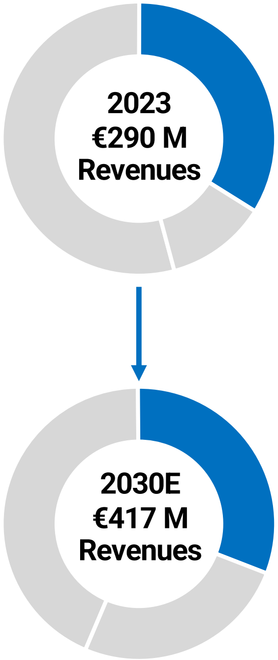
The Core Strength of De Nora

Electrode Technology | **Water Technology**

Strong historical growth and promising future potential





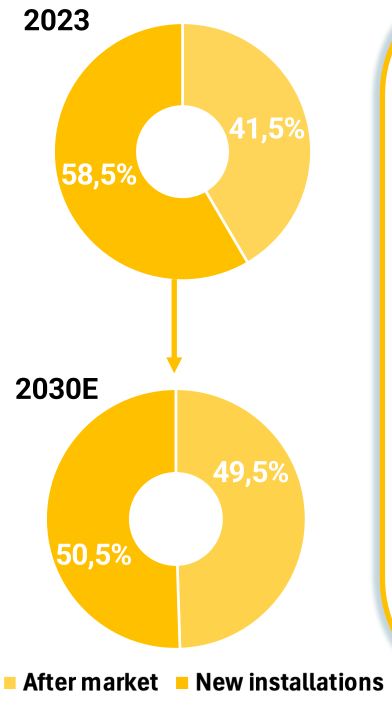


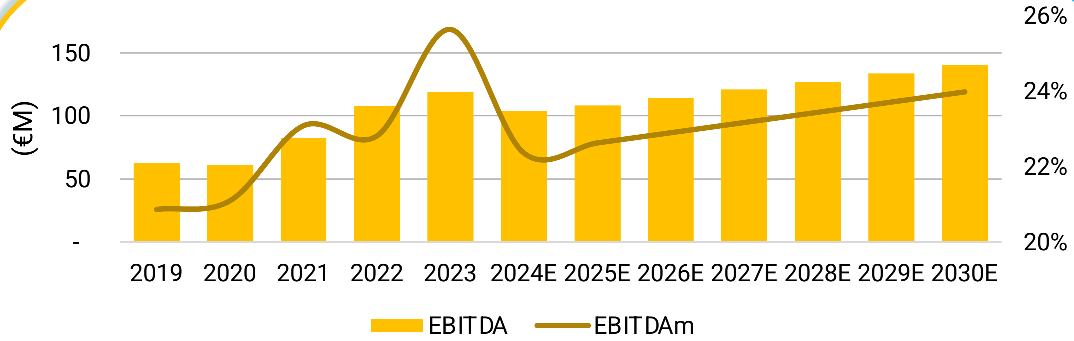
ELECTRODES & WATER TECHNOLOGY

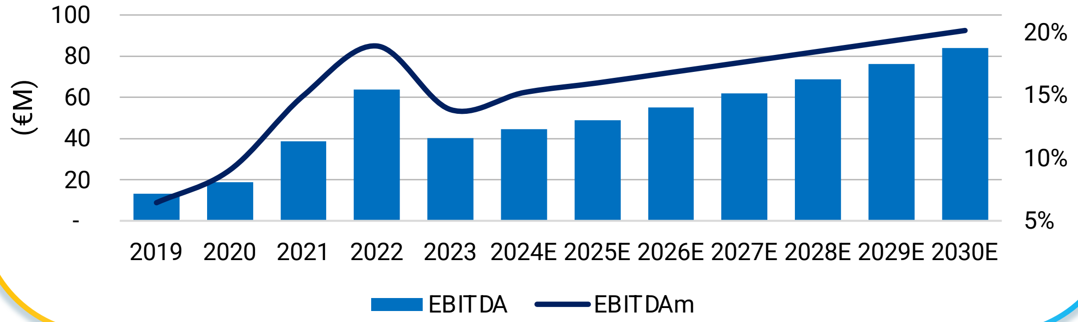
Strengthening margins, Expanding aftermarkets

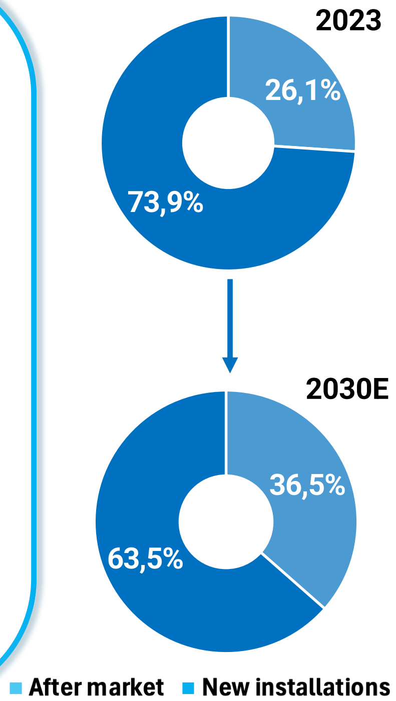
Electrode Technology

Water Technology



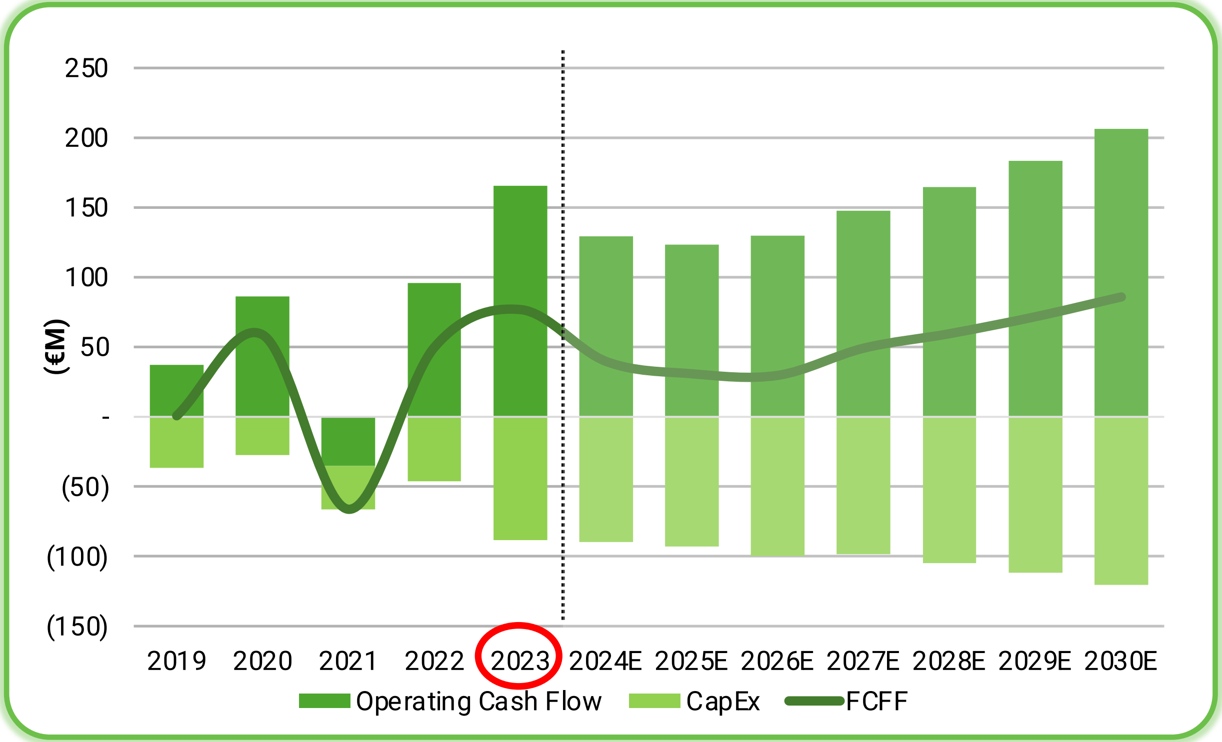






A PROVEN ENGINE OF CASH GENERATION

Free Cash Flow Generation

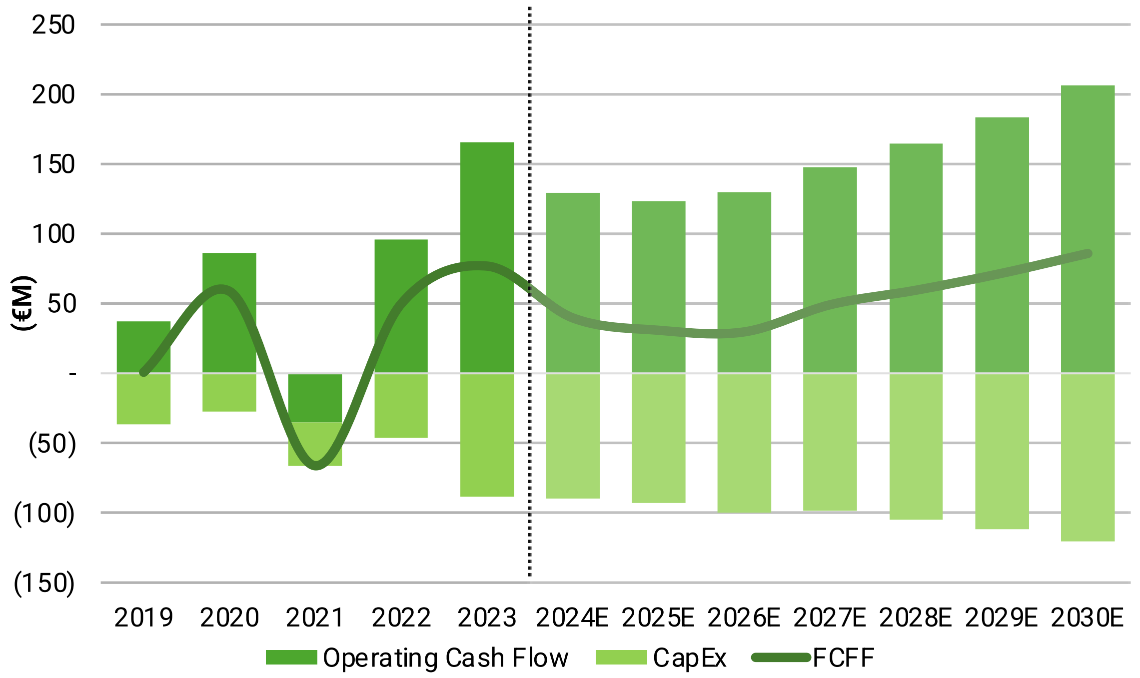


Cash and Cash equivalents

€198M

A PROVEN ENGINE OF CASH GENERATION

Free Cash Flow Generation



Cash and Cash equivalents

€198M

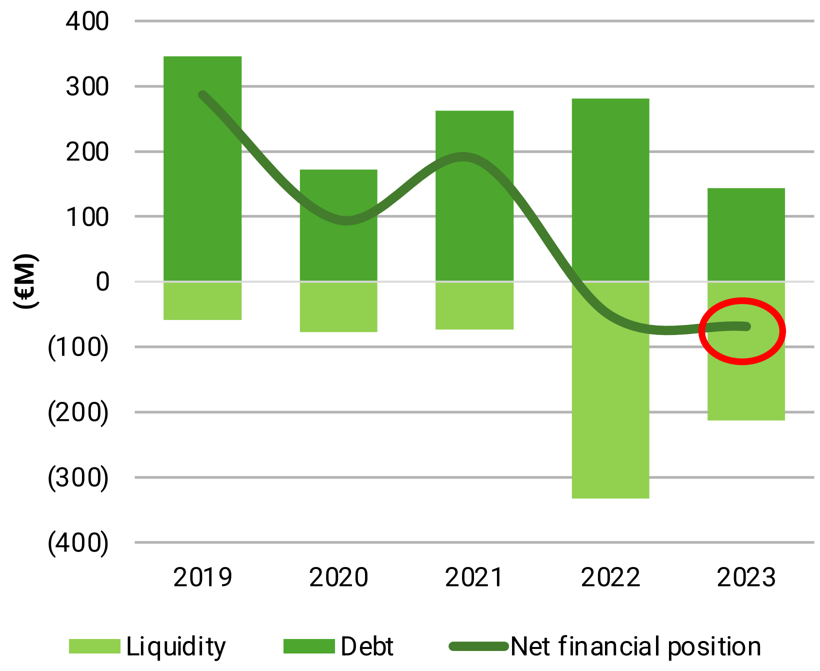
Mature business operations enable **steady and reliable** cash flows

Ideal to support ongoing **investments** and **growth** initiatives

DELEVERAGING SUCCESS

Building a Foundation for Financial Stability

Net Financial Position



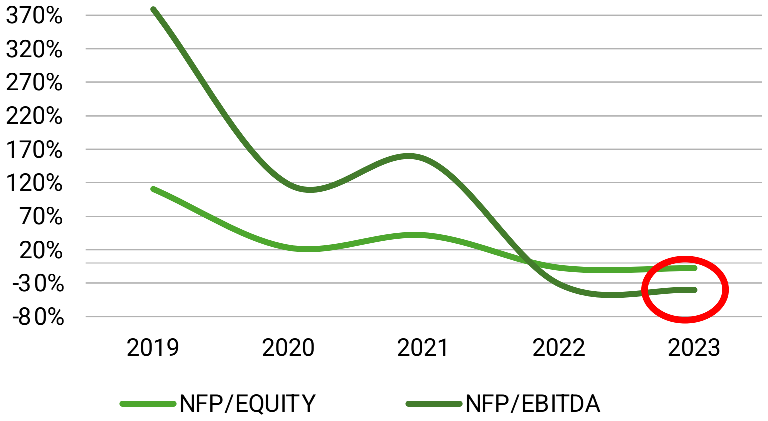
NET FINANCIAL POSITION

€-69M

NFP/EBITDA

-0.40X

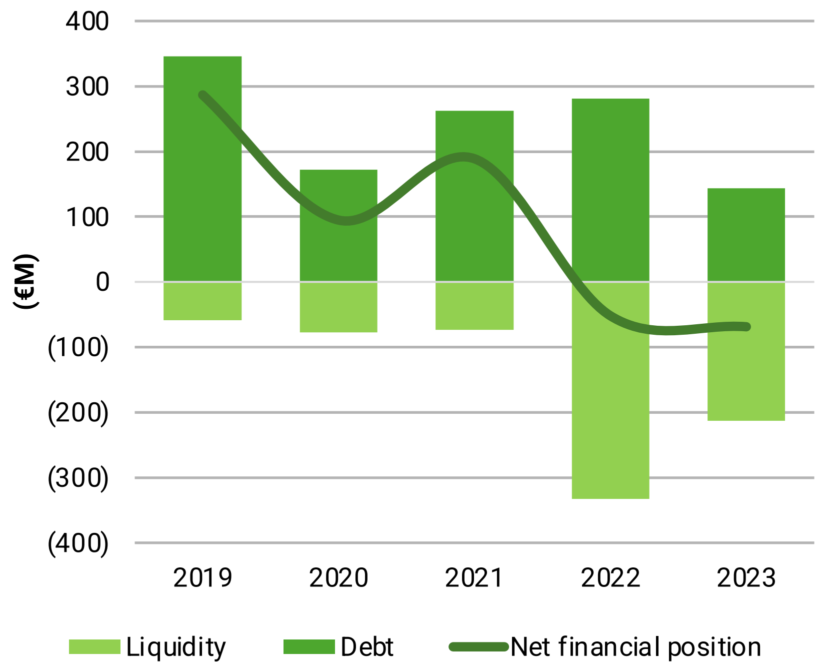
Leverage ratios



DELEVERAGING SUCCESS

Building a Foundation for Financial Stability

Net Financial Position



NET FINANCIAL POSITION

€-69M

NFP/EBITDA

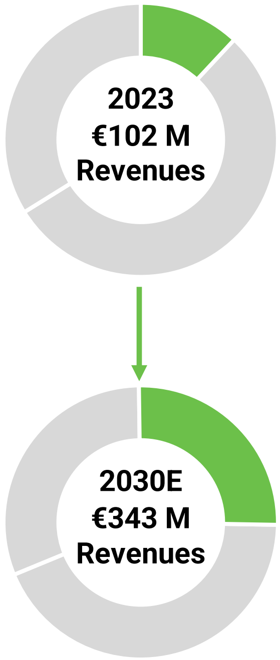
-0.40X

Optimal Financial Stability

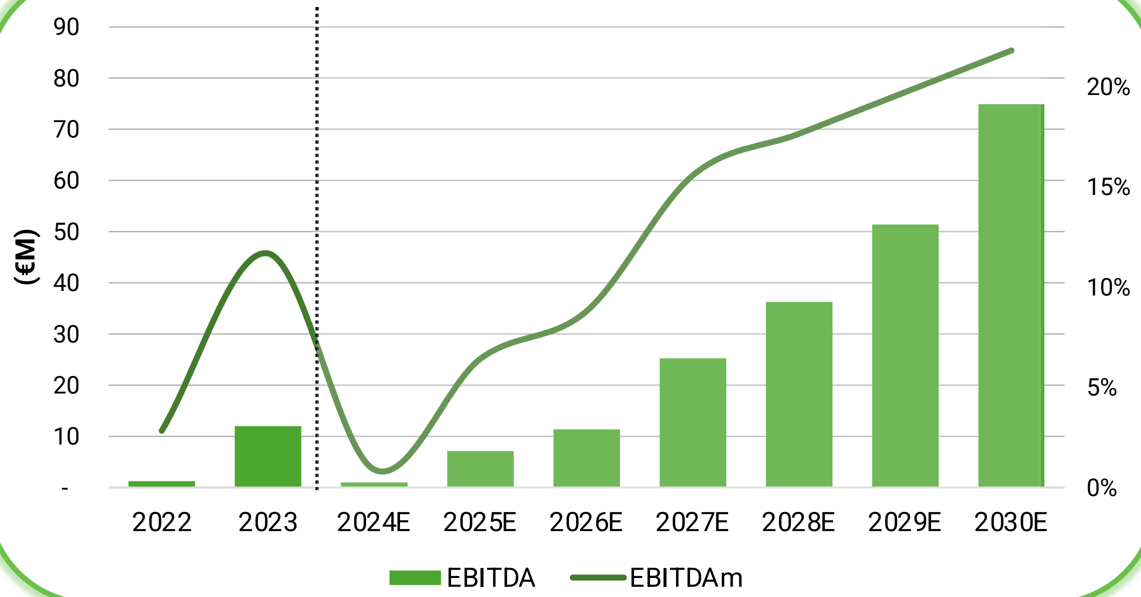
Key to expanding into a new **emerging and volatile** market

Energy Transition: Unlocking Future Success

Energy Transition



A slow start, but a sparkling future ahead



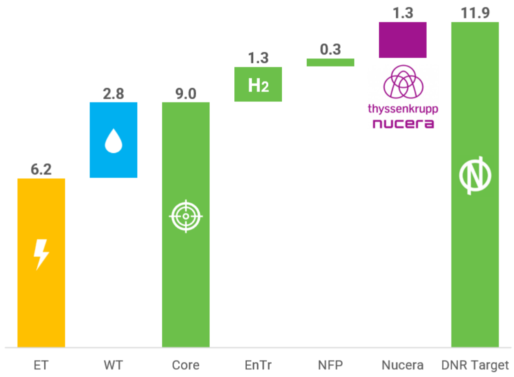
CAGR 24-30
21.8%

EBITDAm 2030E
21.8%

Avg CapEx 24-30
31.4%

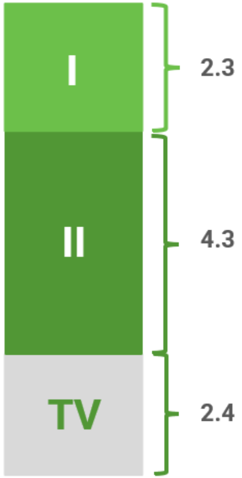
VALUATION

SOTP
€11.9/Share
70%



TARGET PRICE
€11.5/Share
Upside +60.6%
BUY

Three-Stage DCF
€10.6/Share
30%



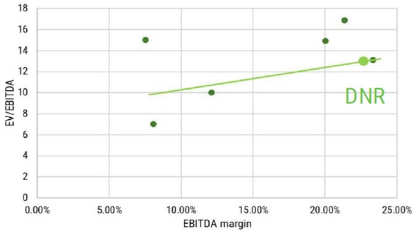
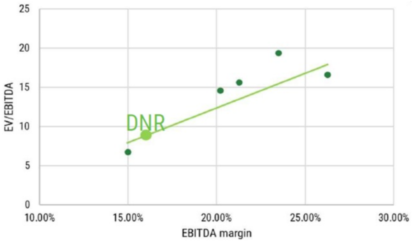
SUM-OF-THE-PARTS

A Strong Core: Electrode Tech & Water Tech

ABB
prysmian
legrand
Rexel
SIEMENS energy
Schneider Electric

WATTS
PENTAIR WATER SOLUTIONS
ECOLAB
xylem
VEOLIA

Relative Valuation

EV/EBITDA 2025E	P/E 2025E	EBITDAm vs EV/EBITDA REGRESSION
13x	28x	
15x	23x	

€8.97 Per Share

25% higher than the current price €7.18*

*As of 31st Jan 2025

SUM-OF-THE-PARTS

Free Option on Hydrogen Growth: Energy Transition

Discounted Cash Flow

BULL	BASE	BEAR
25%	50%	25%

€1.29/Share

75%

Relative Valuation

PEER GROUP	EV/SALES 2026E
Plug Power, Ballard, Bloom Energy, Ceres, Nel, McPhy Energy, ITM Power	1.7x

€1.33/Share

25%

€1.3/Share

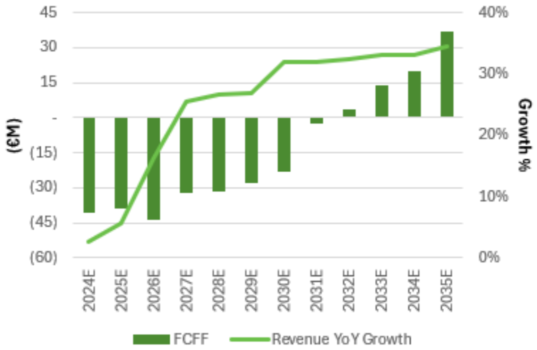
SUM-OF-THE-PARTS

Clear Vision, Uncharted Roads

Momentum Builds

Base Case

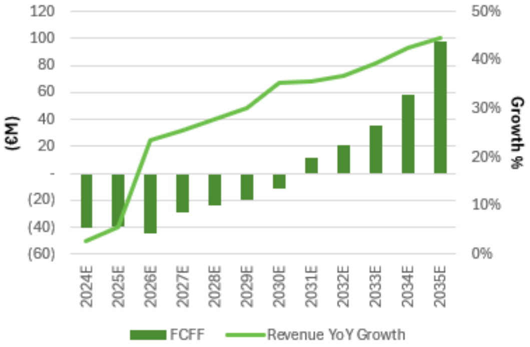
€1.1/Share



Full Acceleration

Bull Case

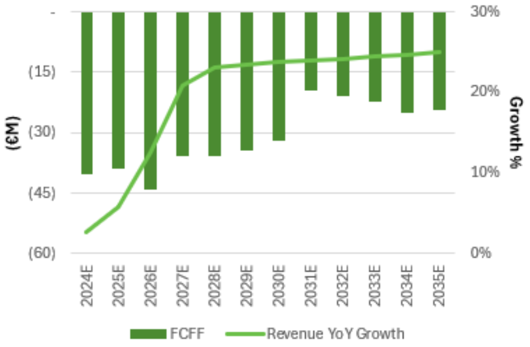
€3.7/Share



False Start

Bear Case

-€0.7/Share

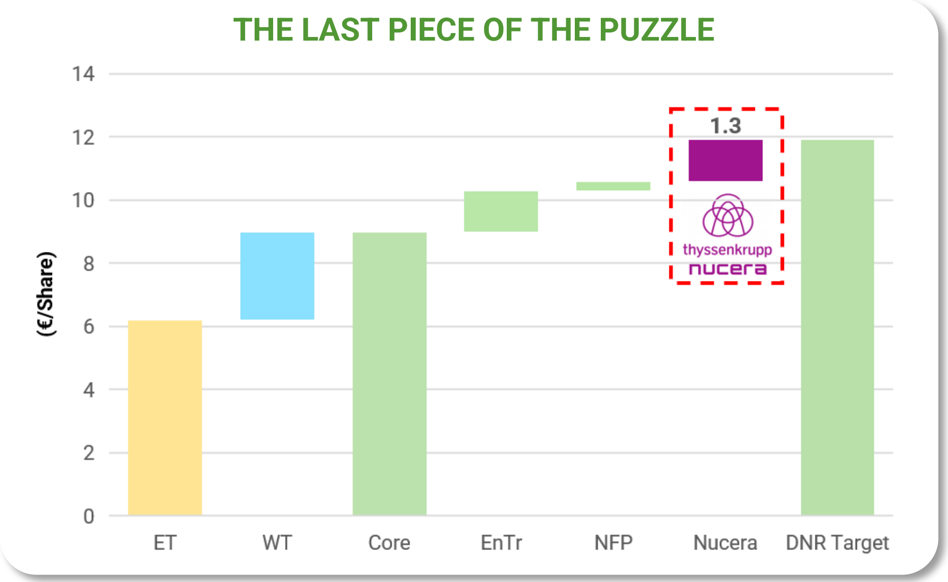


SUM-OF-THE-PARTS
Unlocking Additional Upside

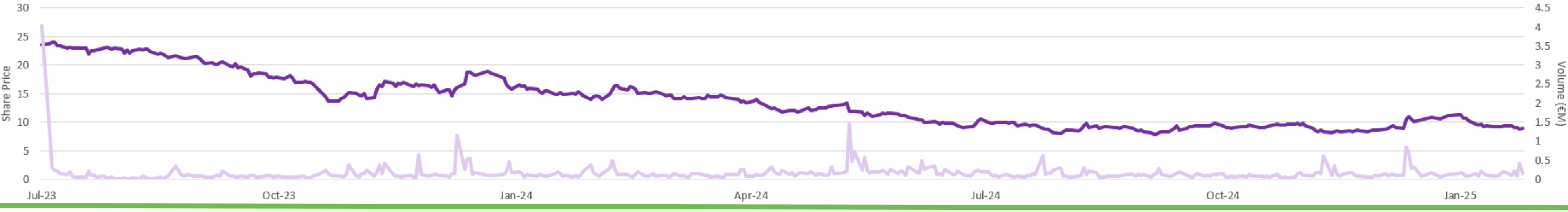
thyssenkrupp
(50.19%)

(25.89%)

thyssenkrupp nucera
€1.04B
Market Cap



NUCERA'S HISTORICAL STOCK PERFORMANCE



VALUATION COUNTERCHECK

Three-Stage Discounted Cash Flow

Near-Term Recovery & Investment Phase

High Growth Phase

Mature Phase

Terminal Growth

1°
2025-2034

2°
2035-2050

TV
>2050

€1.8B EV

21% CAGR 25E-34E
7% CAGR 35E-50E

10.4%
WACC

2.5%
Long-Term g

11.6% Cost of Equity
(Fama & French)

4%
Cost of Debt

0.14
D/(D+E)

€10.6/Share

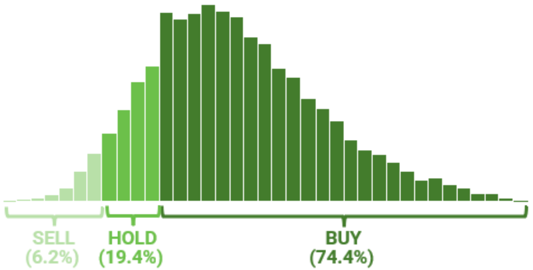
30% Weight

STRESS-TESTING OUR ASSUMPTIONS

Sensitivity Analysis

Terminal Growth \ WACC (Price)	8.9%	9.4%	9.9%	10.4%	10.9%	11.4%	11.9%
1.0%	13.0	11.9	11.0	10.2	9.5	8.9	8.3
1.5%	13.3	12.1	11.2	10.3	9.6	9.0	8.4
2.0%	13.5	12.4	11.4	10.5	9.7	9.1	8.5
2.5%	13.9	12.6	11.5	**10.6**	9.8	9.2	8.6
3.0%	14.3	12.9	11.8	10.8	10.0	9.3	8.6
3.5%	14.7	13.2	12.0	11.0	10.1	9.4	8.7
4.0%	15.3	13.7	12.3	11.2	10.3	9.5	8.8

Monte Carlo Simulation



Parameters Revenues - Margins – Investments - WACC

Number of iterations 10,000

RISKS

Impact \ Likelihood	1	2	3	4	5
5					
4	Technological	Nucera Dependence, Workforce	Geopolitical	Chinese Competition	
3	Cybersecurity, Solvency	M&A, Product Quality	Public Investments, Raw Materials	Regulatory Changes	
2		Credit , ESG & Ethical	Macroeconomic, Destocking	Forex	Limited Free Float
1			Interest Rate		

MAJOR RISKS TO CONSIDER

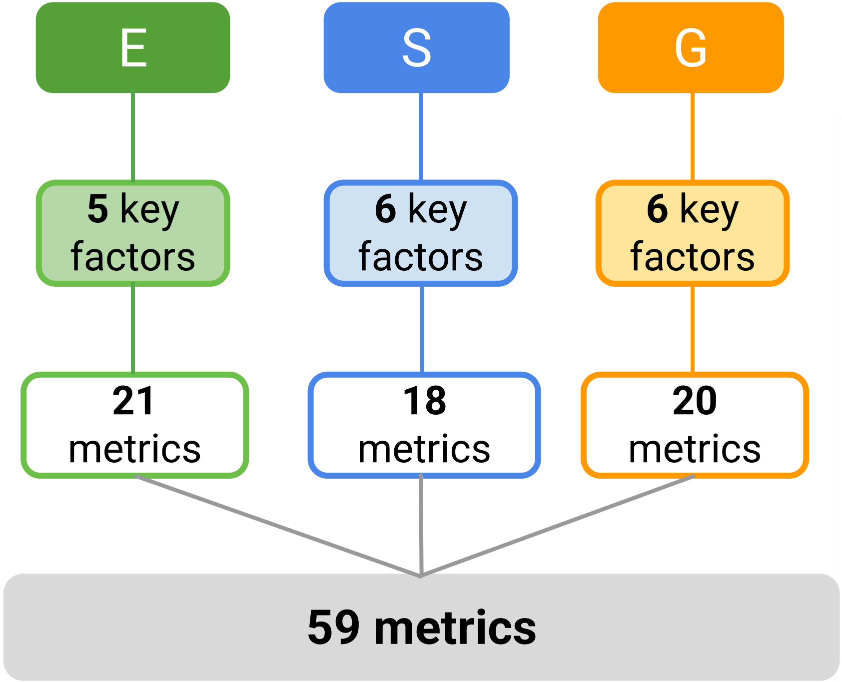
Chinese competition for Green Hydrogen Segment

Regulatory Changes in Green Hydrogen Segment

Supply Chain Risks of Noble Metals

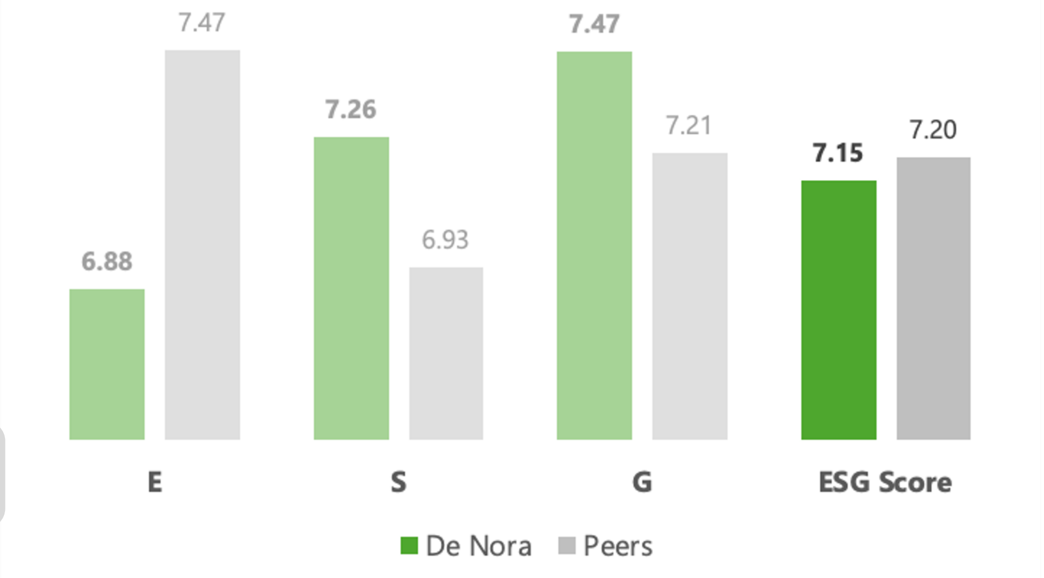
ESG COMPARATIVE ANALYSIS

Transforming Challenges into Opportunities



Overall score: **7.15**

BBB

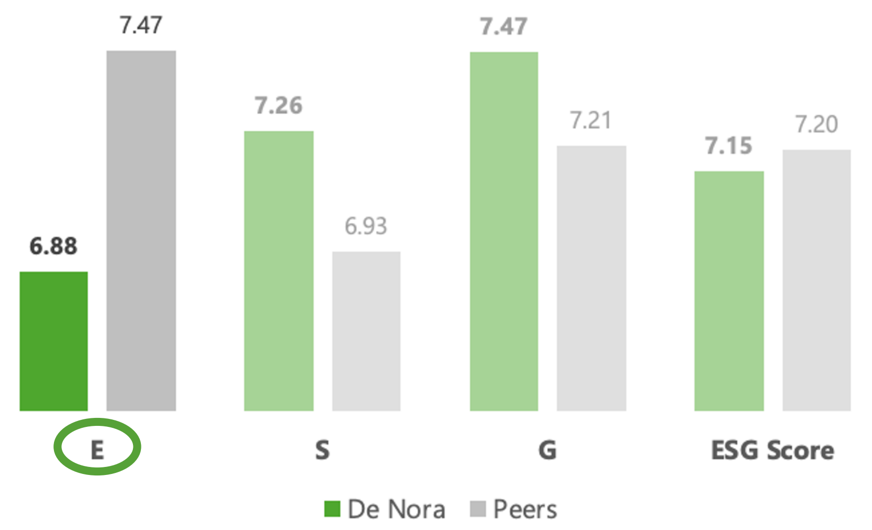


ENVIRONMENTAL

Sustainable Innovation, but Emissions and Energy Challenges Remain

BBB

Environmental score: **6.9**



Hazardous Waste Ratio
59% vs 34%
2026: 10% reduction

Renewable Energy Consumed Ratio
0.08% vs 46.5%
2026: 40% renewable electricity

Scope 3 Emissions Intensity *(tCO2/M€ Revenues)*
46,226 vs 5,962
2030: 50% - 52% reduction of Scope 1&2 - 3

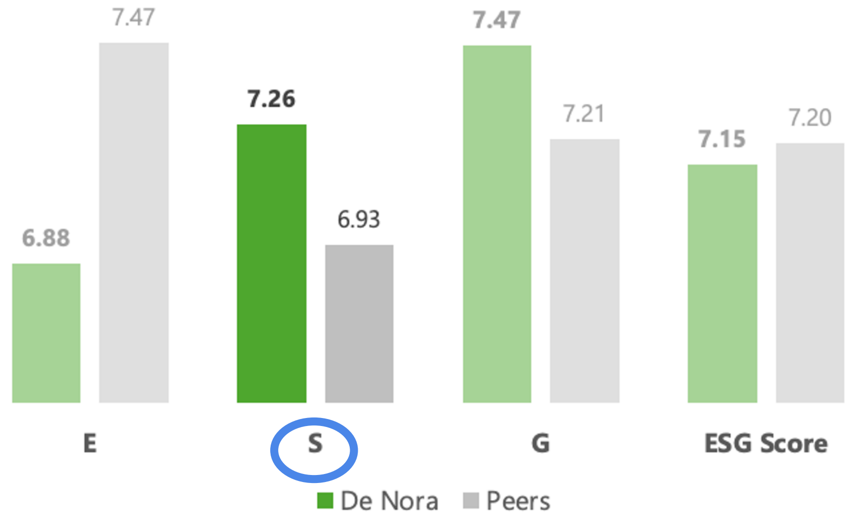
NOx & SOx Emissions Intensity *(thousands tCO2/M€ Revenues)*
0.004 vs 4.8
2025: 100% new products assessed by scorecard

SOCIAL

Strong Workforce and Supply Chain Focus, Diversity Needs Improvement

BBB

Social score: **7.3**



Woman Employees Ratio
19.7% vs 26.3%

Average Training Hours
31 vs 21

Gender Pay Gap
No vs 69% Yes

Community Spending Per EBITDA
0.12% vs 0.14%

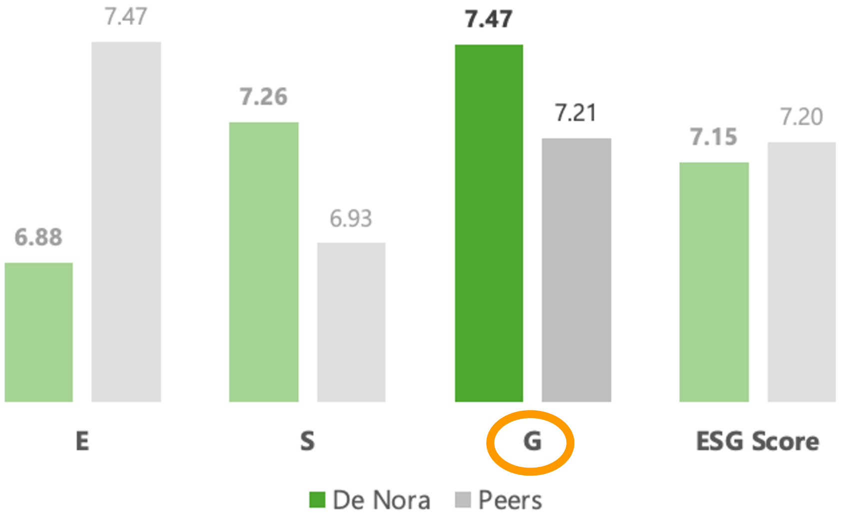
2026: 100% sites with mental health hotline
2030: > 50% suppliers assessed

GOVERNANCE

ESG-driven Leadership, but Voting Power is Highly Concentrated

Governance score: **7.5**

BBB



ESG Linked Compensation
Yes vs 94% No

Board Average Age
56.8 vs 59.8

Board of Directors Attendance Ratio
95% vs 93%

Ownership Required for Special Meeting
5% vs 12.5%

TICKER: DNR.MI

BUY

MKT CAP: €1.44B

Target Price
€11.5
+60.6% Upside

12
Month

Current Price
€7.2
31/01/2025

I — **Leading Market Position** in Legacy Businesses

II — **Solid Financial Structure**

III — **Free Option** on Green Hydrogen

APPENDIX

BUSINESS

MARKET

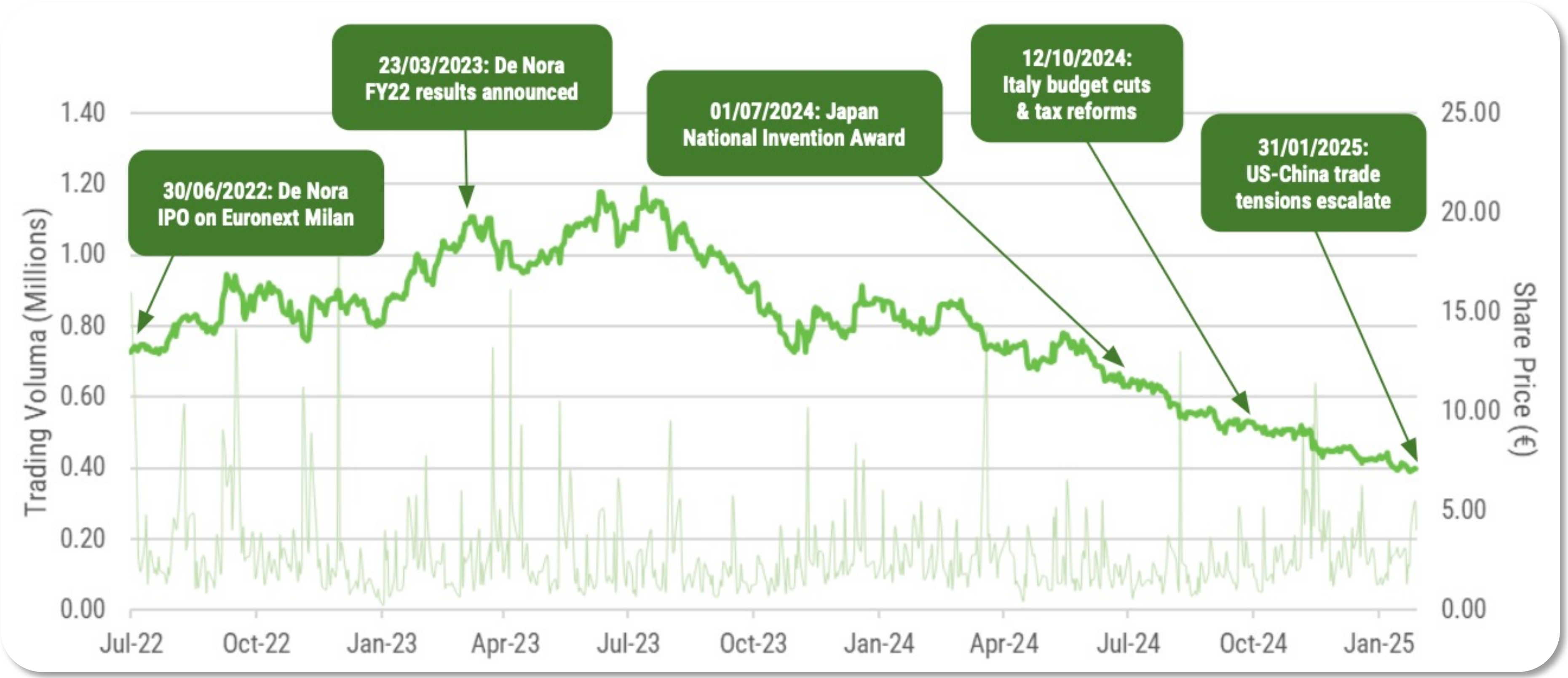
FINANCIAL ANALYSIS

VALUATION

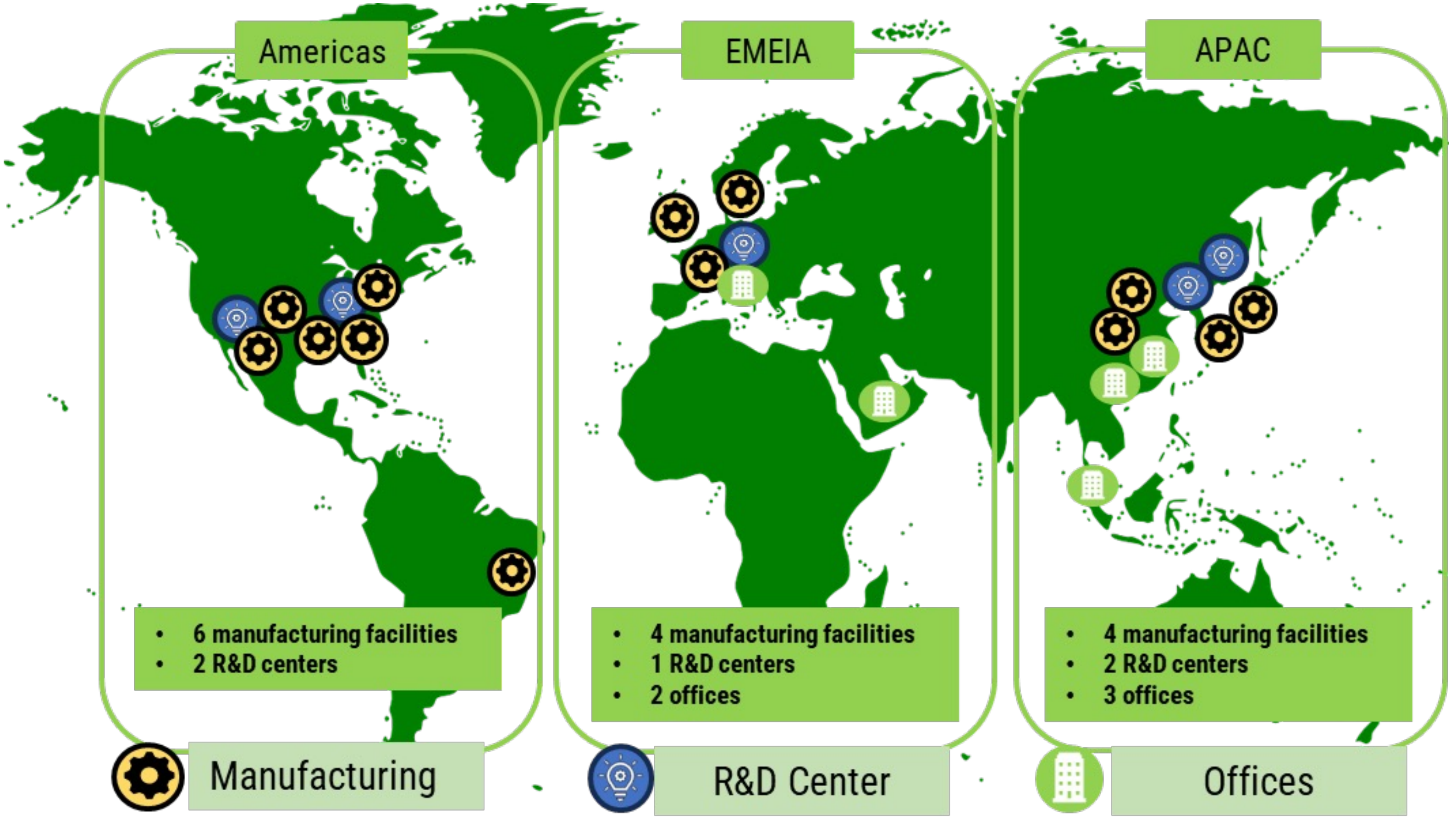
INVESTMENT RISKS

ESG

STOCK PRICE EVOLUTION



GEOGRAPHICAL PRESENCE



PREVIOUS TRANSACTIONS

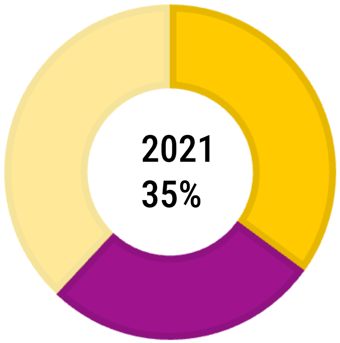
A Dive Into the Water

YEAR	TRANSACTION	BUY/SELL	TARGET	COUNTRY	BUSINESS UNIT	RATIONALE
1969	JV	-	Permelac Electrodes	Jpn	ET	To enter the Japanese market for DSA. In 2010 DNR bought 100%.
1990s	JVs	-	-	U.S.; Chi; Ger	ET	Improve aftermarket services in Electrode during the period of expansion.
2001	JV	-	Uhdenora S.p.A.	Ger	ET	With Thyssenkrupp to promote Chlor-Alkali. The growth strategy shifted to external lines.
2005	M&A	Buy	Eltech Systems	U.S.	ET	Solutions for electrochemical and anodes. DNR reached the leadership in Electrodes.
2011	M&A	Buy	Chlorine Engineers	Jpn	ET	Chlor-Alkali industry and EPC leader.
2015	M&A	Buy	Ozono Elettrica	Ita	WT	Global specialist in ozone technologies. To enter disinfection technologies.
2015	M&A	Buy	Seven Trent Water	U.K.; U.S.	WT	DNR enter Water Technologies via wastewater treatments.
2015	JV	-	thyssenkrupp nucera	-	ET	Uhdenora become tk Nucera, leading company in caustic soda and chlorine.
2018	M&A	Buy	Water Star	U.S.	WT	Acquisition of assets to expand in electrode portfolio products.
2019	M&A	Buy	Neptune	U.S.	WT	Improving position in water treatment industry with OTF solutions for disinfection.
2019	M&A	Buy	Miox	U.S.	WT	Water purification technologies. Previous 20y customer relation with DNR.
2019	M&A	Buy	Calgon Carbon UV	U.S.	WT	Industrial water disinfection division. Acquisition of Hyde Marine entering ballast water.
2021	M&A	Buy	ISIA	Ita	WT	Improve portfolio solution with chlorine dioxide generator technology and patents.
2021	Minority Shares	Buy	Azul Energy	Jpn	WT	Minority stake acquisition. R&D metals for new catalyst solutions in WT.
2024	M&A	Sell	Hyde Marine	U.S.	WT	Exiting ballast water division bought in 2021 (Calgon Carbon UV).

LARGEST CUSTOMERS CONTRIBUTION

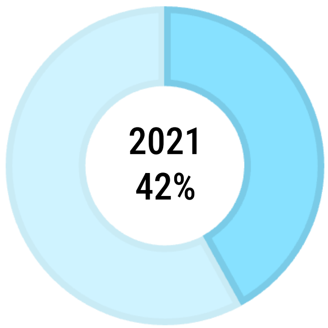
Nucera as the main customer

Electrode Technologies



The largest 20 customers contributed to 35% of De Nora's revenues in Electrodes Technologies, excluding Nucera. Nucera itself accounted for 27%

Water Technologies



The largest 20 customers contributed to 42% of De Nora's revenues in Water Technologies. The 5 larger accounted for 28%

Nucera currently is De Nora's **main customer** with a **contribution of 24% on total revenues in 9M'24**, due to orders associated to the **TMA contract,** that is **expiring in 2038** with automatic **renewal** 5 years in 5 years, with option to exit the contract. The TMA contract follows the maturity of the **Relationship Agreement** with tyssenkrupp AG, in which De Nora has minor streght due to its smaller stake in Nucera

SHAREHOLDERS STRUCTURE

Shareholder structure and Buy-Back Programme

De Nora Family
53.3%

Asset Company 10 S.r.l.
(100% owned by SNAM S.p.A.)
21.6%

Institutional and Retail Investors
22.1%

Treasury shares
1.5%

Management
1.5%

BUY-BACK PROGRAMME

From November 9, 2023
To August 9, 2024

Maximum Amount of the Programme: €45M

In the perod of the programme the price of a share went from:
€15.7 (Dec-23) to €9.9 (Aug-24)

SWOT

Strenghts, Weaknesses, Opportunities and Threats

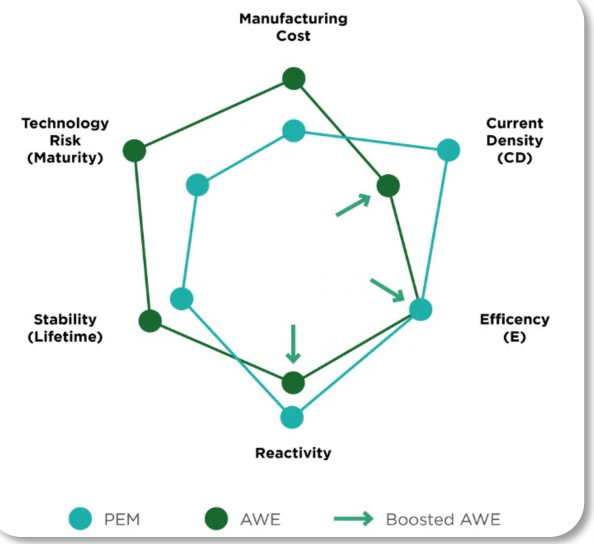
STRENGHTS	WEAKNESSES	OPPORTUNITIES	THREATS
Leadership Positioning Electrodes (>50%) Pools (78%); Top 5 in disinfection #1 Green Hydrogen; AWE **Geographical Diversification** Strong presence in: AMS, EMIA, APAC **Financial Position** Leverage Ratio: 15,8% NFP-to-EBITDA: -0,40x **After-market services** Contributed to 31,6% of total revenues in FY23 and it will grow **Electrodes and Water Technologies are Cash Generating** This core activity generates more cash than the Energy Transition industry consumes	**thyssenkrupp nucera Supplying Relationship** TMA contract regulates the partnership, risks in tk nucera power and limited decisional power **Backlog Visibility of tk nucera** Due to the regulating contract it is not disclosed the amount of tk nucera's orders **Concentration** Despite its leadership position DNR operates in really competitive arenas. It has few main suppliers and customers **Exchange Rate Risk Management** Lost €13,5M in FY24 due to unfavorable Yen exchange rate	**Hydrogen Market Positioning** Contract with tk nucera which is the leader in green hydrogen industry **Expansion in Water Technologies** Expected grow at 6% CAGR (FY24-30E), outperformed by disinfection systems. Increase in after-market services **Regulation** The stricter the regulation, the better for DNR (eg. PFAS; against not-satisfying-enough quality products) **ESG Commitment** The growing the attention on ESG, the better for DNR (sustainable solutions)	**Commodities Fluctuations** Currently higher prices following the pandemic situation **Supply Chain and Delays** Large Supplier's power and shortage of large suppliers; Possible delays related to geopolitical situations **Technological AWE competition** Technological products develop for tk nucera; Highly competing sector due to expected profitability **Chinese Competition** Fierce competition on Green Hydrogen due to lower production costs **Reliance on Public Funds** Green Hydrogen market is highly reliant on Public funds

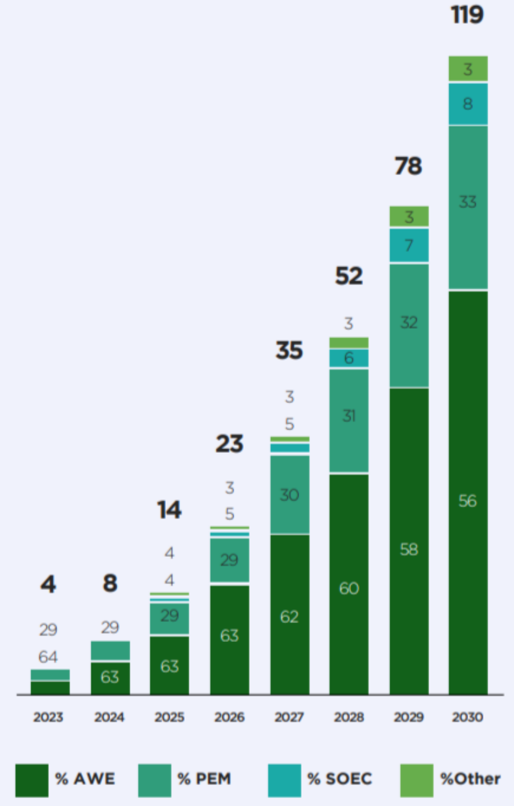
AWE TECHNOLOGY

The AWE reaction takes place in the electrolytic cell, it is composed of two electrodes **(anode and cathode) separated by a diaphragm immersed into a liquid alkaline electrolyte**.

The De Nora's boosted AWE :

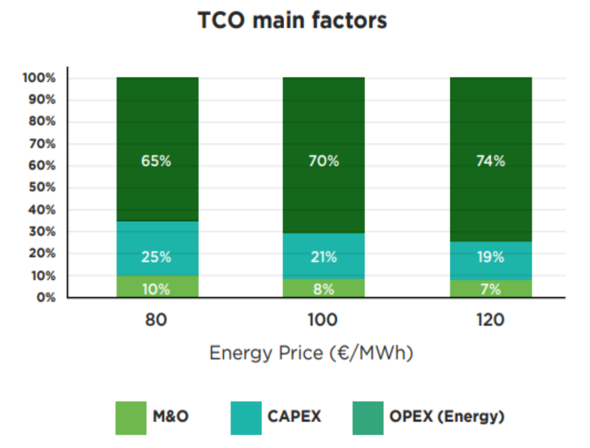
- **High efficiency High-performing electrode coatings** increase the reaction efficiency with lower the operational cost (energy saving).
- **Augmented Current Density**.
- **High flexibility** as wider operational range.
- **Rapid Dynamic**, high capability to respond to load variation.

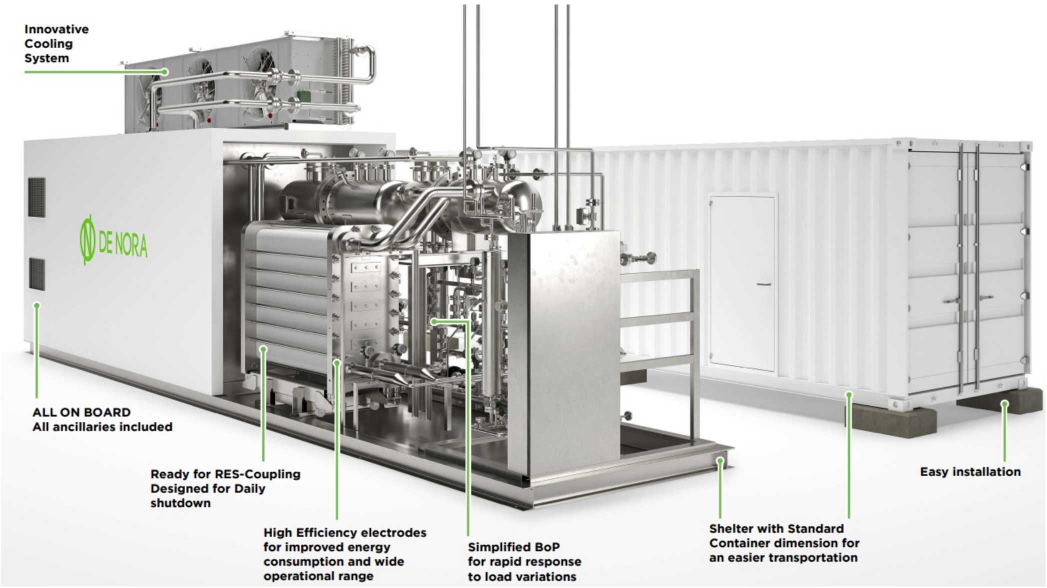




* Roland Berger – Project Demetra Report. April 2024

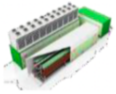
DRAGONFLY



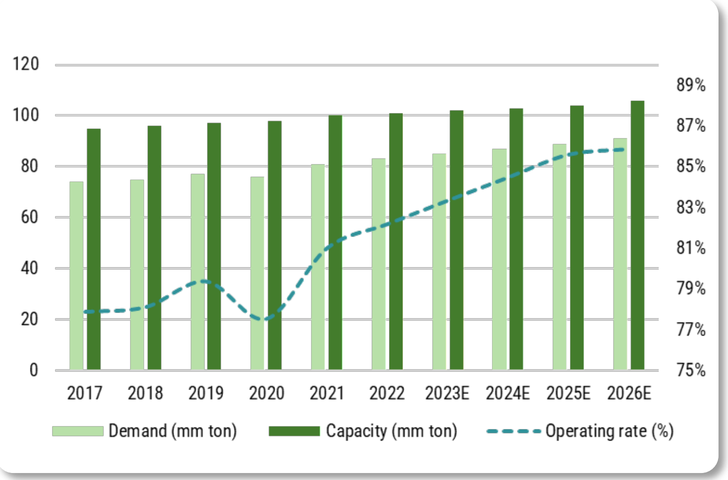


Initial investment: Thanks to its high current density and footprint, material consumption can be sensitively reduced. De Nora AWE solutions do not use Noble Metals as a catalyst.
Maintenance Cost: The simplified BoP and EoL electrodes refurbishment reduces maintenance cost.
Operational Cost: the high efficiency can be translated into power consumption savings.

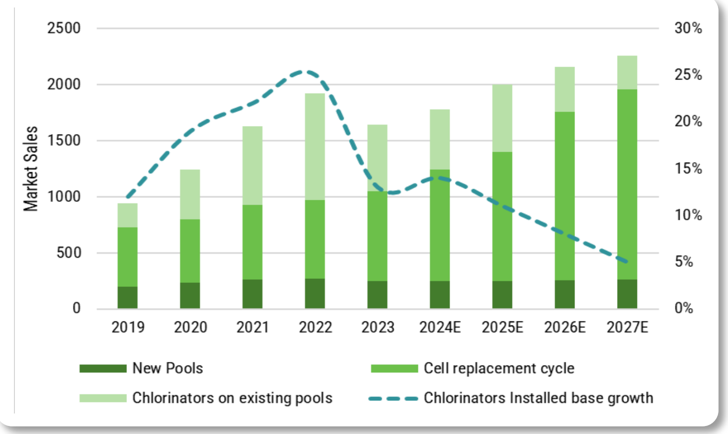
VALUE CHAIN

Value Chain		Technologies providers			EPC Contractors		Off-takers
		Electrodes	Cell	Electrolyzers	BOP	Plant construction	
Electrodes and cells manufacturing (AWE)		De Nora		Thyssenkrupp nucera			Producer
Electrodes and packages (AWE)		De Nora	OEM		EPC		Producer
Electrodes (Fuel Cell)		De Nora	OEM		EPC		Producer
Small Size AWE electrolyzers		De Nora			EPC		Producer

LEGACY MARKET OVERVIEW

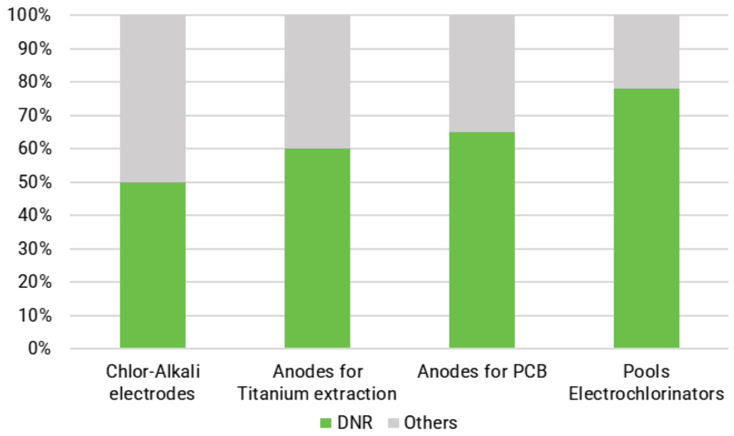


Market Size ($b)	FY24	FY30E	CAGR
Chlor Alkali	71.0	86.8	3.4%
Electronics ($t)	2.5	3.4	5.2%
Electrowinning	23.7	32.9	5.6%
Pools	3.7	5.0	5.1%
Disinfection and Filtration	35.1	53.0	7.1%
Electrochlorination	1.5	2.0	5.3%
Green Hydrogen	4.1	17.6	27.5%



The main competitors are fragmented in each subsector but DNR has been able to keep its **competitive advantage thanks to the efficiency of its solutions** also a leading supplier of efficient sustainable water treatment technologies through its electrochemical disinfection capabilities

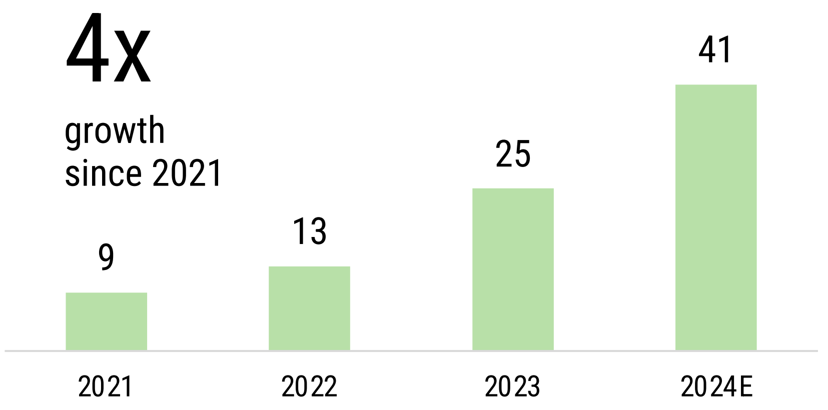
LEGACY BUSINESS COMPETITORS

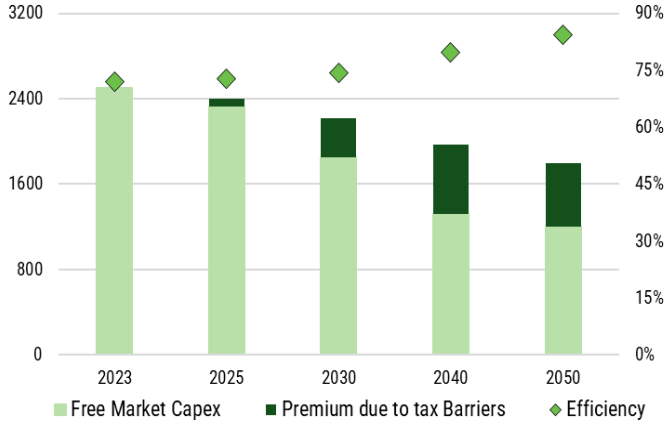


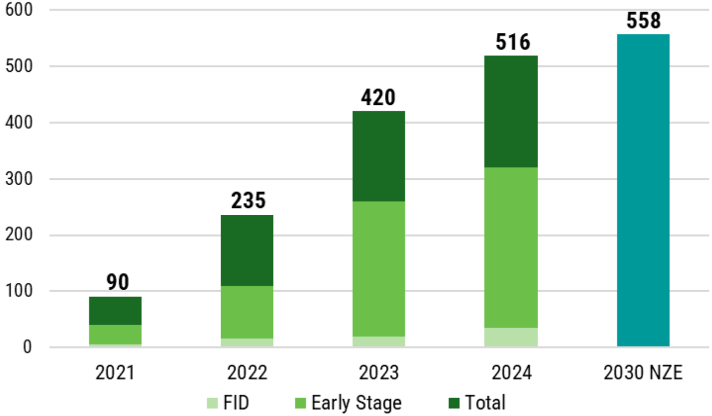
PEERS	EV/ EBITDA 2025E	PE 2025E
Electrode Technologies		
Rexel SA	7.0x	10.9x
ABB Ltd.	14.3x	23.6x
Schneider Electric SE	16.9x	29.3x
Legrand SA	13.1x	18.8x
Prysmian SpA	10.0x	15.3x
Siemens Energy AG	14.5x	72.3x
Average	**12.6x**	**28.4x**
Median	**13.7x**	**21.2x**
Water Technologies		
Ecolab, Inc.	19.4x	31.3x
Watts Water Tech, Inc.	14.6x	22.7x
Veolia Env SA	6.7x	12.2x
Pentair plc	16.6x	20.9x
Xylem, Inc.	15.6x	28.4x
Average	**14.6x**	**23.1x**
Median	**15.6x**	**22.7x**

GREEN HYDROGEN OVERVIEW

Aftermarket Revenues

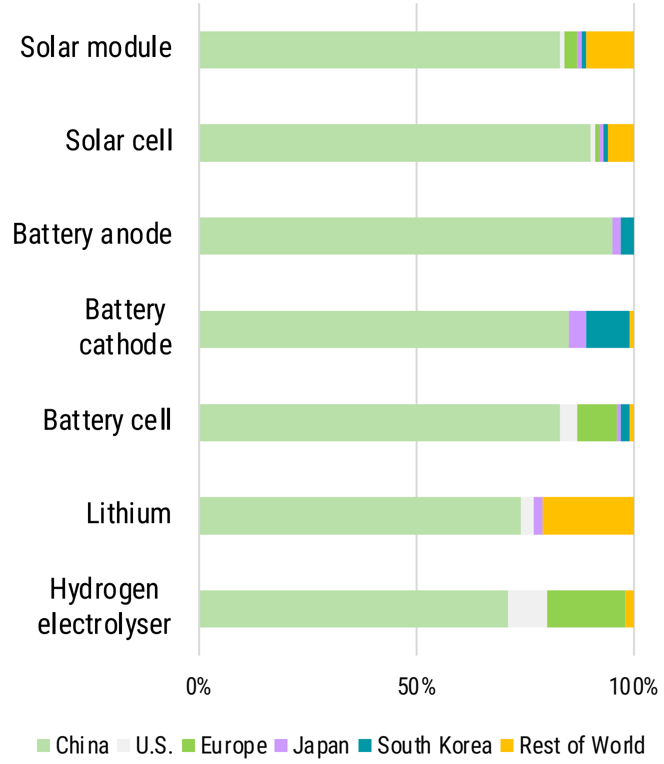


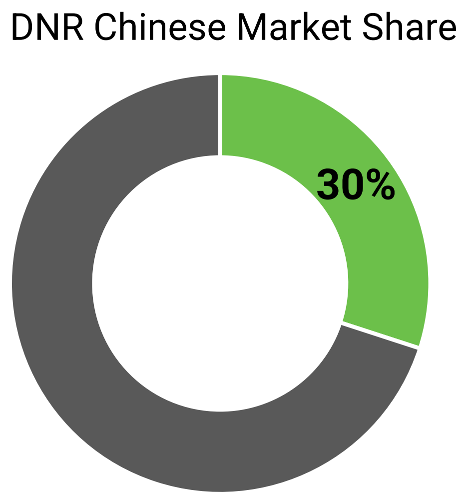




In China, costs are approximately $600/kW, compared to $2,500/kW in Europe and the US, assuming locally sourced equipment. **These regional disparities are further exacerbated by potential trade barriers**, which could reduce cost reductions in Western markets from 53% to just 28% by 2050. While China is expected to see its capex decline by 48% during 2024-2050, driven by economies of scale. **Western stacks remain about 10% more efficient, making them cheaper to use.**

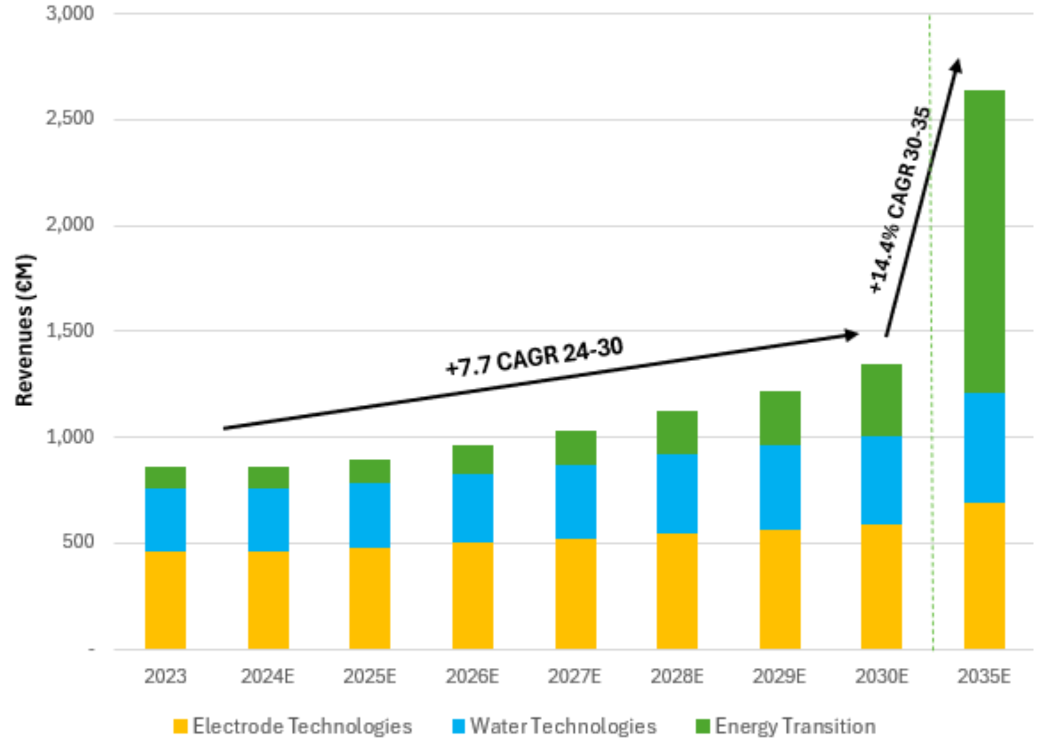
FOCUS ON CHINESE COMPETITION





Known as De Nora China since 2005, De Nora Elettrodi (Suzhou) is a Wholly Owned Foreign Enterprise (WOFE) of Industrie De Nora serving mainly China and Asian countries. Located in Suzhou Industrial Area (Jiangsu - China), De Nora China has an electrode coating, electrolyzer, and manufacturing assembly facility.

FINANCIAL ANALYSIS
Revenue Breakdown by Business Units



Legacy Businesses

Electrode Technologies

+4.1% CAGR 24-30

+3.4% CAGR 30-35

Water Technologies

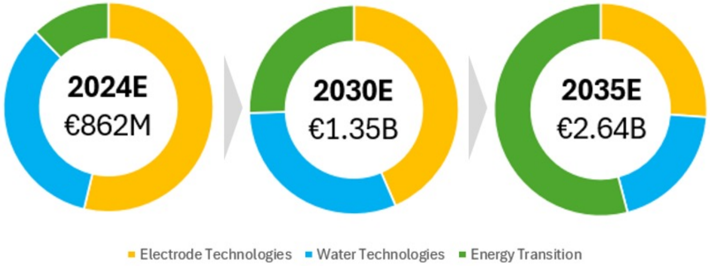
+6.0% CAGR 24-30

+4.6% CAGR 30-35

Energy Transition

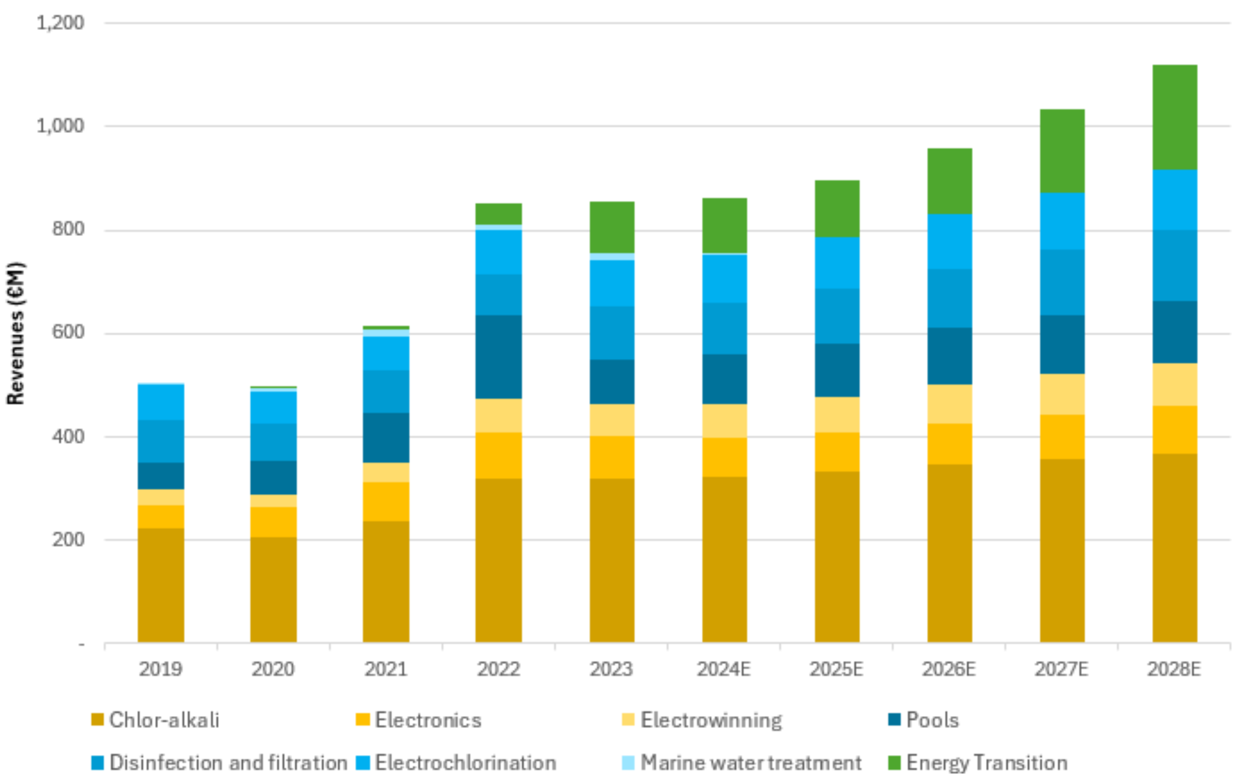
+21.8% CAGR 24-30

+33.0% CAGR 30-35



FINANCIAL ANALYSIS

Revenue Breakdown by Sub-Division

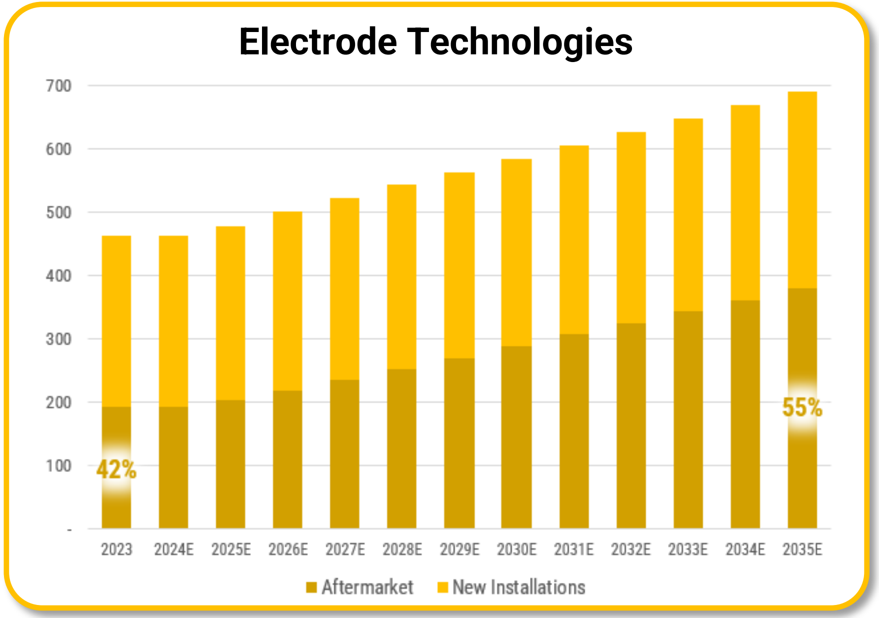


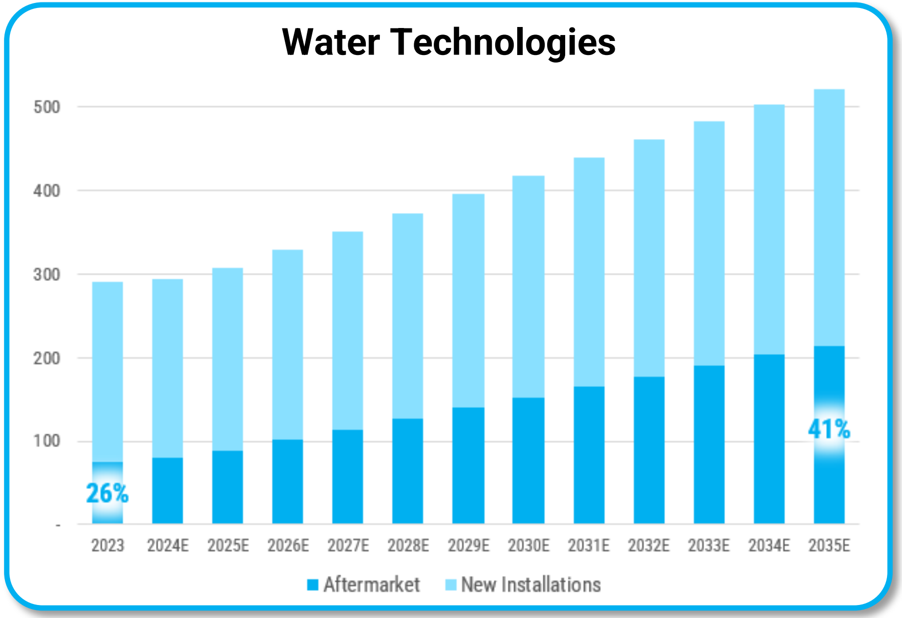
Electronics, Electrowinning and Pools subsegments are expected to return to **single-digit growth as client destocking ends**, by 2025.

Disinfection and filtration is expected to **outperform the market**, driven by SORB removal system, which is well-positioned to capitalize on increasingly strict **PFAS regulation**.

Marine Water Treatment subsegment has been **phased out** in the first semester of 2024.

FINANCIAL ANALYSIS
Aftermarket revenues

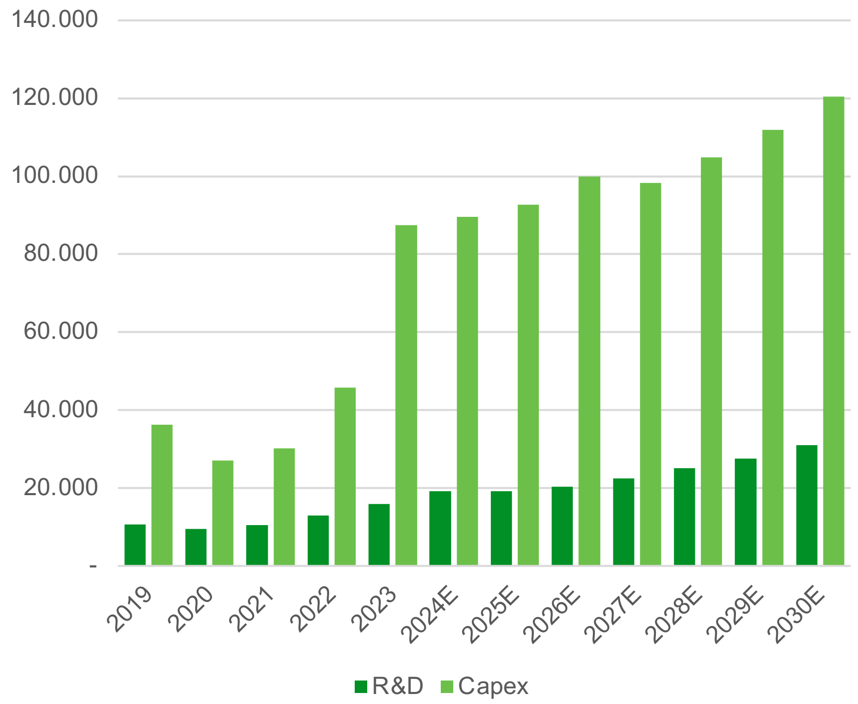


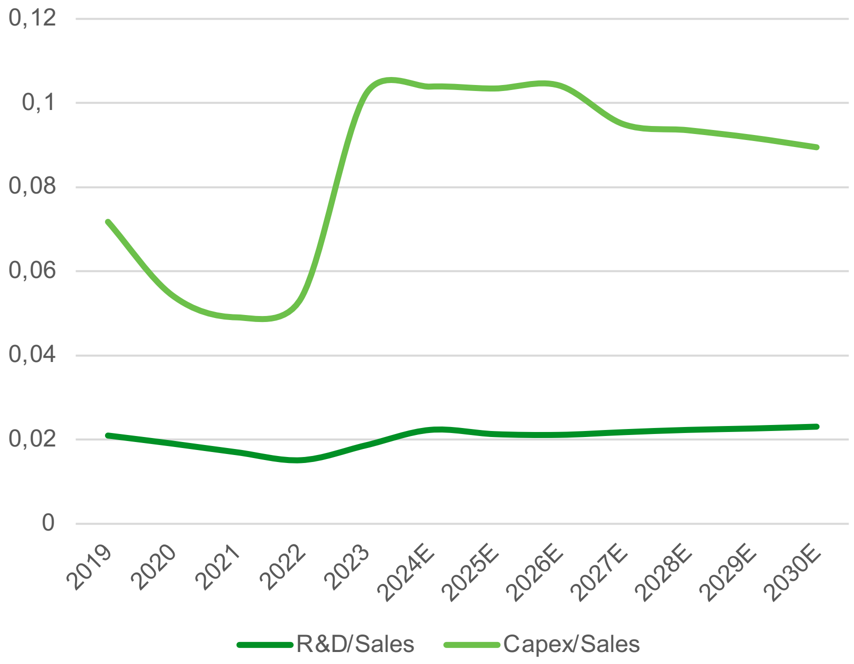


- Electrode recoating, repairs, performance upgrades, retrofits, and maintenance agreements
- Product life cycles averaging **eight years for anodes and cathodes and four years for membranes**
- Aftermarket revenues are expected to constitute an increasing share of core business' revenues

FINANCIAL ANALYSIS

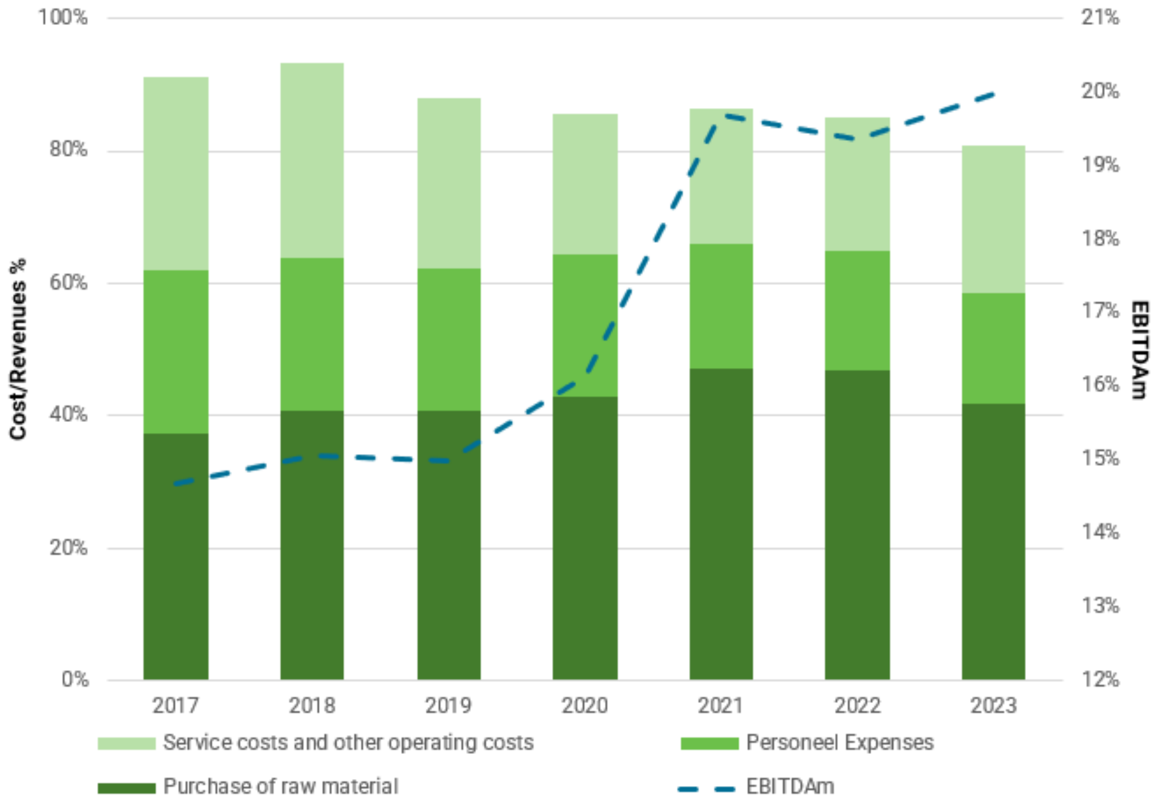
R&D and CapEx





FINANCIAL ANALYSIS

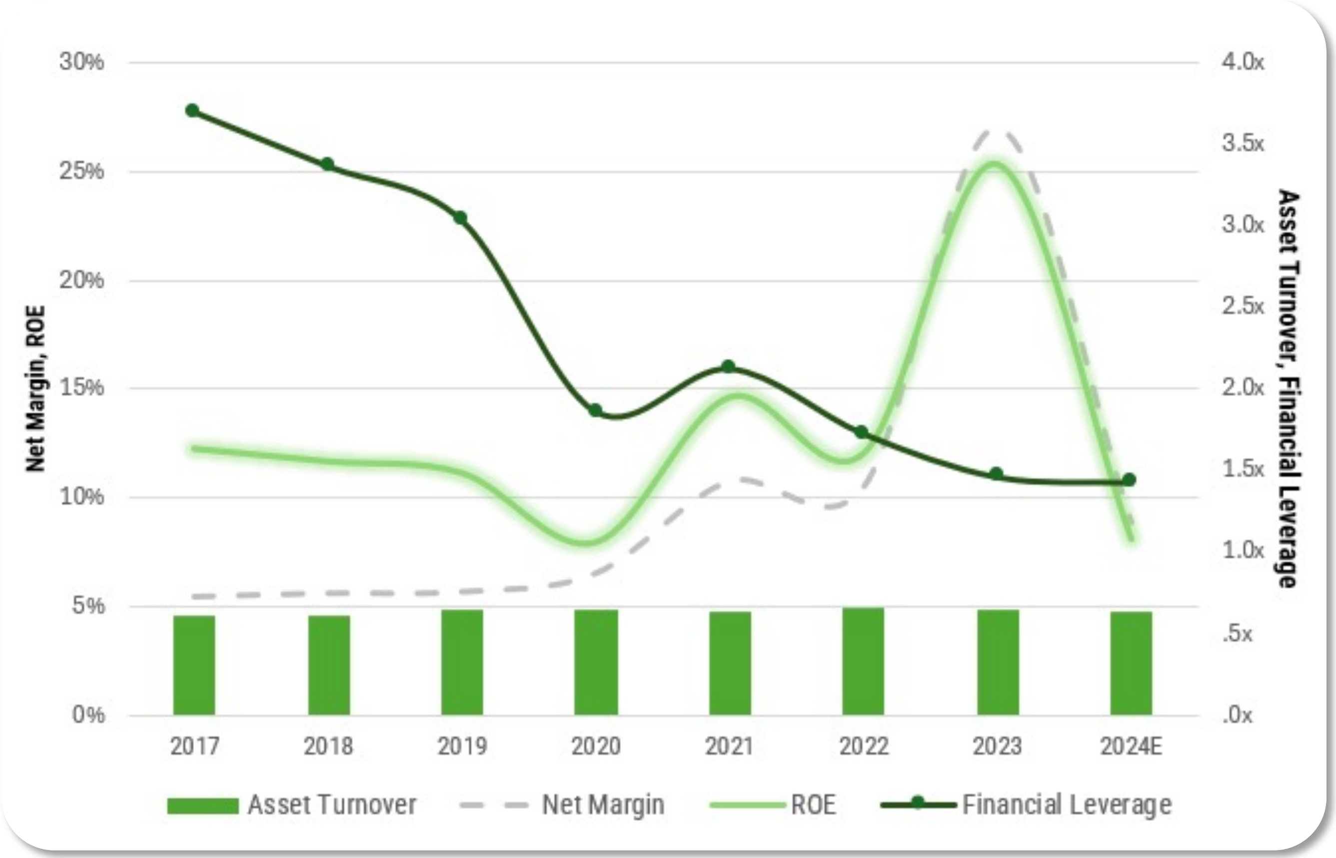
Historical Operating Costs vs EBITDAm



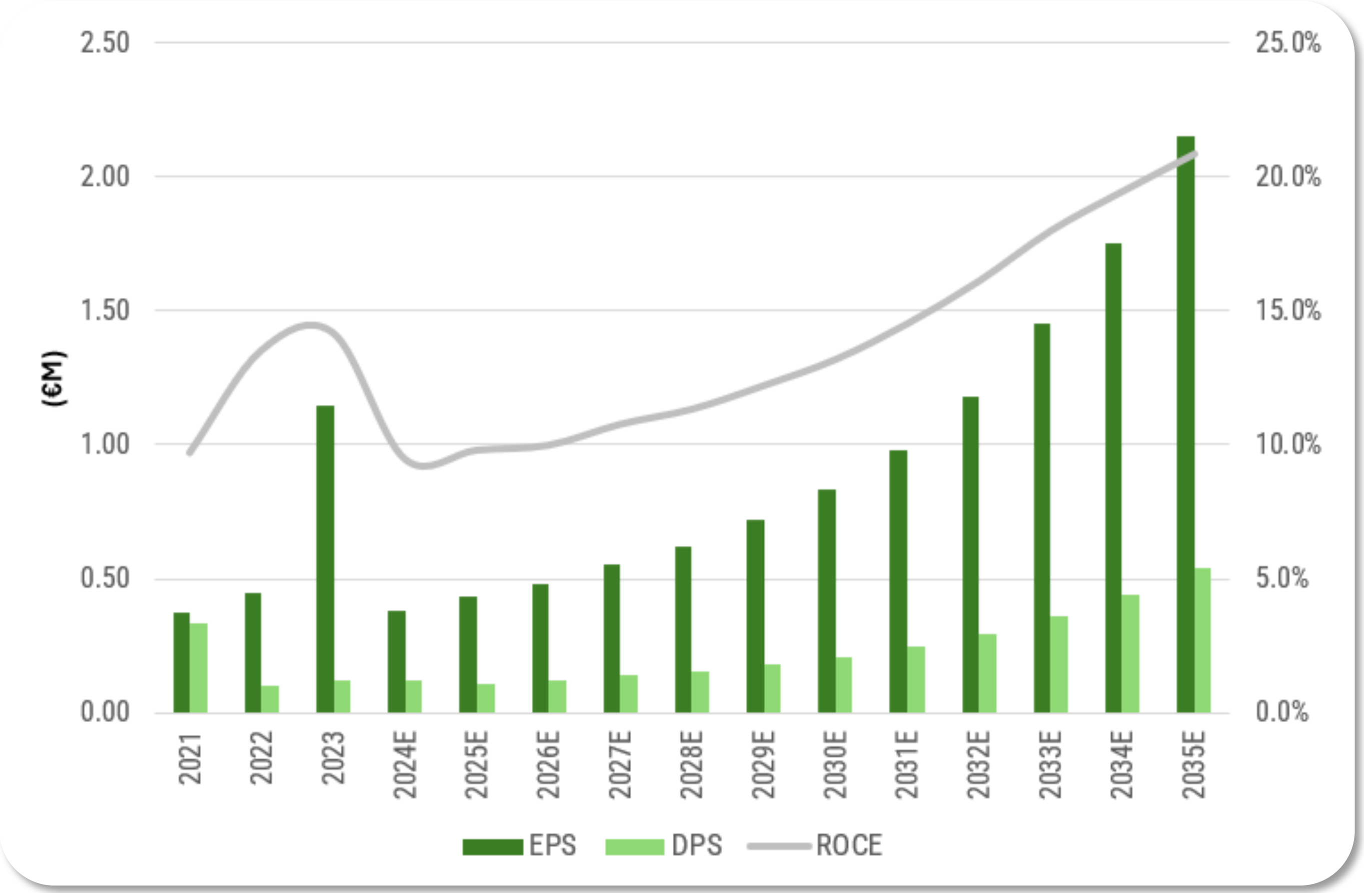
DNR mitigates raw material price volatility, particularly for iridium, titanium, nickel, and steel, through **cost-indexed contracts**, keeping COGS stable at an average of 64% of revenues from FY19-23.
Iridium and ruthenium costs, crucial for DSA manufacturing, fell to 24% in FY23, down from a 39% peak in FY21.

FINANCIAL ANALYSIS

DuPont Analysis

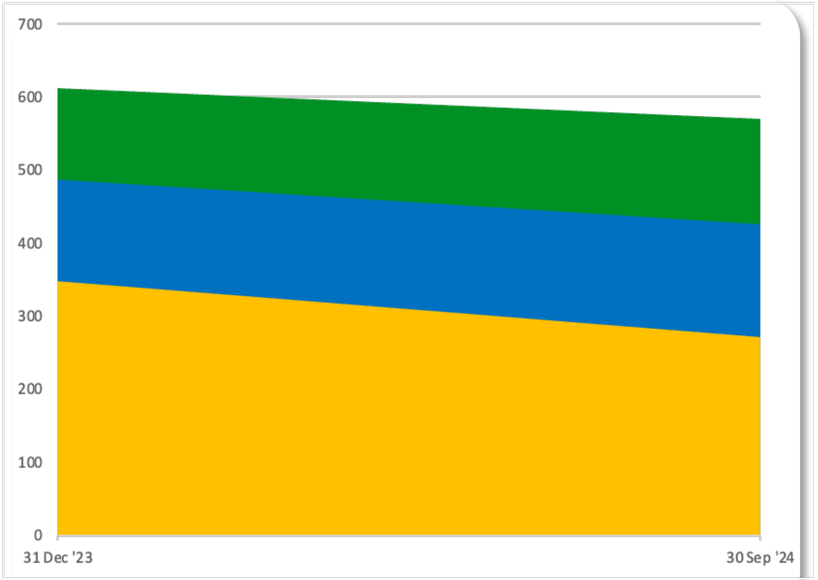


FINANCIAL ANALYSIS
Profitability



BACKLOG

Decreasing trend in Electrode Technologies



Energy Transition:
€125M vs €144.1M
INCREASING
Thanks to Hydrogen Green Steel Project

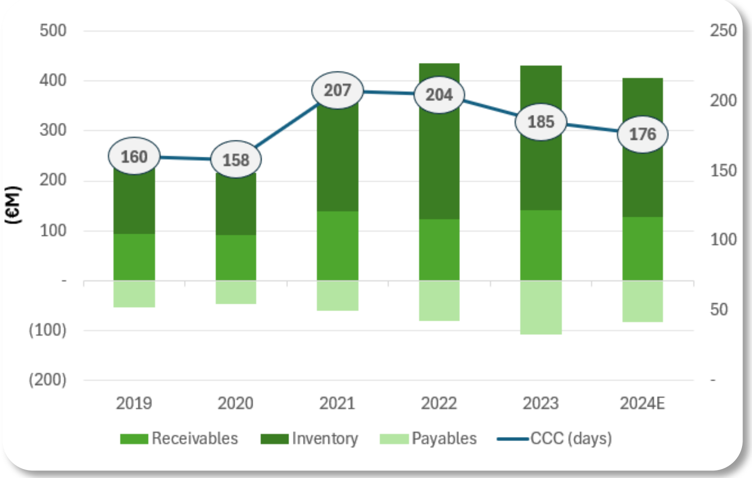
Water Technologies: €138.8M vs €153.8M
INCREASING
Thanks to new orders for €227M in 9M'24 both in Pools and WTS

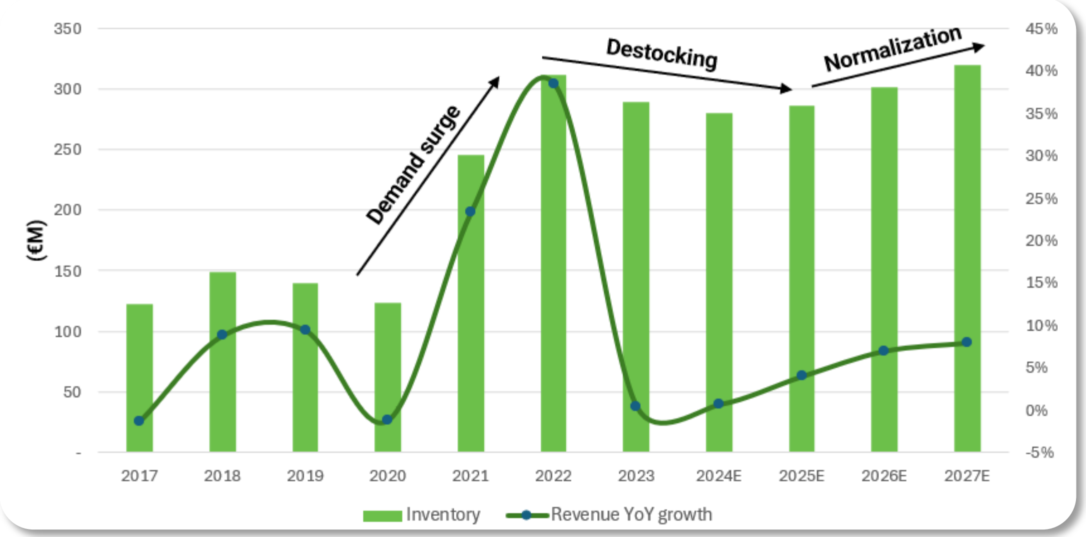
Electrodes: €348.3M vs €271.8M
DECREASING
Due to physiological Backlog Swing, but expected new orders incoming in 12M'24

BACKLOG BY YEAR OF DEVELOPMENT

2024 36% → 2025 43% → 2026 6% → 2027+ 15%

FINANCIAL ANALYSIS
Net Working Capital

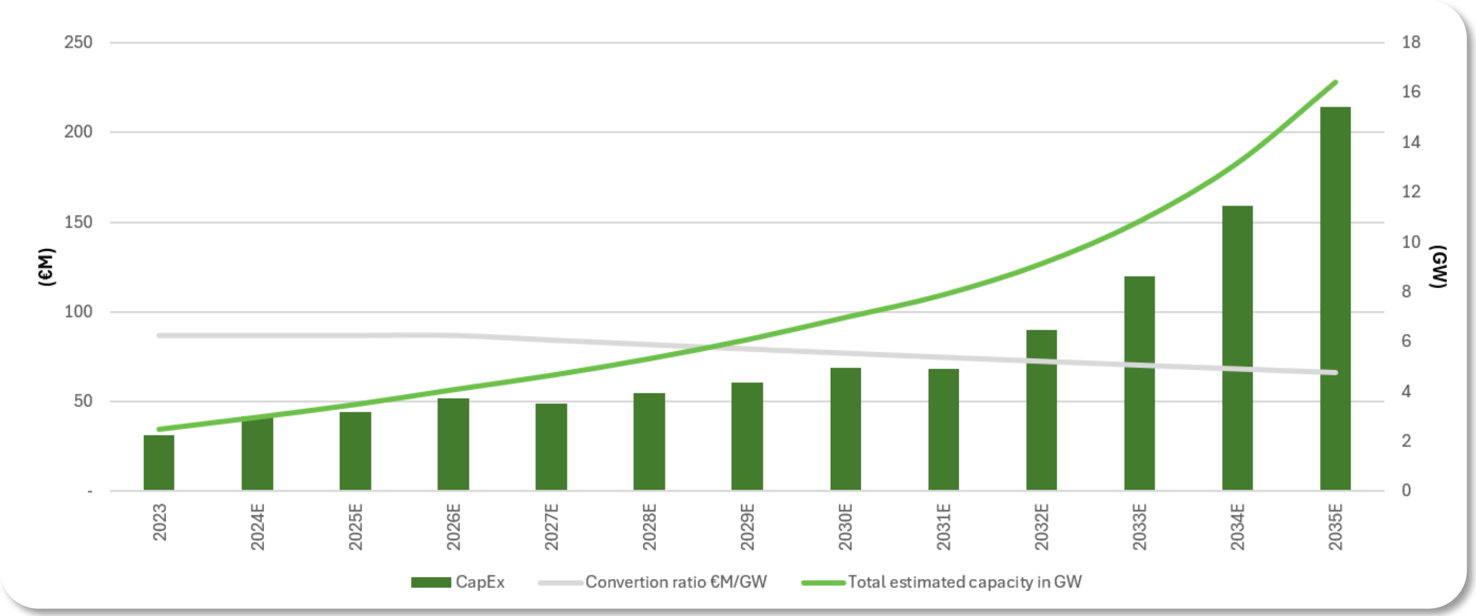




Structurally high CCC, which fluctuates in response to changing market conditions.

Supply chain disruptions forced De Nora to increase inventory levels to mitigate shortages. NWC is expected to normalize and improve as destocking phase concludes.

FINANCIAL ANALYSIS
Energy Transition CapEx Estimation



Investments in EnTr	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	2034E	2035E
Revenue (GW)	1.0	1.1	1.4	1.8	2.2	2.8	3.6	4.6	6.2	8.6	11.9	16.8
Accumulated estimated capacity (GW)	3.0	3.5	4.1	4.7	5.3	6.1	7.0	7.9	9.1	10.8	13.2	16.4
Acquired estimated capacity (GW)	0.5	0.5	0.6	0.6	0.7	0.8	0.9	0.9	1.2	1.7	2.3	3.2
Conversion ratio €M/GW	87.0	87.0	87.0	84.4	81.9	79.4	77.0	74.7	72.5	70.3	68.2	66.1

VALUATION

DCF Stages

VALUATION

Peers Selection: Legacy Business & Energy Transition

Core Business PEERS	Currency	Market Cap (bln)	ET	WT	EnTr	ROCE 3 Years Average	Revenues CAGR 19-23	EBITDA margin 2023	CAPEX/REVENUES 2025E	NFP/EBITDA 2025E	EPS 2025E	PE 2025E	EV/EBITDA		
													2024E	2025E	2026E
Electrode Technologies															
Rexel SA	**EUR**	**7.28**	✓	✗	✗	15.79%	8.65%	8.53%	0.94%	2.00x	2.24	10.9x	7.6x	7.0x	6.6x
ABB Ltd.	**CHF**	**91.33**	✓	✗	✗	25.05%	0.91%	16.27%	2.94%	0.52x	2.08	23.6x	16.6x	14.3x	13.9x
Schneider Electric SE	**EUR**	**135.26**	✓	✗	✗	14.53%	7.23%	20.57%	3.45%	1.38x	8.15	29.3x	18.9x	16.9x	15.3x
Legrand SA	**EUR**	**24.59**	✓	✗	✗	16.81%	6.18%	26.83%	3.00%	0.89x	4.58	18.8x	14.2x	13.1x	12.3x
Prysmian SpA	**EUR**	**18.08**	✓	✗	✗	12.93%	7.45%	8.88%	3.69%	0.91x	3.29	15.3x	12.3x	10.0x	9.3x
Siemens Energy AG	**EUR**	**39.81**	✓	✗	✓	-8.30%	1.96%	-5.27%	4.87%	-0.12x	0.7	72.3x	7.3x	14.5x	9.3x
Average						**12.80%**	**5.40%**	**12.63%**	**3.15%**	**0.93x**	**3.36**	**28.4x**	**12.8x**	**12.6x**	**11.1x**
Median						**15.16%**	**6.70%**	**12.58%**	**3.22%**	**0.90x**	**2.77**	**21.2x**	**13.3x**	**13.7x**	**10.8x**
Water Technologies															
Ecolab, Inc.	**USD**	**66.35**	✗	✓	✗	16.65%	5.09%	20.13%	5.45%	2.53x	6.65	31.3x	20.8x	19.4x	17.9x
Watts Water Technologies, Inc.	**USD**	**6.78**	✗	✓	✗	17.91%	6.47%	19.44%	1.89%	11.76x	8.73	22.7x	14.9x	14.6x	13.7x
Veolia Environnement SA	**EUR**	**19.78**	✗	✓	✗	6.43%	13.64%	13.22%	8.03%	3.88x	2.04	12.2x	7.1x	6.7x	6.4x
Pentair plc	**USD**	**16.63**	✗	✓	✗	21.40%	8.54%	22.04%	2.01%	2.13x	4.28	20.9x	18.0x	16.6x	15.3x
Xylem, Inc.	**USD**	**28.19**	✓	✓	✗	11.10%	8.81%	15.90%	4.07%	1.40x	4.23	28.4x	16.9x	15.6x	14.2x
Average						**14.70%**	**8.51%**	**18.15%**	**4.29%**	**4.34x**	**5.19**	**23.1x**	**15.5x**	**14.6x**	**13.5x**
Median						**16.65%**	**8.54%**	**19.44%**	**4.07%**	**2.53x**	**4.28**	**22.7x**	**16.9x**	**15.6x**	**14.2x**

Energy Transition PEERS	Currency	Market Cap (bln)	ET	WT	EnTr	ROCE 3 Years Average	Revenues CAGR 19-23	Gross margin 2025E	CAPEX/REVENUES 2025E	NFD/Equity 2023	P/BV 2025E	EV/Sales		
												2024E	2025E	2026E
Plug Power, Inc.	**USD**	**1.92**	✗	✗	✓	-23.74%	40.31%	-12.5%	28.29%	21.3%	0.80x	3.00x	2.50x	1.90x
Ceres Power Holdings plc	**GBP**	**0.33**	✗	✗	✓	-18.43%	9.91%	71.3%	19.65%	-76.1%	2.50x	3.70x	3.60x	3.20x
NEL ASA	**NOK**	**4.52**	✗	✗	✓	-22.91%	34.15%	n.a.	22.11%	-50.5%	1.00x	1.80x	1.90x	1.30x
Ballard Power Systems, Inc.	**CAD**	**0.72**	✗	✗	✓	-13.58%	-0.38%	-13.9%	41.76%	-74.2%	0.90x	-1.00x	-0.30x	-0.20x
McPhy Energy SA	**EUR**	**0.033**	✗	✗	✓	-26.69%	13.31%	n.a.	33.90%	65.8%	-	0.40x	0.30x	0.10x
ITM POWER, INC.	**GBP**	**0.22**	✗	✗	✓	-18.24%	3.32%	-85.4%	78.44%	-81.3%	0.60x	5.81x	0.10x	0.00x
Bloom Energy	**USD**	**5.39**	✗	✗	✓	-5.34%	14.16%	28.0%	5.92%	148.0%	8.70x	4.40x	4.67x	3.96x
thyssenkrupp nucera AG & Co. KGaA	**EUR**	**1.34**	✗	✗	✓	3.13%	2.48%	12.8%	4.47%	-89.5%	1.80x	0.60x	0.80x	0.70x
Average						**-15.73%**	**14.66%**	**0.1%**	**29.32%**	**-17.1%**	**2.33x**	**2.34x**	**1.70x**	**1.37x**
Median						**-18.34%**	**11.61%**	**0.1%**	**25.20%**	**-62.4%**	**1.00x**	**2.40x**	**1.35x**	**1.00x**

WACC CALCULATION

Cost of Equity (Ke)	11.58%	Fama & French three factors model ($R_f + \beta_m * MP + \beta_s * SMB + \beta_v * HML$)
Risk-free rate (Rf)	2.86%	Geographically weighted average of 10Y government bonds (Germany, U.S., China)
β Market	1.36	Betas obtained with a multi-linear regression of DNR's last 52 weeks returns against STOXX 600 Europe and weekly returns for SMB and HML premiums (Kenneth French)
β Size	0.38	
β Value	-0.29	
Market Premium	5.77%	Geographically weighted average market premiums
SMB	3.00%	FY10-FY25 historical return of SMB and HML portfolios
HML	0.90%	
Cost of Debt (Kd)	**4.03%**	**10Y German bond + Italian Spread**
Tax rate	26%	Based on DNR historical performance and team estimates
D/(D+E)	0.14	Derived from company data
E/(D+E)	0.86	
WACC	**10.41%**	**Ke * E/(E+D) + Kd * (1-Tr) * D/(D+E)**

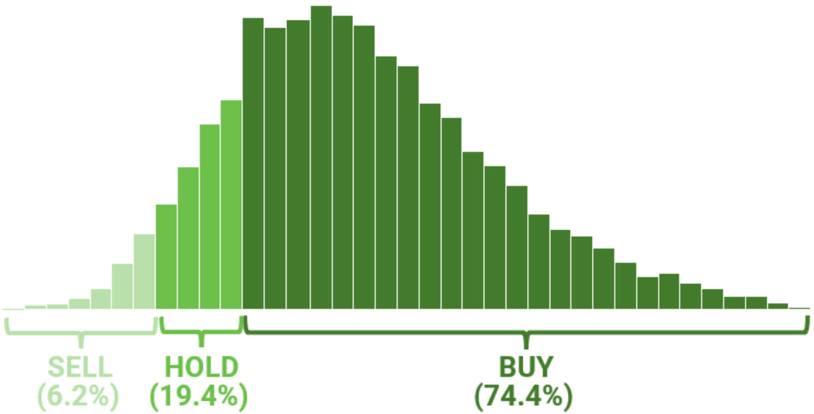
Equity Risk Premium	ERP region	WEIGHT	ERP
EMEIA	7.26%	36.00%	2.61%
AMS	4.33%	30.10%	1.30%
APAC	5.46%	33.90%	1.85%
Equity Risk Premium			**5.77%**

Risk Free Rate	Rfr region	WEIGHT	Rfr
EMEIA (GERMANY 10Y)	2.34%	36.00%	0.84%
AMS (US 10Y)	4.21%	30.10%	1.27%
APAC (CHINA 10Y)	2.21%	33.90%	0.75%
Risk Free Rate			**2.86%**

BETAS CALCULATION

Market Beta, Size Beta and Value Beta were computed using a multilinear regression model of weekly DNR returns for the last 18 months against the STOXX 600 Europe, which represents SSSSS. For Size and Value Betas we used weekly returns provided by Kenneth French. We obtained a raw Market Beta of 1.54, adjusted with the Blume Method to 1.36, this indicates stringer volatility for DNR with respect to the market. Both Size and Value Beta were statistically significant with a βs of 0.38 and β of -0.29.

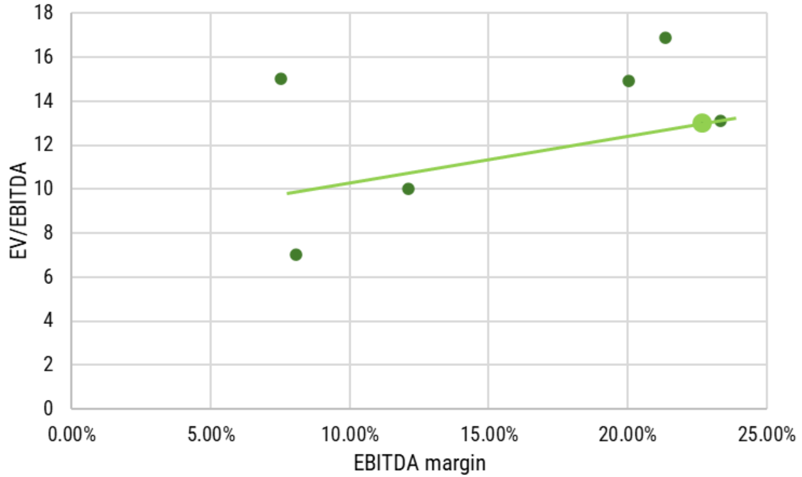
MONTECARLO SIMULATION

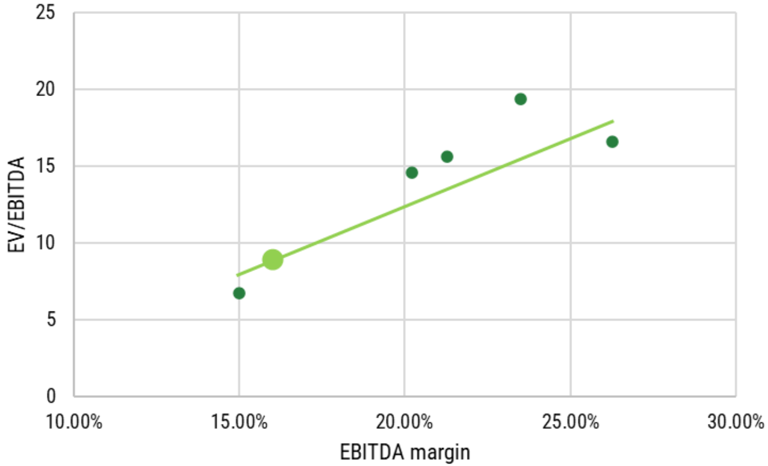


Our **Monte Carlo analysis** provides an important insight: rather than assuming a standard Gaussian distribution of outcomes, **we incorporate the past five years of volatility for key variables influencing ROCE**. By doing so, we account for the wider and fatter tails observed in the distributions of Growth % on Sales, NOPAT % on Sales, ΔNWC, and Capex. This approach results in a broad range of valuation outcomes and a **right-skewed distribution, highlighting DNR's asymmetric upside potential.**

MONTECARLO SIMULATION	DCF ASSUMPTIONS	MONTECARLO SIMULATION ASSUMPTIONS		
		DISTRIBUTION	KEY PARAMETERS	DESCRIPTION
Revenue Growth	Proprietary estimations based on market growth	Normal	Sd: last 5Y standard deviation	Main shocks are dependent as growth depends on previous year revenue with some independent shocks
EBITDA	Proprietary estimations based on market growth and company profitability	Normal	Sd: last 5Y standard deviation	Shocks on relative value with respect to revenues to acknowledge its link
NOPAT	Proprietary estimations based on market growth and company profitability	Normal	Sd: last 5Y standard deviation	Variations depend on Revenue value and EBITDA value with correlation between shocks on those three variables
DA, DWC, Net Capex	Proprietary estimations based on market CAPEX expenditures and company investments	Normal	Sd: last 2Y standard deviation	Variation on absolute terms of expenditures
WACC	Multi-Linear regression using Fama-French 3 factors model	Normal	Sd: standard deviation of historical regression residuals	Variation depends on industry related risks

LEGACY BUSINESS VALUATION





RELATIVE VALUATION FY25E	Sales (€m)	Regr EBITDA Margin	EV/EBITDA Mean	Multiple	EPS	Implied EV	Price per Share
Electrodes EV/EBITDA (80%)	478.36	11.24	12.63	11.94		1293	6.41 €
Electrodes PE (20%)				21.20	0.25	1069	5.30 €
Electrodes						**1248**	**6.19 €**
Water EV/EBITDA (80%)	307.03	14.58	8.85	11.72		575	2.85 €
Water PE (20%)				22.70	0.11	504	2.50 €
Water						**561**	**2.78 €**
Core Business	**785.39**					**1809**	**8.97 €**

ENERGY DCF

DCF (€M)	2023A	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	2034E	2035E	2040E	2045E	2050E	TV
Revenue	**102**	**105**	**111**	**129**	**162**	**205**	**260**	**343**	**453**	**600**	**798**	**1,061**	**1,427**	**2,986**	**3,479**	**4,033**	
Growth % (Base)	***139.6%***	***2.7%***	***5.7%***	***16.2%***	***25.6%***	***26.5%***	***26.8%***	***31.9%***	***32.1%***	***32.5%***	***33.0%***	***33.0%***	***34.5%***	***3.5%***	***3.0%***	***3.0%***	
Growth % (Bear)		***2.7%***	***5.7%***	***12.6%***	***20.8%***	***23.2%***	***23.5%***	***23.8%***	***24.0%***	***24.2%***	***24.5%***	***24.7%***	***25.0%***	***3.5%***	***2.5%***	***2.0%***	
Growth % (Bull)		***2.7%***	***5.7%***	***23.4%***	***25.6%***	***27.9%***	***30.0%***	***35.3%***	***35.7%***	***36.8%***	***39.3%***	***42.5%***	***44.6%***	***10.0%***	***3.0%***	***3.0%***	
NOPAT	**9**	**(2)**	**1**	**2**	**9**	**15**	**24**	**39**	**60**	**91**	**135**	**188**	**263**	**546**	**636**	**737**	
% of revenues	*8.4%*	*-2.4%*	*0.7%*	*1.4%*	*5.8%*	*7.4%*	*9.3%*	*11.2%*	*13.2%*	*15.1%*	*17.0%*	*17.7%*	*18.5%*	*18.3%*	*18.3%*	*18.3%*	
+ D&A	2	4	6	9	12	15	18	21	25	30	36	44	54	119	139	161	
- Δ Working Capital	(7)	(0)	(1)	(3)	(5)	(7)	(10)	(15)	(20)	(27)	(38)	(52)	(66)	(18)	(18)	(21)	
CF from Operations	**3**	**2**	**5**	**8**	**16**	**23**	**32**	**45**	**65**	**93**	**133**	**179**	**251**	**647**	**757**	**878**	
% of revenues	*3.2%*	*1.5%*	*4.9%*	*5.9%*	*10.0%*	*11.3%*	*12.5%*	*13.2%*	*14.4%*	*15.6%*	*16.7%*	*16.9%*	*17.6%*	*21.7%*	*21.8%*	*21.8%*	
- Net CapEx	(31)	(42)	(44)	(52)	(49)	(55)	(61)	(69)	(68)	(90)	(120)	(159)	(214)	(536)	(601)	(691)	
FCFF - Base Case	**(28)**	**(40)**	**(39)**	**(44)**	**(32)**	**(31)**	**(28)**	**(23)**	**(3)**	**3**	**14**	**20**	**37**	**111**	**156**	**186**	**1,951**
FCFF - Bear Case	**(28)**	**(40)**	**(39)**	**(44)**	**(36)**	**(36)**	**(34)**	**(32)**	**(19)**	**(21)**	**(22)**	**(25)**	**(24)**	**(48)**	**(59)**	**(69)**	**(719)**
FCFF - Bull Case	**(28)**	**(40)**	**(39)**	**(44)**	**(29)**	**(24)**	**(19)**	**(12)**	**12**	**21**	**36**	**58**	**98**	**445**	**762**	**940**	**9,847**

BASE CASE	
g	2.5%
WACC	11.74%
EV	221,870
Share price	**1.10**

BULL CASE	
g	3.0%
WACC	11.74%
EV	742,256
Share price	**3.68**

BEAR CASE	
g	2.0%
WACC	11.74%
EV	-143,207
Share price	**-0.71**

RISK MATRIX

Impact	1	2	3	4	5
5					
4	Technological	Nucera Dependence, Workforce	Geopolitical	Chinese Competition	
3	Cybersecurity, Solvency	M&A, Product Quality	Public Investments, Raw Materials and Noble Metals	Regulatory Changes	
2		Credit , ESG & Ethical	Macroeconomic, Destocking	Forex	Limited Free Float
1			Interest Rate		

Likelihood

MARKET RISKS

RISK (Likelihood, Impact)	DESCRIPTION	MITIGATION
Geopolitical Risk	Global conflicts threaten DNR supply chain: since Russia's invasion of Ukraine, DNR ceased working with Russian suppliers, while escalating tensions in the Middle East determined disruption in the Suez Canal, delaying noble metal shipments from South Africa. The U.S.-China trade war may raise costs for Chinese raw materials, with threats of new tariffs on Chinese and European goods could further impact supply chains.	Diversify suppliers, explore partnerships in stable regions, enhance local sourcing, and establish inventory buffers or joint ventures.
Macroeconomic Trends	While inflation has stabilized, risks remain due to monetary tightening, geopolitical tensions, and sluggish economic recovery. A downturn could negatively impact DNR's cyclical businesses.	DNR in past years has focused on operational efficiency maintaining a >15% EBITDAm during the period 2018-23. The company should strengthen its non-cyclical segments like water treatment and broaden its customer base in its cyclical sectors like pools technology and chlor-alkali electrodes.
Public Investments	Hydrogen market growth depends on government funding (e.g., U.S. 45V Credit, EU Hydrogen Bank). While 60 countries will introduce hydrogen strategies covering 84% of CO_2 emissions by 2024, many lack binding commitments or dedicated funding	Align projects with public funding criteria, such as the second EU Hydrogen Bank auction 25% non-Chinese component requirement.

OPERATIONAL AND STRATEGIC RISKS – PART 1

RISK (Likelihood, Impact)	DESCRIPTION	MITIGATION
Raw Materials & Noble Metals	NR electrode production depends on noble metals (platinum, iridium, ruthenium) sourced mainly from South Africa and China, comprising 45% of raw material costs. Price and supply volatility pose significant risks.	De Nora tries to ensure availability of materials signing contracts with suppliers that include minimum purchase volume and it manages inventories based on expected annual production. More than 80% of contracts for strategic raw materials are secured on a yearly basis from a selected set of around ten suppliers. Additionally, the company used in the past the pass-through mechanism to transmit the increased costs of raw materials directly to their clients, keeping margins constant.
M&A Execution	M&As are critical components for the strategic growth of the company. However, the complexity of creating synergies with acquired businesses presents significant risks that could negatively impact De Nora's operations, finances and long-term strategic plans.	Conduct thorough due diligence, assess financial and legal risks, and implement structured integration plans with clear milestones and resource allocation.
Dependence on Nucera	Nucera is required to purchase from De Nora cells, electrodes and aftermarket services for its electrolysers production. Since De Nora has limited control over activities carried out by tk Nucera it may not prevent decisions that would not be beneficial to De Nora. It would be detrimental since the entire Energy Transition sector depends on Nucera's orders at the moment and as of September 2024 Nucera's orders are 23.7% of De Nora's total backlog.	De Nora aims to diversify by advancing its proprietary Dragonfly electrolyser project to establish independence in the hydrogen sector. De Nora is currently working on broadening its customer base; still it is important to reduce in the future the overreliance on Nucera for the Hydrogen segment.

OPERATIONAL AND STRATEGIC RISKS – PART 2

RISK (Likelihood, Impact)	DESCRIPTION	MITIGATION
Workforce	De Nora operates in highly specialized technological industries. These sectors require an expert workforce in fields such as materials science, elettro-chemical engineering and renewable energy systems. The growing global demand for green energy technologies has intensified competition for talent, creating challenges in recruiting and retaining skilled professionals.	Between 2022 and 2023, De Nora lost 8.5% of its qualified engineers so it needs to improve its actions. The Remuneration Policy for the management of the company is based also on criteria aimed at attracting, motivating and retaining people with the professional and human qualities necessary to contribute to the Group's strategy. De Nora could launch in-house training programs and partnerships with universities and technical schools to cultivate a pipeline of skilled workers. It is fundamental also to maintain current workforce stability implementing retention strategies like competitive compensation, flexible work arrangements and clear career progression pathways.
Quality of Products	Industrie De Nora’s competitive advantage depends on its commitment to providing high-quality products. Clients are willing to pay a premium for this reliability, confident that these products adhere to strict performance and durability standards. However, any defects, malfunctions, or failures to meet quality expectations can lead to significant repercussions, including financial losses, damage to reputation, and potential legal issues.	Enhanced quality control measures to eliminate possible defective products, De Nora right now is developing a database with all the data coming from quality tests and before long it will implement machine learning to be able to improve the life assessments of its products.
Technological	Groundbreaking technologies in the electrodes sector and hydrogen production could drastically reduce market share of the company if it is not able to keep up with state of the art technologies.	R&D and innovation are the key to keep the competitive advantage, De Nora in 2023 spent 1.9% of revenues on R&D.

OPERATIONAL AND STRATEGIC RISKS – PART 3

RISK (Likelihood, Impact)	DESCRIPTION	MITIGATION
Chinese Competition	In recent years China extended its dominance in the clean tech supply chain. In 2023 it added alone 70% of global capacity of Hydrogen electrolyzers (Bloomberg). De Nora faces competitive risks from Chinese manufacturers in electrodes and electrolyzers, where state subsidies and scale enable lower-cost production. This could potentially mirror the solar panel and batteries industry's disruption, where European firms lost substantial market share. Additionally, future growth in interest in the hydrogen sector increases probability for larger off-takers (energy players, industrial gas suppliers, chemical companies, etc.) to attempt to enter and disrupt the market.	De Nora must focus on innovation, strategic partnerships, and fair trade advocacy. European regulatory action against unfair practices and De Nora's investments, like expanding its Suzhou plant, will be critical to maintaining competitiveness. It is fundamental to maintain the technological and quality gap with competitors through continuous investment for R&D and protection of the know-how through patents filing. In 2023, De Nora had 2,387 active patents and 492 patent applications pending of which 10 were filed concerning the water electrolysis field.
Destocking	Industrie De Nora's electronic and pool segments might encounter challenges due to destocking trends, which could impact short-term revenue growth. Customers in these sectors are reducing their inventory levels, possibly indicating weaker demand in the end market or a reassessment of supply chains. Extended destocking could put pressure on margins and increase operational risks.	Offering value-added services and just-in-time supply solutions can help stabilize sales and build stronger customer relationships.
Cybersecurity	As a technology-driven company, De Nora could face risks from cyberattacks targeting its intellectual property, operational systems, or sensitive client data.	Strengthen cybersecurity protocols, adopt robust monitoring systems, and conduct regular penetration testing.

FINANCIAL RISKS

RISK (Likelihood, Impact)	DESCRIPTION	MITIGATION
Solvency	De Nora's exposure consists in the potential risk of incurring losses resulting from the inability to meet payment obligations. Considering its low indebtedness level and strong cash flows, the solvency risk is negligible.	
Credit	Loyalty is the base for De Nora's clients, the company constantly scrutinizes its clients for possible default risks. The major risk could come from jk Thyssenkrup Nucera which is by far the largest client, any problems to Nucera could heavily impact De Nora.	De Nora does not have to become too dependent on Nucera; the company. is already working also to start its own production of electrolysers to reduce potential risks.
Interest Rate	While De Nora has a very low leverage position and sustained negative net debt since the IPO (- 69 million € in 2023), most of the firm's financial instruments bear interest at variable rates, a sudden shift in rates would be detrimental.	The company can use instruments to hedge the risks like interest rate swaps.
Forex	De Nora is a multinational company that manages cash flows in different currencies mainly Euro, Dollar and Yen. Changes in exchange rate would pose risks to profitability.	The company in the past has used derivatives contracts to protect itself from the swing against the dollar. De Nora's local for local business model and its global presence in various markets represent a natural hedge for currencies' volatility.
Limited Free Float	With only 25.39% of total shares publicly traded, De Nora faces liquidity and volatility risks, as limited trading volume can lead to significant price fluctuations and deter institutional investors. Concentrated ownership also heightens the risk of decision-making misaligned with minority shareholders' interests since the remaining shares held by De Nora's family and SNAM are multiple voting shares.	Gradual increase of free float through secondary offerings or engage with institutional investors to improve market liquidity.

LEGAL RISKS

RISK (Likelihood, Impact)	DESCRIPTION	MITIGATION
Regulatory	The green hydrogen market is still in its early stages, current and future changes and delays in regulation are dampening growth. There are still doubts behind the 45 V tax credit coming from the IRA, all this uncertainty has caused delays and cancellations in several projects and investments. Regulations are also affecting the Water Treatment segment with more stringent laws for PFAS contamination, however De Nora with its SORB contaminant removal systems is compliant with new regulations.	De Nora could strengthen its participation in industry advocacy groups to shape hydrogen regulations and ensure that its technologies align with evolving standards. For example, it did not participate in the joint letter sent by European hydrogen players to the European Commission to bolster European hydrogen leadership.
ESG and Ethical	While Industrie De Nora's commitment to sustainability is commendable, it introduces a significant investment risk. If the company fails to achieve its ambitious ESG targets, this could harm its reputation and negatively impact investor confidence, potentially affecting financial performance.	De Nora enhanced its credibility by aligning its carbon reduction efforts with the Science-Based Targets initiative (SBTi), demonstrating its commitment to global decarbonization efforts. Moreover, the company launched the 2024-2026 People Strategy, introducing a strategy aimed at fostering an inclusive and wellness-focused corporate culture. The company places heavy importance on supply chain ESG compliance with De Nora’s Supplier Code of Ethics. Additionally, De Nora is the only company among its peers that uses ESG linked compensation for the management. It is important to engage third-party auditors to verify ESG claims and certify compliance with global standards.

AMERICAN REGULAMENTATION

Mechanism	Explanation	Decision timeline
Congress Budget Bill	The federal budget is reviewed every year and contains negotiations over tax credits and federal spending. Hydrogen related tax credits such as 45V or 45Q may be included, cut or modified as a part of the federal budget process.	4Q 2025
Congressional Review Act	Congress can reject the rules to qualify for the 45V hydrogen production tax credit and force the US Department of the Treasury to draft new guidelines.	2-3 years

President Trump's January 20, 2025, Executive Order (EO) 14154, titled "Unleashing American Energy" puts on hold all credits coming from the IRA for green hydrogen

Money for the first phase of four of the hubs, about $170 million out of the $7 billion, had already been awarded prior to President Trump’s inauguration. The second round of funding, worth some 15% of the $7 billion, is not scheduled for another 12-18 months. Any delays in phase two are thus unlikely to affect near-term progress.

ESG MODEL

ENVIRONMENTAL (WEIGHT: 40% - SCORE: 6.88 - RANK: BBB)								
Key factors	Metric	De Nora 2023	De Nora 2022	Competitors Average	Competitors Min	Competitors Max	Score	
							Metric	Key factors
Energy Management (21.5%)	Total Energy Consumption Per Revenues (MWh/M€)	0.13	0.12	0.33	0.02	2.73	8.5	6.17
	Percent of Renewable Energy Consumed	0.08%	0%	46.5%	0.08%	98.8%	3	
	Energy Consumption Reduction Policy	✓	✓	100% ✓			7	
GHG Emissions Management (21.5%)	Scope 1+2 Emission Per Revenues (Location-based) (tCO_2e/M€)	37.02	36.95	28.1	0.02	83.4	7	6.00
	Scope 1+2 Emission Per Revenues (Market-based) (tCO_2e/M€)	39.60	39.34	16.19	0.01	46.81	4	
	Scope 3 Emission Per Revenues (tCO_2e/M€)	46,226	40,774	5,962	0.3	46,226	3	
	GHG Emissions Reduction Policy	✓	✓	100% ✓	✓	✓	7	
	Scope 1+2 Emission Changes Per Year (Location-based)	0.8%	7.3%	-0.1%	-16.9%	59.6%	7	
	Scope 1+2 Emission Changes Per Year (Market-based)	2.4%	7.6%	4.90%	-32.6%	175%	7.5	
	Scope 3 Emission Changes Per Year	14%	-	7.40%	-16%	78.9%	6.5	
Water Management (21.5%)	Total Water Discharged Per Revenues (ML/M€)	0.18	0.21	0.12	0.004	0.43	7	7.13
	Total Water Withdrawal Per Revenues (ML/M€)	0.25	0.27	24.72	0.007	268.64	9	
	Total Water Consumption Per Revenues (ML/M€)	0.063	0.059	0.076	0.026	0.16	7	
	Water Use Policy	✗	✗	24% ✗ - 76% ✓	✗	✓	5.5	
Waste Management (21.5%)	Percent of Hazardous Waste to Total Waste	59%	49%	34%	3%	94%	6	6.83
	Waste Reduction Policy	✓	✓	12% ✗ - 88% ✓	✗	✓	7.5	
	Percent of Waste Recycled to Total Waste	42%	39%	46%	3%	87%	7	
Air Quality (14%)	Nitrogen Oxides Emissions Per Revenues (kt/M€)	0.004	0.005	4.8	0.004	23.56	10	9.00
	Sulphur Oxides Emissions Per Revenues (kt/M€)	0.004	-	3.26	0.004	13.03	10	
	Volatile organic compounds (VOC) Emissions Per Revenues (kt/M€)	0.07	0.08	0.19	0.005	0.42	9.5	
	Air Pollution Reduction Policy	✗	✗	57% ✗ - 43% ✓	✗	✓	6.5	

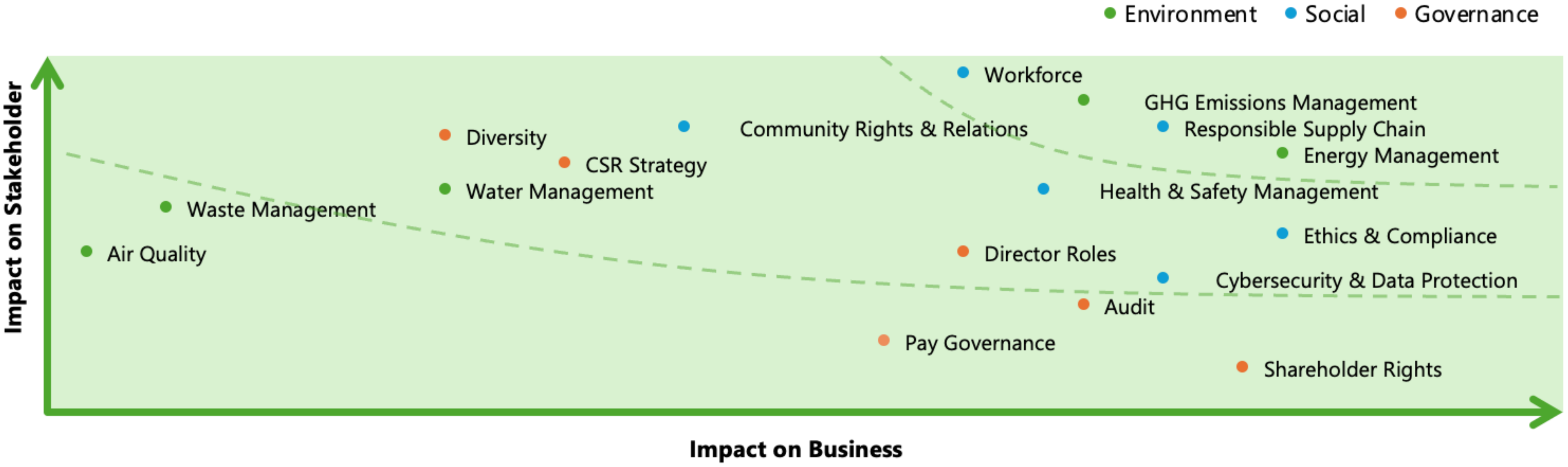
ESG MODEL

SOCIAL (WEIGHT: 40% - SCORE: 7.26 - RANK: BBB)								
Key factors	Metric	De Nora 2023	De Nora 2022	Competitors Average	Competitors Min	Competitors Max	Score	
							Metric	Key factors
Workforce (23.5%)	Percent of Woman Employees	19.7%	19.4%	26.3%	19.7%	38%	3	6.70
	Percent of Woman in Managerial Roles	24.3%	20.9%	27.3%	19.1%	34%	6.5	
	Employee Turnover	16%	26%	14.7%	8.5%	21.7%	7.5	
	Average Training Hours	31	15	21	5	43	8	
	Gender Pay Gap	✗	✗	31% ✗ - 69% ✓	✗	✓	8.5	
Community Rights & Relations (23.5%)	Community Engagement Policy	✓	✓	50% ✗ - 50% ✓	✗	✓	8	7.33
	Fair Remuneration Policy	✓	N	85% ✗ - 15% ✓	✗	✓	6.5	
	Child Labor Policy	✓	✓	18% ✗ - 82% ✓	✗	✓	7.5	
Health & Safety Management (10%)	Health and Safety Policy	✓	✓	100% ✓	✓	✓	7	7.50
	Accident Rate	0.60%	-	1.13%	0.07%	3.11%	8	
Responsible Supply Chain (33%)	Supply Chain Management Policy	✓	✓	11% ✗ - 89% ✓	✗	✓	7.5	7.50
	Percent of Community Spending Per EBITDA	0.12%	-	0.14%	0.02%	0.24%	7	
	Supporting Local Communities Policy	✓	✓	50% ✗ - 50% ✓	✗	✓	8	
Ethics & Compliance (5%)	Business Ethics Policy	✓	✓	100% ✓	✓	✓	7	7.17
	Whistleblower Protection	✓	✓	100% ✓	✓	✓	7	
	Anti-Corruption Policy	✓	✓	6% ✗ - 94% ✓	✗	✓	7.5	
Cybersecurity & Data Protection (5%)	Data Protection Policy	✓	✓	6% ✗ - 94% ✓	✗	✓	7.5	7.50
	Cyber Security Policy	✓	✓	31% ✗ - 69% ✓	✗	✓	7.5	

ESG MODEL

GOVERNANCE (WEIGHT: 20% - SCORE: 7.47 - RANK: BBB)								
Key factors	Metric	De Nora 2023	De Nora 2022	Competitors Average	Competitors Min	Competitors Max	Score	
							Metric	Key factors
Diversity (12.5%)	Board Average Age	56.8	55.8	59.8	56.8	64.9	9	7.50
	CEO or Equivalent a Woman	✗	✗	94% ✗ - 6% ✓	✗	✓	6.5	
	Percent of Woman on Board	33%	30%	36%	14%	50%	7	
Director Roles (22.5%)	Percent of Non Executive Directors on Board	83%	80%	89%	57%	100%	7.5	7.50
	Percent of Independent Directors on Board	50%	50%	69%	17%	100%	6.5	
	Percent of Board of Directors Attendance	95%	93%	93%	75%	100%	8.5	
Pay Governance (12.5%)	Remuneration Committee Size	3	3	4	0	6	7	7.00
	Percent of Independent Directors on Remuneration Committee	67%	67%	88%	50%	100%	7	
	Clawback Policy	✗	✗	39% ✗ - 61% ✓	✗	✓	5.5	
	ESG Linked Compensation	✓	✓	94% ✗ - 6% ✓	✗	✓	8.5	
Shareholder Rights (22.5%)	Cumulative Voting System	✗	✗	100% N	✗	✗	6	7.83
	Dual Class Unequal Voting Rights - Common	✓	✓	72% ✗ - 28% ✓	✗	✓	7.5	
	Percent Ownership Required for Special Meeting	5%	5%	12.5%	5%	25%	10	
Audit (15%)	Audit Board Committee Size	3	3	4	2	8	5	7.33
	Percent of Independent Directors on Audit Commitee	100%	100%	93%	50%	100%	10	
	Independent Chairperson on Audit Committee	✓	✓	100% ✓	✓	✓	7	
CSR Strategy (15%)	Percent of Independent Directors on CSR Committee	67%	67%	78%	0%	100%	7	7.38
	CSR/Sustainability Committee	✓	✓	17% ✗ - 83% ✓	✗	✓	7.5	
	SDGs Target Policy	✓	✓	38% ✗ - 63% ✓	✗	✓	7.5	
	UN Global Compact Policy	✓	✓	29% ✗ - 71% ✓	✗	✓	7.5	

ESG
Materiality Map



ESG
Targets

2025
- 100% **new** products assessed by **scorecard**
- 100% facilities certified **ISO 14001**
- 100% of site certified **ISO 45001**

2026
- 40% **renewable electricity**
- 100% sites with **mental health** hotline
- 100% of employees trained on **anti-corruption** policy

2027
- 100% **existing** products assessed by **scorecard**
- 100% facilities certified **ISO 50001**

2030
- 50% reduction of **Scope 1** and **2**
- 52% reduction of **Scope 3** intensity
- 100% **renewable electricity**
- > 50% **suppliers** assessed