



CFA Institute

CFA Institute Research Challenge

Hosted by
CFA Society Italy

CapEx Catalysts

The CFA Institute Research Challenge is a global competition that tests the equity research and valuation, investment report writing, and presentation skills of university students. The following report was prepared in compliance with the Official Rules of the CFA Institute Research Challenge, is submitted by a team of university students as part of this annual educational initiative and should not be considered a professional report.

Disclosures:

Ownership and material conflicts of interest

The author(s), or a member of their household, of this report does not hold a financial interest in the securities of this company. The author(s), or a member of their household, of this report does not know of the existence of any conflicts of interest that might bias the content or publication of this report.

Receipt of compensation

Compensation of the author(s) of this report is not based on investment banking revenue.

Position as an officer or a director

The author(s), or a member of their household, does not serve as an officer, director, or advisory board member of the subject company.

Market making

The author(s) does not act as a market maker in the subject company's securities.

Disclaimer

The information set forth herein has been obtained or derived from sources generally available to the public and believed by the author(s) to be reliable, but the author(s) does not make any representation or warranty, express or implied, as to its accuracy or completeness. The information is not intended to be used as the basis of any investment decisions by any person or entity. This information does not constitute investment advice, nor is it an offer or a solicitation of an offer to buy or sell any security. This report should not be considered to be a recommendation by any individual affiliated with CFA Society Italy, CFA Institute, or the CFA Institute Research Challenge with regard to this company's stock.



Industrie De Nora

Italy | Industrials | Capital goods

CFA Institute Research
Challenge 2025

Initiation of Coverage
1st February 2025

Recommendation

BUY

Date	31/01/2025
Current Price	€7.18
Target Price	€11.53
Upside	+60.6%

STOCK DATA

First trading day	01/07/2022
52-Week High 29/02/24	€15.56
52-Week Low 29/01/25	€6.90
Ticker	DNR.MI
Stock Exchange	Italian Stock Exchange

MARKET DATA

Shares Outstanding	201.69mln
Market Capitalization	€1.436bln
EPS	€1.15
Free Float	44.6M

STOCK PERFORMANCE



SHAREHOLDERS' STRUCTURE

	Share	Rights
De Nora Family	53.4%	63.9%
Asset Company 10 S.r.l.	21.6%	26.0%
Free Float	25.1%	20.1%

Investment Summary

De Nora: Buy Low and Enjoy the Gains

We initiate coverage on **Industrie De Nora S.p.A. (DNR)** with a **BUY** recommendation and a **one-year target price of €11.5**, implying a **60.6% upside** from the closing price of **€7.18 on January 31st 2025**. DNR's unique value proposition lies in its **strategic diversification, relentless focus on quality, and commitment to innovation** through R&D, geographic expansion, and high-margin aftermarket services, all of which provide a recurring revenue stream. Additionally, the company has successfully leveraged **strategic partnerships** to consolidate its market presence across multiple industries. With its legacy in electrochemistry and water treatment, DNR is uniquely positioned to benefit from the **accelerating demand for green hydrogen** and **sustainable water solutions**. Through its strategic joint venture, **tk nucera**, DNR has solidified its role in **large-scale electrolyzer production**, crucial for hydrogen generation.

Business: a Century of Innovation

Founded in **1923**, DNR has evolved into a **global leader in electrochemical solutions and sustainable technologies**. Over the past century, the company has continuously expanded its reach, capitalizing on economies of scale across its diversified business divisions: **(i) Electrode Technologies** supplies high-performance electrodes for Chlor-Alkali, Electronics, and Electrowinning markets, **(ii) Water Technologies** focuses on salt electrochlorination, disinfection, and filtration, providing cutting-edge solutions for municipal and industrial water treatment, and lastly **(iii) Energy Transition** is dedicated to green hydrogen production, supplying advanced electrodes and fuel cells for electrolysis. DNR's ability to drive value creation lies in its **global expansion, industry-leading product quality, and established expertise in electrode manufacturing**, particularly in the promising yet volatile green hydrogen sector.

Industry: Catalyzing Change in Electrochemical Solutions

The global electrochemical solutions market represents a **fragmented yet high-growth environment**, underpinned by increasing demand across industrial processes, energy transition, and water treatment applications. Key structural growth drivers include: **(i) Innovation in electrochemical applications**, driving increased adoption of high-performance electrodes across industrial, electronics, and energy applications; **(ii) Tightening environmental regulations**, accelerating investment in **advanced water treatment**, emissions control, and sustainable disinfection solutions; **(iii) The global energy transition**, with hydrogen technologies playing an integral role in **net-zero strategies**, supporting long-term electrolysis demand. Within this landscape, **DNR is positioned as a global leader**, benefiting from a diversified product portfolio, deep technical expertise, and an established market footprint. Despite competition from large industrial players and niche specialists, **DNR's ability to scale innovation and commercialize electrochemical solutions** efficiently differentiates it from peers. The company is strategically aligned with secular growth themes, including industrial efficiency, clean energy adoption, and sustainability-focused regulation, reinforcing its long-term relevance and earnings potential.

Financial Analysis: Resilient and Ready

After an **exceptional revenue surge during the COVID-19 years** (+30.7% CAGR FY20-22), DNR entered a **stabilization phase in FY23**, impacted by **destocking** among key clients in the Electronics and Pool Technologies segments. This adjustment led the company to rebalance its own inventory, which had nearly doubled between FY20 and FY21, causing a **sharp drop in FCF** due to the significant increase in NWC. Despite these short-term challenges, DNR has undergone a remarkable financial transformation, **shifting from a highly leveraged structure (154% gearing FY17) to a cash-generating powerhouse (-7.6% gearing FY23)**, supported by continuous capital strengthening. Investment policies have also evolved, with CapEx nearly doubling to €88M in FY23 (+92% YoY), primarily allocated to the **construction of the Gigafactory**, expected to be operational by FY26E. Considering these dynamics and the temporary nature of the destocking phase, we forecast a **+7.7% CAGR in sales over FY24E-30E**, largely driven by green hydrogen growth. We expect **profitability to return to historical levels by FY27E**, with EBITDam reaching 20%, while sustained CapEx will support EnTr expansion. Meanwhile, **NWC and FCF should normalize as destocking concludes by FY25E**, setting the stage for a new cycle of sustainable growth.

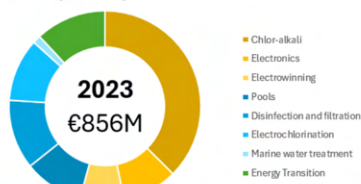
Exhibit 1
DNR in numbers

Highlights (€M)	2021A	2022A	2023A	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Total Revenues	615.9	852.8	856.4	862.1	896.4	958.8	1,034.6	1,120.9	1,219.2	1,345.3
EBIT	121.2	165.2	171.0	149.2	164.4	181.3	208.0	232.3	261.3	299.1
Net Income	66.4	89.7	231.1	76.6	87.3	96.4	111.2	125.1	144.6	167.9
EPS (€/share)	0.37	0.44	1.15	0.38	0.43	0.48	0.55	0.62	0.72	0.83
DPS (€/share)	0.34	0.10	0.12	0.12	0.11	0.12	0.14	0.16	0.18	0.21

Profitability/Valuation	2021A	2022A	2023A	2024E	2025E	2026E	2027E	2028E	2029E	2030E
EBIT margin (%)	19.7%	19.4%	20.0%	17.3%	18.3%	18.9%	20.1%	20.7%	21.4%	22.2%
FCFF/Sales (%)	-10.8%	5.8%	9.0%	4.6%	3.4%	3.1%	4.8%	5.3%	5.9%	6.4%
NFP	188.8	(52.0)	(68.8)	(62.1)	(74.2)	(83.6)	(109.2)	(142.1)	(182.7)	(232.6)
NFP/EBITDA (x)	1.6x	-0.3x	-0.4x	-0.4x	-0.5x	-0.5x	-0.5x	-0.6x	-0.7x	-0.8x
ROCE (%)	9.7%	13.5%	14.2%	9.4%	9.8%	10.0%	10.7%	11.3%	12.2%	13.2%
Dividend Yield (%)	90.3%	22.3%	10.5%	31.9%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%
EV/EBITDA (x)	-	19.1x	19.0x	21.7x	19.7x	17.9x	15.6x	14.0x	12.4x	10.8x
P/E (x)	-	30.5x	13.8x	41.5x	36.4x	33.0x	28.6x	25.4x	22.0x	18.9x

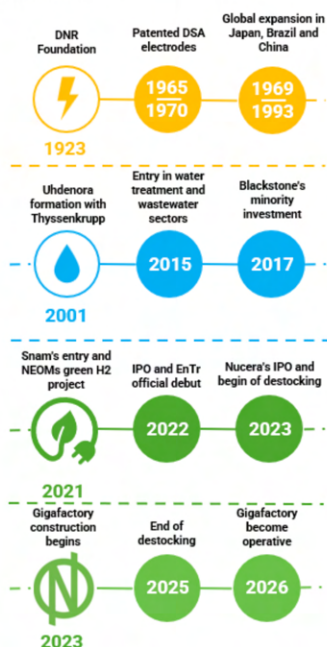
Source: Team Analysis

Exhibit 2
Revenues by sub-segment



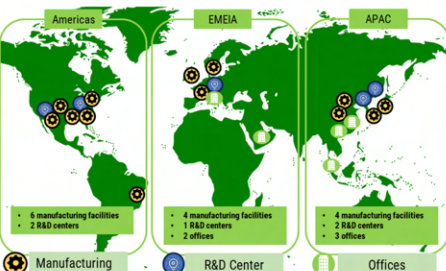
Source: Company Data

Exhibit 3
DNR's Milestones



Source: Company Data, IPO prospectus

Exhibit 4
Geographic positioning



Source: Company data, IPO prospectus

Valuation: The Slope of Enlightenment

We derive our **target price of €11.5** per share using a blended approach that combines a **Sum-of-the-Parts (SOTP)** valuation and a **three-stage Discounted Cash Flow (DCF)** model. This methodology reflects DNR's unique positioning across its diverse business segments. For the **core business** (Electrodes and Water Technologies), we employ a **relative valuation approach**, using sector-relevant trading multiples to account for the maturity and stability of these markets. Meanwhile, the **energy transition** segment, primarily driven by exposure to green hydrogen, is valued through **three distinct DCF models**, each representing a **different scenario to capture the inherent volatility** and uncertainty of the market's evolution. Additionally, we value DNR's stake in its joint venture, **thyssenkrupp nucera**, at its **current market capitalization** to reflect the most transparent market-implied valuation. Following the green hydrogen sector's rapid rise and subsequent correction, DNR is currently navigating the "disillusionment" phase of the industry's Hype Cycle. However, with its technological leadership, strong partnerships, and growing market adoption, **is the company on track to reach the "slope of enlightenment"?** **We believe the answer is yes.**

Risks: Resilience in a Shifting Landscape

DNR maintains a **proactive approach to risk management**, continuously assessing its operations to mitigate potential challenges. In the near term, the company must address key risks, including potential supply chain disruptions due to **geopolitical tensions**, which could impact the **availability of noble metals** essential for electrode production. **Competitive pressure from Chinese manufacturers**, supported by state subsidies, presents a pricing challenge, while **regulatory uncertainty in the green hydrogen sector** may influence market dynamics. Additionally, DNR's heavy reliance on its joint venture nucera, its largest client and primary driver of order intake in the Energy Transition segment, shows the need for diversification to ensure long-term stability.

ESG: Transforming Challenges into Opportunities

DNR holds a **BBB ESG rating** with a **7.15 overall score**, balancing **strong governance (7.47)** and **social responsibility (7.26)** with areas for **environmental improvement (6.88)**. While its ESG-linked executive compensation reinforces sustainability alignment, low renewable energy adoption (0.08%) and high Scope 3 emissions (46,226 tCO₂e/M€) remain challenges. However, 9% taxonomy-aligned turnover and 22% CapEx in hydrogen technologies highlight its commitment to green innovation. Future **investments in the Gigafactory and Dragonfly System will drive Energy Transition growth**, with key milestones including 40% renewable energy sourcing by 2026 and 50% Scope 1 & 2 emissions reduction by 2030, critical for enhancing its ESG profile and investor appeal.

A Market Star that lost its Shine...

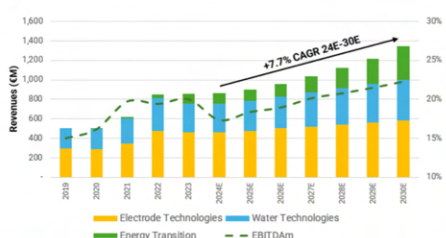
It had all the makings of a stock market success story, but the initial euphoria lasted only a year. Today, DNR trades around **€7 per share**, a far cry from its **€21 peak in the summer of FY23**. However, this sharp decline in share price does not appear to reflect the company's actual performance. In the first nine months of FY24, **DNR reported revenues of €601M**, with an **EBITDAm of 17.8%**, **net income of €52M**, and a **net cash position of €29M**. These solid results do not justify the stock's poor performance. Moreover, the company's guidance and our estimates point to revenues of around **€862M** with **€149M in EBITDA (17.3% margin)** and approximately **€300M in capital expenditures** planned between **FY24E and FY26E**, with more than half allocated to the **Energy Transition division** for growth and development. Looking at the company's track record, DNR has demonstrated **remarkable revenue growth**, with a **+14.1% CAGR since FY19**, effectively doubling its revenues since FY17. The initial excitement surrounding the green transition led analysts to **overvalue** the company, expecting an **unrealistically exponential revenue expansion**. When such aggressive expectations weren't met, **investor sentiment turned sour**. Additionally, regulatory delays in the **green hydrogen sector** and DNR's **low free float percentage** have led to reduced market attention.

...but not its Strength

However, this **growth is not canceled, it is merely delayed**. Beyond the numbers, DNR has consistently shown strong innovation capabilities and the ability to seize emerging opportunities, attracting the interest of some of the **world's top financial and energy infrastructure players**. Its strategic **partnership with thyssenkrupp**, through their joint venture **tk nucera**, has positioned the company as a key player in the large-scale **design and production of electrolyzers**, reinforcing its role in the global energy transition.

Business Description

Exhibit 5
Revenue breakdown



Source: Team Estimates

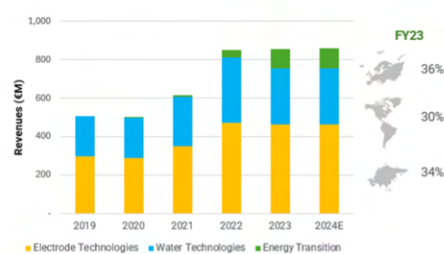
Company Presentation: Innovation, Growth and Sustainability

Industrie De Nora S.p.A. is a **global leader in electrochemical solutions**, specializing in Electrode Technologies, Water Technologies, and Energy Transition solutions. Founded in 1923 by Oronzio De Nora, the company quickly became a **global leader in the electrode industry, securing over 50% market share** and expanding its presence worldwide. By FY23, DNR reported €856.4M in revenues, with a well-balanced geographical distribution (Exhibit 6) across EMEA (36%), AMS (30%), and APAC (34%). **Electrode Technologies**, the historical core business, contributed **€464M (54.2%) of total sales**. **Water Technologies**, formally established in 2015, accounted for **€289M (33.9%)**, solidifying its role as a key revenue driver. Meanwhile, **Energy Transition**, which was launched in FY22 to capture emerging opportunities in clean energy, generated **€102M (11.9%) in revenue** (Exhibit 5). DNR international expansion began in Asia (Japan: 1969 to market DSA anodes; India: 1989), followed by entry in the Americas (Brazil: 1983, U.S.: 1997) and later Europe (Germany: 1998). Nowadays, the company operates through 24 subsidiaries in 10 countries and retains five R&D centers in Italy, Japan, and the U.S., fostering innovation thanks to 280 patent families (Exhibit 4).

A Technological Edge across Industries

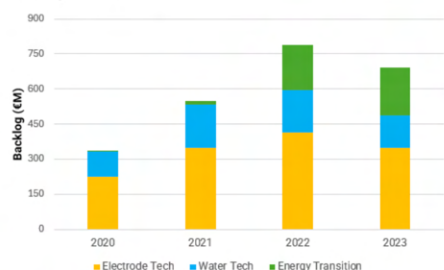
At the heart of DNR's success lies its pioneering **Dimensionally Stable Anodes electrodes**, a breakthrough technology **developed in-house**. Engineered with specialized coatings, these electrodes not only enhance efficiency by improving reaction times but also significantly reduce corrosion, extending their operational lifespan. This technological innovation has allowed DNR to penetrate multiple industries, establishing a strong presence across various end-markets. DSA electrodes play a fundamental role in **chlorine and caustic soda production**, a key segment in industrial chemistry, while also being essential in **printed circuit board manufacturing**, where precision and durability are critical. In the mining and metallurgy sectors, they facilitate the **refining of noble metals**, ensuring high-purity extraction processes. Their application extends to **cathodic protection systems**, safeguarding critical infrastructure from corrosion, as well as to **electrochlorination**, a widely used method in both **residential swimming pools** and **large-scale industrial water treatment**. Most notably, DNR's expertise in electrochemistry has positioned it at the forefront of the **green hydrogen revolution**, with DSA electrodes serving as a core component in next-generation electrolyzers.

Exhibit 6
Revenue split by Division and Geography



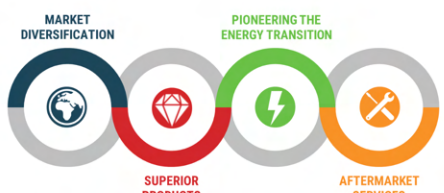
Source: Company Data, Team Estimates

Exhibit 7
Backlog Breakdown



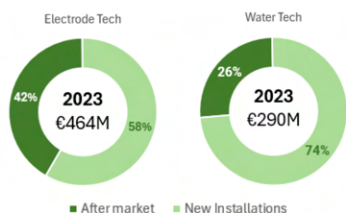
Source: Company data, Team Estimates

Exhibit 8
DNR Revenue Drivers



Source: Company data, Team Estimates

Exhibit 9
Contribution from Aftermarket revenues for Core business



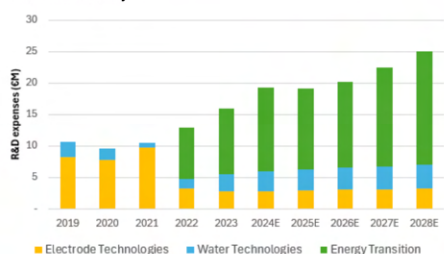
Source: Company data, Team Estimates

Exhibit 10
Operating Costs vs EBITDAm



Source: Company data, Team Estimates

Exhibit 11
DNR R&D activity



Source: Company data, Team Estimates

Throughout its history, DNR prioritized internal growth but was also able to strategically exploit external opportunities, using strategic partnerships and acquisitions to strengthen its market position. One of the most significant milestones in its expansion was the collaboration with thyssenkrupp in 2001, which led to the creation of the **joint venture thyssenkrupp nucera (tk nucera)**. Originally focused on the chlor-alkali business, tk nucera has since become a **key player in the green hydrogen industry, particularly in Alkaline Water Electrolysis (AWE) technology**. Commercial relations between tk nucera and DNR are managed by the **TMA agreement valid until 2038** with an option to be renewed. This contract **imposes tk nucera to purchase from DNR** and supported €209M in revenues in FY23 (€148M in FY22), primarily from electrode sales.

Over the years, DNR's rapid expansion and diversification have attracted significant investments. In FY17, **Blackstone Tactical Opportunities acquired a 32.9% stake** in the company, accelerating its presence in WT business and preparing its entry into the EnTr sector. This stake was later acquired by **Snam S.p.A.** in FY20-21, reinforcing DNR's strategic focus on the green hydrogen market. The company's success culminated in its **IPO** on the Italian Stock Exchange in **June 2022**. Despite recent operations, the **founding family retains majority ownership** (53.3% of total shares, 63.95% of voting shares), followed by Snam (21.6%, 25.99% voting shares), institutional investors (22.1%, 8.88% voting shares), treasury shares (1.48%), and management (1.47%).

MISSION: Agility & green technologies for value creation. DNR delivers value through reliable and innovative solutions for water treatment and Energy Transition, by using its know-how and leadership to adapt to a rapidly changing environment.

Two Certainties and a Winning Bet

Throughout the years DNR has enlarged its worldwide presence dealing through **business-to-business (B2B)** activity, with **relationships of over 20 years long** with the majority of its 20 largest customers.

i) Electrodes (€464M FY23 revenues, +11.6% CAGR FY19-23): it has been the core business since its foundation. DNR produces **high quality** anodes, cathodes and catalytic coatings applied to chlor-alkali industry, electrodeposition of copper foil for Printed Circuit Boards (PCB) and electrowinning of metals.

ii) Water Technologies (€289M FY23 revenues, +8.81% CAGR FY19-23): initially developed through **inorganic growth**, DNR provides metal-coated titanium electrodes for salt chlorinators both for **individual swimming pools** or **industrial production** of on-site chlorine by providing disinfection solutions for water and wastewater.

iii) Energy Transition (€102M FY23 revenues): DNR produces electrodes that are mainly used in nucera's Alkaline Water Electrolysers (**AWE**) and battery cells for **PEM electrolyzers**. This division represent DNR's long-term growing sector backed by the **Gigafactory and international agreements**. The Gigafactory will be built near Milan, with its construction started in FY23 and expected to be completed by FY25-26, with a target of **2GW** to be reached by FY30 thanks to **AWE technologies** and a **Dragonfly** electrolyzer, three times more **efficient** than comparable Chinese systems. From **FY25-26** the Gigafactory is expected to **produce up to 1GW**, reaching the full capacity in FY30. The construction will be financed by **€63M in public funds** and it will be useful to implement activities currently based around Italy. The Gigafactory is part of DNR commitment to improve its position in Energy Transition, with main **projects in backlog** of about 1.5GW related to **NEOM** in Saudi Arabia and the **Green Steel project** in Sweden and **hot deal for 1.3GW** (ca.€122M) in an **increasing pipeline trend** (9M24: 88GW vs 9M23: 46GW).

In 9M24 DNR's **backlog is €569M (FY23: €612M)** with €144M linked to **Energy Transition** due to Green Steel Project (Exhibit 7). **Water Technologies** recorded a backlog of €227M, **10.8% higher** than Dec. FY23 driven by new orders both in Pools and WTS. Lastly **Electrodes** reported lower backlog (€271M in 9M24 vs €348M for FY23) but the **chlor alkali is expected to pick up** through global contracts.

Revenue Drivers: De Nora's Formula for Success

DNR remarkable success lies in its strategic diversification across markets, products, and services, ensuring resilience and adaptability in a constantly evolving industrial landscape (exhibit 8).

MARKET DIVERSIFICATION: how does DNR maintain such a broad reach? The answer is its **well-distributed geographic and industry presence**. Revenue streams from traditional divisions are balanced across regions. For ET, APAC leads with 47.7% of revenues, followed by the Americas (26.2%) and EMEA (26.1%). Meanwhile, WT derives 46% of its revenues from the AMS, with EMEA contributing 31.5% and APAC 22.5%. The EnTr division, as a newer business, primarily generates revenues in Europe (EMEA), where strategic partnerships are driving growth.

SUPERIOR PRODUCTS: what sets DNR apart from its competitors? Its **commitment to innovation and quality**. DNR manufactures high-performance electrodes and develops advanced water treatment technologies, earning credibility and a competitive edge, particularly over Chinese manufacturers, whose focus is on cost leadership.

PIONEERING THE ENERGY TRANSITION: is DNR ready for the green revolution? Absolutely. The **Energy Transition division represents a natural extension of DNR expertise in electrodes**, venturing into the water electrolysis market. Recognizing the challenges of entering a volatile and nascent sector, DNR leveraged its JV with thyssenkrupp, initially focused on chlorine and caustic soda production, to establish itself in the green hydrogen market.

AFTERMARKET SERVICES: what ensures long-term value for DNR customers? Its **comprehensive aftermarket services** (exhibit 9). In FY23, 31.6% of revenues came from services such as **electrode recoating, repairs, performance upgrades, retrofits, and maintenance agreements**. With product life cycles averaging eight years for anodes and cathodes and four years for membranes, **aftermarket activities provide recurring revenue**. As ET and WT mature, we expect that **aftermarket will constitute a key for growth and an increasing share of their revenues will come from these services** (respectively 55% and 41% by FY35E), reinforcing DNR financial stability.

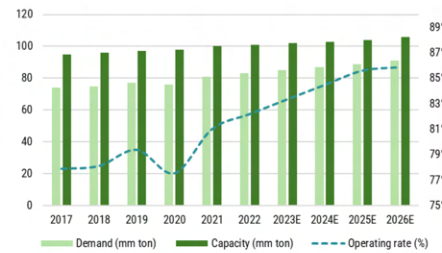
Cost Drivers: Mitigating Volatility with Strategic Expertise

DNR expertise in specialized electrodes and water treatment systems is reinforced by strategic cost control and continuous innovation. The company 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. Even in non-indexed cases, **strong client relationships and the limited cost impact of its products within broader supply chains help cushion price fluctuations**. Iridium and ruthenium costs, crucial for DSA manufacturing, fell to 24% of COGS in FY23, down from a 39% peak in FY21, reflecting DNR effective cost management (Exhibit 10).

At the same time, DNR drives **long-term growth through innovation**, investing €16M in R&D in FY23 (+24% YoY). With 5 research centers across Italy, the U.S., and Japan, and partnerships with top universities and research institutes, the company is developing: **(i) sustainable electrodes with reduced energy consumption** for the Chlor-Alkali industry and new solutions for the electrochemical refining of copper extracted from mines; **(ii) new solutions capable of meeting more stringent regulatory requirements in relation to drinking and waste water;** **(iii) projects aimed at supporting the strategy in the hydrogen sector**. On average, 72% of total R&D were tied to the ET division FY17-21, with a peak of 94% in FY21. However, this declined to 24% and 18% in FY22-23, due to the **reclassification of certain R&D activities to the EnTr unit**, which was previously considered a subsegment of ET.

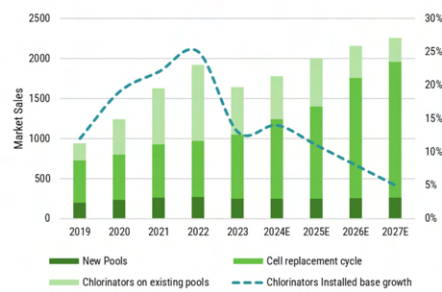
Industry Overview and Competitive Positioning

Exhibit 12
Global Caustic Soda demand and capacity (Mt)



Source: IHS, Bloomberg

Exhibit 13
Pool Chlorinators Market Growth



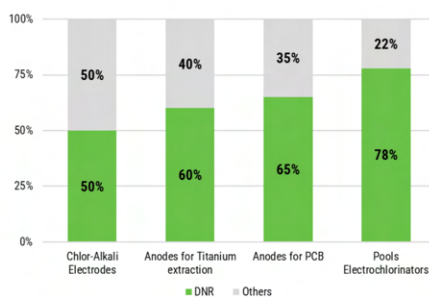
Source: Report Prime, Precedence Research, Company Data, Team Estimates

Exhibit 14
Market Evolution

	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%

Source: IPO Prospectus, Statista, Team Estimates

Exhibit 15
DNR Market share



Source: Company data, IPO prospectus

Exhibit 16
Green Hydrogen Competitors

COMPETITORS	EV / SALES FY25	EV / EBITDA FY25	NFP / EBITDA FY25
Plug Power, Inc.	2.5x	-6.6x	-3.0x
Ceres Power Holdings	3.6x	-9.5x	5.2x
NEL ASA	1.9x	-8.1x	5.6x
Ballard Power Systems	-0.3x	-1.6x	2.6x
McPhy Energy SA	0.3x	-0.2x	-1.7x
ITM POWER, INC.	0.1x	-1.0x	5.8x
Bloom Energy	4.7x	30.5x	0.7x
thyssenkrupp nucera AG	0.8x	13.6x	-10.6x
Average	1.67x	2.1x	0.6x
Median	1.4x	-1.3x	1.7x

Source: Factset, Bloomberg

DNR operates in three main segments, each characterized by different competitive dynamics, but with in common the production of advanced high quality electrodes paired with its aftermarket services.

Electrode Technologies: Engineering Excellence Drives Industrial Efficiency

The Electrode Technology segment is the foundation of DNR's operations. DNR's expertise in electrode design and manufacturing enables efficient, reliable, and sustainable performance in critical processes. The main competitors are fragmented in each sub sector but DNR has been able to keep its **competitive advantage thanks to the efficiency of its solutions**. **i) Chlor-Alkali (market size \$71.5B, +2.9% FY18-23 CAGR)**: Growth in the segment has been driven by demand for Polyvinyl Chloride (PVC) in construction and caustic soda in chemical manufacturing. The PVC market has been a **key driver, particularly in infrastructure projects and housing developments**. APAC, led by China, has been the fastest-growing market due to its expanding manufacturing sector and significant infrastructure investments. **DNR is a global leader in electrodes for the industry with 50% of market share** and few global competitors: **Permascand (Sweden), Asahi-Kasei (Japan) and China National Blue Star**. Another form of competition comes from small Chinese firms which base their business on cost effective replication of electrodes. The equipment market for the industry which includes electrodes is valued at €834.2M and DNR is able to address 84% of it (Roland Berger). **ii) Electronics (market size \$2.7T, +5.2% FY18-23 CAGR)**: The electronics industry has experienced remarkable growth in recent years, driven by advancements in technology and evolving consumer needs. The surge in demand for consumer electronics, including smartphones, wearables, and smart home devices, has played a pivotal role. **Innovations in artificial intelligence (AI) and the Internet of Things (IoT) have further accelerated the development**. In FY24, APAC dominated the consumer electronics market, holding a 38.1% share. **DNR leads with a market share >50%** both the market for Anodes for Printed Circuit Boards production and Copper Foil electrodeposition. The 2 main competitors are MAGNETO (subdivision of Xylem) and Jiangsu Miracle. **iii) Electrowinning, (market size \$23.7b, +11.3% FY18-23 CAGR)**: The increasing need for metals such as copper, gold, and silver across various industries, including mining and electronics, has propelled the adoption of electrowinning technologies. **DNR maintains a dominant position with a market share of 60% for the production of anodes for Nickel and Cobalt extraction**.

MARKET DRIVER: Demand for chlor-alkali products usually reflects general economic activity (Exhibit 12), as they are essential raw materials for industries tied to infrastructure and consumer goods. Market growth is expected to follow global GDP growth (+3.4% CAGR FY24E-30E). The electronics segment is set to rebound after the end of destocking processes that should ease in FY25. This industry is a major consumer of PCBs and copper foil. With the rise of IoT devices, 5G infrastructure, and miniaturization of electronics, the demand for high-performance PCBs is rising. **Moreover, the evolution of AI workloads require specialized hardware like GPUs, TPUs and AI accelerators furtherly increase market demand**. (+5% CAGR FY24E-30E). Modest growth will come from the electrowinning segment, the demand will be pushed by necessities to **improve efficiency of mineral extraction and more sustainable processes**. The segment CAGR is expected to be +5.6% FY24E-30E.

Water Technologies: Clean Water, Clear Vision

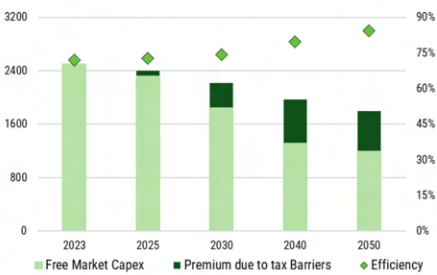
The water technologies segment competes with Xylem, Veolia, and Pentair. Xylem focuses on water treatment and infrastructure, offering smart sensors and filtration systems. Veolia specializes in large-scale water management, emphasizing resource recovery and reuse. Pentair provides energy-efficient filtration and management solutions for residential, commercial, and industrial applications. **DNR distinguishes itself as a leading supplier of efficient sustainable water treatment technologies through its electrochemical disinfection capabilities** together with on-site electrochlorination systems technologies despite offering competitors broad yet sophisticated solutions. **i) Pools technology (market size \$3.73b, 2.2% FY18-23 CAGR)**: Growing wealth in North America and parts of Europe, has fueled demand for high-end pools. Additionally, the COVID-19 pandemic led to a surge in home improvement and outdoor living projects, including residential pool installations (Exhibit 15). **DNR is the leader in production of electrodes for small electrochlorination systems** for residential pools with an **estimated market share of 78%**. The main competitor in the segment is Evoqua (acquired by Xylem) but there are also smaller local competitors like NMT (South Africa) and AIS Water (Australia). **ii) Disinfection and Filtration (market size \$35.1b, 13.6% FY18-23 CAGR)**: **The COVID-19 pandemic has profoundly influenced global water filtration and disinfection practices**. Intensified hygiene measures and water treatment protocols became critical to ensuring public health, many wastewater treatment facilities increased chlorine dosages. **DNR ranks 3rd in municipal water disinfection and in the top 5 for water filtration**. Within their end markets Xylem and Veolia Environnement remain the main competitors for municipal water markets. **iii) Electrochlorination (market size \$1.5b, 5.2% FY18-23 CAGR)**: Increasing regulations on disinfection and water quality have boosted the adoption of electrochlorination in municipal and industrial applications. Additionally, **government policies restricting chemical chlorine use have accelerated the shift toward on-site electrochlorination systems**. The group is a global leader in industrial on-site electrochlorination. The addressable market size for on-site electrochlorination is estimated at \$432M in FY24 (Business Research Insights) with Xylem and Ecolab as principal competitors even if they are not focused on electrochemical technologies.

MARKET DRIVER: The main driver of growth will come from the disinfection and filtration technologies. Regulation about PFAS removal is becoming more stringent, with the new limits set by the EPA (U.S. Environmental Protection Agency) of 4ppt per MCL of drinkable water. The EPA expects investments up to 1.5 b/Y. This will drive the growth of the segment to +7.1% CAGR FY24E-30E. Electrochlorination systems are poised for significant growth. Key factors include **increasing demand for safe water disinfection** coupled with stricter regulatory requirements for chemical safety and environmental compliance. The ability of electrochlorination systems to generate chlorine onsite using only salt, water, and electricity eliminates the need for hazardous chemical storage and transportation, enhancing safety and reducing costs. Market CAGR is expected to be +5.3% FY24E-30E. The pools electrochlorination sector is now recovering after a sustained destocking trend, historically the **growth of residential pools has been linked to population and residential construction growth** (Exhibit 13). Pool salt chlorinators have a lifespan of 10000 hours, which increases aftermarket services. Market expectations will be +5.1% CAGR FY24E-30E.

Addressing PFAS: Challenges and Regulations

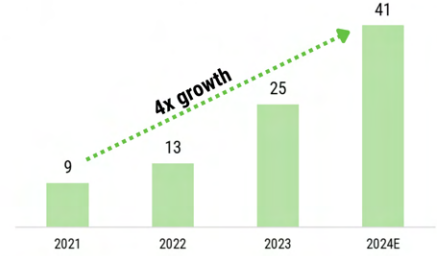
PFAS (per- and polyfluoroalkyl substances) are a group of **synthetic chemicals** valued for their resistance to heat, water, and oil, making them common in industrial applications and consumer products. Their strong carbon-fluorine bonds, however, lead to **environmental persistence and bioaccumulation**, posing significant health risks such as immune disruption and potential toxicity. As evidence of widespread contamination grows, regulatory agencies worldwide are tightening controls through **enhanced monitoring, phased bans, and the promotion of safer alternatives**. This evolving regulatory landscape not only increases compliance challenges and potential operational costs for industries but also creates a **demand for innovative remediation technologies**. DNR with expertise in advanced water treatment is well-positioned to capitalize on this shift by addressing PFAS contamination and **turning environmental challenges into strategic opportunities**.

Exhibit 17
Forecast of efficiency and Capex of electrolysis projects in EU and the US



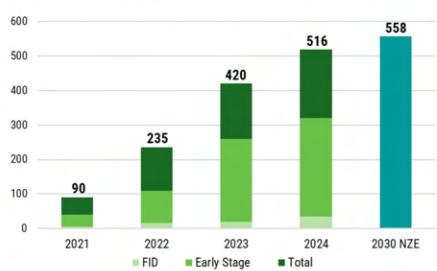
Source: Bloomberg NEF

Exhibit 18
Electrolyser manufacturing capacity (GW/y)



Source: Bloomberg NEF, IEA

Exhibit 19
Announced electrolyser manufacturing capacity (GW/y)



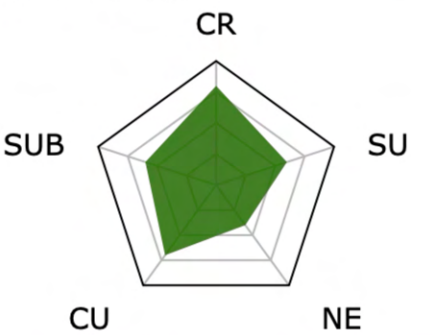
Source: Bloomberg NEF, IEA

Exhibit 20
SWOT Analysis

STRENGTHS
- Leadership position in the electrodes market - Geographical diversification - Strong financial position - Profitable after-market services
WEAKNESSES
- Thyssenkrupp Nucera supplying relationship - Backlog visibility on Nucera's orders - Exchange rate risk management
OPPORTUNITIES
- Hydrogen market evolution - Stricter water pollution regulation - ESG commitment
THREATS
- Supply chain disruptions - Chinese electrodes competition - Reliance on public funds for the hydrogen segment

Source: Team Estimates

Exhibit 21
Porter's 5 forces Analysis



Source: Team Estimates

Green Hydrogen: Fueling the Future Net-Zero Ambitions

Global Hydrogen Demand reached 97Mt in 2023, however only 1% of the total production derived from green hydrogen. Projections to 2030 expect a total of 47 Mt production of green hydrogen (IEA) and the lowering of production price is expected to exponentially boost growth after 2030. Clean hydrogen, which could decarbonize c.15% of global GHG emissions (c.20% of CO2 emissions) could be a key pillar of the energy mix. In the Net Zero Emissions by 2050 Scenario, hydrogen demand reaches close to 150 Mtpa by 2030, 45% of which is low-emissions hydrogen. But currently only 12% of announced 2030 clean H2 production volume has identified an off-taker (Bloomberg NEF).

The role of green hydrogen will be in sectors in which emissions are hard to abate, such as the steel industry, long-haul transport and electricity generation. Low-emissions hydrogen production costs from renewable electricity are expected to fall by half by 2030, with a cost range of \$2-\$9/kg H2 in the IEA's NZE Scenario. Currently, capital expenditure for electrolysis projects show major regional disparities: in China, costs are approximately \$600/kW, compared to \$2,500/kW in Europe and the US (Exhibit 17), 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, but Chinese efficiencies are expected to catch up by 2030 (Bloomberg).

Both the EU and the US are accelerating their efforts to support green hydrogen through distinct regulatory frameworks and investments. The EU launched the Fit for 55 package with EU Hydrogen Strategy to increase domestic renewable hydrogen production to 10 Mt and import 10 Mt by 2030. The EU Hydrogen Bank pilot aims to connect hydrogen production to market needs through provisions that support producers by spending €3B in risk reduction subsidies. Hydrogen development assumes a central role in the US under the Inflation Reduction Act (IRA) after its recent draft incorporated a maximum \$3/kg tax credit for emissions-friendly hydrogen. The executive order freezing US clean hydrogen funding issued by President Trump on his first day in office is set to slow activity in the first half of 2025, as the industry awaits clarity on the new administration's intentions for the sector. Progress could be stalled further if Congress decides to challenge the tax credits available under the Inflation Reduction Act.

Regarding production, progress is being made in scaling up, but infrastructure remains a bottleneck. Deployment of hydrogen pipelines and storage facilities is critical to link production sites with demand centers, and delays are impeding market growth (IEA). DNR is currently leader in production of Electrodes for AWE technologies. The evolution of the market is following Gartner's Hype Cycle (Annex 10).

AWE Vs PEM Technology

DNR is well-positioned in the green hydrogen value chain, supplying critical components for both major electrolysis technologies that cover over 90% of global green hydrogen production. The company manufactures electrodes for Alkaline Water Electrolysers (AWE) and fuel cells for Proton Exchange Membrane (PEM) systems. AWE technology utilizes a liquid alkaline electrolyte to split water into hydrogen and oxygen. This mature technology is valued for its cost-effectiveness and reliability, despite offering lower current densities and a slower dynamic response relative to its counterparts. PEM systems employ a solid polymer membrane that facilitates higher current densities and rapid response times, attributes that make them particularly well-suited for integration with variable renewable energy sources. However, these performance advantages come at a premium, as PEM systems require advanced materials and sophisticated design, leading to higher capital costs.

DNR's Competitive Fortress: Patents, Partnerships, and Performance

DNR exploited its know-how and synergies to enter new geographical markets and industries. Thanks to DNR "legacy" in Electrodes first, and the relative steady growth in Water Technologies, jointly with the commitment for sustainability pushed DNR to enter the Energy Transition market. Due to this operations industry attractiveness differs.

COMPETITIVE RIVALRY (CR): The competition, particularly in Energy Transition and Water Technologies is fierce. DNR leadership position, especially in the Electrode industry, is strongly safeguarded by patents and R&D (backed up by decades-long partnerships, particularly with thyssenkrupp e tk nucera), superior product quality (for instance DNR newest products Dragonfly is high current density with up to 12 kA/m2 while chinese competitor's products produce up to 3 kA/m2), and aftermarket services. Additionally, stringent regulations provide further market protection, particularly in Europe and the U.S against other international competitors. Growing concerns on water treatments are likely to drive continued market growth for DNR Water Treatment solutions, further solidifying its competitive positioning.

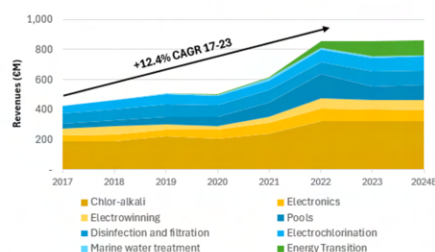
NEW ENTRANTS (NE): lower risk is associated to high entry barriers deter new competitors due to the capital-intensive nature of industries, the necessity of advanced technological expertise and the importance of an established supply chain. Large chemical players are more likely to enter the Chlorine Electrodes sector through vertical integration with existing competitors, ensuring quality control within their supply chains or by acquiring firms with lack of financial resources but backed up by know-how. Furthermore, regulatory and public policy support in the hydrogen industry play a crucial role in shaping competition. Restrictions on Chinese green hydrogen products limit their access to certain markets, reducing substitution threats and reinforcing DNR market position.

SUPPLIERS (SU): the risk is moderate. DNR maintains a diversified global supplier base to minimize costs and mitigate supply chain risks. Key suppliers are large size companies which provide raw materials such as palladium, nickel, and titanium, which are crucial for Electrodes production. These materials are sourced globally, with major suppliers including nucera in Europe and Furuya Metal in Japan. Long-term agreements based on ethical codes ensure supply stability, although geopolitical factors and fluctuations in energy prices can impact procurement costs and availability. The company's ability to manage these supplier relationships effectively is critical to maintaining product quality and competitive positioning.

CUSTOMERS (CU): the risk is medium to high. Nucera is both a key customer and strategic partner for DNR. Their contractual agreement (TMA) mandates exclusive purchases of hydrogen-related technology components from DNR. This relationship provides stability and growth opportunities but also introduces dependency risks related to order sizes and the limited decisional power of DNR on tk nucera. DNR leverages its industry expertise to expand its aftermarket services, ensuring continuous engagement with customers, in fact relationships with some of its main 20 customers are more than 2 decades long. Additionally, Chinese competitors have yet to match De Nora's quality and performance standards, bringing customers to prefer DNR's products. Its long-standing history and technological leadership further strengthen its positioning.

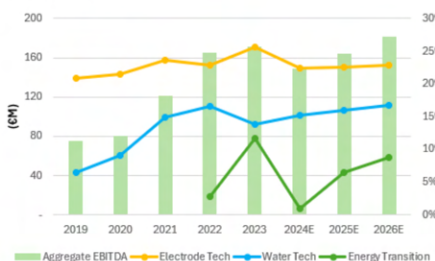
SUBSTITUTES (SUB): medium risk. Alternative technologies, such as membrane filtration and chemical treatments, exist but do not match DNR's efficiency in electrochlorination and membrane electrode assemblies (MEAs). The primary risk lies in competitors developing disruptive products, patented technologies that could erode DNR competitive edge. Additionally, talent acquisition by rivals could reduce the technological gap between competitors. However, DNR extensive intellectual property portfolio and its focus on innovation help mitigate these risks, ensuring that its products remain at the forefront of the industry.

Exhibit 22
Revenue Breakdown by Subsegment



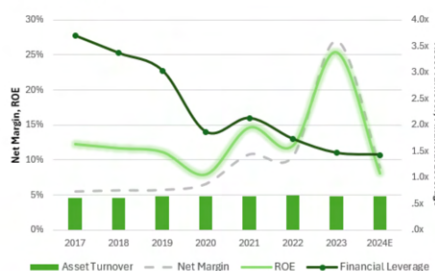
Source: Company Data, Team Estimates

Exhibit 23
EBITDA by BU



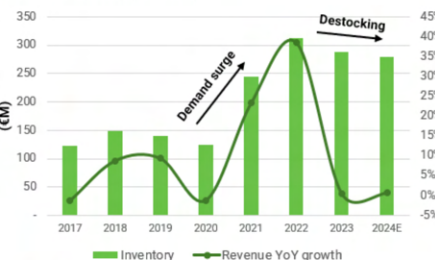
Source: Company Data, Team Estimates

Exhibit 24
DuPont Analysis



Source: Company Data, Team Estimates

Exhibit 25
Covid-19 inventory build-up



Source: Company Data, Team Estimates

Exhibit 26
Free Cash Flow dynamics



Source: Company Data, Team Estimates

Exhibit 27
Cash Conversion Cycle



Source: Company Data, Team Estimates

As of FY23, DNR reported €856.4M in consolidated revenues (+0.4% YoY), demonstrating **strong historical growth (+14.1% CAGR FY19-23)** and **resilient margins (18.0% avg. EBITDAm FY19-23)**. The company is making significant strategic investments (Capex +92% YoY) to support the Gigafactory Project and new installations while maintaining a **solid net cash position of €68M (+32.3% YoY)**. With a flexible financial structure and strong liquidity, DNR is actively navigating recent challenges, such as supply chain slowdowns and regulatory delays in water treatment and green hydrogen, maintaining its **focus on profitability and seizing market opportunities**.

Revenue Breakdown: Driving Growth with Strategic Diversification

Across its core divisions, DNR has successfully leveraged its strong competitive positioning and diverse product portfolio to serve a wide range of end markets. In FY23, **Electrode Technologies** generated €464M in revenues (54.2% of total sales). Despite a modest 1.9% YoY decline, the ET division consolidated its international leadership and efficiently faced market challenges. **Electronics** subsegment (-9.5% YoY, +23% CAGR FY20-22) and **Electrowinning** (-3.9% YoY, +69% CAGR FY20-22) only slightly declined due to the destocking phase and post-COVID market demand normalisation. Conversely, **Chlor-Alkali** subsegment, supported by DNR strategic partnerships, achieved steady growth of 0.5% YoY and demonstrated its solidity as ET's largest revenue contributor. **Water Technologies** generated €289M in revenue (33.9% of total sales). The -13.9% YoY decline was largely driven by a sharp drop in the **Pools** division (-46% YoY, +57% CAGR FY20-22) attributable to **client destocking, normalisation of demand to pre-pandemic levels and lower average selling prices**. Despite this, the WT segment demonstrated resilience, offsetting the reduction in sales through strong growth in **Disinfection and Filtration** (+27.6% YoY), supported by pipeline project execution, and **Electrochlorination** (+8% YoY), fueled by backlog fulfillment and rising demand in Asia. The **Marine Water Treatment** subsegment (4% of WT revenue) grew modestly (+2.9% YoY) before being phased out in early FY24E. Finally, the **Energy Transition** division, DNR's flagship and newest segment, generated €102M in revenues in FY23, achieving remarkable +139.6% YoY growth and a staggering **+230% CAGR since inception**. This rapid expansion, primarily driven by projects with its JV nucera, underscores DNR's commitment to the sector. While grey hydrogen remains dominant due to its lower production costs, the company is strategically positioning itself for the market's shift toward greener and more sustainable solutions as conditions evolve.

Profitability: Strong Growth, Smart Strategy

DNR reported **EBITDA of €171M (20% EBITDAm)**, an impressive rise from 14.7% in FY17. This improvement reflects the company's success in maintaining stable COGS and optimizing operational expenses, reinforcing its ability to navigate dynamic market conditions. The positive trend extended across business units, with ET reaching a 25.6% EBITDAm in FY23, WT stabilizing at 13.8%, and EnTr achieving a rare industry-positive margin of 11.7% (Exhibit 23). This robust operating performance translated into a **net profit of €231M (€1.15 EPS, +158% YoY), resulting in a 27% net margin**. However, this figure was notably **influenced by the IPO-related dilution gain from DNR's reduced stake in nucera**, where ownership dropped from 34% to 25.85%. Adjusting for this gain, the net income margin stood at 11.4%, reinforcing the positive trend in EBITDAm and still marking a substantial improvement from 5.5% in FY17. Key profitability metrics further validate the company's strong financial performance. ROA climbed from 3.3% in FY17 to 7.0% in FY22, **surging to 17.4% in FY23 due to the nucera dilution gain**. ROCE strengthened from 5.1% in FY17 to 13.5% in FY22 and remained solid at 14.2% in FY23. These figures highlight DNR's ability to sustain profitability in line with ET and WT competitors, which posted average ROA of 4.8% and 5.7% and ROCE of 10.0% and 10.8% over the past three years, despite the considerable challenges of the EnTr segment, where most companies face difficulties in generating value. Finally, ROE remained steady at an average of 11.6% from FY17 to FY22 before surging to 25.4% in FY23 due to the dilution gain. With a lower financial leverage (Assets/Equity) following deleveraging and stable asset turnover around 0.64x (Exhibit 24), **the main driver of ROE expansion was the sustained improvement in margins**.

CAPEX: Investing for Tomorrow

DNR operates in a **capital-intensive sector that requires ongoing investment**. Between FY17 and FY22, Capex averaged 6.2% of sales and maintenance 2.2%. The **D&A/Capex ratio averaged 78%**, indicating the significant upkeep required for its assets and highlighting the historical commitment to reinvest over 8% of annual revenues to sustain production and support moderate growth. Although Capex-to-sales ratio declined from 6.9% in FY17 to 5.4% in FY22, reflecting enhanced efficiency at an optimal sales level, it rose to 10.3% in FY23 resulting in a drop in the D&A/Capex ratio to 34.6%. This increase was driven by the **expansion of the EnTr division and Gigafactory construction, marking the beginning of a new phase of intensified investment**, with DNR planning to allocate approximately €290M between FY24E-26E. In FY23, Capex for ET reached 9.8% of sales, surpassing the 6.4% historical average and significantly higher than the industry norm of 2.6%, reflecting efforts to expand capacity. WT had a Capex of 2.8% of sales, **slightly below the industry average of 3.8%**. The EnTr segment saw its Capex rise from 17.9% in FY22 to 30.7% in FY23, still well below the industry average of 82%, due to the use of **pre-existing assets initially allocated to the electrode division** and cost-efficient facility conversions.

NWC and FCFF: from Peaks to Valleys

NWC. DNR faces significant working capital challenges, driven by extended inventory holding periods due to complex production processes and strategic material stocking, slower receivables collection from large-scale industrial contracts, and moderate trade payables. These factors result in a **structurally high CCC**, which fluctuates in response to changing market conditions. From FY17 to FY20, the CCC averaged 163 days, before **rising to 207 days in FY21** (Exhibit 27), largely due to DIO reaching 173 days. **Supply chain disruptions** forced De Nora to increase inventory levels to mitigate shortages, a trend that persisted even in subsequent years as the company prioritised securing stock to prevent production slowdowns (Exhibit 25). As a result, CCC only gradually improved to 185 days in FY23. These **CCC fluctuations directly impacted NWC turnover**. Starting at 3.23x in 2017, it dipped slightly to 2.98x in 2018, peaked at 3.82x in 2020, and then dropped to 2.42x in 2021, in line with the CCC surge. By FY23, however, NWC turnover had rebounded to 3.24x, reflecting enhanced working capital efficiency. Despite these challenges, we recognise DNR's strong focus on supply chain management and view its dedication to ensuring uninterrupted production as a sign of the company's strength and reliability for customers.

FCFF. **Fluctuations in DNR FCFF** (Exhibit 26) were linked to changes in NWC and CAPEX, with the FCF/EBITDA ratio varying from 1% in FY19 to 73% in 2020, then dropping to -54.6% in FY22. The reinvestment rate (calculated as the ratio between NOPAT and the sum of ΔNWC and CAPEX) also fluctuated, peaking at 469% in FY20 before falling to 40% in FY21.

Financial Structure: Leveraging Strengths for Future Growth

Historically, DNR partially relied on debt to sustain operations and manage cash flow across its global subsidiaries. In FY17, the company reported financial liabilities of €345M, resulting in a **high leverage ratio of 181.2%**. However, **€130M of these liabilities were tied to the right of withdrawal granted to Blackstone**, which had acquired a 33% stake in the company. In FY20, following Snam's buyout of Blackstone's stake, the financial liability related to the withdrawal right was derecognized and reclassified under equity.

Exhibit 28
Equity Evolution



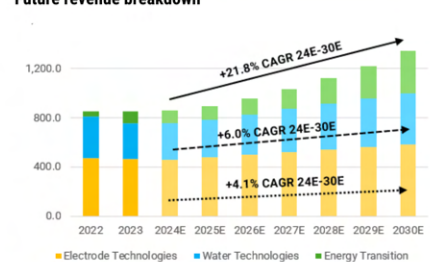
Source: Company Data, Team Estimates

Exhibit 29
DNR Financial Position



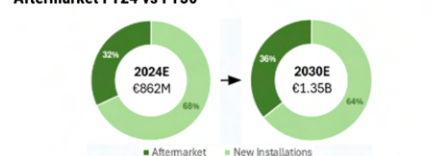
Source: Company Data, Team Estimates

Exhibit 30
Future revenue breakdown



Source: Company Data, Team Estimates

Exhibit 31
Aftermarket FY24 vs FY30



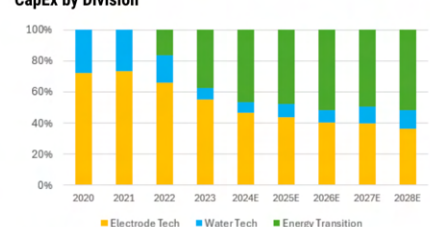
Source: Company Data, Team Estimates

Exhibit 32
Estimates vs consensus

		2024E	2025E	2026E	2027E
Revenues (€M)	Team Est.	862	896	959	1,035
	Consensus	861	906	969	1,052
EBITDA margin	Team Est.	17.3%	18.3%	18.9%	20.1%
	Consensus	17.2%	17.9%	18.2%	18.5%
ROE	Team Est.	8.1%	8.5%	8.8%	9.3%
	Consensus	7.4%	8.5%	8.8%	9.6%

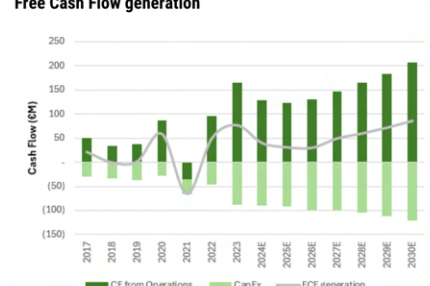
Source: Company Data, Bloomberg, Team Estimates

Exhibit 33
CapEx by Division



Source: Company Data, Team Estimates

Exhibit 34
Free Cash Flow generation



Source: Company Data, Team Estimates

Alongside the partial repayment of loans, this move significantly strengthened DNR financial structure, reducing financial liabilities to €172M and **improving the leverage ratio to a solid 41.6%** (Exhibit 28). Despite the inventory buildup in FY21 limited the cash generation of operating units and required additional debt, the company's FY22 IPO raised €197M and, after a bullet refinancing, allowed DNR to reduce its financial liabilities to €144M by FY23, achieving a negative NFP. With equity surging to €910M, the **leverage ratio dropped dramatically to 15.8%**. The company's deleveraging efforts are evidenced also from the improvement of the **NFP-to-EBITDA ratio from 4.70x in FY17 to -0.40x in FY23** (Exhibit 29) and the increase of the Interest Coverage from 2.66x to 6.20x.

These achievements highlight DNR strategic shift towards a more stable and flexible financial structure. While debt can lower the cost of capital and enhance shareholder returns, the current financial setup provides the company with crucial advantages to support the early and uncertain stages of the EnTr business. A key strength of the company lies in its **ability to back EnTr not only through cash flows generated by its core units but also through its adaptable financial structure**. Additionally, its robust liquidity serves as both a safeguard to sustain operations when cash generation falls short and a strategic advantage, enabling the company to seize new opportunities in the emerging market (see also Appendix 03).

Future Revenues: Short-Term Pressure, Long-Term Gains

We estimate **revenues to grow at a +7.7% CAGR FY24E-30E, reaching €1.35B in FY30**. Each sector has been independently assessed by combining market growth trajectories and demand drivers with DNR's ability to capitalize on its market share (Exhibit 30). **Electrodes** segment, we expect revenues to grow at a +4.1% CAGR (FY24E-30E), **slightly outpacing GDP growth**, primarily **driven by the chlor-alkali segment's weight** in the business. The electronics market is set to rebound after the current destocking phase, which should ease by 1H25E, leading to a +4.9% CAGR (FY24E-30E). The electrowinning segment is projected to outperform market growth, supported by advancements in anode technology for copper extraction, with revenues expected to grow at a +5.6% CAGR (FY24E-30E). A key driver of growth and profitability in this segment will come from **aftermarket services**, which we estimate to contribute **49.5% of segment revenues by FY30E**, highlighting strong customer loyalty between DNR and its clients. **Water** segment is forecasted to grow at a +6.0% CAGR (FY24E-30E), **led by the disinfection and filtration systems segment**, which is expected to outperform the market with an 8.3% CAGR (FY24E-30E). This growth will be driven by DNR's SORB removal system, which is well-positioned to **capitalize on increasingly strict PFAS regulations**. Meanwhile, the pools and electrochlorination segments are expected to follow market trends, with a 5.2% CAGR (FY24E-30E). Similar to the Electrodes segment, aftermarket services will play a crucial role, with **36.5% of FY30E revenues expected to come from services** a 9.5% increase compared to FY24E (Exhibit 31). **Hydrogen** sector represents the biggest opportunity for growth, as the expansion of the **green hydrogen market will be a game-changer for DNR**. We have considered three different scenarios, with our base case forecasting **sluggish growth until FY27**, followed by **exponential expansion driven by the launch of Dragonfly electrolyzers at the Gigafactory**, the **expected decline in hydrogen prices**, and **improved regulatory frameworks**. Under this scenario, we project a 21.8% CAGR (FY24E-30E), reflecting DNR's technological leadership in electrolysis electrodes and its ability to maintain a competitive advantage in the market. Looking further ahead, we expect this segment to reach **€343M (3.6 GW) in revenues by FY30E**.

Future Profitability: Weathering the Storm

The first 9M of FY24E have been marked by supply chain challenges and a lower-than-expected backlog (-12.5% YoY), impacting DNR's performance. The company has guided for lower margins, with key **pressure points in the ET and EnTr segments**, partially offset by margin improvements in WT, especially thanks to the Pools subsegment. We forecast **FY24E EBITDA at €149M (-12.8% YoY) with a 17.3% margin**, reflecting a decline in ET to €104M (-12.9% YoY, 22.4% margin) and a sharp drop in EnTr to €0.9M (-92.1% YoY, 0.9% margin), while WT grows at €45M (+11.2% YoY, 15.2% margin), though not enough to offset broader declines. As a result, **net profit is expected to fall from €231M in FY23 (27% net margin, 11.4% adjusted) to €77M (-67.6% YoY, 8.9% margin)**.

Looking ahead, DNR is well-positioned for a **strong recovery**, supported by its leadership in the market, high-quality products, and the operational launch of its Gigafactory. Once the Gigafactory reaches full capacity, we anticipate a **rapid margin expansion, with EBITDAm expected to rebound to 20% by FY27E**, driven by increased efficiency and growth in green energy solutions (Exhibit 32).

Future CapEx: from Expansion to Optimization

We projected Capex using a combined approach, first estimating the Capex-to-sales ratio for each business unit to reflect individual division growth and then ensuring the consolidated figure aligned with the company's overall evolution. For the **ET** we forecast Capex at 9% of sales in FY24, gradually converging to 6% by FY30, **in line with historical trends and the company's commitment to maintaining modern, competitive facilities**. Near-term higher Capex also reflects strategic pre-investments that could be redirected to EnTr, providing flexibility to meet unexpected demand. In **WT**, we expect the Capex-to-sales ratio to rise from 2.0% in FY24E to 4.0% by FY30E. **With the portfolio for this segment now complete, capex will align with industry average to support organic growth**. For **EnTr**, we anticipate Capex-to-sales to remain high at 40%, decreasing from 30% to 20% as the **Gigafactory reaches full capacity** to subsequently settle at 15%, which we consider sustainable for a maturing yet fast-expanding business (Exhibit 33). At the consolidated level, we estimate an average Capex-to-sales ratio of 10.4% over the next three years, declining to 8.1% by 2031E as investment needs ease. However, the ratio is projected to rise again, reaching 10.5% by 2035E, reflecting EnTr's growing share and sustained investment requirements.

Future NWC and FCF: through Normalization

We anticipate that working capital will normalize and improve beyond pre-pandemic levels as the destocking phase concludes, with inventory gradually decreasing as a percentage of revenues. **CCC is projected to stabilize at 147 days by FY35E** (161 avg. FY25E-35E). FCF should also stabilize, supported by normalized NWC and a clear CAPEX strategy focused on reaching 16.75GW capacity by FY35E (Exhibit 35). In FY24E, we anticipate a **9.67% YoY decline in NCP**, driven by lower net income, higher guided CAPEX, a €24M dividend, and a strategic share buyback. Looking ahead, **DNR is poised to generate significant excess cash** (Exhibit 34), enabling a consistent 25% dividend payout while funding growth initiatives.

Exhibit 35
Financial Highlights

Highlights	2021A	2022A	2023A	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Returns										
ROE	14.6%	12.0%	10.7%	8.1%	8.5%	8.8%	9.3%	9.7%	10.2%	10.8%
ROCE	9.7%	13.5%	14.2%	9.4%	9.8%	10.0%	10.7%	11.3%	12.2%	13.2%
Leverage										
NFP/EBITDA	1.56x	-0.31x	-0.40x	-0.42x	-0.45x	-0.46x	-0.53x	-0.61x	-0.70x	-0.78x
Gearing	41.6%	-7.0%	-7.6%	-6.6%	-7.3%	-7.6%	-9.2%	-11.0%	-12.9%	-15.0%
CapEx & FCF										
Reinvestment Rate	40.2%	130.1%	163.4%	109.8%	95.0%	90.4%	102.7%	107.1%	114.6%	119.4%
D&A/CapEx	84.7%	60.9%	34.6%	35.9%	38.6%	40.5%	47.0%	48.6%	47.0%	48.0%

Source: Company Data, Team Estimates

Exhibit 36

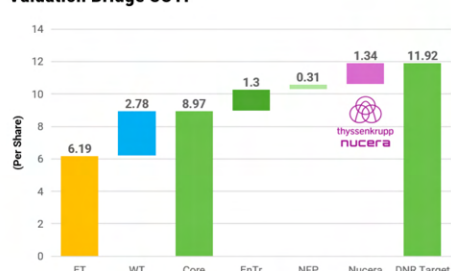
Core peers multiples

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

Source: Company Data, Bloomberg

Exhibit 37

Valuation Bridge SOTP



Source: Company Data, Bloomberg

Exhibit 38

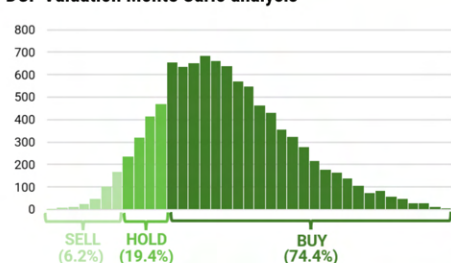
DCF Valuation Sensitivity (WACC and growth rate)

	Price	WACC						
		8.91%	9.41%	9.91%	10.41%	10.91%	11.41%	11.91%
1.0%	13.01	11.94	11.02	10.21	9.51	8.88	8.33	
1.5%	13.26	12.14	11.17	10.34	9.61	8.96	8.40	
2.0%	13.54	12.36	11.35	10.47	9.72	9.05	8.47	
2.5%	13.87	12.61	11.54	10.63	9.84	9.15	8.55	
3.0%	14.25	12.90	11.77	10.80	9.98	9.26	8.63	
3.5%	14.70	13.24	12.03	11.00	10.13	9.38	8.73	
4.0%	15.25	13.65	12.33	11.24	10.31	9.52	8.84	

Source: Company Data, Bloomberg

Exhibit 39

DCF Valuation Monte Carlo analysis



Source: Team Estimates

We issue a **BUY recommendation on DNR**, with a target price of **€11.5**, a 60.6% upside on January 31st FY25 closing price. Our target price calculation is based on a mix of two different methodologies: SOTP (70%) DCF (30%). (i) a **Sum-Of-The-Parts with price €11.9**, in order to capture the uniqueness of DNR businesses and industry environment, given the large amount of data at our disposal on each division; (ii) a **Three-stage FCFF Discounted Cash Flow of the entire company until 2050 with price €10.6**, as a control variable.

Sum-Of-The-Parts Approach

In our SOTP, we apply a **relative valuation methodology to the company's traditional businesses**, reflecting the maturity and stability of these markets, while utilizing a mix of relative and FCFF DCF approach for the **Energy Transition division to better capture the inherent risks and volatility of the green hydrogen industry**.

To account for potential outcomes, we have incorporated **three distinct scenarios** for the Energy Transition: a base case, a bull case, and a bear case where the unit operates at a cash-burning level. For the Electrode and Water segments, we employ an independent valuation approach based on a **weighted blend of 2025 P/E and EV/EBITDA multiples** (80%) and the remaining 20% is based on the median value of P/E multiples (Appendix 9). Given the niche nature of the Electrodes market, identifying direct public competitors is challenging, as most operate privately. Therefore, for peer comparison, we analyze **European Electrical Technologies companies** that align with DNR's business model. In the Water Technologies segment, we benchmark DNR against **key publicly listed global water treatment companies** (Exhibit 36). Notably, our valuation of the **core business alone stands at €8.97**, above the company's current market price, **reinforcing our BUY recommendation**. The **Energy Transition division is valued using a combination of three distinct DCF models (one per scenario)** with a 75% weighting, complemented by three relative valuations (weighted at 25%) based on the EV/Sales multiple of key hydrogen sector peers. For the Energy Transition sector, we compare DNR with **leading players in the green hydrogen space** (Excluding tk nucera from Multiple valuation). However, given DNR's unique positioning, alongside nucera as one of the only companies in the sector maintaining a positive EBITDA, **the relative valuation holds less relevance in our assessment**. The standalone DCF analysis for the Energy Transition segment per scenario (Appendix 11) has been conducted by applying a distinct WACC to reflect its higher risk profile. By benchmarking against the FTSE Alternative Energy Index, we derive a segment-specific WACC of 11.7%, capturing the increased volatility and risk premium associated with emerging energy markets. The resulting weighted target price for the Energy Transition segment is €1.30. For the evaluation of the **JV nucera we use the market capitalization**, since the company performed an IPO in 2023. DNR currently holds a 25.5% stake in the joint venture, this reflects into a price of €1.34 per share.

Discounted Cash Flow

As a counter-check to our SOTP, we have constructed a three-stage FCFF Discounted Cash Flow model. The valuation of the entire firm is made using the Base scenario as reference and we the resulting price is €10.6. Our DCF model follows a **Three-Stage Approach** (Exhibit 40, Appendix 8): (i) **Near-Term Recovery & Investment Phase (FY25E-FY30E)**, this period reflects the anticipated normalization of operations following recent supply chain disruptions in core business segments. Additionally, we incorporate substantial Capex to support growth in the ET segment, which is expected to be a key driver of long-term value creation. (ii) **High-Growth Phase (FY30E-FY35E)**, we anticipate a period of rapid expansion, underpinned by the company's strategic positioning in the Green Hydrogen market, which is expected to experience significant demand growth driven by regulatory support and technological advancements. (iii) **Mature Phase & Terminal Growth (FY35E-FY50E)**, as the company matures, we assume a gradual convergence toward a **long-term growth rate of 2.5%**, reflecting intensified competition, market saturation, and a more stable industry landscape. To ensure a rigorous cost of capital assessment, we have calculated the WACC using the **Fama-French Three-Factor Model** (Appendix 6). Our analysis, based on a linear regression against the STOXX 600 Europe, results in a **WACC of 10.4%**. Importantly, we have not incorporated any ESG premium or discount, as we assess the company's sustainability profile to be broadly in line with industry best practices.

Sensitivity Analysis and Monte Carlo

We evaluate the robustness of our DCF-derived 12-month target price by analyzing its sensitivity to key fundamental variables. With the **Terminal Value** accounting for approximately **26.9% of the Enterprise Value**, we focus on two critical assumptions: the WACC and the long-term growth rate. Our analysis (Exhibit 38) reveals a potential maximum drawdown of 21.6% relative to our DCF target price. Notably, our sensitivity analysis identifies the BUY scenario as the most likely outcome.

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 (Appendix 7). This approach results in a broad range of valuation outcomes and a **right-skewed distribution, highlighting DNR's asymmetric upside potential**. However, while a valuation adjustment is feasible, it is not without risks. We think such risks are balanced by the upside potential we have analysed in the context of the Energy Transition and Green Hydrogen segment.

Exhibit 40

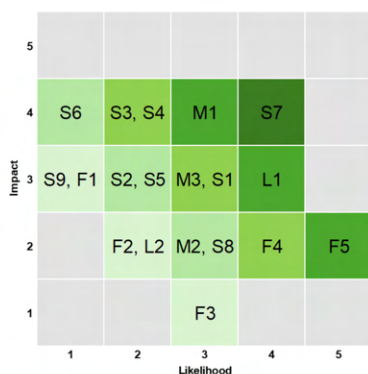
Discounted Cash Flow at a glance

DCF (€M)	2023A	2024E	Near-Term Recovery & Investment Phase					High Growth Phase					Mature Phase & Terminal Growth				TV
			2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	2034E	2035E	2040E	2045E	2050E	
EBIT	137	117	129	141	162	181	209	241	284	340	416	502	616	1,082	1,269	1,472	
Tax rate	12.9%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	
NOPAT	119	84	93	101	116	131	150	174	204	245	300	361	443	779	914	1,059	
+ D&A	31	32	36	40	46	51	53	58	64	70	77	86	98	141	154	178	
- Δ Working Capital	16	13	(5)	(12)	(15)	(17)	(19)	(25)	(30)	(38)	(47)	(60)	(95)	(34)	(35)	(40)	
CF from Operations	165	129	124	130	147	164	184	206	237	277	330	388	446	886	1,033	1,197	
- Net CapEx	(88)	(90)	(93)	(100)	(98)	(105)	(112)	(120)	(122)	(146)	(178)	(219)	(276)	(587)	(619)	(704)	
FCF to the Firm	77	40	31	30	49	60	72	86	116	131	152	169	170	299	414	494	6,397
% of EBIT	56.2%	33.9%	24.0%	21.1%	30.4%	32.9%	34.4%	35.6%	40.8%	38.6%	36.4%	33.6%	27.6%	27.7%	32.6%	33.5%	
PV			28	24	37	40	44	47	58	59	62	63	57	61	52	38	487
Discounted FCFF			173					289					1,348				

Source: Company Data, Team Estimates

Exhibit 41

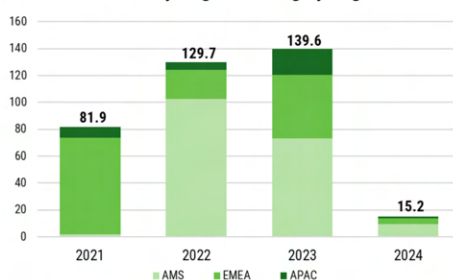
Likelihood / Impact risk assessment



Source: Company Data, Team Estimates

Exhibit 42

Annual Promised Hydrogen Funding by Region



Source: Bloomberg NEF

Exhibit 43

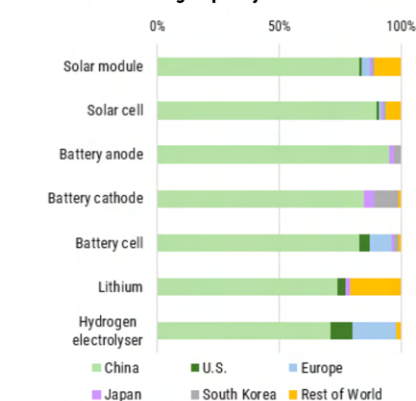
Indexed Noble Metals Prices



Source: Bloomberg

Exhibit 44

Global Manufacturing Capacity



Source: Bloomberg NEF

Exhibit 45

Main DNR Exchange Rate



Source: Bloomberg

MARKET RISKS

M1 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. **Mitigation:** Diversify suppliers, explore partnerships in stable regions, enhance local sourcing, and establish inventory buffers or joint ventures.

M2 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. **Mitigation:** DNR in past years has focused on operational efficiency maintaining a >15% EBITDA m 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.

M3 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 CO₂ emissions by 2024, many lack binding commitments or dedicated funding (Exhibit 42). **Mitigation:** Align projects with public funding criteria, such as the second EU Hydrogen Bank auction 25% non-Chinese component requirement.

OPERATIONAL AND STRATEGIC RISKS

S1 Raw Materials & Noble Metals: DNR 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 (Exhibit 43). **Mitigation:** DNR secures supply through long-term contracts with minimum purchase volumes, strategic inventory management, and pass-through cost mechanisms to maintain margins.

S2 M&A Execution: M&As are key to growth but present risks in integration, financial impact, and strategic alignment. **Mitigation:** Conduct thorough due diligence, assess financial and legal risks, and implement structured integration plans with clear milestones and resource allocation.

S3 Dependence on nucera JV: DNR relies on tk nucera for orders (23.7% of backlog as of Sept. FY24). However, limited control over nucera's decisions could impact the hydrogen business. **Mitigation:** Advance DNR's Dragonfly electrolyser to reduce dependence and expand its hydrogen customer base.

S4 Workforce Risks: DNR operates in specialized industries requiring experts in materials science, electrochemical engineering, and renewable energy. Rising competition for talent makes hiring and retention challenging. **Mitigation:** Improve retention (DNR lost 8.5% of engineers in FY22-23) through competitive compensation, training programs, university partnerships, and clear career progression paths.

S5 Product Quality: DNR's premium positioning relies on product reliability. Defects could lead to financial losses, reputational damage, and legal risks. **Mitigation:** Strengthen quality control, develop a comprehensive database of test results, and leverage machine learning for product lifecycle assessments.

S6 Technological Risk: 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. **Mitigation:** Sustain competitive edge through R&D, which accounted for 1.9% of revenue in FY23.

S7 Chinese Competitors and competition growth: In recent years China extended its dominance in the clean tech supply chain. In FY23 it added alone 70% of global capacity of Hydrogen electrolyzers (Bloomberg). DNR 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 (Exhibit 44). 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. **Mitigation:** Focus on innovation, strategic partnerships, and advocacy for fair trade. Expand Suzhou operations, strengthen R&D, and protect IP through patents (2,387 active, 492 pending, 10 in water electrolysis in FY23).

S8 Destocking in Electronics & Pools: Customers in these sectors are reducing their inventory levels, possibly indicating weaker demand or a reassessment of supply chains. Extended destocking could put pressure on margins and increase operational risks. **Mitigation:** Offer value-added services and just-in-time supply solutions.

S9 Cybersecurity Risk: As a technology-driven company, DNR could face risks from cyberattacks targeting its intellectual property, operational systems, or sensitive client data. **Mitigation:** Strengthen cybersecurity protocols, adopt robust monitoring systems, and conduct regular penetration testing.

FINANCIAL RISKS

F1 Solvency Risk: DNR'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 risk is negligible.

F2 Credit Risk: DNR constantly scrutinizes its clients for possible default risks. The major risk could come from jk hyssenkrupp nucera which is by far the largest client, any problems to nucera could heavily impact DNR. **Mitigation:** DNR does not have to become too dependent on nucera; the company is already working also to start its own production of electrolyzers to reduce potential risks.

F3 Interest Rate Risk: While DNR maintains low leverage (net debt: -€69M in FY23), most financial instruments bear variable-rate, so shifts in interest rates can pose risks. **Mitigation:** Hedge exposure with interest rate swaps.

F4 Forex Risks: DNR 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 (Exhibit 45). **Mitigation:** The company in the past has used derivatives contracts to protect itself from the swing against the dollar. DNR's local for local business model and its global presence in various markets represent a natural hedge for currencies' volatility.

F5 Limited Free Float: With only 25.39% of shares publicly traded, liquidity risks remain, and concentrated ownership (De Nora family & SNAM) may misalign with minority shareholders. **Mitigation:** Increase free float via secondary offerings and engage institutional investors.

LEGAL RISKS

L1 Regulatory Changes: 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 DNR with its SORB contaminant removal systems is compliant with new regulations. **Mitigation:** DNR 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.

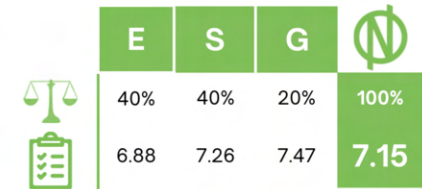
L2 ESG & Ethical Risks: If the company fails to achieve its ambitious ESG targets, this could harm its reputation and negatively impact investor confidence, potentially affecting financial performance. **Mitigation:** Strengthen credibility through Science-Based Targets (SBTi), the FY24-26 People Strategy, and supply chain ESG compliance. DNR is also the only peer using ESG-linked executive compensation. Engage third-party auditors to verify ESG claims.

Exhibit 46
ESG Score Distribution

ESG Score	Rank
[9.0 - 10]	AAA
[8.51 - 8.99]	AA
[7.51 - 8.50]	A
[6.51 - 7.50]	BBB
[6.0 - 6.50]	BB
[5.51 - 5.99]	B
[4.51 - 5.50]	CCC
[3.51 - 4.50]	CC
[2.51 - 3.50]	C
[0 - 2.50]	D

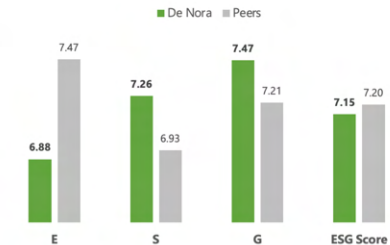
Source: Team Estimates

Exhibit 47
ESG De Nora Score



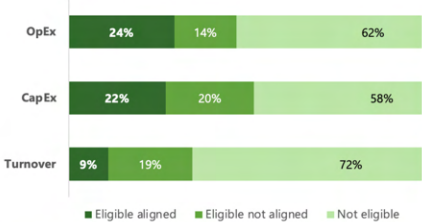
Source: Team Estimates

Exhibit 48
ESG Score Comparison



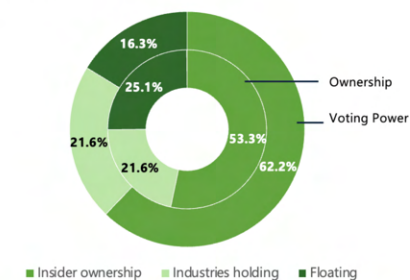
Source: Team Estimates

Exhibit 49
De Nora EU Taxonomy Alignment



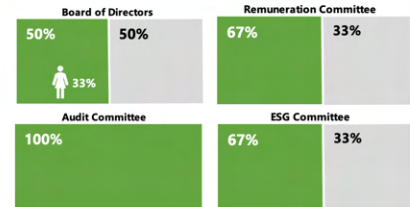
Source: Company Data, Team Estimates

Exhibit 50
De Nora Shareholding Structure



Source: Company Data, Team Estimates

Exhibit 51
De Nora Governance



Source: Company Data, Team Estimates

DNR demonstrates a strong commitment to ESG principles, guided by 4 strategic pillars: **green innovation, climate action and circular economy, continuous people development and well-being, and community engagement with a sustainable supply chain.** The company has set ambitious goals, including achieving a 50% reduction in Scope 1 and Scope 2 emissions by 2030, ensuring all production sites are ISO 45001 certified by 2025, and evaluating over 50% of its suppliers on ESG performance by 2030 (Appendix 22). DNR adherence to the UN Global Compact Policy and progress on the United Nations Sustainable Development Goals (SDGs) further highlight its dedication to sustainability. Moreover, DNR commitment to sustainability is evident in its alignment with the **EU Taxonomy**, though there is still room for improvement. In 2023, **9% of turnover, 22% of CapEx, and 24% of OpEx were taxonomy-aligned** (Exhibit 49), largely driven by investments in hydrogen technologies and climate change mitigation efforts. Our analysis evaluates **59 metrics** across the three ESG pillars, **Environmental (21 metrics), Social (18 metrics), and Governance (20 metrics)**, benchmarked against **18 peers in Electrode Technologies, Water Technologies, and Energy Transition.**

ENVIRONMENTAL: Sustainable Innovation, but Emissions and Energy Challenges Remain

DNR scores **6.88** in the Environmental pillar with a **BBB** rating, slightly **below the peers' average of 7.47**, indicating room for improvement. **Renewable energy consumption** is a key challenge, with just **0.08%** of energy sourced from renewables compared to the peers' average of 46.5%. This reflects DNR reliance on conventional energy for its high-demand manufacturing processes, although the company is working on pilot projects to **increase renewable energy adoption to 40% by 2026.** **Emissions intensity** is another concern, **Scope 3 emissions (46,226 tCO2e/M€ vs. peers' 5,962)**, which have risen due to production growth and limited supply chain decarbonisation. To address this, DNR has set a target to achieve **50% and 52% reduction of Scope 1 and 2, and Scope 3 emissions by 2030**, respectively. The **lack of a formal water use policy**, while not uncommon (24% of peers also lack one), highlights an opportunity for improvement. **Hazardous waste** remains high (**59% vs. peers' 34%**), driven by advanced electrode production. Still, the company is actively working with partners to **enhance recycling** and aims to **cut hazardous waste intensity by 10% by 2026.** Thanks to its advanced technologies, DNR excels in controlling **NOx and SOx emissions**, recording the **lowest values among peers (0.004 kt/M€).** DNR also considers green innovation, aiming to achieve **100% new products assessed by scorecard by 2026.** While progress is being made, DNR must accelerate its efforts to align more closely with industry leaders in energy efficiency, emissions reduction, and waste management.

SOCIAL: Strong Workforce and Supply Chain Focus, Diversity Needs Improvement

With a score of **7.26**, ranked **BBB**, DNR outperforms its peers' Social pillar average of 6.93, reflecting its strong focus on workforce development and social responsibility. The company prioritises employee growth, offering an average of **31 training hours per employee**, significantly higher than the peers' 21 hours. Its efforts to address diversity challenges, including adopting a **Diversity, Equity, and Inclusion Policy**, the **InCluDe Leadership Program**, and a partnership with **Valore D**, aim to improve **gender representation** (currently **19.7% vs. peers' 26.3%**). DNR is also committed to strengthening its supply chain, targeting more than **50% of suppliers to be assessed through ESG rankings by 2030**, ensuring alignment with ethical and sustainability standards. This company has introduced a **Human Rights Policy** to strengthen ethical practices and align with sustainability goals. Its **community engagement programs** also focus on education and infrastructure development, complementing its broader social impact efforts. While DNR **lack of gender pay gap** sets it apart, the company should enhance diversity initiatives and formalise remuneration policies for a stronger social impact.

GOVERNANCE: ESG-driven Leadership, but Voting Power is Highly Concentrated

In the Governance pillar, DNR ranks **BBB** with a score of **7.47**, surpassing the peers' average of 7.21, demonstrating strong governance practices. The **Board Average Age of 56.8**, the **lowest** among peers, DNR benefits from a more dynamic and modern governance structure. Board engagement is also high, with **95% attendance**, exceeding the peers' average of 93%, indicating a high engagement level among board members. DNR is the **only company with ESG-linked compensation**, aligning executive incentives with sustainability outcomes, a forward-thinking approach that 94% of peers lack. The company also empowers minority shareholders with a **5% ownership threshold for special meeting requests**, the **lowest** among peers, highlighting a commitment to transparency. However, the ownership structure concentrates significant voting power with **Federico De Nora S.p.A.**, which holds **44.3% of the share capital and 53.13% of voting rights**, bolstered by 150.5 million multiple voting shares granting 3 votes each. This tightly controlled environment ensures stability but raises concerns about the balance of power and minority shareholder influence. While DNR adheres to transparency and maintains independent committees, fostering executive diversity and addressing these power imbalances could further strengthen its governance leadership.

OVERALL: BBB (Bright, Bold, and Blooming)

Based on our analysis, DNR achieves a combined ESG score of **7.15** out of 10, slightly below the average peer score of 7.20 (Exhibit 48). Despite this small gap, the company's **BBB** rating highlights its relatively strong ESG performance. DNR proactive approach, outlined in its ambitious ESG Plan until 2030, reflects a clear commitment to continuous improvement. To strengthen its position further, we recommend accelerating Scope 3 emissions reduction efforts by **adopting the Science-Based Targets Initiative (SBTi)**, aligning its goals with the Paris Agreement and enhancing investor confidence. We also expect DNR to **fully leverage the Gigafactory and Dragonfly System** to achieve operational efficiency and scale green hydrogen production, further enhancing its environmental impact and leadership in the energy transition.

Exhibit 52
ESG Materiality Map



Source: Company Data, Team Estimates

#	Appendix	Page	#	Appendix	Page	#	Appendix	Page
01	Income Statement	11	08	Discounted Cash Flow	14	15	DNR Value Chain	17
02	Balance Sheet	11	09	Core Business Valuation	14	16	Porter's 5 forces Analysis	17
03	Altman Z-Score	12	10	Hydrogen Market	15	17	Peers Selection	18
04	Forecasts	12	11	Energy Transition DCF Scenarios	15	18	SWOT Analysis	18
05	DNR Historical Price	13	12	Green Hydrogen Technologies	16	19	Historical M&A Analysis	18
06	WACC	13	13	Water Technologies Portfolio	16	20	ESG Score	19
07	Montecarlo Simulation Assumptions	13	14	Product Portfolio	17	21	Board of Directors	20
						22	ESG Targets	20

Financial Analysis

Appendix 01 – Income Statement

Income Statement (€M)	2019A	2020A	2021A	2022A	2023A	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2035E
Total Revenues	505.4	499.5	615.9	852.8	856.4	862.1	896.4	958.8	1,034.6	1,120.9	1,219.2	1,345.3	2,639.0
<i>Growth %</i>	<i>9.4%</i>	<i>-1.2%</i>	<i>23.3%</i>	<i>38.5%</i>	<i>0.4%</i>	<i>0.7%</i>	<i>4.0%</i>	<i>7.0%</i>	<i>7.9%</i>	<i>8.3%</i>	<i>8.8%</i>	<i>10.3%</i>	<i>18.2%</i>
<i>Organic Growth Pre Forex</i>	<i>5.3%</i>	<i>0.7%</i>	<i>27.0%</i>	<i>31.1%</i>	<i>4.1%</i>	<i>2.7%</i>	<i>-0.4%</i>	<i>6.7%</i>	<i>6.8%</i>	<i>8.3%</i>	<i>8.8%</i>	<i>10.3%</i>	<i>18.2%</i>
<i>Forex Effect</i>	<i>3.6%</i>	<i>-1.9%</i>	<i>-2.3%</i>	<i>4.3%</i>	<i>-3.4%</i>	<i>-2.0%</i>	<i>4.4%</i>	<i>0.3%</i>	<i>1.0%</i>	<i>0.0%</i>	<i>0.0%</i>	<i>0.0%</i>	<i>0.0%</i>
Gross Profit	163.8	174.3	224.1	308.4	291.7	283.0	301.2	325.4	361.2	395.6	435.4	486.8	1,018.9
<i>Gross margin %</i>	<i>32.4%</i>	<i>34.9%</i>	<i>36.4%</i>	<i>36.2%</i>	<i>34.1%</i>	<i>32.8%</i>	<i>33.6%</i>	<i>33.9%</i>	<i>34.9%</i>	<i>35.3%</i>	<i>35.7%</i>	<i>36.2%</i>	<i>38.6%</i>
SG&A	(91.5)	(63.3)	(68.2)	(80.5)	(82.2)	(83.4)	(86.0)	(90.7)	(96.2)	(102.1)	(108.5)	(116.2)	(182.3)
R&D	(10.6)	(9.5)	(10.5)	(12.9)	(16.0)	(19.2)	(19.1)	(20.3)	(22.5)	(25.0)	(27.6)	(31.1)	(51.7)
Other OPEX	14.0	(21.0)	(24.2)	(49.8)	(22.6)	(31.3)	(31.8)	(33.1)	(34.5)	(36.1)	(38.0)	(40.5)	(71.5)
EBITDA	75.7	80.6	121.2	165.2	171.0	149.2	164.4	181.3	208.0	232.3	261.3	299.1	713.5
<i>EBITDA margin %</i>	<i>15.0%</i>	<i>16.1%</i>	<i>19.7%</i>	<i>19.4%</i>	<i>20.0%</i>	<i>17.3%</i>	<i>18.3%</i>	<i>18.9%</i>	<i>20.1%</i>	<i>20.7%</i>	<i>21.4%</i>	<i>22.2%</i>	<i>27.0%</i>
D&A	(27.1)	(26.5)	(26.2)	(28.1)	(30.6)	(32.2)	(35.8)	(40.5)	(46.1)	(51.0)	(52.6)	(57.7)	(97.8)
Provisions and Impairments	(0.9)	1.4	(7.4)	(11.2)	(3.5)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBIT	47.8	55.5	87.6	125.8	136.9	117.0	128.6	140.8	161.8	181.3	208.7	241.4	615.7
<i>EBIT margin %</i>	<i>9.5%</i>	<i>11.1%</i>	<i>14.2%</i>	<i>14.8%</i>	<i>16.0%</i>	<i>13.6%</i>	<i>14.3%</i>	<i>14.7%</i>	<i>15.6%</i>	<i>16.2%</i>	<i>17.1%</i>	<i>17.9%</i>	<i>23.3%</i>
Net Financial Expenses	(12.1)	(15.3)	(2.9)	(4.2)	(10.3)	(10.9)	(7.4)	(6.9)	(7.3)	(7.5)	(7.8)	(8.2)	(12.2)
Gains from Nucera IPO					133.2								
Other financial items	5.1	4.0	8.8	(1.2)	5.4	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBT	40.8	44.3	93.6	120.4	265.3	107.2	121.2	133.9	154.5	173.9	200.9	233.2	603.5
Income Taxes	(11.9)	(11.5)	(27.1)	(30.8)	(34.2)	(30.6)	(34.0)	(37.5)	(43.3)	(48.7)	(56.3)	(65.3)	(169.1)
Net Income	28.9	32.8	66.4	89.7	231.1	76.6	87.3	96.4	111.2	125.1	144.6	167.9	434.4

Appendix 02 – Balance Sheet

Balance Sheet (€M)	2019A	2020A	2021A	2022A	2023A	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2035E
Intangibles and Goodwill	143.6	131.1	132.8	131.6	115.8	110.1	104.3	99.5	95.8	93.1	91.4	90.8	104.7
Property, Plant & Equipment	156.0	153.9	167.6	184.2	254.3	317.2	380.4	445.4	502.5	560.7	623.9	689.9	1,247.5
Equity accounted investees	125.5	111.6	121.8	122.7	231.5	231.5	231.5	231.5	231.5	231.5	231.5	231.5	231.5
Net Fixed Assets	425.2	396.5	422.2	438.4	601.6	658.8	716.2	776.4	829.8	885.4	946.8	1,012.1	1,583.7
Accounts Receivable	93.0	90.9	140.0	123.4	141.9	126.7	131.1	139.6	149.9	161.6	175.0	192.1	369.5
Accounts Payable	(53.7)	(46.9)	(61.4)	(80.6)	(106.8)	(82.8)	(85.5)	(90.9)	(97.5)	(104.9)	(113.4)	(124.3)	(237.5)
Inventory	139.5	123.8	245.4	311.9	288.9	280.2	286.4	301.0	319.2	339.6	362.7	392.8	712.5
Other current assets/(liabilities)	(29.5)	(37.2)	(69.6)	(74.6)	(59.4)	(72.4)	(75.6)	(81.1)	(87.8)	(95.5)	(104.2)	(115.4)	(229.6)
Net Working Capital	149.2	130.6	254.3	280.2	264.6	251.7	256.5	268.6	283.8	300.8	320.0	345.2	614.9
Other non-operating assets/(liability)	(28.4)	(19.3)	(33.7)	(25.7)	(24.8)	(25.0)	(25.9)	(27.7)	(29.9)	(32.4)	(35.3)	(38.9)	(76.4)
Capital Employed	546.1	507.9	642.8	692.8	841.4	885.6	946.7	1,017.3	1,083.7	1,153.8	1,231.6	1,318.4	2,122.2
Owners of the Parent Company	255.6	409.6	450.5	741.2	904.5	942.0	1,015.0	1,094.5	1,186.0	1,288.4	1,406.2	1,542.1	2,746.9
Minority interests	3.8	3.5	3.5	3.6	5.7	5.7	6.0	6.4	6.9	7.5	8.1	9.0	17.6
Total Equity	259.4	413.1	454.0	744.8	910.2	947.7	1,020.9	1,100.9	1,192.9	1,295.9	1,414.3	1,551.0	2,764.5
Medium/long term financial debt	344.8	154.8	3.8	267.5	133.7	134.6	140.0	149.7	150.0	150.0	150.0	150.0	150.0
Short term financial debt	1.0	17.3	258.4	13.7	10.2	10.3	10.7	11.4	12.3	13.3	14.5	16.0	31.4
Financial assets and derivatives	(3.5)	(1.6)	0.4	(159.0)	(14.2)	(14.3)	(14.8)	(15.9)	(17.1)	(18.6)	(20.2)	(22.3)	(43.7)
Cash and cash equivalent	(55.6)	(75.7)	(73.8)	(174.1)	(198.5)	(192.7)	(210.0)	(228.8)	(254.4)	(286.9)	(327.1)	(376.4)	(779.9)
Net Financial Position	286.7	94.8	188.8	(52.0)	(68.8)	(62.1)	(74.2)	(83.6)	(109.2)	(142.1)	(182.7)	(232.6)	(642.2)
Total Funds	546.1	507.9	642.8	692.8	841.4	885.6	946.7	1,017.3	1,083.7	1,153.8	1,231.6	1,318.4	2,122.2

Originally developed for manufacturing firms, the Altman Z-Score is a financial model designed to **assess a company's risk of bankruptcy** by combining key financial ratios into a single score. It incorporates **liquidity** (NWC/Total assets), **reinvestment capacity** (Retained earnings/Total assets), **profitability** (EBIT/Total assets), **leverage and asset efficiency** (Asset turnover). Over time, this tool has been adapted for broader industries, proving its versatility. DNR's operational and financial profile makes it a strong candidate for Z-Score analysis. Its **fixed assets are primarily tangible** (PP&E), aligning with the model's manufacturing focus. While the company invests in intangibles, these represent a decreasing share of total assets, minimizing potential distortions. Furthermore, the **company's net cash position, reduced liabilities and strong EBIT margin underpin its improved Z-Score**. While normalization of NWC levels may slightly reduce the short-term liquidity metric, this is unlikely to materially affect the overall score. The projected trajectory reflects long-term stability and robust financial fundamentals.

Altman Z-Score	FACTORS	2017A	2018A	2019A	2020A	2021A	2022A	2023A	2024E
Short-term liquidity	1.2	0.19	0.21	0.19	0.17	0.26	0.22	0.20	0.19
Reinvestment capacity	1.4	0.21	0.23	0.25	0.48	0.35	0.32	0.34	0.50
Profitability	3.3	0.05	0.06	0.06	0.07	0.09	0.10	0.10	0.09
Leverage	0.6	0.37	0.42	0.49	1.16	0.89	1.37	2.16	2.31
Asset efficiency	1	0.60	0.61	0.64	0.65	0.64	0.66	0.64	0.64
Overall Score		1.51	1.64	1.72	2.45	2.28	2.51	2.99	3.24
		DISTRESS ZONE	DISTRESS ZONE	DISTRESS ZONE	GREY ZONE	GREY ZONE	GREY ZONE	SAFE ZONE	SAFE ZONE

2.29 (avg.)

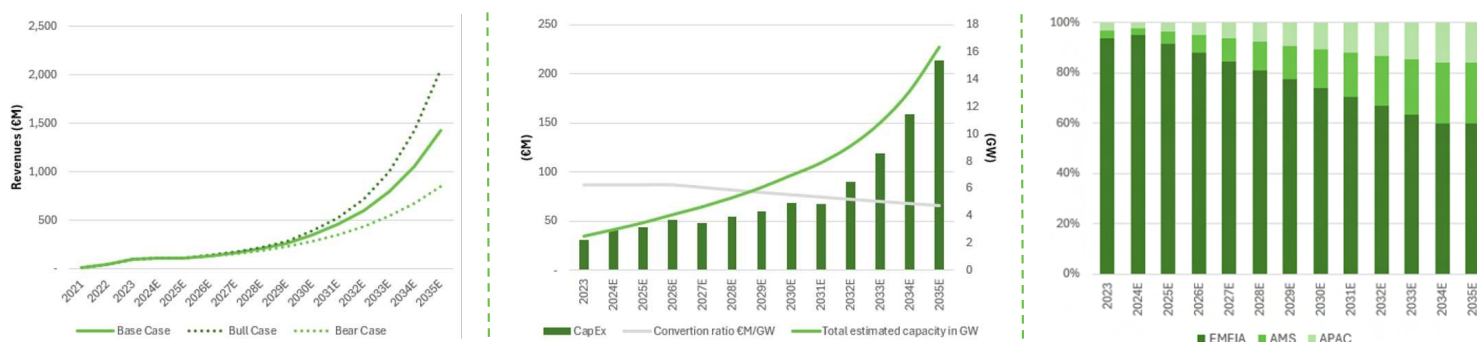
Distress zone if <1.81, Safe zone if >2.99



Appendix 04 – Forecasts

Energy Transition Estimates

After defining a sustainable CapEx-to-sales ratio, we developed a model to assess whether the projected investments could support future sales. With €174 million allocated to energy transition, targeting a capacity increase from 4.5 GW to 6.5 GW, we estimate that **€87 million will be required per additional 1 GW**. This conversion ratio is expected to decline over time due to **economies of scale, technological advancements, and infrastructure improvements**. Based on our estimates, the company would only need the conversion ratio to decrease by 3% per year to support not only near-term sales but also long-term growth through FY30E–35E, when market demand is expected to surge.



Business Units Estimates

Revenue Estimation (€M)	2019A	2020A	2021A	2022A	2023A	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2035E
Chlor-Alkali	221.7	204.8	236.9	319.2	320.9	322.3	333.5	345.1	356.9	368.8	381.0	393.4	457.8
Growth %	17.2%	-7.6%	15.6%	34.7%	0.5%	0.4%	3.5%	3.5%	3.4%	3.4%	3.3%	3.3%	3.0%
Electronics	46.1	58.7	75.8	88.3	79.9	74.6	75.0	81.4	86.3	91.0	95.5	99.8	120.9
Growth %	14.4%	27.3%	29.2%	16.5%	-9.5%	-6.6%	0.5%	8.5%	6.0%	5.5%	5.0%	4.5%	3.6%
NikeV/Cobalt Electrowinning	31.3	23.2	36.1	66.0	63.4	66.4	69.9	74.4	78.9	83.3	87.7	91.9	111.5
Growth %	-49.0%	-25.8%	55.6%	82.6%	-3.9%	4.7%	5.3%	6.5%	6.0%	5.6%	5.2%	4.8%	3.6%
Electrode Technologies	299.1	286.8	348.8	473.4	464.2	463.3	478.4	500.9	522.0	543.2	564.2	585.1	690.2
Growth %	2.8%	-4.1%	21.6%	35.7%	-1.9%	-0.2%	3.2%	4.7%	4.2%	4.0%	3.9%	3.7%	3.2%
Pool Technologies	51.9	65.3	98.2	161.8	86.0	97.0	103.1	109.2	115.0	120.5	125.8	131.0	157.0
Growth %	36.2%	25.7%	50.5%	64.7%	-46.8%	12.7%	6.3%	5.9%	5.3%	4.8%	4.4%	4.1%	3.5%
Disinfection and Filtration	81.6	74.1	83.1	79.1	100.9	98.0	104.4	114.5	124.9	135.9	147.2	158.4	206.7
Growth %	18.6%	-9.1%	12.0%	-4.8%	27.6%	-2.9%	6.5%	9.7%	9.1%	8.8%	8.3%	7.6%	3.9%
Electrochlorination	67.8	61.6	63.3	84.6	91.4	94.0	99.5	105.1	110.7	116.3	122.0	127.9	157.7
Growth %	8.0%	-9.2%	2.8%	33.6%	8.0%	2.8%	5.9%	5.6%	5.3%	5.1%	4.9%	4.8%	3.9%
Marine Water Treatment	4.9	8.1	13.1	11.3	11.6	4.8							
Growth %	206.3%	64.8%	61.7%	-13.4%	2.9%	-59.1%							
Water Technologies	206.2	209.1	257.7	336.7	290.0	293.8	307.0	328.8	350.6	372.7	395.0	417.2	521.5
Growth %	20.4%	1.4%	23.3%	30.7%	-13.9%	1.3%	4.5%	7.1%	6.6%	6.3%	6.0%	5.6%	3.8%
Energy Transition			9.4	42.7	102.2	105.0	111.0	129.0	162.0	205.0	260.0	343.0	1427.3
Growth %				354.2%	139.6%	2.7%	5.7%	16.2%	25.6%	26.5%	26.8%	31.9%	34.5%



Appendix 06 – WACC

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%

COST OF EQUITY

The cost of equity is determined by applying the Fama & French 3 factor model. With a value of 11.58% $K_e = R_f + \beta_m * ERP + \beta_s * SMB + \beta_v * HML$

RISK FREE RATE

Weighted average by geographical exposure of 10Y government bonds for each region (Germany for EMEIA, China for APAC and United States for AMS).

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 β_s of 0.38 and β_v of -0.29.

MARKET RISK PREMIUM, SMB RISK PREMIUM, HML RISK PREMIUM

The Market Risk Premium was derived with a weighted average by geographical exposure of countries Equity Risk Premium with a result of 5.77% (data source: Damoradan). The SMB and HML were calculated as historical average returns over the last 15 years provided by Kenneth French's database.

COST OF DEBT

Considering the financial position of DNR the cost of debt has a low weight on final WACC calculation, we estimated it as the Risk Free Rate provided by German 10Y BUND plus the Italian sovereign spread, resulting in a 4.03% Cost of Debt.

WACC

The resulting WACC after all calculations is 10.41%, for our Discounted Cash Flow we kept the WACC fixed for all the time periods since it avoids to overcomplicate the model and keeps the focus on key value drivers like revenue growth and margins

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%	$K_e * E/(E+D) + K_d * (1-Tr) * D/(D+E)$

Appendix 07 – Montecarlo Simulation Assumptions

MONTECARLO SIMULATION	DCF		MONTECARLO SIMULATION ASSUMPTIONS		
	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	

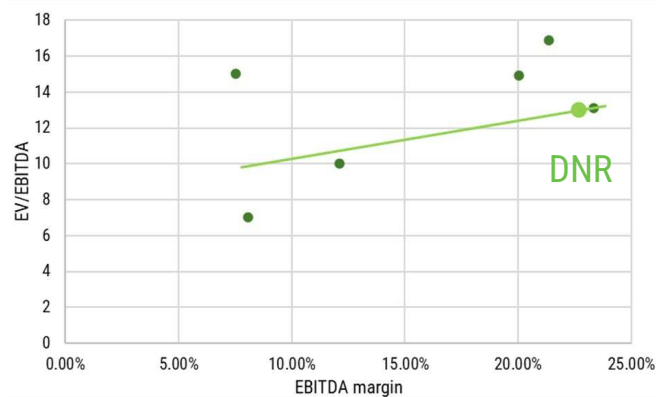
			Near-Term Recovery & Investment Phase					High Growth Phase					Mature Phase & Terminal Growth				
DCF (€M)	2023A	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	2034E	2035E	2040E	2045E	2050E	TV
Revenue	856	862	896	959	1,035	1,121	1,219	1,345	1,498	1,688	1,928	2,232	2,639	4,409	5,131	5,949	
Growth %	0.4%	0.7%	4.0%	7.0%	7.9%	8.3%	8.8%	10.3%	11.3%	12.7%	14.2%	15.8%	18.2%	3.4%	3.0%	3.0%	
EBITDA	171	149	164	181	208	232	261	299	347	410	494	588	714	1,223	1,423	1,650	
Margin %	20.0%	17.3%	18.3%	18.9%	20.1%	20.7%	21.4%	22.2%	23.2%	24.3%	25.6%	26.3%	27.0%	27.7%	27.7%	27.7%	
EBIT	137	117	129	141	162	181	209	241	284	340	416	502	616	1,082	1,269	1,472	
Margin %	16.0%	13.6%	14.3%	14.7%	15.6%	16.2%	17.1%	17.9%	18.9%	20.1%	21.6%	22.5%	23.3%	24.5%	24.7%	24.7%	
Tax rate	12.9%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	
NOPAT	119	84	93	101	116	131	150	174	204	245	300	361	443	779	914	1,059	
% of revenues	13.9%	9.8%	10.3%	10.6%	11.3%	11.6%	12.3%	12.9%	13.6%	14.5%	15.5%	16.2%	16.8%	17.7%	17.8%	17.8%	
+ D&A	31	32	36	40	46	51	53	58	64	70	77	86	98	141	154	178	
- Δ Working Capital	16	13	(5)	(12)	(15)	(17)	(19)	(25)	(30)	(38)	(47)	(60)	(95)	(34)	(35)	(40)	
CF from Operations	165	129	124	130	147	164	184	206	237	277	330	388	446	886	1,033	1,197	
% of revenues	19.3%	15.0%	13.8%	13.5%	14.3%	14.7%	15.1%	15.3%	15.9%	16.4%	17.1%	17.4%	16.9%	20.1%	20.1%	20.1%	
- Net CapEx	(88)	(90)	(93)	(100)	(98)	(105)	(112)	(120)	(122)	(146)	(178)	(219)	(276)	(587)	(619)	(704)	
FCF to the Firm	77	40	31	30	49	60	72	86	116	131	152	169	170	299	414	494	6,397
% of revenues	9.0%	4.6%	3.4%	3.1%	4.8%	5.3%	5.9%	6.4%	7.7%	7.8%	7.9%	7.5%	6.4%	6.8%	8.1%	8.3%	
% of EBITDA	45.0%	26.6%	18.8%	16.4%	23.7%	25.7%	27.5%	28.7%	33.3%	32.0%	30.7%	28.7%	23.8%	24.5%	29.1%	29.9%	
PV			28	24	37	40	44	47	58	59	62	63	57	61	52	38	487
Discounted FCFF				173					289					1,348			

Enterprise Value	1,810
NFP	69
Minority Interests	(6)
Equity Value	1,873
Tk Nucera	271
N° of Shares outstanding	202
Share Price	10.63

Case	EV	Price per Share	Weight
BEAR	2,083 €	10.33 €	25%
BASE	2,376 €	11.78 €	50%
BULL	2,785 €	13.81 €	25%
SOTP	2,405 €	11.92 €	70%
DCF	2,144 €	10.63 €	30%
TARGET	2,327 €	11.53 €	

Appendix 09 – Core Business Valuation

Electrode Technology Regression



Given Industrie DNR's unique market positioning, our valuation methodology employs a data-driven relative approach incorporating three distinct multiples:

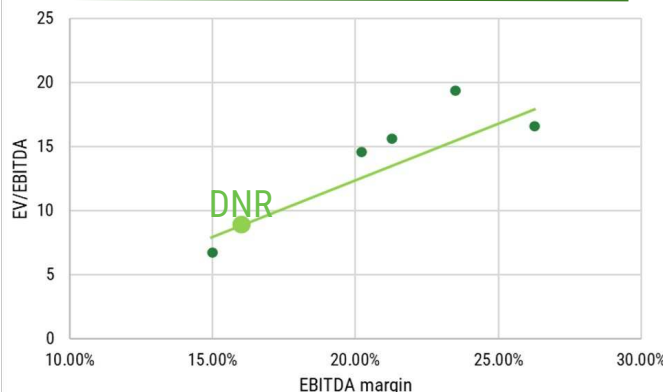
i) EV/EBITDA Peer Mean (40% Weight): We utilize the EV/EBITDA mean of comparable peer companies as a primary benchmark.

ii) EBITDA Margin Regression (40% Weight): We perform an Ordinary Least Squares (OLS) linear regression for the electrode segment peers, focusing on the relationship between the 2025E EV/EBITDA multiples and the corresponding 2025E EBITDA margins. The resulting implied multiples are then applied to the segmental 2025E EBITDA figures.

ii) P/E Peer Mean (20% Weight): To capture broader market dynamics, we also include the P/E mean of peers, though with a lower weighting relative to the EV/EBITDA metrics.

This multi-faceted approach is designed to deliver a comprehensive and robust valuation of DNR, effectively blending intrinsic value measures with broader market dynamics to enhance the overall depth of our analysis. Each valuation has been independently made for each segment using relative peer companies and then aggregated. The Electrodes segment, which represents a significant portion of DNR's business, is valued using an EV/EBITDA multiple of 11.94x, applied to estimated 2025 sales of €478.36m and a regression-implied EBITDA margin of 11.24%, leading to an implied EV of €1,293m and a price per share of €6.41. Additionally, applying a P/E multiple of 21.20x to an estimated EPS of 0.25 results in an implied EV of €504m and a price per share of €2.50. Weighting both approaches, the final implied valuation for the Electrodes segment is €1,248m, corresponding to a price per share of €6.19.

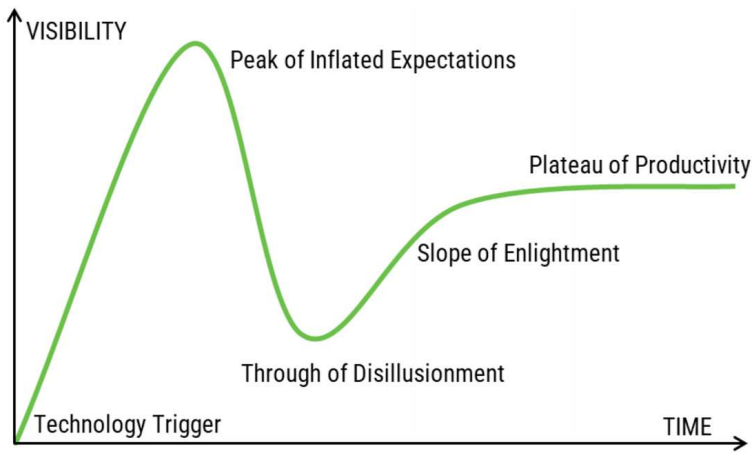
Water Technology Regression



For the Water segment, a similar approach is used, with an EV/EBITDA multiple of 11.72x applied to €307.03m in sales and a 14.58% EBITDA margin, resulting in an implied EV of €575m and a price per share of €2.85. The P/E-based valuation, using a 22.70x multiple on an EPS of 0.11, gives an implied EV of €504m and a price per share of €2.50. Weighting both approaches, the final Water segment EV is €561m, with a price per share of €2.78.

Combining the valuations of both segments, DNR's core business achieves a total implied EV of €1,809m, leading to a final price per share estimate of €8.97. This methodology effectively balances intrinsic earnings power with broader market comparables, providing a comprehensive assessment of DNR's market 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 €



20th CENTURY INNOVATION TRIGGER

Green hydrogen had an immense potential in the 20th century as the viable solution to industrial and energy needs through water electrolysis powered by renewables and zero-carbon energy. Yet, green hydrogen was overlooked due to expensive renewable energy, poor infrastructure, and the cheap production of grey hydrogen from natural gas using steam methane reforming (SMR).

2010s - 2023 PEAK OF INFLATED EXPECTATIONS

Green hydrogen resurged in the 2010s thanks to falling renewable energy prices and bold decarbonization goals along with a growing urgency to fight climate change. Policymakers across the globe outlined hydrogen in their plan agendas, with flagship initiatives like the EU's Green Deal and the US Inflation Reduction Act offering billions of dollars to scale production and infrastructure. Just between 2021 and 2023 pledges for hydrogen funding reached \$351.2 billion globally (Bloomberg). Governments greenlighted daring strategies bringing back optimism into the game. This included all players across the value chain in electrolyzer manufacturing, hydrogen infrastructure development, and energy production.

2024 THROUGH DISILLUSIONMENT

However the sector quickly faced a reality check. High costs of production, inadequate infrastructure and delays in the various regulatory frameworks slowed progress. The cost of production of green hydrogen is currently 1.3-5x that of blue hydrogen, depending on the price of natural gas and the LCOE. Key policies like US renewable H2 tax credits are still not finalized and face further uncertainty under a re-elected President Trump whose proposal is to loosen hydrogen production emission rules, hindering the development of green hydrogen by prioritizing blue hydrogen. Cost parity between these two technologies is expected to be reached in 2030 but trade barriers could delay it up to 2035 (Bloomberg). Due to this uncertainty developers started to dial back their project announcements even cancelling existing ones. It is no wonder that DNR together with the main green hydrogen players faced heavy headwinds in 2024 with plummeting stock prices and general negative market sentiment.

SLOPE OF FUTURE ENLIGHTENMENT

The hydrogen sector in the next few years will start its Slope of Enlightenment as past unreasonably high expectations shift to concentrate on practical implementation through focused development. Green hydrogen will prove its realistic capabilities to replace fossil fuels in challenging sectors that include steelmaking along with heavy transport services and energy storage facilities during this phase. Electrolyser capacity in Europe has reached FID more than quadrupled in 2023 and has grown almost 50% in 2024 to 2.5GW (Bloomberg). Additionally under 2050 NZE Scenario global installed electrolyser capacity should reach 126 GW which is tenfold the 2024 capacity. DNR

Appendix 11 – Energy Transition DCF Scenarios

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%	34.5%	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

BEAR CASE			BASE CASE			BULL CASE		
g		2.0%	g		2.5%	g		3.0%
WACC		11.74%	WACC		11.74%	WACC		11.74%
EV		-143,207	EV		221,870	EV		742,256
Share price		-0.71	Share price		1.10	Share price		3.68

Bullish Scenario: the global energy transition accelerates as governments implement stringent decarbonization policies for a 2050 NZE, creating a favorable regulatory environment for renewable energy adoption. **Clear policy frameworks:** including tax incentives, subsidies, and ambitious carbon reduction targets, drive substantial capital inflows into green hydrogen infrastructure. Further, continued investment in research and development fosters innovation, improving electrolyzer efficiency, reliability, and cost-effectiveness. These advancements create a reinforcing cycle of technological leadership and market penetration, solidifying DNR's competitive positioning. As adoption scales, the company stands to benefit from strong revenue growth, margin expansion, and long-term shareholder value creation, establishing itself as a pivotal player in the green hydrogen ecosystem.

Bearish Scenario: the green hydrogen segment continues to underperform, emerging as a cash-burning business unit. Our DCF analysis currently attributes a negative valuation to this segment, reflecting significant challenges that impede its growth trajectory. **Regulatory Uncertainty:** The regulatory framework for green hydrogen remains fragmented. Instead of benefiting from a cohesive global push with robust policies, stable subsidies, and clear emissions targets, the market is beset by inconsistent government support. This lack of policy uniformity significantly undermines the economic rationale for green hydrogen projects. **Technological Headwinds:** The anticipated technological advancements in electrolyzer efficiency and cost reduction have not materialized as expected. As production costs remain elevated, the segment faces intensifying competition from both established energy companies and emerging players. This technological lag not only escalates operational risks but also constrains DNR's ability to capture and sustain a meaningful market share. **Policy Actions Impacting Funding:** Recent executive orders freezing US clean hydrogen funding initiated under President Trump have further dampened the momentum in the sector. Additionally, efforts by Congress to challenge the tax credits provided under the Inflation Reduction Act add another layer of uncertainty, further stalling progress in the green hydrogen space.

Appendix 12 – Green Hydrogen Technologies

Water electrolysis is a process that **splits water into hydrogen and oxygen using electricity**. It consists of two electrodes, an anode and a cathode, separated by an electrolyte, which facilitates ion transport. Depending on the electrolyte type and operating conditions, different WE technologies exist, each with varying **efficiency, cost, and reactivity**. DNR's advancements focus on improving electrode materials, catalysts, and cell design to enhance efficiency, reduce costs, and increase adaptability for modern hydrogen production.

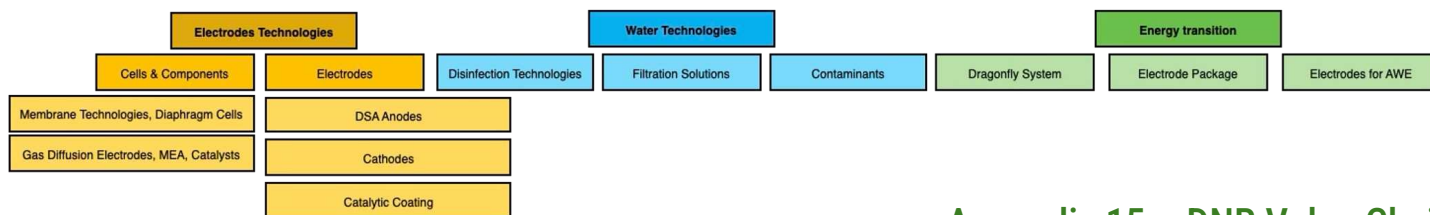
TECHNOLOGY	CHARACTERISTICS	EFFICIENCY	COST	REACTIVITY
Standard				
AWE	Alkaline Water Electrolysis uses an alkaline electrolyte and nickel-based electrodes, separated by a porous diaphragm, to produce hydrogen and oxygen. Operating at 60–90°C with moderate current densities, it is well-suited for large-scale hydrogen production.		Low	
PEM	Proton Exchange Membrane electrolysis uses a solid polymer membrane as both the electrolyte and separator, enabling higher current densities and lower voltages for superior efficiency compared to AWE. However, its reliance on costly platinum and iridium catalysts, along with corrosion-resistant components, increases overall expenses.		High	
SOEC	Solid Oxide electrolysis uses a solid ceramic electrolyte for oxygen ion transport and operates at high temperatures, enabling high efficiency by utilizing non-precious metal catalysts and industrial waste heat. However, material degradation from thermal cycling and maintaining performance remain key challenges.		Medium	
De Nora				
Improved AWE	DNR's improved AWE features advanced electrode coatings, high-performance catalysts, and optimized cell design, enhancing efficiency and durability. These advancements lower energy consumption, boost hydrogen production, and improve adaptability to variable power inputs.		Low-Medium	
Improved PEM	De Nora develops high-performance electrocatalysts, including platinum-group metal coatings, to enhance reaction kinetics and reduce energy consumption. Their innovations minimize the use of costly materials like platinum and iridium while maintaining or improving efficiency.		Medium-High	
Improved SOEC	DNR's expertise in advanced coatings and high-performance electrodes enhances the longevity and efficiency of solid oxide cells. Their work aligns with broader efforts to develop more efficient and cost-effective hydrogen production solutions.		Medium	

Appendix 13 – Water Technologies Portfolio

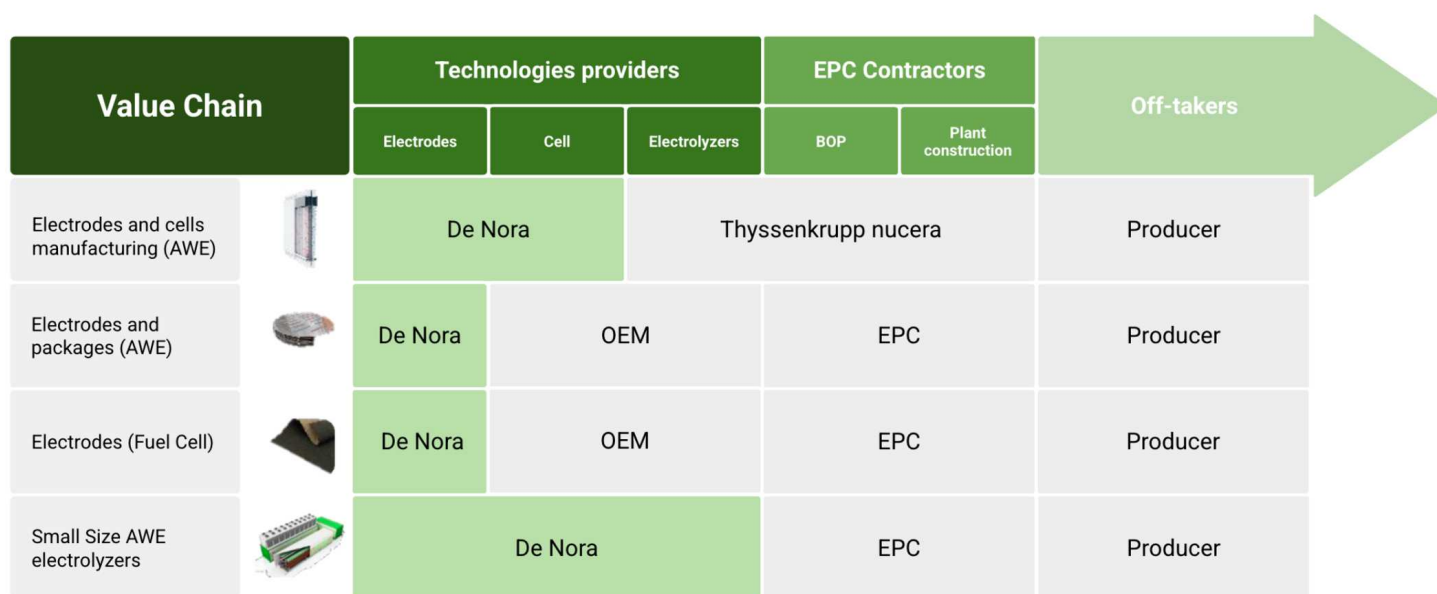
DNR's Water Technology division offers a comprehensive range of solutions for **electrochlorination, disinfection, and filtration**, serving both **municipal and industrial applications**. The company's innovative technologies ensure safe and efficient water treatment, addressing challenges in sectors such as drinking water, wastewater treatment, cooling water systems, offshore and marine industries, and power plants.

PRODUCTS		DESCRIPTION AND FEATURES		END APPLICATIONS	
Electrochlorination and Disinfection systems					
	Electrodes for pool Chlorinators	Typically made with DSA coated with precious metals like ruthenium or iridium, these electrodes facilitate the electrochemical reaction that converts salt into chlorine gas, which then dissolves in water to form hypochlorous acid, the active disinfectant that keeps pools clean and free from bacteria and algae.		Residential and commercial swimming pools, spas, aquatic centers	
	ClorTec®	Modular on-site hypochlorite generators that produce a chlorine solution from salt and water through electrolysis. These systems are widely used in municipal drinking water and wastewater treatment plants, industrial cooling towers and food and beverage cleaning processes.		Municipal drinking water treatment, industrial cooling systems, food & beverage sanitation	
	MIOX®	Systems that produce a mixed oxidant solution that combines sodium hypochlorite with additional reactive oxidants for superior disinfection. These are highly effective in municipal water treatment, industrial cooling systems and oil and gas applications where biofilm control is critical.		Municipal water treatment, industrial cooling systems, oil & gas facilities	
	CECHLO™	Advanced on-site hypochlorite generation system designed for large scale applications, such as municipal water treatment plants and industrial operations like power plants and desalination facilities.		Municipal water treatment, power plants, desalination facilities	
	SEACLOR®	Systems designed for large-scale seawater electrochlorination applications, particularly in industries requiring biofouling control. They are used in power plants, coastal desalination facilities and offshore oil and gas platforms to prevent marine organism growth in cooling systems and water intakes, well suited for harsh marine environments.		Power plants, offshore oil & gas platforms, coastal desalination facilities	
	SANILEC®	Modular seawater electrochlorination units designed for medium to large-scale applications. They are used in offshore platforms, marine vessels and desalination plants to prevent biofouling and ensure clean water systems.		Offshore platforms, marine vessels, desalination plants	
	CAPITAL CONTROLS®	Ozone Generators are advanced systems designed for water treatment, disinfection, and oxidation processes across various industries. These generators produce ozone (O ₃) by applying a high-voltage electrical discharge to oxygen, creating a powerful oxidant that eliminates bacteria, viruses, and organic contaminants without leaving harmful byproducts.		Municipal water treatment, industrial wastewater treatment, pharmaceutical & food industries, swimming pools	
Filtration Solutions					
	TETRA® Filter Underdrain	These filters ensure uniform backwash distribution in gravity filters, enhancing cleaning efficiency and filtration performance. It is durable, energy-efficient and widely used in municipal and industrial water treatment.		Municipal drinking water treatment, industrial water purification, wastewater treatment	
	TETRA® Biological Filter	These filters support microbial growth for processes like nitrification and organic contaminant removal. It combines physical and biological treatment, improving water quality while reducing chemical use.		Municipal wastewater treatment, industrial wastewater treatment, aquaculture	
	TETRA® ABF Bioactive Filter	ABF Bioactive Filters integrate biological filtration with advanced media for nutrient and organic matter removal. It is ideal for wastewater treatment and water reuse, offering high efficiency and compact design.		Municipal wastewater treatment, industrial water reuse, environmental remediation	

DNR technologies are splitted between Business Unit. **Electrode Technologies** are related to DNR's **electrochemical know-how** and are subdivided in: **Electrodes** and **Cells & Components**. Former are advanced high quality technologies customized for customers processes while latter are the technologies in which electrochemical reactions or electrolysis occurs. **Water Technologies** are solutions for **water and wastewater treatments**, divided into: **Disinfection Technologies** (chlorine, ozone, UV and salt water treatments), **Filtration Solutions** (especially demanding wastewater and steel mill applications) and **Contaminants** (to tackle most complex water contaminants such as arsenic and PFAS). Lastly the **Energy Transition** includes: **Dragonfly System** (for decentralized green hydrogen production), **Electrode Package** (to pursue a lower hydrogen Total Cost of Ownership) and **Electrodes for AWE** (the most established technology for green hydrogen).



Appendix 15 – DNR Value Chain



DNR plays a critical role in the energy transition business as a key B2B technology provider, working in collaboration with strategic partners and contributing across multiple segments of the value chain. The company leverages its **extensive electrochemical and manufacturing expertise** to deliver innovative and essential technologies for energy transition advancement. Key contributions along the value chain include:

(i) DNR **manufactures electrodes and cells for alkaline water electrolysis (AWE)**, supplying them to its joint venture **Thyssenkrupp Nucera**, which constructs electrolyzers and serves as an EPC (Engineering, Procurement, and Construction) contractor for large-scale hydrogen production.

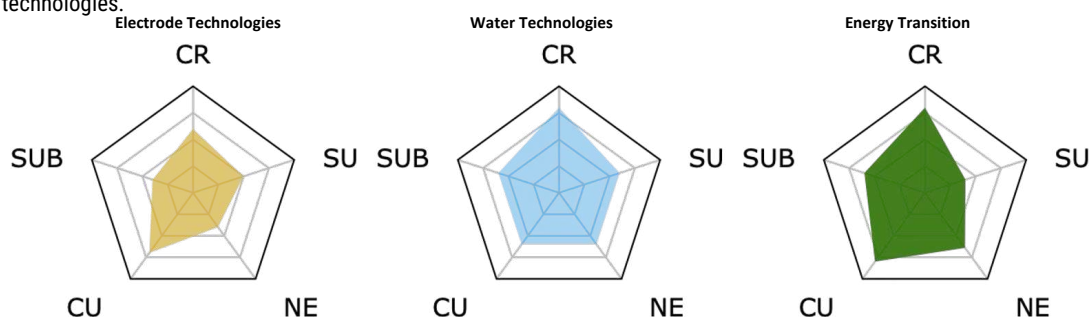
(ii) DNR additionally provides **specialized technologies further down the value chain, producing Electrodes and electrode packages**, tailored for **OEMs involved in assembling AWE systems**, and Electrodes for fuel cells, essential for downstream hydrogen and fuel cell applications, supporting the deployment of clean energy solutions across industries.

(iii) The company also **develops and supplies compact AWE electrolyzers designed for smaller-scale hydrogen production**. These are directly provided to EPC contractors and deployed to facilitate hydrogen production before reaching end producers.

DNR's ability to deliver both large-scale solutions through its joint venture and tailored technologies for OEMs demonstrates its versatility and commitment to driving innovation. By contributing at multiple stages of the hydrogen value chain, DNR enables a seamless integration of advanced technologies into the clean energy ecosystem, playing a crucial role in achieving global energy transition goals.

Appendix 16 – Porter's 5 forces Analysis

Every DNR's business unit has its own different characteristics. **Competition** is generally fierce, particularly in the energy transition industry due to potential high return and principal players have different competitive leverages as well as for water technologies, in which DNR has potential to grow. On the other hand through its leader positioning DNR suffer less competition in electrodes. **Suppliers** are mainly related with the business of Electrodes. They provide strategic raw materials (titanium, iridium and ruthenium), but thanks to long-run partnership their bargaining power is limited, but the suffer high risks from geopolitical situations. The risk of **new entrant** is generally low due to the characteristics of the industries requiring patents, know-how and are cash consuming, however potential large chemical companies may acquire specialized companies. **Customer power** is high due to their size. Particularly tk nucera has strong power being its main customer in electrodes and energy transition businesses. Lastly **substitutes products** are mainly related to disruptive technologies. The risk is moderate on average, particularly low on electrodes due to the leadership role of DNR. Energy Transition can be slightly more hazardous due to changing in politics that could influence other technologies.



Main DNR competitors as Permascand, ProMinent GmbH, China Blue Star, Nalco Water, MAGNETO and Jiangsu Miracle are not comparable companies for the valuation since they all are privately owned companies. Other competitors in the electrodes segment as Asahi-Kasei and Umicore, were not included since our focus was on European Electrical Technologies companies. For the energy transition we chose relevant players in the green hydrogen market.

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														P / BV			EV/Sales	
Plug Power, Inc.	USD	1.92	✗	✗	✓	-23.74%	40.31%	-109.16%	28.29%	n.a.	-1.25	0.80x	3.00x	2.50x	1.90x			
Ceres Power Holdings plc	GBP	0.33	✗	✗	✓	-18.43%	9.91%	-241.89%	19.65%	n.a.	-14.46	2.50x	3.70x	3.60x	3.20x			
NEL ASA	NOK	4.52	✗	✗	✓	-22.91%	34.15%	-20.33%	22.11%	n.a.	-0.2	1.00x	1.80x	1.90x	1.30x			
Ballard Power Systems, Inc.	CAD	0.72	✗	✗	✓	-13.58%	-0.38%	-145.48%	41.76%	n.a.	-1.4	0.90x	-1.00x	-0.30x	-0.20x			
McPhy Energy SA	EUR	0.033	✗	✗	✓	-26.69%	13.31%	-258.34%	33.90%	n.a.	-1.97	-	0.40x	0.30x	0.10x			
ITM POWER, INC.	GBP	0.22	✗	✗	✓	-18.24%	3.32%	-1853.13%	78.44%	n.a.	-6.09	0.60x	5.81x	0.10x	0.00x			
Bloom Energy	USD	5.39	✗	✗	✓	-5.34%	14.16%	-10.95%	5.92%	n.a.	0.4	8.70x	4.40x	4.67x	3.96x			
thyssenkrupp nucera AG & Co. KGaA	EUR	1.34	✗	✗	✓	3.13%	2.48%	66.60%	4.47%	n.a.	0.09	1.80x	0.60x	0.80x	0.70x			
Average						-15.73%	14.66%	-321.58%	29.32%	n.a.	-3.12	2.33x	2.34x	1.56x	1.37x			
Median						-18.34%	11.61%	-127.32%	25.20%	n.a.	-1.33	1.00x	2.40x	1.35x	1.00x			

Appendix 18 - SWOT Analysis

STRENGTHS	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

Appendix 19 - Historical M&A Analysis

YEAR	TRANSACTION	BUY/SELL	TARGET	COUNTRY	BUSINESS UNIT	RATIONALE
1969	JV	-	Permela 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	-	WT	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).

ESG Model Explanation

Our ESG model evaluates **59 key metrics** across DNR and **18 industry peers**, structured under the **Environmental (40%)**, **Social (40%)**, and **Governance (20%)** pillars. The 40% weight for Environmental reflects its critical role in **DNR's product innovation** and **long-term sustainability**, particularly in **hydrogen technologies** and **water treatment**. Social is equally weighted at 40% due to its **direct impact on operational success**, especially through **supply chain management** and **stakeholder engagement**. A **strong Social performance** also **enhances Environmental initiatives**, particularly in driving **supply chain ESG compliance**. Governance is weighted at 20%, as DNR already **maintains strong oversight** through **ESG-linked compensation**, **shareholder transparency**, and **independent committees**, making E and S more influential on long-term sustainability goals. Each **quantitative metric** is benchmarked against **industry averages** and **min/max values**, receiving a **positive or negative rating based on performance relative to peers**. For example, DNR's Scope 3 emissions per revenue (46,226 tCO2e/M€) far exceed the peer average (5,962 tCO2e/M€), leading to a low score in this category. **Qualitative metrics** (Y/N values) are assessed based on **peer adoption rates**, with **higher scores for industry-leading practices**; for instance, DNR is the only company with ESG-linked executive compensation, scoring high since 94% of peers lack this initiative. The **final ESG score** is calculated as a **weighted average of the three pillars**, providing a holistic evaluation of DNR's sustainability performance and highlighting strengths while identifying key areas for improvement, such as renewable energy adoption, emissions reduction, and supply chain ESG integration.

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) (tCO2e/M€)	37.02	36.95	28.1	0.02	83.4	7	6.00
	Scope 1+2 Emission Per Revenues (Market-based) (tCO2e/M€)	39.60	39.34	16.19	0.01	46.81	4	
	Scope 3 Emission Per Revenues (tCO2e/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	

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	

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	
Shareholder Rights (22.5%)	ESG Linked Compensation	✓	✓	94% ✗ - 6% ✓	✗	✓	8.5	7.83
	Cumulative Voting System	✗	✗	100% N	✗	✗	6	
	Dual Class Unequal Voting Rights - Common	✓	✓	72% ✗ - 28% ✓	✗	✓	7.5	
Audit (15%)	Percent Ownership Required for Special Meeting	5%	5%	12.5%	5%	25%	10	7.33
	Audit Board Committee Size	3	3	4	2	8	5	
	Percent of Independent Directors on Audit Committee	100%	100%	93%	50%	100%	10	
CSR Strategy (15%)	Independent Chairperson on Audit Committee	✓	✓	100% ✓	✓	✓	7	7.38
	Percent of Independent Directors on CSR Committee	67%	67%	78%	0%	100%	7	
	CSR/Sustainability Committee	✓	✓	17% ✗ - 83% ✓	✗	✓	7.5	
	SDGs Target Policy	✓	✓	38% ✗ - 63% ✓	✗	✓	7.5	
	UN Global Compact Policy	✓	✓	29% ✗ - 71% ✓	✗	✓	7.5	

Full Name	Roles	Committees				Background & Contribution
		Strategic	Control, Risk & ESG	Nomination & Remuneration	Related Parties	
Federico De Nora (1968)	Chairperson	✓				- Major shareholder and key leader in DeNora's strategic direction - Began his career in 1988 in the planning and corporate control department of Norfin S.r.l.
Paolo Enrico Dellachà (1968)	CEO	✓				- Leads company operations and business growth - Master's degree in Electronic & Management Engineering (Milan Polytechnic)
Stefano Venier (1963)	Non-Executive Director					- CEO of Snam S.p.A. Brings expertise in energy infrastructure - Master's degree in Energy and Environmental Management and Economics (Scuola Superiore Enrico Mattei)
Paola Bonandrini (1974)	Non-Executive Director		✓			- Provides risk oversight and ESG strategy input - Graduated with honors in Electronic Engineering (State University of Genoa)
Maria Giovanna Calloni (1964)	Independent Director				✓ (Chairperson)	- Specializes in financial oversight and corporate governance - Master's in Industrial Engineering (Milan Polytechnic) - MBA with honors (INSEAD)
Mario Cesari (1967)	Non-Executive Director	✓		✓		Experienced in corporate strategy and financial governance
Alessandro Garrone (1963)	Non-Executive Director					Executive Vice Chairperson at ERG S.p.A. with a background in energy
Michelangelo Mantero (1970)	Non-Executive Director					Experienced in industrial operations and management
Giorgio Metta (1970)	Independent Director					Specialist in AI and robotics, adding tech expertise
Teresa Naddeo (1958)	Independent Director		✓ (Chairperson)		✓	Experienced in ESG and corporate governance
Elisabetta Oliveri (1963)	Independent Director			✓ (Chairperson)	✓	Strong governance and compliance background
Giovanni Toffoli (1968)	Independent Director		✓			Specializes in corporate finance and ESG reporting

Appendix 22 – ESG Targets

- 100% **new** products assessed by **scorecard**
- 100% facilities certified **ISO 14001**
- 100% of site certified **ISO 45001**
- 100% **existing** products assessed by **scorecard**
- 100% facilities certified **ISO 50001**



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

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



SUSTAINABLE DEVELOPMENT GOALS