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BUY

DNR

Price:	€ 6.90
Target Price:	€ 10.63
Upside:	54.05%
Dividend yield:	1.44%
Total shareholders' return:	55.49%

Stock Data

Market Capitalization:	1,392 m
Shares outstanding:	201.7m
Exchange:	Italian Stock Exchange
Ticker:	DNR.MI
52 week H/L:	€ 6.86 - € 16.17
Average daily volume:	158,6k
TTM:	-50.46%
YTD:	-8.12%

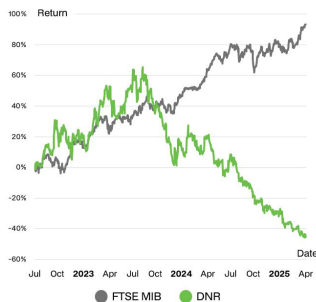
Stock Performance

(IPO-June 30 t12022)

Absolute: -46.53%

Related to FTSE MIB

Exhibit 1- Historical Stock Performance



Shareholders Structure

Insider ownership:	63.95%
Free float:	22.1%

Exhibit 2 - Financial Highlights

[m€]	2023	2024E	2025E	2026E	2027E	2028E	2029E
Revenues	856.4	864.3	900.6	958.1	1,030.5	1,122.7	1,231.1
Growth	0.4%	0.9%	4.2%	6.4%	7.6%	8.9%	9.7%
EBITDA	176.5	151.5	163.9	176.8	195.6	217.9	241.4
EBITDAm	20.6%	17.5%	18.2%	18.5%	19.0%	19.4%	19.6%
EPS (€share)	1.15	0.40	0.43	0.47	0.52	0.59	0.65
DPS (€share)	0.12	0.10	0.11	0.12	0.13	0.15	0.16
NFP	-72	-63	-50	-34	-11	12	40
NFP/EBITDA	-40.2	-40.2	-30.1	-19.9	-0.06	0.06	0.17
FCFF	86.1	35.9	39.6	43.5	51.0	58.9	68.5
FCFF yield	4.3%	1.8%	2.0%	2.2%	2.5%	2.9%	3.4%
ROCE	13.0%	10.2%	10.2%	10.1%	9.9%	10.5	10.6%
EV/EBITDA	11.4	13.3	12.3	11.4	10.3	9.2	8.3

Source: Team Estimation

Two is a deal, three is a steal

INVESTMENT SUMMARY

We initiate our coverage on Industrie De Nora (DNR) with a **BUY** recommendation and a TP of **€10.63** per share, consisting of an **upside of 54.05%** from the closing price on 5th February 2025 (€6.90 per share) and a **1.44% dividend yield**.

With a **market cap of €1,392m** and **€864m** in revenues in FY24E, DNR is a **global electrochemical company of excellence** which combines cutting-edge technologies with unmatched operational efficiency and innovation. We believe that **DNR's stock is substantially undervalued**, as the market fails to recognize the company's true value by not adequately considering its key fundamentals. Indeed, **DNR is often mischaracterized as a primarily green hydrogen (gH2) player, overlooking both the reliability and potential of its electrode and water segments** (Exhibit 2). Listed since June 2022, DNR initially reached momentum-driven valuations in the 12m following its IPO, due to strong expectations surrounding the gH2 market, reaching an all-time high of €21.20 per share in July 2023. Starting in late 2023, as **the hype around green hydrogen faded**, DNR's stock naturally adjusted, mirroring the decline of pure players in the sector, as shown by the strong correlation between stock prices (Exhibit 3). However, **what began as a justified correction has now turned into an overreaction and fundamentals are overlooked**, hiding the company's true value as a technologically leading player in the global electrochemistry industry.

Given its strong fundamentals and overlooked value, DNR could become the **perfect target for a PE-backed take-private deal** if the market continues to undervalue it for too long.

THE ELECTROCHEMICAL STANDARD

Founded in 1923, DNR combines a century of expertise with breakthrough innovation under the leadership of the De Nora family and a skilled management team led by the CEO Paolo Dellachà since 2010. Leveraging on its technological expertise in electrode technologies (ET), **DNR successfully expanded beyond industrial chemical production into water purification (WT) and clean energy transition solutions (ETR)**. In the way of diversification, in 2001 DNR entered in a JV with Thyssenkrupp, establishing Thyssenkrupp Nucera (NCH), listed in 2023) which now operates in chlor-alkali and hydrogen technologies, integrating DNR's electrodes into its electrolyzers and strengthening their long-standing partnership in the sector. DNR's innovation engine is powered by a **robust R&D pipeline** (22% vitality index, FY23) and **vast patent portfolio** (280 families, 2,800+ extensions), creating significant entry barriers and a long-term tech-based competitive advantage, which has been clearly confirmed by our extensive industry-expert base research (Annex A4). This technological leadership underpins its resilience, reflected in a **diversified revenue mix in FY24E that ensures counter-cyclicality**, with 53.62% in ET, 34.10% in WT, and 12.28% in ETR.

GROWTH BEYOND THE SURFACE

While the market appears to be anticipating a hydrogen boom (which would certainly unlock additional upside for DNR), **currently the stock's upside is primarily driven by substantial business opportunities embedded in its two core segments: ET (3.86% revenue CAGR in FY24E-35E) and WT (6.04%)**. Leveraging on its technological competitive advantage, DNR has room to acquire market shares in several segments it has been able to enter through organic growth, stimulated by constant and intense R&D, and external growth, to integrate complementary technologies. Therefore, (i) electronics, (ii) electrowinning, (iii) swimming pools, (iv) water purification, and (v) contaminant removals are all businesses we indicate as key enablers of expected future performance, and which will significantly contribute to the stock upside. **We strongly support that our BUY recommendation is sustained by DNR's core business (ET and WT) and we see gH2 (ETR) as an enormous opportunity which the company proved to be ready to embrace as the natural evolution of its electrode legacy.**

HITTING THE VALUE CHAIN'S SWEET SPOT

DNR **strategically positions itself at a critical stage in the supply chain, that of components**. By focusing on the essential role electrodes play in overall system performance, **the company leverages on its core competitive advantage to achieve higher margins** (19.48% EBITDAm vs 17.42% for peers in FY20-23). **This strategy ensures constant cash flow generation** (FCFF €60.5m in FY22-30E) **yet significant CAPEX** (avg. €78.4m in FY22-30E), which are mainly allocated to ETR, supported by consistent cash flows from ET and WT. ETR is expected to contribute positively to FCFFs by the end of the decade through a projected revenue growth at a 19.4% CAGR in FY24E-30E. Moreover, **DNR's strong balance sheet position** (€63.1m net cash in FY24E) **provides a solid foundation** for navigating macroeconomic uncertainty, offering reliability and confidence to investors while ensuring steady dividend distributions year after year (avg. payout ratio 41.1% FY21-23).

WORLDWIDE, WORTH WHILE

"To sell to the world, you need to go out into the world to sell." (Niccolò De Nora)

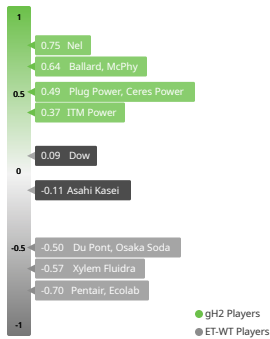
Since the 1980s, under the visionary leadership of the founder's son, Niccolò De Nora, **the company has pursued a strategic path towards internationalization**. This initiative was carried forward by the current management, culminating in a balanced revenue split across the different regions reached in FY23 (34% EMEA, 33% Americas and 33% APAC).

DNR's global presence ensures its proximity to customers, enabling delivery of electrodes tailored to the unique demands of each region. It also underscores the company's innovative edge, as its exposure to a range of markets enables it to remain at the forefront of external discoveries and advancements, cementing its leadership position. **DNR's internationalization strategy has also bolstered its performance in services** (11% revenue CAGR in FY20-23): making up 32% of turnover in FY23, services provide recurring revenue, adding stability and reinforcing resilience in DNR's business model. For customers operating plants 24/7, this proximity is a clear competitive advantage, offering unmatched responsiveness and reliability, far surpassing less well-equipped competitors.

A FREE TICKET TO THE HYDROGEN FUTURE

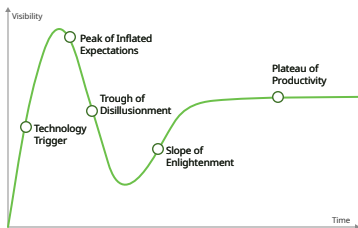
DNR stock presents an attractive risk-reward profile, combining leadership in its core businesses of ET and WT with the exposure to the fast-growing hydrogen segment (15.86% revenues CAGR in FY25E-FY35E). As a first mover since FY21, DNR has committed significant investments (€35.2m avg in FY22-26E) to secure its role as a key player in the energy transition. **When DNR went public in 2022, market expectations for DNR were high**, inflated by the assumption of rapid regulatory support and government subsidies. **Instead, the ETR sector has faced delays** caused by the lengthy authorisation processes necessary for renewable energy projects and lower-than-expected growth in demand on account of technology costliness. These hurdles have dampened the optimistic projections, leading to a recalibration of growth expectations.

Exhibit 2 - Price Correlation Matrix



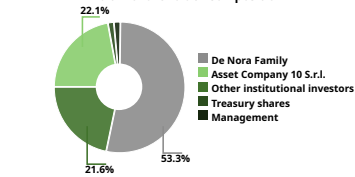
Source: Factset, Team Estimation

Exhibit 3 - Beyond the Slope of Enlightenment



Source: Company Data, Team Elaboration

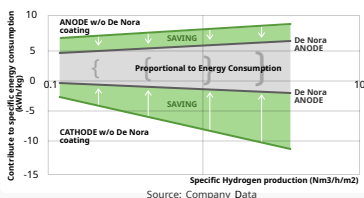
Exhibit 4 - Shareholder Composition



100% of the shares of Asset Company 10 S.r.l. (21.6%) are held by Snam

Source: Company Data

Exhibit 5 - Energy Savings with DNR Electrodes



Source: Company Data

This situation reflects the natural lifecycle of emerging technologies, as outlined in the Gartner Hype Cycle (Exhibit 3), which captures the interplay of high expectations and subsequent disillusionment. Therefore, we believe that DNR's commitment, fuelled by substantial CAPEX, will serve as the engine propelling the company to spearhead innovation over the next decade.

VALUATION

Our **€10.63 per share TP** relies on the **DCF model**, the most suitable approach given DNR's unique positioning across multiple markets and its segments' distinctive business model. In addition, the **TP includes a premium obtained through a real option valuation to capture the potential upside of the highly uncertain and volatile ETr business unit**. Furthermore, given its strategic and financial relevance, we **valued DNR's 25.85% stake in NCH2 separately through a DCF approach**. Finally, we **double-check the soundness of our TP with a market-based relative valuation**, to ensure a robust and well-rounded assessment, for both DNR and its JV's business units.

Valuation method	DNR + 25.85% stake in NCH2	Real option on ETr	TP
DCF	€10.28 per share	60.35 per share	€10.63 per share
Relative valuation	€10.27 per share		

BUSINESS OVERVIEW

INTRODUCTION

With a market cap of €1.39 billion and a projected revenues of approximately €864m in FY24E, DNR is a R&D-intensive group operating in the electrochemical sector. Founded in 1923, the company set a benchmark in the industry by introducing the first commercialized mixed metal oxides (MMO) electrodes in 1969 (*Annex A1*), replacing less-efficient soluble graphite anodes in applications where performance and durability are critical. **DNR develops, manufactures, and markets electrodes and related products (*Annex A4*)** across a wide range of industries, including primary chemical production, electronics, water purification, galvanic processes, energy storage, and infrastructure corrosion protection. A robust **aftermarket business** (32% of FY23 revenue) ensures recurring returns from servicing, maintenance, and replacements. The Group operates through 24 subsidiaries across ten countries, supported by five R&D centres in Italy (1), the USA (2), and Japan (2). Its proprietary technologies are employed in over 100 countries (*Exhibit 6*), backed by more than 280 patent families and 2,800+ territorial extensions. Producing over 400,000 m² of coated electrodes annually, DNR is the leading global supplier of activated cathodes and anodes, cementing its position as a key innovator in the electrochemical space.

OPERATING SEGMENTS

DNR operates through three core segments (*Exhibit 8*): Electrode Technologies (53.62% of FY2024E revenue), Water Technologies (34.1%), and Energy Transition (12.28%).

Electrode Technologies (ET) - DNR's Electrode Technologies (ET) segment, is the company's core business (see Annex 1). Electrodes are solid metal components designed to conduct electricity and enable electrochemical reactions, they are coated with catalytic materials containing iridium, ruthenium, rhodium, palladium, and platinum (platinum-group metals, PMG). DNR's 300+ proprietary catalytic coating formulations form its core competitive edge, **reducing activation energy for electrolysis and extending electrode lifespan** for up to eight years (*Exhibit 6*).

Water Technologies (WT) - In 2015, DNR broadened its reach by acquiring Severn Trent's Water Purification business, establishing its Water Technologies (WT) segment. The division serves both the public and the private-sector, offering (i) saltwater swimming pool disinfection anodes (31.9% of WT 2024E revenue), (ii) electro chlorination systems (31%) producing chlorine on-site for industrial and municipal use, which slashes transport of hazardous chemicals, and (iii) advanced disinfection and filtration solutions (34%) for drinking water and wastewater, capitalizing on the growing demand for contaminant removal technologies (including PFAS). In December 2023, DNR sharpened its focus on key markets by deciding to exit the non-strategic Marine Technologies business (3%), a process set to be completed in 2025.

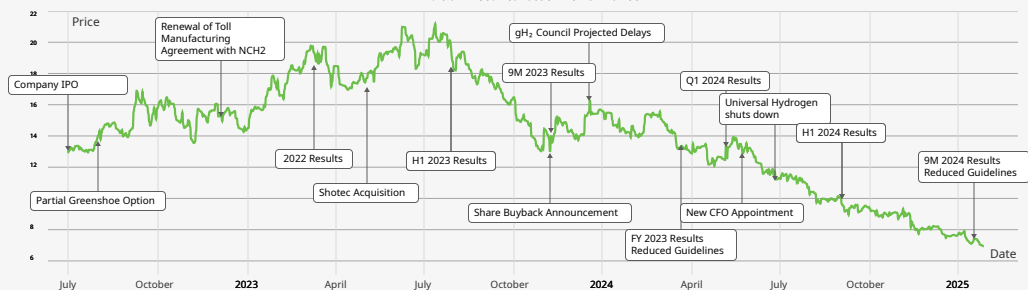
Energy Transition (ETr) - Launched in 2021, the Energy Transition (ETI) segment underscores DNR's **bold gamble on its future role as an enabler of decarbonization**. Leveraging on its electrochemical expertise, DNR develops cutting-edge electrodes and small scale electrolyser technologies for green hydrogen production via alkaline water electrolysis (AWE)—a clean solution for hard-to-abate industries and energy storage (*Annex A2*). Its proprietary coatings are engineered to meet renewable energy demands, offering durability against current reversal and resilience to frequent shutdowns, ensuring seamless integration with intermittent power sources.

Corporate Strategy

TECHNOLOGICAL LEADERSHIP THROUGH R&D

DNR maintains **technological leadership** in ET (>50% market share), Pool Technologies (>80%), and Disinfection & Filtration (top five globally) through its unrelenting **focus on innovation and high-quality, low-TCO products**. Backed by over a century of expertise and protected by 280 patent families, the company establishes significant entry barriers for competitors and deters upstream vertical integration through products that are unmatched in performance and competitiveness. The company consistently allocates approximately 2% of its annual revenues to R&D, emphasizing product excellence to reinforce its market leadership and explore new growth avenues. This approach is exemplified in two areas: (i) Core enhancements, **bringing continuous improvement to key technologies** such as the DSA anode, and, (ii) **Innovative development** (22% vitality score index in 2023). Here the focus is on reducing LCOH to reinforce DNR's position in the ETr value chain and enhancing the WT offering by leveraging advancements in electrochlorination technology. This strategy is further reinforced by targeted acquisitions (e.g. Shotec in 2021) and partnerships (e.g. Hydrolite in 2023) which integrate new capabilities and access to valuable patents.

Exhibit 6 - Historical Stock Performance



Source: Factset, Team Elaboration

Exhibit 7 - Business Segmentation FY2023

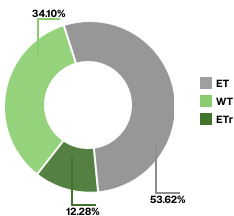


Exhibit 8 - DNR vs Mkt Geographical Distribution

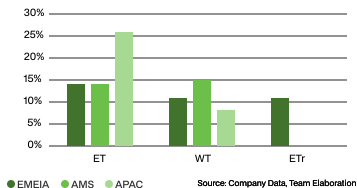
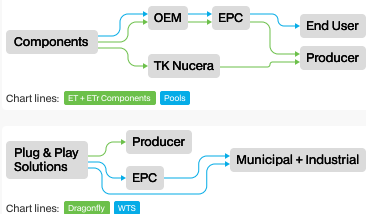


Exhibit 9 - DNR Value Chain



"Plants are needed to sell DSA® anodes, and DSA® anodes are needed to sell plants" Niccolò De Nora

Exhibit 10 - BCG Matrix

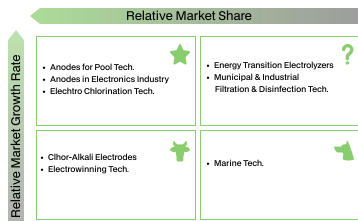


Exhibit 11 - DNR Aftermarket

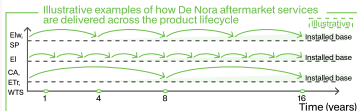
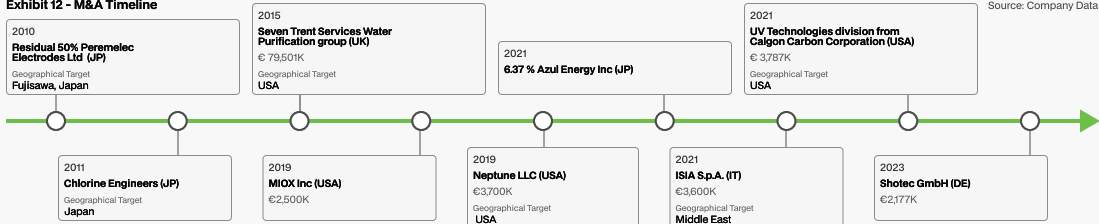


Exhibit 12 - M&A Timeline



DIVERSIFICATION AND COUNTER-CYCICALITY

DNR addresses revenue fluctuations inherent in component for machinery sales, such as overstocks or reduced demand for new installations, through **diversifying its market exposure**. By adapting its core electrode technology to serve different markets, the ET segment caters to the chlor-alkali (70% of ET FY2024E revenues), electronics (13.5%), and specialties industries (16.5%), **mitigating the impact of cyclical downturns**. To extend its reach, DNR has pursued vertical integration through its 2015 acquisition of Severn Trent Group's Water Purification segment. This move transitioned DNR from a component supplier to a provider of finished plug-and-play solutions in the disinfection & filtration and electro chlorination segments. Through this, DNR has leveraged on inorganic growth to build up its WT portfolio, acquiring Calgon Carbon's UV Technologies and ISIA S.p.A in 2021 (Exhibit 13)), introducing UV, ozone, and chlorine dioxide technologies to tackle chlorine-resistant contaminants.

INTERNATIONALIZATION

DNR strategically positions its production facilities in regions with strong demand (Exhibit 9) and market opportunities, leveraging on proximity to customers to ensure timely delivery of products and services. This approach creates a competitive advantage for the company since most of its competitors are mainly concentrated in one geographical area, while DNR can seize opportunities wherever they arise. This strategy has resulted in an almost perfect revenue balance across EMEA (34% of FY2023), AMS (33%), and APAC (33%). A key milestone was acquiring full ownership in Permelec Electrode in 2009 - 2010 (previously a 50% joint venture) and the related purchase of Chlorine Engineers from Mitsui, solidifying its global dominance in ET and strengthening its position in Asia through Mitsui's local influence.

MANUFACTURING EXPANSION THROUGH ORGANIC GROWTH

DNR is expanding capacity in Italy, Germany, China, USA, Brazil, and Japan, with flexible manufacturing designed to adapt to market trends. Ready to pivot across product lines, the company is positioned to **capitalize on the expected growth** in hydrogen demand while **remaining agile** for future opportunities. Their strategy includes modernizing production lines with advanced automation, unifying machinery to streamline operations, and reducing OPEX through standardized processes. The company is building its Italian gigafactory in collaboration with Snam (Annex A3), backed by €63.25 million in public funding. This organic growth is supported by a strong free cash flow (FCF) in DNR's solid business, with minimal reliance on debt.

Focus on ThyssenKrupp Nucera Joint Venture (JV) (25.85% of total shares)

In 2001, DNR and ThyssenKrupp formed Udenora S.p.A., a joint venture combining DNR's electrochemical expertise with ThyssenKrupp's engineering strengths to promote chlor-alkali plant business. Now operating as ThyssenKrupp Nucera (NCH₂), with a market capital of €1168 million, it is as DNR's largest customer (25.85% of 2024E revenue) across both the chlor-alkali and green hydrogen segments. Under a Toll Manufacturing and Services Agreement, DNR supplies critical components for NCH₂'s chlor-alkali electrolyzers and large-scale AWE projects, including key initiatives like Neom in Saudi Arabia and H2 green steel in Europe.

VALUE AND REVENUE DRIVERS

Powering Efficiency and, Lowering Total Cost of Ownership (TCO): DNR electrodes are the beating heart of electrolyzers, powering the electrochemical reactions that drive production plants. With a sharp focus on efficiency, DNR has cut energy consumption - an average of 40% of client OPEX (source NCH2 report) - by 30% over the past decade through (i) its patented coatings, which improve durability and minimize maintenance costs, and (ii) zero-gap cell configurations. In the latter case, direct contact between the anode, cathode, and separator enables a more compact system design that reduces capital expenditure. Renowned for its reliability, **DNR delivers critical high-value components that are essential to the overall process and are difficult to replicate, enabling the company to achieve high margins** (EBITDA margin 2024E 22.5% for ET and 16% for WT) is the undisputed choice for clients demanding efficiency and performance.

Reliability That Never Rests: Maintenance and services tied to DNR's technologies play a crucial role, contributing to 32% of FY 2023 overall revenue and boosting profitability. These services include periodic maintenance and the replacement of electrodes with next-generation models designed to improve process performance and meet evolving material regulations. DNR ensures rapid response through 12 service teams worldwide and a network of authorized representatives - critical for 24/7 plants where downtime means halted production. **Recurring maintenance and service contracts (Exhibit 12) help DNR forecast its revenue with greater precision** by adding credibility to its backlog, which in turn enables more effective resource allocation. A strong backlog reinforces financial stability and drives sustainable growth.

COSTS DRIVERS

Raw materials represented 37% of OPEX in 2023, heavily impacted by the volatile pricing of noble metals such as PGMS, which are critical for electrode coating manufacturing. To meet these challenges, the Group embarked a plan to reduce noble metal usage in catalytic coatings by 4% by 2026. **DNR mitigates dependence on raw materials** through (i) partial contract indexation (~50% linked to raw material prices), (ii) annual contracts covering over 80% of strategic materials, (iii) safety stock management, (iv) aligning procurement with production forecasts (enabled by a predictable backlog), and (v) supplier diversification.

Personnel costs represent 24% of OPEX in 2023, reflecting DNR's strategic investment in a skilled workforce, which combines chemical, process, mechanical, and manufacturing expertise.

Expert Verdict: DNR's R&D Powers Its Market Dominance

DNR's R&D is its strategic backbone. Our multi-angle analysis, based on 21 expert interviews (15 industry specialists, 6 former employees), leverages complementary perspectives to validate R&D strength (Annex A5). Former employees provide first-hand insights into innovation processes, while external experts evaluate DNR's technological positioning in the broader market. Both groups independently converge on a single conclusion: **DNR's R&D stands on three key pillars:**

- Sustained Technological Leadership** - Electrode coating is De Nora's key technological differentiator, securing a lasting competitive edge. As part of its expansion strategy, "De Nora integrates innovations from its global sites," scaling through gigafactories and reinforcing market leadership.
- Strong Intellectual Property** - "By the time patents expire, De Nora has already developed the next-gen technology," ensuring continuous innovation. "The patent team scans thousands of innovations globally," translating insights into IP strategy.
- Strategic M&A Expansion** - "DNR's M&A strategy is focused on vertical integration and tech expansion rather than financial engineering," enhancing diversification and "executing one of the most strategically sound M&A approaches."

Both internal and external perspectives confirm: "DNR holds a technological a competitive edge well beyond double digits." This R&D-driven advantage lowers Total Cost of Ownership ensuring long-term market leadership.

Exhibit 13 - SWOT Analysis

Strengths

Leadership in electrode technologies
Strong R&D
Diversified exposure to end-markets
Strategic joint venture and partnerships

Opportunities

Green hydrogen focus, reducing LCOH with innovation
Water treatment growth, addressing global water scarcity
Strategic collaborations
Regulatory support and incentives

Weaknesses

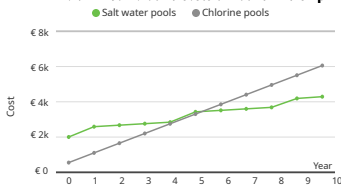
Dependence on key raw materials
Public funding reliance for hydrogen growth
High capital requirements for innovation and infrastructure

Threats

Macroeconomics uncertainties
Supply chain tensions leading to scarcity/inflation in raw materials
Slower-than-expected penetration of Green Hydrogen

Source: Team Elaboration

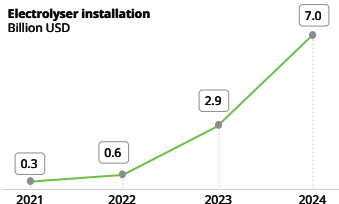
Exhibit 14 - Cumulative Costs of Pool Ownership



Source: Team Elaboration, Fixr

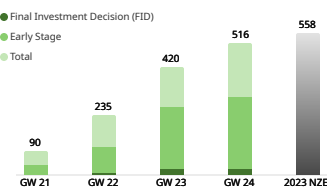
Exhibit 15 - gH₂ Investments

Electrolyser installation
Billion USD



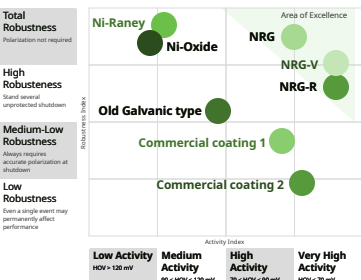
Source: IEA Global Hydrogen Review 2024

Exhibit 16 - Announced Electrolyser Projects by 2023



Source: IEA Global Hydrogen Review 2024

Exhibit 17 - Electrode Performance Benchmark



Source: Company Data

Industry Overview

ELECTRODE TECHNOLOGIES MARKET

The ET market is in a state of transforming, driven by industry shifts in chlor-alkali, electronics, and electro-winning market. **Chlor Alkali - essential goods with a stable, GDP-driven growth:** The \$53b CA industry plays a critical part in the production of chlorine and caustic soda (NaOH). These chemicals are used in water treatment, pulp and paper processing, and to produce organic and inorganic chemicals. PVC manufacturing alone accounted for 35% of the 2023 chlorine demand, fuelled by growth in the construction sector and urbanization trends. **Rising aluminium demand from the automotive sector drives NaOH consumption,** projected to grow to 83m tonnes in FY24, alongside uses in textile finishing and organic chemistry. **Stricter regulations,** including Europe's mercury phase-out and, in the US, EPA's asbestos ban, are pushing the industry towards membrane cell technology, now the dominant method (80% of global capacity). This shift replaces older diaphragm and mercury-based processes, cutting energy consumption and environmental impact. Regionally, APAC leads the market with a 60% share, propelled by construction and agricultural PVC demand, while North America and Europe face slower growth due to high energy costs. Long term, the chlor alkali market is expected to grow in line with GDP, driven by rising demand for chlorine and NaOH across key industries.

Electronics - powering the future of digitalization and electrification: In the electronics sector, electrodes are vital for producing copper foil (9.9% CAGR FY23-FY32), a key material for printed circuits and lithium batteries, as well as for electrochemical copper plating (6.3% CAGR FY24-FY31) in high-density interconnection (HDI) printed circuit boards (PCBs). Following a decline in 2023 caused by supply-demand imbalances during the COVID-19 pandemic, the global PCB manufacturing industry is now on a recovery trajectory. This rebound is fuelled by digitalization trends, including 5G expansion, IoT applications, connected vehicles (IoV), and AI integration. Furthermore, the global shift towards decarbonization is driving significant growth in lithium battery demand, particularly in renewable energy and EV sectors. **Electrowinning - efficient and sustainable metal extraction:** Elw, a technology used in modern metal recovery, especially for nickel, cobalt, and copper, is expected to grow at a CAGR of 7.1% FY23-FY32, supported by the mining industry's increasing focus on efficiency.

WATER TECHNOLOGIES MARKET

Water is a high-value asset, and demand for advanced water treatment is accelerating. DNR's WT unit operates across three key segments: (i) saltwater swimming pools, (ii) industrial and municipal disinfection and filtration (D&F), and (iii) on-site electro chlorination.

The pool market is going saltwater: The salt water pool technology market is projected to grow at a CAGR of 8.2% FY24-FY30, driven by rising disposable income, GDP growth, and shifting consumer preferences. Nearly 50% of new pool installations now use saltwater chlorination owing to its operational benefits and the lower total cost of ownership (Exhibit 14) (source: DNR competitor). While these systems require higher initial investment, they significantly reduce annual chemical costs, as salt is cheaper than chlorine. Automated systems cut maintenance, while preventing chlorine spikes and algae outbreaks. Additionally, environmental and health benefits (including reduced chemical dispersion, less eye and skin irritation, and no strong chlorine smell) are accelerating their adoption. While demand surged during the staycation boom, recent industry destocking has temporarily slowed growth. The market is, however, expected to regain momentum, supported by the long-term advantages of saltwater systems.

Clean water, rising market - D&F industry grows by 6%: Water disinfection and filtration technologies are key to ensuring safe drinking water, treating industrial wastewater, and protecting the environment by eliminating harmful contaminants. The global water treatment market is projected to grow at a CAGR of over 6% FY23-FY30, driven by stricter regulations, technological advancements, and increasing water quality concerns. Governments worldwide are enforcing tougher standards in US and Europe, with regulations like EPA's Safe Drinking Water Act and the Water Framework Directive accelerating the adoption of advanced disinfection technologies. Hybrid solutions are gaining traction as industries seek higher pathogen elimination efficiency while reducing environmental impact. The push for PFAS remediation is reshaping regulatory priorities. EPA set a 4 ppt limit for drinking water in 2024, giving utilities five years to comply, with estimated cleanup costs of €1.5B annually, driving demand for advanced treatment technologies. Meanwhile, IoT-enabled smart water management systems, which cut OPEX by up to 30%, are being adopted to boost efficiency and minimize water waste. Regionally, APAC and India lead growth, driven by urbanization and major infrastructure projects like India's National Mission for Clean Ganga. US and Europe remain strong with established infrastructure and regulatory backing, while water scarcity in the Middle East is accelerating investment in desalination and disinfection technologies. In LATAM, particularly Brazil, increasing infrastructure investment is tackling waterborne diseases and urban demand.

Electro chlorination - scalable, on-site disinfection: As a key segment within disinfection and filtration, the electro chlorination market is projected to grow at a CAGR of 6.34% FY24-FY30 (source: GII), driven by its efficiency in water disinfection, scalability, and the safety of on-site chlorine generation, which eliminates the risks of transporting hazardous chemicals. Advances in technology continue to improve energy efficiency and automation, reducing OPEX and simplifying maintenance. While challenges linked to the corrosiveness of sodium hypochlorite and environmental compliance requirements still persist, technological innovation should address and mitigate these issues.

ENERGY TRANSITION MARKET

Green hydrogen market - rising costs, growing doubts, massive opportunities: The ETR unit manufactures electrodes for gH₂, a cornerstone technology in the transition to net-zero emissions. By enabling energy storage, decoupling production from use, and decarbonizing hard-to-abate industries, gH₂ is critical to achieving net-zero targets set for 2050 by the EU and US. Despite its transformative potential, gH₂ faces headwinds, as the relative levelized cost of hydrogen (LCOH) is significantly higher than for grey hydrogen, as it is driven by costly renewable energy and electrolyzers. Macroeconomic pressures like inflation, geopolitical instability, and supply chain disruption have delayed project execution, with capital costs for installed electrolyzers rising by 20% in 2023 due to higher material, labour, and contingency costs. Global electrolyser capacity hit 1.4GW in FY23, with 700 MW added that year (Exhibit 15). China led the capacity expansion, representing 80% of growth through state-led initiatives like Sinopec's 260-MW Kuqa project. Europe added 12%, driven by energy independence goals and frameworks such as IPCEI Hy2Infra, Hydrogen Bank, and the Net-Zero Industry Act, although fragmented national priorities have slowed progress. In the USA, the Inflation Reduction Act drives optimism countered by delays and political uncertainty. Emerging players like Saudi Arabia (Neom) and India (AM Green) focus on export-oriented gH₂ and ammonia projects to meet demand in Europe and East Asia.

However, the sector faces a phase of disillusionment, as sluggish market demand and high LCOH limit adoption. By 2023, only 4% of announced gH₂ projects had reached a final investment decision, according to the International Energy Agency (IEA) (Exhibit 16). Even so, if all announced projects are completed, electrolyser capital costs could decline by 30% by 2030 through economies of scale and mass manufacturing. Global gH₂ capacity is forecast to grow significantly, reaching 90 GW by FY2030 (a 50-fold increase from May 2024 levels) underpinned by decarbonization undertakings, regulatory clarity, and sustained government support.

Competitive Analysis

INDUSTRY ATTRACTIVENESS

Low Threat of New Entrants: Capital and Expertise Create a Moat - Entering the electrode production industry presents high barriers due to the massive capital investment required for advanced manufacturing facilities and specialized equipment. The market is R&D-intensive, dominated by patented technologies and decades of expertise from established players like DNR. These incumbents benefit from economies of learning, making it extremely difficult for new entrants to replicate their technical know-how and industry depth. In short, experience and innovation set the rules, leaving little space for new competition.

The diagram illustrates the distribution of various chemical treatments within a 25% xylem cross-section. The xylem is divided into segments labeled with percentages: 10%, 12.5%, 15%, 17.5%, 20%, 22.5%, and 25%. Treatments are indicated by arrows and labels: INECS at 15%, xylem at 17.5%, FLUIDRA at 20%, and DUPONT at 22.5%. Logos for Asahi KASEI, Dow, PERMASCAND, OCEANA SIDA, and PENTAIR are also shown.

Stacked bar chart showing Revenues in million euros from 2013 to 2023. The Y-axis represents Revenues in million euros (€ 900m, € 800m, € 700m, € 600m, € 500m, € 400m, € 300m, € 200m, € 100m). The X-axis represents Years (2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023). The legend indicates three categories: ET (dark green), WT (light green), and ETy (grey).

Year	ET (€ m)	WT (€ m)	ETy (€ m)	Total (€ m)
2013	250	0	0	250
2014	250	0	0	250
2015	280	80	0	360
2016	280	130	0	410
2017	270	140	0	410
2018	290	160	0	450
2019	290	190	0	480
2020	280	190	0	470
2021	340	240	20	600
2022	460	240	120	820
2023	450	240	120	810

Exhibit 22 - Competitors' EBITDA m dynamics

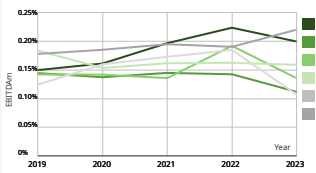


Exhibit 23 - Net Capex, Change NWC and CC

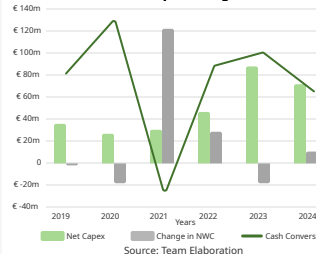


Exhibit 24 - Capex projections



Exhibit 25 - Services/New Installation vs EBITDA m ET & WT

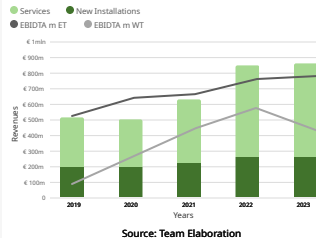


Exhibit 26 - Annual Compounded Returns of Metals

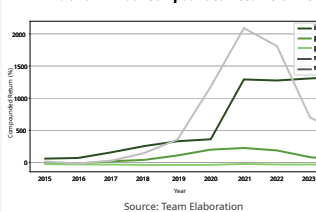
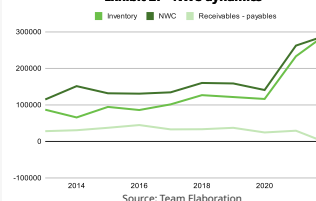


Exhibit 27 - NWC dynamics



ET is structured into **Chlor-Alkali, Electronics , and Specialties & New Applications** (CA, EI, and S&NA), each benefiting from unique macro trends. **CA** (69.83% of ET revenue in FY24) soared by 7.86% CAGR (FY19-24E), reaching €323.6m, fuelled by a volume expansion with additional boost from platinum group metals (PGM) price inflation. **EI** advanced at 6.38% CAGR (FY19-24E), hitting €62.82m in FY23. This segment rode a pandemic-fuelled overstocking wave driven by increasing demand for consumable devices, soaring with a 24.18% CAGR (FY19-22) to €88.28m in FY22, before normalizing at a -15.65% CAGR (FY22-24E). The broader 6.38% CAGR (FY19-24E), however, highlights the segment's resilience and solid long-term expansion potential. In FY19, the **S&NA** line experienced a sharp 49.02% revenue decline, primarily due to the completion of a major electrowinning project with Norilsk. However, starting in FY20, the segment began to recover, achieving a CAGR of 34.94% (FY20-24E). A significant boost came in FY22, when revenue surged by 82.61%, driven by new orders from Norilsk Nickel, increasing electrode sales in the USA and APAC, and strong demand for systems and plant electrodes in Japan. This momentum contributed to the segment's overall expansion, with its share of De Nora's ET revenue growing from 8.1% in FY20 to 16.62% in FY24E. After this surge, revenue trends stabilized, consolidating the segment's position within the ET business.

WT comprises **Swimming Pools (SP)** and **Water Treatment Systems (WTS)**, shaped by distinct industry trends and technological advancements. **SP** thrived on the **staycation effect** (see the Business Overview section), with Italy and US subsidiaries capitalizing on lockdown-driven home investments. This segment expanded at a remarkable 57.44% CAGR (FY20-22) reaching €161.75m (2.48x compared to the FY20 value), then normalized to €94.02m in FY24E, reflecting a post-pandemic decline at a negative 23.76% CAGR (FY22-24E). However, the underlying trend of consumer preference for salted swimming pools remains intact (12.62% CAGR FY19-24E). **WTS** expanded at a 5.17% CAGR (FY19-24E), mainly driven by (i) **Electro chlorination**: +33.63% in FY22, fuelled by larger bagworks (on-site hypochlorite generation in the US and electro chlorination technology in APAC), and (ii) **Disinfection & Filtration**: +27.6% in FY23, supported by major ozone projects (Middle East), increased gas-fed installations (US, EMEA), and large-scale deep filtration (Saudi Arabia, including one of the world's largest desalination plants).

ET segment surged by 157.91% in FY21, with DNR sustaining its momentum and achieving an **extraordinary growth** from €39.3m to €102.24m over the following two years. This exceptional result reflects DNR's ability to seize the hydrogen boom, securing high-profile projects such as NEOM in Saudi Arabia and key initiatives in Germany. By riding the initial wave of market hype, DNR capitalized on the early-stage momentum of the hydrogen economy. As the market transitioned into the **disillusionment phase** of the Gartner hype cycle, ETR revenue eased back to a more moderate 3.8% growth in FY24E. **Services** posted an 11.13% CAGR (FY20-23), with strong contributions from ET and WT and growing impact from ETR: (i) **ET**: +9.03% CAGR, reaching €192.87m in FY23, driven by an expanding customer base and evolving process requirements, (ii) **WT**: +15.96% CAGR, achieving €75.61m in FY23, supported by stable recurring business and higher EBITDA m (8-10% above new equipment sales), and (iii) **ETR**: reaching €2.3m in FY23, with extremely positive expectations for revenue growth and diversification (*Exhibit 25*).

TURNING VOLATILITY INTO VALUE: PROFITABILITY THROUGH STRATEGIC PRECISION

DNR consistently outperformed peers, delivering **best-in-class margins** (19.48% avg. EBITDA m FY21-23 and 10.50% net profit margin) compared to competitors (17.56% avg. EBITDA m and 7.80% NPm) reversing prior weaknesses (avg. EBITDA m FY16-20: 14.14% vs 16.03% for peers) (*Exhibit 22*).

ET: The group's crown jewel, consistently **outperforms peers** (19.48% avg EBITDA m in FY21-23 vs 17.56% for competitors) due to its strategic **positioning in the most profitable stage of the supply chain, that of performance-value-adding components**. While **WT** (16% EBITDA m in FY24E) and **ETR** (0.10%) weigh on overall margins, ET's strong performance more than offsets this impact, allowing DNR to maintain profitability levels that consistently exceed industry averages and reinforce its market leadership.

WT: This segment's **marginality has been experiencing strong growth** (25.42% EBITDA CAGR in FY20-24E vs 8.97% revenue CAGR). Since its establishment in FY15 (through the acquisition of Severn Trent Water Purification and the Severn Trent De Nora JV) this BU has exhibited volatile margins, struggling to break even, with an average EBITDA m of just 2.82% (FY16-20). However, DNR's management turned the tide, **leveraging on synergies to elevate profitability** through (i) integrating know-how, (ii) optimizing cost and quality supported by a centralized procurement strategy, and (iii) an expanded product portfolio. This work boosted DNR's WT EBITDA m (avg. 16.10% FY21-24E), peaking at 19.27% in FY22. The aforementioned acquisition, coupled with the increased debt for its financing, halved the ROCE (-53.28% yoy FY14-15). Recovery was gradual yet steady, with ROCE stabilizing at a high single-digit average of 10.10% (FY15-24E).

ETR: As a newly established business unit, it **experienced volatile margins** of 5.61% in FY22, peaking at 12.20% in FY23 amid the hydrogen market hype. Meanwhile, DNR started to invest heavily in its galfactory, driving up costs before margins dropped to 0.10% in FY24E. That year, **inefficiencies relating to the ramp-up of production capacity** further impacted on profitability. DNR's EBITDA m **has never turned negative, unlike other players in the hydrogen industry** (-131.68% avg EBITDA m in FY22-23). This advantage stems from its strategic decision to avoid the more margin-compressed engineering, procurement, and construction business model embraced by competitors. DNR has instead positioned itself mainly as a component's supplier, capitalizing on its established know-how and existing assets to enter the market with agility and efficiency. Notwithstanding the challenges, DNR remains competitive with **room for further growth**. WT is making significant progress (35.49% EBITDA m CAGR in FY16-24E), although ETR's early-stage performance (5.97% avg EBITDA m in FY21-24E) is under pressure but expected to improve, benefitting from a scale up and a contextual servicing stream expansion.

LIQUIDITY IN PLAY, STABILITY AT BAY

DNR maintains a **strong financial structure**, backed by a solid balance sheet (€63.07m net cash in FY24E). Its cash conversion is currently constrained by two main factors, i.e. heightened CAPEX (€73.98m avg in FY23-24E) for business expansion and increased inventory levels (23.98% inventory/revenue in FY15-20 vs 33.13% in FY21-24E) to mitigate macroeconomic volatility and supply chain disruptions (*Exhibit 23*).

INVESTING BOLDLY, SCALING SMARTLY

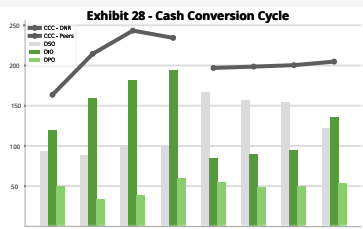
Even under this pressure, DNR consistently converts part of its operating profit into FCF. In FY24E, regardless of its **huge investment**, its cash conversion (FCFF/EBITDA) stood at 23.66%, reflecting solid resilience even under expansionary effort. Moreover, DNR effectively covers these cash outflows through its cash flow from operations while still generating FCF annually. Over the medium term (FY25E-35E), a projected reduction in CAPEX implies a **significant improvement in cash conversion**, reaching 48.1% by the end of the period. On the investment side, DNR's historical net CAPEX averaged around 6% of revenue (FY15-22). In FY23, DNR's CAPEX surged to 10.20% of revenues (2.5x the avg. in FY15-22), marking a strategic shift towards expansion and modernization. The company guided CAPEX at €290m over FY24E-26E (60% ETR, 40% ET&WT), underscoring sustained investments in hydrogen technology (*Exhibit 24*). However, DNR plans to lower this guidance in its FY25E Industrial plan to avoid overcommitting to hydrogen projects, given recent delays in the market.

DNR's **NWC requirements remain high** (33.39% avg NWC/revenues in FY15-23), primarily driven by critical raw materials (PGMs) and WIP in the WT segment (27.37% avg inventory/revenue in FY15-23) (*Exhibit 27*). In FY21-22, DNR increased its inventory by 1.27x in response to macroeconomic events that disrupted supply chains and drove up raw material costs. This led customers to overstock, triggering a similar reaction from DNR, with its inventory peaking at 37.84% of revenue in FY21. As a result, DNR's **cash conversion cycle (CCC)** averaged 213.95 days (FY20-23), significantly above the 103.68-day peer benchmark, largely due to high days of inventory outstanding (DIO, 76.52% of CCC) (*Exhibit 28*). While this policy raises inventory-related risks, management adjusts inventory levels based on confirmed backlogs, except in the WT business unit. **WT requires WIPs to operate, whereas SP relies on catalogue products. This strategy helps mitigate supply chain disruption and ensures business continuity for WT.** The inventory management strategy coupled with a pass-through effect has successfully driven strong top-line growth (30.67% revenue CAGR in FY20-22) and sustained EBITDA m (20.54% avg in FY21-22), enabling DNR to deliver strong results despite the challenges in FY21 and FY22.

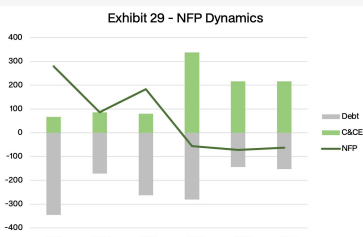
All adjusted EBITDA figures have been restated to include the item "occurred and release of provision for risks & charge," as per management's guidance during the H1 2024 earnings call.

Insight:PGMs and pass-through

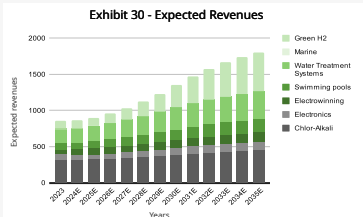
A key competitive edge for DNR lies in its mixed metal oxide coatings, where 50% of product pricing is indexed to precious metals (a scarce and highly valuable resource). To manage commodity volatility, DNR systematically applies pass-through clauses across its contracts, linking prices to raw material costs (PGMs) at the time of signing. This widespread mechanism ensures that price fluctuations are transferred to customers, allowing DNR to (i) benefit from rising metal prices and (ii) stabilize margins, mitigating supply chain disruptions that could impact profitability.



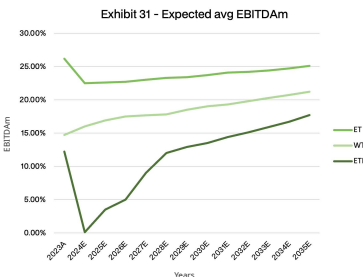
Source: Team Elaboration



Source: Team Elaboration



Source: Team Elaboration



Source: Team Elaboration

ROCK-SOLID FOUNDATION, READY TO STRIKE

DNR reported an excellent net cash average of €63.86m between FY22-FY24E, despite a DPS of €0.10 in FY22 and €0.12 in FY23, a share buyback of €43.41m (Nov. 2023 to Apr. 2024), and a €19.36m management incentive plan (see ESG section). C&E remained stable over the decade, augmented by €196.7m in IPO proceeds in FY22. DNR applied these funds to deleveraging, cutting debt by €150m and thereby reinforcing its previously mentioned strong NFP (Exhibit 29). With such robust liquidity, DNR is well positioned to seize any emerging opportunity through both organic investments (such as further H₂-related CAPEX without incurring new debt) and inorganic moves, like strategic M&A whenever the right deal arises. This steadfast balance of prudence and forward thinking puts DNR on track to thrive in an evolving market.

Future Analysis

REVENUES PROJECTIONS - CAPTURING MARKET MOMENTUM

We forecast an overall revenue growth at 7.73% CAGR (FY24E-30E) (Exhibit 30), underpinned by three core growth catalysts: (i) **increasing market demand for DNR's offer**, particularly in electronics, swimming pools, and WTS, which are poised to gain traction in the latter half of the decade, (ii) **a growing stream of after-sale services**, leveraging on the substantial installed base built up earlier in the decade, and (iii) **market share expansion in key strategic regions**, with a particular focus on the Middle East (WT) and Asia (ET) (Exhibit 30). A period of stabilization is expected to follow, driven by a mid-single-digit growth (5.21% CAGR FY30E-35E), progressing towards the terminal value (TV), which has been computed according to the perpetuity formula, setting a 3% FCFF terminal growth rate in line with revenue growth (Annex C4). Given that DNR's three business segments are driven by distinct market dynamics, we have estimated their growth trajectories individually, according to the specific drivers influencing each sector.

Starting from ET, Chlor-alkali is set to **convert its expanded production capacity** in North America, Middle East and China into revenue starting in 2026, aligning from FY28 with the projections based on **Molecule by molecule** (Annex C1), our proprietary framework that accurately estimates the market's growth at a 3.49% CAGR for FY24E-35E. **Electronics and electrowinning** will benefit from favourable market conditions, with DNR **poised to capture market share from 2026**, leveraging on its decades of expertise in electrode technologies and its proven ability to offer superior customer services compared to new, inexperienced competitors. Our estimations project a single-digit CAGR of 7.62% for electronics and 5.88% for electrowinning during FY25E-30E.

In WT, **swimming pools anodes** (8.50% CAGR FY25E-30E) **are a key asset** in DNR's portfolio. Regulations set increasingly demanding high standards, and the rising trend of saltwater pools also presents a target for the company during this period, with DNR technology being applicable to about 50% of new pools (source: DNR competitor). Similarly, **WTS** (7.96% CAGR FY24E-30E) **are stimulated by stricter water scarcity regulations**. DNR is well positioned to address the **PFAS technological race**, as it is already developing advanced technologies that meet these evolving standards. **Cash flows will thus grow in the coming years**, initially in the US and later on also in Europe, where regulations move more slowly but competition is weaker and our projections are in part driven by the opportunity to acquire market share.

The ETR segment experienced a wave of early-decade euphoria, inducing the company to issue hyper-booming guidance (€500-600m by 2025, announced in 2022, as well as a 40% CAGR FY24-26, announced in 2024 and already set to be revised). However, **growth has slowed significantly below normalization after the boom** (57.71% CAGR FY22-FY24E vs 11.96% CAGR FY24E-26E), **reflecting the challenges of scaling in this emerging market** caused by uncertain sector regulation and final investment decision delays on the part of plant owners, who are substantially new adopters. Our projections assume a **recovery in growth** (booming 23.23% CAGR FY26E-30E), also driven by after-market services on the way. However, we do not expect ETR revenue to reach the initially forecasted levels by FY30 (€306.8m in revenue forecast in FY30E, lower than previous expectations), also due to the completion of NEOM project expected in FY26E – one of the main revenue drivers for both DNR and NCHZ – which are both well-positioned to capture further opportunities. It is worth underlining that DNR's MoU with Asahi Kasei, signed on 11th September 2024, will ensure a solid partner and bring in revenue streams from the Asian market for this segment as well as generating business unrelated to NCHZ.

MARGINS EXPECTATIONS - JUICY PROFITS ON THE WAY

DNR's technological competitive advantage and the diverse factors driving the three business units meant that we analysed the margins differently in each segment (Exhibit 31). Over the next decade, margin growth (2.58x FY35E adj. EBITDA vs FY24E figure) will be driven by (i) **continuous innovation in coating technology**, (ii) **efficiency in supply chain management and operational performance**, and (iii) **a high market share in its core business with room to explore different sectors**. Moreover, the balance between new installations and after-sale services plays a pivotal role, as services typically yield significantly higher margins than installations.

In details, we expect ET to maintain its **best-in-class** margins, driving up profitability across the whole company. We project the adj. EBITDAm to grow from 22.5% in FY24E to 25.1% in FY35E, reflecting the different mix expected for the upcoming years in terms of new installations and services, as already mentioned.

WT is positioned for **significant margin expansion**, narrowing the gap with industry leaders. Our projection is an adj. EBITDAm of 16% in FY24E, with an expected EBITDAm of 1.33x in FY35E, vs FY24E figure. This improvement is expected to raise DNR to the upper tier of the sector in terms of profitability (21.2% EBITDAm FY35E).

ETR faces near-term **profitability pressure** due to **ongoing heavy investments**, particularly for its new gigafactory (GF). We forecast the adjusted EBITDAm to average 4.4% between FY24E and FY27E, reflecting this capital-intensive effort. DNR is expected to go beyond its FY23 levels (adj. EBITDAm of 12.2%) by FY29E (adj. EBITDAm projected at 12.9%), benefitting from the GF contribution and then slowly growing to 17.9% by FY35E. This result will be achieved through **upcoming scale economy effects** as DNR leverages on its **first-mover advantage** and **matures into a leading player in the ETR market**.

CASH CONVERSION - RESILIENT THROUGH STRUCTURAL CHALLENGES

With a **net cash position of €63m** in FY24E, DNR enters the period on a solid financial footing. However, its financial position will be challenging until the end of the decade. Focusing on ET and WT, our projection is an average cash conversion of 48.7% in FY24E-30E, reflecting DNR's strong operational consistency and reliability. However, the **extraordinary ETR CAPEX related to the GF** is expected to impact the company significantly, lowering the overall average cash conversion to 26.56% over the same period. Nevertheless, these **investments will be entirely funded through operating cash flow** from DNR's core business, further reinforcing its financial stability. Regarding inventory, macroeconomic events impacted the beginning of the decade, requiring substantial investments which increased the **inventory/turnover ratio** from 25.28% in the period FY13-20 to 34.17% in FY21-23. We see this event as contingent and, therefore, expect the company to concentrate on decreasing the **ratio down to 30%** as from FY24E, thus easing the burden on cash conversion.

[m€]	FY2023	FY2024E	FY2025E	FY2026E	FY2027E	FY2028E	FY2029E	FY2030E	FY2035E
Revenues	856.4	864.3	900.6	958.1	1,030.5	1,122.7	1,231.1	1,351.4	1,800.5
growth yoy	0.42%	0.92%	4.20%	6.39%	7.56%	8.94%	9.66%	9.77%	5.21%**
ET growth yoy	-1.95%	-0.17%	3.09%	3.59%	4.07%	4.49%	4.71%	4.75%	3.38%**
WT growth yoy	-13.89%	1.66%	4.21%	7.50%	7.77%	8.17%	8.63%	8.63%	3.84%**
ETR growth yoy	139.63%	3.80%	9.00%	15.00%	20.00%	25.00%	25.00%	23.00%	9.62%**
EBITDA*	176.5	151.5	163.9	176.8	195.6	217.9	241.4	267.6	390
EBIT*	136.9	114.4	124.3	133.7	149.3	167.3	186	206.8	309
NP*	231.1	80.3	87.5	94.2	105.5	118.5	131.9	147	221
EBITDAm	20.61%	17.53%	18.20%	18.45%	18.98%	19.41%	19.61%	19.81%	21.68%
EBITm	15.99%	13.23%	13.80%	13.95%	13.98%	14.91%	15.11%	15.31%	17.18%
NPm	26.98%	9.29%	9.71%	9.83%	10.23%	10.55%	10.72%	10.87%	12.27%
ROCE	12.99%	10.15%	10.17%	10.05%	9.94%	10.52%	10.61%	10.67%	9.26%
Cash Conv.	48.80%	23.66%	24.16%	24.60%	26.07%	27.04%	28.37%	32.00%	38.93%
NFP/EBITDA	-0.42	-0.42	-0.31	-0.19	-0.06	0.06	0.17	0.25	0.60
D/E	0.16	0.16	0.18	0.20	0.22	0.25	0.28	0.31	0.51

*adjusted items **FY2031E-FY2035E CAGR

Exhibit 32

	First Stage	Second Stage	Third Stage	TV
Years	2024E-26E	2027E-30E	2031E-35E	> 2035E
Sales CAGR	5.29%	9.45%	5.21%	3.0%
Avg. EBITDAm	18.06%	19.45%	20.76%	21.68%
% on EV	5.8%	9.4%	18.3%	66.5%

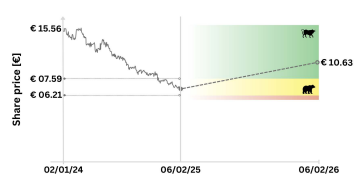
Source: Team Elaboration

Exhibit 33

WACC	9.01%	Fama & French Two-Factor Model
Cost of equity	9.89%	$K_E = r_f + \beta_E \times ERP + \beta_{SMB} \times SMB$
Risk-free rate	2.48%	Return of AAA 10Y government bonds
Beta	1.0385	Obtained through a multi-linear regression of DNR historical returns (weekly data since IPO in June 2022) against STOXX600 index and a custom portfolio which accounts for SMB obtained through the difference between the returns of MSCI Europe Small Cap and MSCI Europe Large Cap indices.
Market Size β_{SMB}	1.3360	
Market premium	5.71%	Equity risk premiums provided by A. Damodaran for each region where DNR operates (EMEA, APAC, and AMES), weighting them based on their relevance in terms of revenue contribution.
SMB	1.11%	1990-2024 average value of the SMB factor for a European Index portfolio, accounting for premium return of small-cap stocks vs large-cap stocks, yearly data (annual European SMB from K. R. French data library).
Tax rate	27.90%	Sum of Italian corporate (IRES) and regional production (IRAP) tax rates.
Cost of Debt	4.29%	Obtained adding to the risk-free rate an Interest Coverage Ratio Spread (Average market borrowing spread for companies with similar ICR, A. Damodaran) and a Country Risk premium (associated with country's default risk weighted by area in which DNR operates).

Source: Team Elaboration

Exhibit 34 - Bull & Bear Scenarios



Source: Team Elaboration

Exhibit 35 - Black and Scholes Model

Real Option Valuation: Black & Scholes Model	
Spot Price [m€]	146.3
Strike Price [m€]	219.5
Time to Maturity [y]	5
Risk-free rate	2.48%
Risk-free rate c.c.	2.45%
Variance	45.18%
d1	0.5709
d2	-0.9398
N(d1)	0.7133
N(d2)	0.1736
Call premium [m€]	70.7
Contribution to TP [€]	0.35
In the money probability	15.94%

Source: Team Elaboration

Exhibit 36 - Montecarlo Simulation



Source: Team Elaboration

Exhibit 37 - Relative Valuation Summary

	BU	Multiples	Regressor	Result Multiple	Result
DNR	ET	EV/EBITDA	EBITDAm FY24E	10.79	
	WT	EV/EBITDA	Sales g FY23-26E	10.35	8.28€
	ETr	EV/Sales	Sales g FY23-26E	0.81	
NCH2	CA	EV/EBIT	R&D/Sales FY24E	11.69	25% TP
	AWE	EV/Sales	GW Prod. Capacity	0.28	1.99€
				Total	10.27€

Source: Team Elaboration

VALUATION

We start our coverage on DNR with a **BUY recommendation and a TP of €10.63 per share**, consisting of an upside of 54.05% from the closing price on 5th February 2025 (€6.90 per share) and a 1.44% dividend yield. (Annex D)

Our valuation relies on the DCF model, the most suitable approach given **DNR's unique positioning across multiple markets and its segments' distinctive business model**. In addition, the TP includes a premium obtained through a real option valuation to capture the potential upside of the highly uncertain and volatile ETR business unit. **While our DCF projections related to this segment reflect the current outlook of the energy transition market, the option allows us to account for its untapped potential, recognizing the opportunity in a sector that remains unpredictable but could experience exponential growth**. Furthermore, given its strategic and financial significance for DNR, we evaluate NCH2 25.85% stake separately through a DCF approach.

We also double check the soundness of our TP with a market-based relative valuation, to ensure a robust and well-rounded assessment, for both DNR and its JVs' business units, leading to a €10.27 per share.

DCF

The four-stage DCF valuation (Exhibit 32) is based on a **9.01% WACC** (Exhibit 33), estimated using the Fama and French two-factor model, and a terminal value derived through a perpetuity approach with a 3% terminal growth rate, following a structured computation of FCFs over FY24E-35E (Annex D2).

The breakdown of the four stages is as follows:

Investing for the future (FY24E-26E) : During this phase, DNR will invest significantly in the hydrogen sector, mainly leveraging on cash flows from its ET and WT segments to support the transition. This strategy will lead to substantial capital outflows, strongly impacting on its free cash flows generation.

Riding the waves (FY27E-30E) : DNR is expected to grow in this period through (i) increased after-sales services from the expanding post-COVID installed base for ET and WT, (ii) increasing regulatory pressure concerning water treatment (e.g. water contaminants like PFAS), and (iii) expansion of market share gain driven by its technological competitive advantage, particularly its strong geographical presence and unique value proposition.

Consolidating its position (FY31E-35E) : Following a decade of expansion, marked by its entry into the innovative and potentially disruptive hydrogen sector, DNR is expected to benefit from a period of stabilization to solidify its position across its business segments.

Sailing with the tide (TV) : In the terminal stage, DNR is expected to capitalize on its established and diversified portfolio, benefiting from its exposure to environment-related businesses that align with the global trend towards sustainability. This portfolio includes: (i) the resilient and foundational chlor-alkali business, (ii) high-growth areas such as electronics, electrowinning, and water treatment, which are increasingly driven by regulatory and environmental pressure, and (iii) the hydrogen sector, where DNR, as a first mover, holds significant potential to capture upside as the shift towards environmental solutions gains momentum (Exhibit 34).

REAL OPTION VALUATION - UNLOCKING HIDDEN VALUE

The DCF well stands with the ET and WT business dynamics, and their stable and predictable cash flows. However, **it fails to account for DNR's strategic flexibility, particularly in scaling its ETR segment at an optimal future time**. As a result, **it does not capture the optionality embedded in the hydrogen business, where expansion timing is highly dependent on market conditions, regulatory incentives, and technology costs**.

To bridge this gap, we apply a real option valuation to quantify ETR value on top of the DCF valuation of ET and WT. Indeed, **investors buying DNR's stock are, in effect, positioning themselves long in a call option on the company's hydrogen business unit (ETr)**.

To quantify this optionality, we leveraged on the Black & Scholes model, estimating the volatility of ETR by constructing a custom portfolio of six global hydrogen companies, diversified across geographies and technologies. Using Markowitz's modern portfolio theory, we built a minimum variance portfolio being conservative, obtaining a risk-adjusted volatility consistent with the dynamics of emerging energy markets.

Calibrating the strike price: balancing volatility and arbitrage-free pricing

The strike price was set at 1.5x the spot price, ensuring a balance between:

Volatility constraints: a **lower strike would imply an unrealistic probability of exercise**, which would be incoherent with the high degree of volatility embedded in this sector.

Arbitrage-free pricing: a **higher strike would create mispricing**, violating the assumptions of Markowitz's framework and the Black-Scholes model, **creating an arbitrage opportunity**. The 1.5x strike ensures a probability of exercise which maintains both theoretical consistency and market realism.

This real option premium is not an arbitrary adjustment, but a financially justified enhancement that reflects ETR's true contribution to the value of DNR. This approach allows us to integrate market volatility and strategic flexibility into our valuation model, ensuring a more robust and investment-relevant assessment.

RELATIVE VALUATION

To validate our DCF-based TP, we cross-checked it against the market value through a relative valuation analysis.

Since no other company fully mirrors DNR's unique business model and the three segments are driven by different value drivers, we applied a sum-of-the-parts (SOTP) approach, identifying peers based on the key value and financial drivers specific to each business segment (Exhibit 37, Annex D6).

ET market is driven by distinct end-industries and strong proprietary expertise aimed at maximizing performance and minimizing total cost of ownership (TCO). For this reason, peers were selected on the basis of (i) geographical presence, (ii) materiality, ensuring that the company focuses on proprietary mixes protected by patents to increase technology efficiency, (iii) same stage in the value chain (components), and (iv) lower TCO, by cutting upfront CAPEX while preserving quality and increasing efficiency. Moreover, market cap, revenues, EBITDAm, and Altman Z score were all taken into consideration when we selected the comparables. Since EBITDA margin aligns with the strong link between profitability and value creation, driven by operational efficiency and a focus on high-value products, we conduct a linear regression of EV/EBITDA against EBITDA margin, resulting in an implied 10.79x EV/EBITDA for the ET segment.

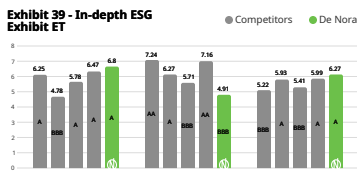
WT is a fragmented market involving players with a wide market scope and technology manufacturing companies. DNR's peers were selected according to i) plug and play solutions, ii) product portfolio alignment, and iii) market exposure balance. To fine-tune our comparable selection model, we also considered a series of financial metrics, i.e. EBITDAm, CAPEX, sales CAGR, EBITDA CAGR, and the Altman Z score. Data show that the WT market is priced on sales CAGR, driven by the significant growth trend over the upcoming years, as highlighted in the Industry Overview section. The EV/EBITDA vs sales growth regression effectively reflects the fact that peers are priced according to strong growth expectations, resulting in an implied 10.35x EV/EBITDA for the WT segment.

ETr market is driven by (i) sustainable energy solutions, (ii) technological advancements in hydrogen production and (iii) cost-effective and scalable solutions. Since DNR is a components producer, its peers were selected according to demand for innovative components in the green and renewable sectors. These sectors are still facing a period of market uncertainty but embed significant potential for future growth. Following this, we selected the comparables based on the following criteria: i) similar market scope, ii) tech and innovation focus, iii) reliance on proprietary technologies, iv) market cap, v) revenue, and vi) sales CAGR. The EV/Sales multiple, combined with the sales CAGR factor, captures the early-stage nature of ETR peers, which often operate with negative EBITDA but strong growth potential in a rapidly evolving sector, leading to an implied 0.81x EV/Sales. Moreover, we cross-checked our DCF valuation of NCH2 at market values, too. We opted again for a **SOTP relative valuation** given the different drivers between its chlor-alkali and hydrogen (AWE) segments, based on proper comparables per each segment (see Annex D6). Overall, we obtained **€10.27 per share** (Exhibit 37).

Exhibit 38 - ESG Ratings

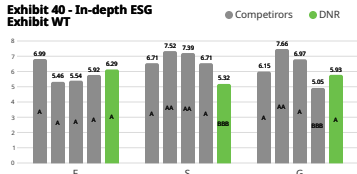
	Morningstar	MSCI	LSGE
De Nora	22.2	AA	B
Asahi Kasei	39.40.41	AAA	B
Xylem	22.9	AAA	A-
ITM Power	32.2	AA	C

Exhibit 39 - In-depth ESG Exhibit ET



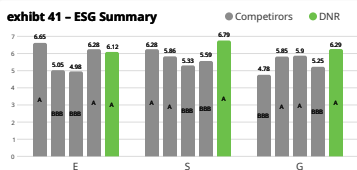
Source: Team Estimates, Refinitiv

Exhibit 40 - In-depth ESG Exhibit WT



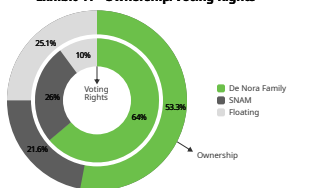
Source: Team Estimates, Refinitiv

Exhibit 41 - ESG Summary



Source: Team Estimates, Refinitiv

Exhibit 41 - Ownership/Voting Rights



Source: Company Data

Exhibit 42 - ESG Summary

	Industry 2023	Best 2023	Worst 2024
Target Emissions	93%/- 7% $\checkmark$	$\checkmark$	$\checkmark$
Emissions/Red. Target %	50.00%	46.00%	31.25%
Green Capex	33%/- 66% $\checkmark$	$\checkmark$	$\checkmark$
Salary Gap	18	35.44	16
Women Employees	20.00%	24.28%	21.84%
Corruption Due Diligence	46%/- 54% $\checkmark$	$\checkmark$	$\checkmark$
Board Size	13	11	9
Board Gender Diversity, Percent	30.00%	29.67%	37.00%
Executive Compensation Policy	100%/- 0% $\checkmark$	$\checkmark$	$\checkmark$

Source: Team Estimates, Refinitiv

Exhibit 43 - Company Organisational Chart



Source: Company Data

ENVIRONMENTAL, SOCIAL & GOVERNANCE (ESG)

Based on an in-depth analysis of 39 key industry metrics (13 for environment, 15 for social, 11 for governance) (Annex F1) sourced from Refinitiv, MSCI ESG Ratings (Exhibit 38), non-financial reports, press releases, and sustainability disclosures, **DNR is best-in-class for environmental matters, while in social it lags behind its peers and in governance it brings up some considerations about financial leadership stability and legal risk management.** We began our analysis to obtain DNR's ESG score by examining 108 ESG drivers, and then whittled out any with incomplete data or not relevant to DNR's industry dynamics, finishing up with our 39 key metrics. We then compared DNR against 12 peers across the ET, WT, and ET sectors (Exhibit 39, 40, 41), selected on the basis of similarity in i) business model, ii) technology and value-adding components, iii) geographic footprint, and iv) company size. Based on these 39 metrics and following MSCI criteria, **DNR's final ESG score is A for environmental factors, BBB for social factors and A for governance factors, resulting in a total ESG score of A, which is in line with its industry peers.**

Environmental performance: rating A

DNR boasts **strong performance in the environmental pillar (rating A)** compared to its peers. The company is best-in-class for its i) low emissions and waste ii) rigorous resource policy across its environmental supply chain, ensuring that raw materials, energy, and waste are handled sustainably from sourcing to disposal, and, iii) significant investments in green capex (Exhibit 42). **DNR performs particularly well in emissions-related metrics**, outclassing its peers for CO2 equivalent emissions in Scope 1 (direct greenhouse gas emissions from the company, accounted for 5,519.51 tons) and Scope 2 (indirect emissions from the generation of purchased electricity, steam, heating, and cooling, accounted for 1,796.21 tons). **DNR produces 16 metric tonnes of CO2 equivalent emissions per employee, well below the industry average of 70 metric tonnes of CO2 per employee.** DNR has, moreover, set an emission reduction target of 50%, significantly outperforming the industry average of 31%. Regarding its environmental supply chain policies, DNR has implemented a **supplier code of conduct**, which requires its **5400+ suppliers worldwide to minimize waste generation**. In 2023, the company activated its Supply Relationship Management platform, to reduce low-value-added activities while ensuring transparency and compliance in procurement processes, setting DNR apart from its industry peers. The Group also achieves **strong scores in innovation, particularly in its green capex initiatives**. A key initiative is its Italian gigafactory, featuring photovoltaic facades that actively reduce air pollution, a self-sufficient rainwater system, and a biolake to boost biodiversity. The 25,000m² facility has a target of 2GW H₂ electrolyser production by 2030. Additionally, its **€10m investment in 360 Capital's 360 Life II fund supports sustainable innovation across Europe**. However, DNR's carbon footprint in hydrogen equipment manufacturing remains a key scrutiny point - greater transparency here would solidify its environmental leadership.

Social performance: rating BBB

DNR's social performance score of **BBB reflects its strong people strategy and community initiatives**. There is nevertheless **room for improvement, in particular to modernize its workforce strategy and address diversity and inclusion within leadership and decision-making**. The Group's social performance is in line with our benchmark average, reflecting both positive and negative aspects across key metrics. The company demonstrates a solid human capital management strategy, performing better than its peers in terms of local community impact. Key community-focused initiatives include i) a minimum wage policy, ii) robust anti-corruption due diligence (90% of employees given anti-corruption training), supported by ISO 3700 and the United Nations Global Compact, and iii) a working hours policy, where hours are flexible and designed to accommodate personal needs. Additionally, with its new gigafactory, the Group is creating 200 direct jobs and 2,000 indirect jobs. DNR actively supports local communities through philanthropic initiatives (e.g. charitable donations worldwide and disaster relief) and, working with organizations like Water.org, UNICEF, and the Red Cross, DNR is strongly involved in access to clean water and humanitarian aid. The Group is committed to diversity, equity, and inclusion, driven by its "Each for Equal" committee and achieved the **"Great Place to Work" certification in 2023 and 2024**. At 16%, employee turnover remains in line with industry standards (up by 1 percentage point on FY2023). Significantly, **DNR's gender pay gap is 18 points (according to the MSCI scoring system), significantly better than the 35-point industry average**, reflecting its progress in pay equity (Exhibit 42). Alongside all these positive aspects, DNR underachieves in some areas. The company's impact on job generation (employment creation) is at 4.2% (below the 9% of our benchmark). The lack of women in the decision-making process is a concern: **with only 20% of the workforce (avg of 29.5% female employees among peers) and just one woman among 16 C-level executives, DNR slightly underperforms against the industry benchmark of two women in leadership roles**. While this signals a turnaround after a two-year decline across the Group, the company is still far from achieving gender parity.

Governance performance: rating A

DNR's A score in governance pillar aligns with the industry average, reflecting a balance of strengths and weaknesses. While areas such as **financial leadership stability and legal risk management require attention**, the company demonstrates resilience, emphasizing **independent leadership, technical expertise, and performance-driven policies** that position it competitively within its sector. On the positive side, the **De Nora family maintains a 63.95% shareholding (Exhibit 41)**, exerting sizeable influence over the company's strategic direction and injecting a long-term focus in the volatile gH₂ sector. The company has upheld the recommendations of its Corporate Governance Code by appointing an **external CEO for the past 15 years**, ensuring clear separation between ownership and executive leadership, which strengthens objectivity and minimizes conflicts of interest. **DNR's Board of Directors consists of 12 members (Annex F2), 50% of whom are independent and 30% are women (avg of 23.5% in our peers benchmark).** **Board Directors have a substantial financial and industry expertise, and more than a half (50% of the women) have technical knowledge crucial to DNR's industry**, including the CEO of Snam, a minority shareholder, and four Directors have a financial background (20% of the women). The company has also worked on its executive pay policies. In 2023, senior management remuneration dropped to 4.1% of total personnel costs, down from 15.1% in 2022, which had been inflated by a €20m management incentive plan tied to DNR's IPO. Furthermore, 20% of the CEO's variable remuneration is linked to ESG objectives, backed by a Performance Share Plan that aligns executive pay with company performance. We believe that the company incentivizes its workforce by offering bonuses for patents, as well as through innovation awards and career advancement opportunities (Annex A5). There are, however, some **red flags. The family's considerable influence introduces potential risks**, such as resistance to change, limited engagement of future generations, and conflicts over control and direction. **Financial leadership instability has been a remarkable concern, with three CFOs departing within two years**, including one after just a year - an unsettling occurrence given the critical importance of stable financial oversight. Additionally, the company has faced **two legal disputes**: a 2015 patent issue with an IT company, and a case involving the incorrect design of a water treatment system for cruise ships. Although both cases were resolved amicably, they highlight the need for stronger IP protection and improved legal risk management.

INVESTMENT RISK

Leveraging on its strong fundamentals, DNR could emerge as a potential target for Private Equity Investors, opening the door to a **de-listing scenario as a mechanism to unlock its fair value**. The company's strong market positioning, solid cash flow generation, and current undervaluation make it an **attractive take-private opportunity**, aligning well with the investment strategies of PE funds targeting companies of this size. Its strong balance sheet (see Financial Analysis) also allows for increased leverage, further supporting this scenario. While the De Nora family's willingness remains a key variable, a free float acquisition or full buyout could accelerate value realization, shielding the company from market fluctuations and allowing for a more focused and strategic growth path. If such a scenario were to materialize, it could serve as a catalyst for a stock re-rating.

Exhibit 44 - Sensitivity Analysis

	ETR Revenues					
	10.27€	-20.00%	-15.00%	-10.00%	-5.00%	0.00%
EBITDAm	-10.00%	4.90€	5.80€	6.69€	7.59€	8.49€
	-8.00%	5.16€	6.08€	7.00€	7.92€	8.84€
	-6.00%	5.41€	6.36€	7.31€	8.25€	9.20€
	-4.00%	5.67€	6.64€	7.61€	8.58€	9.56€
	-2.00%	5.92€	6.92€	7.92€	8.92€	9.91€
	0.00%	6.18€	7.20€	8.22€	9.25€	10.27€

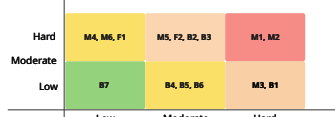
Source: Team Elaboration

Exhibit 45 - Sensitivity Analysis

	DNR Revenues					
	10.62€	-2.00%	-1.50%	-1.00%	-0.50%	0.00%
EBITDAm	-3.00%	7.02€	7.39€	7.78€	8.18€	8.60€
	-2.50%	7.31€	7.70€	8.09€	8.51€	8.94€
	-2.00%	7.61€	8.00€	8.41€	8.83€	9.27€
	-1.50%	7.91€	8.31€	8.73€	9.16€	9.61€
	-1.00%	8.21€	8.62€	9.04€	9.49€	9.95€
	-0.50%	8.50€	8.92€	9.36€	9.81€	10.28€
0.00%	8.80€	9.23€	9.68€	10.14€	10.62€	

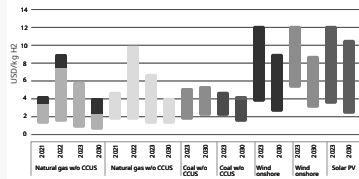
Source: Team Elaboration

Exhibit 46 - Risk Map



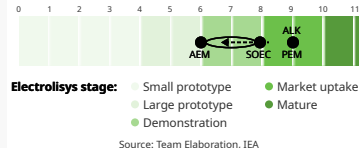
Source: Team Elaboration

Exhibit 47 - Hydrogen Production Costs



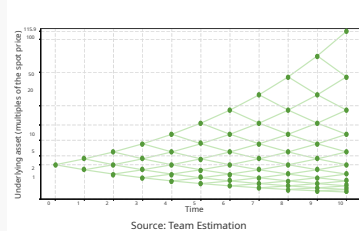
Source: Team Elaboration, IEA

Exhibit 48 - gH2 Technology Readiness Level



Source: Team Elaboration, IEA

Exhibit 49 - Binomial Tree for Call Option (10 Steps)



Source: Team Estimation

MARKET RISKS

Risks Related to High LOCH Compared to Fossil Fuels and Other Energy Carriers

Risk Description: Producing hydrogen from renewable sources currently costs 1.5 to 6 times more than fossil-based methods. Unsubsidized natural gas production ranges from \$4 to \$5 per gigajoule, whereas electrolytic hydrogen is typically much more expensive. Even a \$15/gJ delay in LOCH reduction could make gH2 economically unviable for many applications.

Risk Mitigation Strategies & Impact Assessment: This risk is beyond DNR's control and could lead to significant decline in sales if LOCH reductions are delayed past 2030. Nevertheless, DNR has consistently developed H2 technologies focused on reducing consumer OPEX, helping to narrow the price gap between gH2 and fossil fuels.

Risks Related to the Development of a Green Hydrogen Market

Risk Description: Critical delays threaten the future of the gH2 market, driven by (i) unclear demand, (ii) regulatory and financing uncertainties, (iii) high costs, and (iv) infrastructure gaps. Additionally, government or public subsidies are fundamental to the growth of the green hydrogen economy, and any shortfall in these subsidies could trigger a significant downturn. These challenges raise serious doubts about the feasibility of achieving the 90% annual growth to 49 Mtpa by 2030, as projected by the IEA.

Risk Mitigation Strategies & Impact Assessment: In a delay scenario, DNR risks its substantial CAPEX investment in the new gigafactory. With approximately €100 MM invested, these costs could become partially unrecoverable if the widespread adoption of gH2 is pushed beyond 2030.

Risks Related to Renewable Energy Resources

Risk Description: Renewable energy resources are inherently non-predictable as they depend on natural sources and weather conditions. Since gH2 production relies entirely on renewable energy - unlike blue hydrogen, a low-emission type reliant on natural gas - its production is directly tied to the availability of these resources.

Risk Mitigation Strategies & Impact Assessment: This dependency exposes DNR to significant fluctuations in sales, with margins potentially much lower during years with adverse climatic conditions.

Risks Related to gH2 Emerging Technologies

Risk Description: Emerging technologies like SOEC (high operating efficiency), PEM (high H2 purity), and AEM (high cost-effectiveness) present a moderate threat to DNR. AEM augmented leadership, while PEM is more advanced but costlier, and SOEC and AEM have lower readiness levels, their future advancements could challenge AWE's position, requiring close monitoring.

Risk Mitigation Strategies & Impact Assessment: DNR addresses the risk of emerging technologies by investing in R&D across PEM, WE, AEM, and SOEC, partially narrowing the gap with specialized competitors. NCHZ has received €36 MM in FY2023 revenues with a mining and metallurgical client who is not currently subject to sanctions but remains potentially at risk.

Risks Related to Russia-Ukraine Conflict

Risk Description: The Russia-Ukraine conflict and sanctions imposed by the US, EU, UK, CH, CA, JP, and AU have impacted DNR operations. These sanctions limit the export of products to Russia and the import of raw materials like nickel, titanium, and copper, complicating supply chains. DNR has one significant Russian project, which generated €18 MM in FY2023 revenues with a mining and metallurgical client who is not currently subject to sanctions but remains potentially at risk.

Risk Mitigation Strategies & Impact Assessment: Although ongoing conflict remains a concern, as of FY2023, DNR suppliers of strategic materials are outside Russia and Ukraine, and no significant procurement, production, or sales issues have arisen. In FY23, DNR's revenue from conflict-affected regions remained steady at 21% with exposure to Russian customers totaling only €1.8M.

FINANCIAL RISKS

Credit Risk

Risk Description: Despite efforts to maintain diversification, reliance on key customers makes DNR vulnerable to credit risks. Delays in payments or defaults due to customer insolvency or regulatory changes - especially in cross-border operations - could result in delayed cash inflows. Cumulative trade receivables, amounting to €56.8B MM in FY2023, highlight the risks of non-payment, particularly in regions with legal challenges for debt recovery.

Risk Mitigation Strategies & Impact Assessment: DNR addresses the risk of emerging technologies by investing in R&D across PEM, WE, AEM, and SOEC, partially narrowing the gap with specialized competitors. NCHZ has received €36 MM in FY2023 revenues with a mining and metallurgical client who is not currently subject to sanctions but remains potentially at risk.

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BUSINESS RISKS

Risks Related to Intellectual Property Rights

Risk Description: Safeguarding IP (including part of that of NCHZ) is a critical challenge for DNR due to the risk of misuse - such as "leaking around" patents - is an ever-present threat. This concern is heightened in regions like China, where weaker IP protections make unauthorized use of patents and trademarks more prevalent. These are not hypothetical risks: in 2015, DNR was embroiled in a dispute over patent ownership relating to an R&D project, resulting in an amicable settlement. Expanding into new markets without registering IP rights in advance further compounds this vulnerability.

Risk Mitigation Strategies & Impact Assessment: To impede IP misuse and infringement, management confidential information accessible only to authorized personnel under the "two key" principle, supported by strict control measures, including IT safeguards. IP management is centralized in Milan and Fujisawa through the IP Department, which ensures robust protection. In markets with weaker IP protections, such as China, further precautions are employed: DNR uses coded labels on coating containers to avoid revealing the specific recipe safeguarding its source of competitive advantage.

Risks Related to Critical Raw Materials Pricing and Unavailability

Risk Description: Securing a stable supply of noble metals like platinum (Pt), a critical challenge for DNR due to their reliance on global markets dominated by a few suppliers in specific regions. Strategic metals like Pt, Pd, Rh, Ru, and Ir are essential for electrolyzers and fuel cells. Supply chain bottlenecks such as the Suez Canal blockage could instantly disrupt access to key materials like titanium and nickel, leading to severe shortages or soaring prices.

Risk Mitigation Strategies & Impact Assessment: As a preventive measure, DNR secures supply contracts with minimum purchase commitments, aligns procurement with backlog, and maintains buffer stock to manage disruptions. It diversifies sourcing opportunities through negotiations with major suppliers in different countries - Cabot S.p.A., ITI, Furuya Metals (JP), Heraeus (DE) etc. - and offsets price volatility by adjusting product prices with a pass-through mechanism.

Risks Related to Cyber Security

Risk Description: DNR's reliance on IT systems and cloud storage for sensitive data, including patents, innovation projects, and financial plans, exposes it to potential system failures, data breaches, and unauthorized access. These risks are heightened by its globally distributed IT infrastructure. A March 2021 ransomware attack underscored these vulnerabilities, compromising over 80 servers and workstations across Singapore, EMA, and the U.S.

Risk Mitigation Strategies & Impact Assessment: To preserve cybersecurity, DNR has implemented robust measures, including established IT security procedures and a proactive incident management model that analyzes security events across its infrastructure. On November 7, 2022, DNR signed a Protocol of Understanding with the Lombardy Postal and Communications Police Department to prevent and combat cybercrime.

Risks Related to Reputational Damage

Risk Description: International sanctions by the USA, EU, and UN on countries like Russia, Venezuela, China, and Iran, along with associations with sanctioned entities, create potential reputational concerns for DNR. Secondly, market shifts toward sustainable products, can damage DNR's reputation if it is perceived as failing to meet its Sustainability Plan (2026-2030). Lastly, non-compliance with global product marketing regulations (e.g., NF standards), could lead to customer dissatisfaction and regulatory scrutiny. The regulatory landscape across 90+ countries presents a significant challenge.

Risk Mitigation Strategies & Impact Assessment: DNR suspended activity in countries like Iran after the UDA withdrawal from JCPOA. It addresses the complexities of global product marketing regulations by leveraging a dedicated Regulatory Affairs department to adapt to evolving standards such as REACH and US frameworks. By aligning with the recommendations of the Task Force on Climate-Related Financial Disclosures, DNR ensures transparency in assessing climate-related risks.

Risks Related to Non-compliance with Sales and Supply Conditions

Risk Description: DNR operates in an industry inherently exposed to product defects, improper usage of equipment, malfunctions, and non-compliance with applicable standards. Defects or malfunctions could disrupt operations, harm the environment, or pose risks to public health. As of its Prospectus date, De Nora Water Technologies Italy S.r.l. was engaged in a dispute related to a defective water treatment system for two cruise ships owned by the "Naval Client".

Risk Mitigation Strategies & Impact Assessment: DNR non-compliance with sales and supply terms could result in: (i) penalties for delayed, missed, or incorrect deliveries; (ii) indemnification obligations borne by its core companies under specific circumstances; and (iii) a termination right in favour of the customer. Nevertheless, DNR commercial contracts provide warranties of varying durations, depending on the product type, application, operating conditions, and geographical market.

Risks Related to Limited Control over the ThyssenKrupp Nucera Joint Venture

Risk Description: DNR holds a limited 25.8% minority stake in NCHZ, restricting its influence over governance, despite NCHZ contributing 25.57% of DNR's total revenues in FY2024E making it DNR's largest customer. Dependence on NCHZ is further highlighted by the TMA (acquired in 2020), which provides exclusive rights to supply specific products but at lower margins compared to DNR's customers. Especially in the ETR segment, NCHZ accounts for the vast majority of revenues, underscoring its pivotal role in DNR's success as the gH2 market evolves.

Risk Mitigation Strategies & Impact Assessment: The TMA's expiration could heavily impact DNR's financials, as NCHZ is its main gH2 partner. To mitigate its limited control, DNR ensures key representation: Fabio Federico, NCHZ's CTO and former DNR engineer, maintains technical continuity. DNR's CEO (Paolo Delmas), CFO (Luca Ogliaro), and Managing Director (Roberto Scanziani) also serve on Nucera's Board to align on strategy. In addition, DNR develops advanced technologies to meet NCHZ's needs while retaining the freedom to work with other gH2 players, as the TMA is non-exclusive.

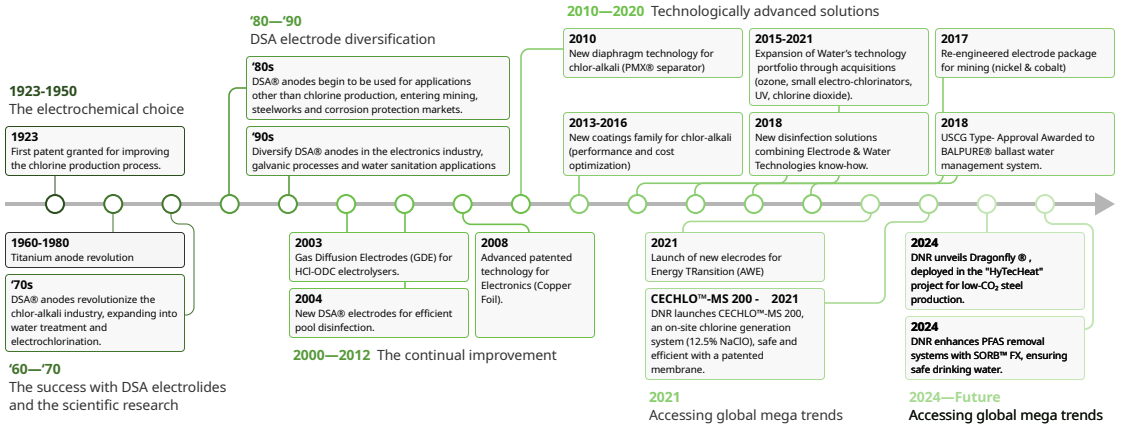
Risks Related to the Group's International Operations

Risk Description: DNR's global operations encounter difficulties in standardizing best practices across facilities. Differences in technology, expertise, and resources can hinder process optimization. For instance, while electrode plating in Japan uses advanced robotic arms for uniform electrode coating and quality, other European plants make use of manual operations, leading to variability and lower efficiency.

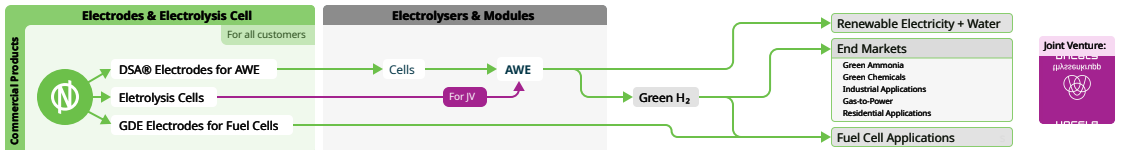
Risk Mitigation Strategies & Impact Assessment: This inconsistency in quality standards increases DNR's COGS through higher labour costs and inefficiency, reducing gross margin.

A. BUSINESS DESCRIPTION

A1. TECHNOLOGICAL AND INNOVATIVE EVOLUTION



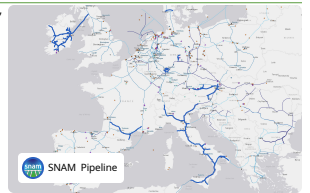
A2. GREEN HYDROGEN: FROM CORE OFFERINGS TO FINAL MARKET APPLICATIONS



A3. SNAM

DNR's partnership with Snam is a strategic lifeline for its gH2 ambitions. As of April 2023, Snam, through its subsidiary Asset Company 10 S.r.l., holds a 21.59% stake in DNR, enhancing its commitment to the hydrogen sector.

Europe's gas infrastructure consists of transmission pipelines, which move large gas volumes across long distances, and distribution networks, which deliver gas to end-users. While distribution pipelines face material limitations for gH2 transport, transmission pipelines—made of high-grade steel—can be cost-effectively repurposed to carry pure hydrogen or blends. Snam, Europe's gas transport leader with 38,000 km of pipelines and 17% of EU storage, has been committed to hydrogen for years. In 2019, it successfully tested hydrogen injection into its high-pressure network, proving its technical feasibility long before market adoption. Now, with €14.5B (2028-2032) committed to repurposing 60-70% of its network, Snam ensures that when gH2 scales, the infrastructure will be ready to transport it seamlessly. For DNR, this de-risks market adoption—with a ready-made pipeline network, gH2 can flow without the need for massive new infrastructure. While it doesn't guarantee demand, it removes key bottlenecks, enabling credibility in the energy transition, making Snam's backing an essential pillar of DNR's gH2 strategy.



A4. DNR state of the art products

ELECTRODE TECHNOLOGY

Target Market	Application	Main Technologies	End Market	Brand
Chlor-Alkali	Chlor-alkali electrolysis process; membrane, diaphragm and mercury technologies Production of chlorine from the recycle of hydrochloric acid	Anodes, cathodes, coatings Gas diffusion electrodes Electrolyzers elements and components Separators Re-coating and services	Chlorine & caustic industry	
Electronics & Surface Finishing	Production of electrolytic copper foil Electrochemical copper plating of PCB Plastic/metal surface finishing for decorative or functional uses (anti-corrosion finishing)	Anode technologies Re-coating and services	Electronics and lithium batteries Automotive, plumbing, tubing for furnishings, jewelry and	DSA® NRG® PMX® LIDA® ELGARD®
Specialties & New Applications	Corrosion protection of structures of reinforced concrete, steel or metal Refining of non-ferrous metals by electro-winning (hydrometallurgy processes) Chlorate: synthesis of sodium	Mixed metal oxide Re-coating and services	Infrastructure Mining Pulp and paper	

WATER TECHNOLOGY

Target Market	Application	Main Technologies	End Market	Brand
Swimming Pools	Disinfection of swimming pools by electro-chlorinators	Self-cleaning noble metal-coated titanium electrodes	Pool owners (private and commercial)	
Electrochlorination	Disinfection through the production of hypochlorite by electrochemical technologies	Seawater Electro-chlorination (SWEC) Onsite Brine Electro-chlorination (OSHG) Advanced Oxidation Process (AOP)	Energy (onshore/offshore power, petrochemical, Oil & Gas, Liquefied Natural Gas) Municipal water, industrial process water, wastewater treatment facilities	BALPURE® HYDE Guardian® ClorTec® CECHLO®
Disinfection & Filtration	Disinfection: chemical removing or reducing of microorganisms in water and wastewater Filtration: physical separation of water pollutants	Gas Feed Chlorination, Ozone systems, Chlorine (UV) treatment Media filtration for tertiary treatment, Biofilters, Reverse Osmosis, Ion Exchange	Municipal drinking water and wastewater treatment facilities Industrial process water and waste water treatment facilities Water desalination	Capital Controls® DE NORA TETRA® MIOX® OMNIPURE™ SANILEC® SEACLOR® SOBT™
Marine	Treatment of ballast water in tankers, bulk carriers and other vessels Treatment of waste water on cruise ships	Electrolytic disinfection system Ozone systems	Marine (shipping and shipbuilding industries) Cruise ships owner	

ENERGY TRANSITION

Target Market	Application	Main Technologies	End Market	Brand
2022 Power to Chemicals	Alkaline water electrolysis	Anodes, cathodes, coatings Cells manufacturing and components Stacks and systems Re-coating and services	Chemical and gas industries	Electrodes for Alkaline Water Electrolysis (AWE) Dragonfly® AENRG™ Anodes NRG® Cathodes Dragonfly® Gas Diffusion Electrodes for fuel cells
2022 Mobility and Utilities	Alkaline fuel cells PEM fuel cells	Anodes, cathodes, coatings Stacks and systems Gas diffusion electrodes	Gas industries Heavy duty vehicles manuf. Construction Co.s (Diesel replacement) Utilities (CH&P)	
2022 Hard to Abate Industries	Alkaline water electrolysis	Anodes, cathodes, coatings Cells manufacturing and components Re-coating and services	Steel industry Cement industry Mining industry	
2025 Power to Gas & Power to Power	Alkaline water electrolysis Alkaline and PEM fuel cells	Anodes, cathodes, coatings Cells manufacturing and components Stacks and systems Gas diffusion electrodes	Lorem Ipsum	
2030 Redox Flow Batteries (RFB) Energy Storage (LOHC)	Alkaline water electrolysis Alkaline and PEM fuel cells	Anodes, cathodes, coatings Cells manufacturing and components Stacks and systems Gas diffusion electrodes	Gas industries Energy companies	

A5. THE VALUE OF DE NORA'S R&D

Our model "Experts' Verdict" delivers a multi-angle assessment of DNR's R&D strength,leveraging the team's expert interviews. It contrasts two complementary perspectives: former internal employees, who provide first-hand insight into the company's innovation processes, and external industry experts familiar with the company, who evaluate its technological positioning in the broader market. Our analysis revealed that DNR's R&D strength lies in three key pillars: (I) consistent advancement of core technologies, (II) strong intellectual property protection, and (III) strategic expansion through M&A and partnerships. This leads us to the conclusion that both groups independently converge on the idea that DNR's R&D is not just a department—it's the company's strategic backbone.

EXPERTS' VERDICT

Key Quotes From	Disruptive Vs. Incremental Innovation	Human Capital Excellence	R&D-To-Market Efficiency	Tech Focus & Future Directions
Insider Intelligence: Perspectives From Former Company Professionals				
PhD Chemistry Advanced Production Technology	"R&D works well, production is being improved. The company is pushing hard on AWE."	"Safety is a priority from day one: extensive training upon arrival, strict movement rules in production areas."	"The efficiency of production depends on the predicted iridium use vs. the actual amount. De Nora knows margins shrink when iridium use predictions are off."	"DNR is actively working on CO2 capture and conversion, as well as photoelectrocatalysis."
	"Zero-gap technology is a key focus, reducing resistance and increasing efficiency."	"There's a strong culture of efficiency and precision. Forecasts on material usage are closely monitored against actual data."	"Automation is key: Japan is much more advanced, while Germany's site is working to close the gap."	"In China, the process is different—Coating containers are labeled as premixed solutions to prevent replication."
	"Potential for gigafactory expansion is high—De Nora is bringing in Japanese innovations."	"In China, the process is different—Coating containers are labeled as premixed solutions to prevent replication."	"Automatic spraying for coatings is being improved to align plants with the most efficient areas globally."	
Hydrogen R&D Electrochemistry & Innovation Pipeline	"De Nora leveraged its chlor-alkali expertise to develop hydrogen electrolyzers, expanding into the energy transition segment."	"De Nora's strength lies in its deep process knowledge and trustworthiness. It offers longer electrode lifetimes compared to Chinese alternatives."	"De Nora leads with lower Levelized Cost of Hydrogen. Higher CAPEX than China, but lower OPEX offsets it."	"Future breakthroughs will come from SOEC, led by SunFire—De Nora is already on it."
	"De Nora accelerates R&D as large competitors like Ineos and Chinese firms push vertical integration."	"Intellectual property is well-managed: by the time patents expire, De Nora has already developed the next-gen technology."	"The company is actively working on reducing iridium and platinum usage, shifting towards abundant materials."	"De Nora's service segment is growing fast, while competitors often stay out."
R&D Process Development Industrial Scaling & Efficiency	"Continuous innovation in electrodes and water purification systems secures market leadership."	"De Nora's R&D hiring process is highly selective, requiring STEM degrees, expertise in numerical modeling, and regulatory knowledge."	"Key R&D performance metrics are: patents filed, Product Vitality Index, and time-to-market efficiency."	"De Nora integrates client feedback into product development, co-developing and validating prototypes."
	"R&D plays a critical role in developing sustainable solutions aligned with global environmental regulations."	"Low turnover—except for internships and temporary contracts, ensure continuity in research efforts."	"The department has autonomy in resource allocation and experimentation, but strategic decisions are aligned with top management."	"Employees are incentivized through bonuses for patents, innovation awards, and career growth opportunities."
	"An R&D department that drives patents, secures competitive edge and licensing potential."	"Even Nucera outsources engineers from DNR—its Chief Technology Officer is originally from De Nora."		
Senior Scientist & Project Manager Hydrogen Tech Breakthroughs	"De Nora adapts technology based on client needs: upgrades to electrodes are provided even during operational life"	"De Nora's R&D equipe covers specialists in electrode formulation and process innovation"	"Every project undergoes a rigorous stage-gate process, ensuring feasibility and market potential before execution."	"Scarcity of critical metals (Titanium, Ruthenium) is driving De Nora to pioneer alternative materials while maintaining efficiency."
	"From 1960s hydrogen electrolysis to today's Gigafactory—decades of R&D drive market leadership."	"De Nora's DNA attracts talent with long-term vision. They leveraged external collaborations to achieve technological discoveries."	"The patent team scans thousands of innovations globally, translating insights into IP strategy."	"Hydrogen will disrupt global supply chains—De Nora is already engineering sustainable solutions to stay ahead."
	"The shift from graphite anodes to DSA electrodes revolutionized the industry, with De Nora leading the transition."			"Modular electrochemistry is key success factor for De Nora."
Market Reality Check: Insights From Industry Experts				
Ex-GM, Leading Energy Firm Energy Transition & Academic Research	"The backlog of large-scale projects is critical —electrolyzers are not a commodity, but De Nora showed technological differentiation."	"De Nora's expertise in electrodes is strong, but competition is increasing—its reputation and trustworthiness are key assets."	"Scaling up electrolysis presents challenges—De Nora balances performance improvements with degradation control."	"De Nora's M&A strategy is purely strategic, focused on vertical integration and tech expansion rather than financial engineering."
	"DNR is a technological leader in AWE, holding a competitive edge well beyond double digits, which helped secure major projects like NEOM."			
Principal, Strategy Consulting Industrial R&D & Market Adoption	"PEM may be slightly better for smaller-scale applications, but AWE dominates for large projects due to better cost-performance ratios."	"DNR's R&D structure is deeply embedded in its success, with a historical and well-stratified knowledge base."	"De Nora is expanding beyond just being a tech provider—it's moving towards system integration and full-solution offerings."	"DNR's move into Dragonfly targets smaller industrial players, but large-scale projects remain the main revenue driver."

Senior Partner, Global Consulting | Scaling Deep-Tech & M&A

"De Nora's electrode coating technology is the real game-changer—improving efficiency and reducing costs."

"De Nora's R&D structure is solid: historically stratified, deeply technical, and continuously evolving with top engineering talent."

"Clients choose De Nora because it reduces Total Cost of Ownership. Savings are well beyond double digits in CAPEX + OPEX."

"DNR has executed one of the most strategically sound M&A approaches, focused on diversification rather than financial plays."

"De Nora entered the hydrogen market leveraging its deep electrochemical expertise, securing major projects like NEOM well ahead of competitors."

"De Nora is not just a tech provider anymore. It's evolving into a full-solution integrator."

SVP Hydrogen & Sustainability | Driving Clean Energy Commercialization

"The real technological differentiator is coating technology for electrodes, which determines efficiency and cost-effectiveness."

"De Nora's competitive advantage is its control over both anode and cathode production, giving it better cost control and product quality."

"Clients choose De Nora for superior Total Cost of Ownership, achieving savings beyond double digits."

"Hydrogen market growth has slowed from 'hyper-booming' to just 'booming,' but De Nora remains positioned as a long-term winner due to its core technological edge."

Director, Water Treatment & Environmental Protection | Wastewater Technology & Infrastructure

"De Nora's focus is on electrochlorination, while competitors invest more in ozonation and UV oxidation for advanced wastewater treatment."

"De Nora is a key technology provider for General Contractors but doesn't operate as a fully integrated water treatment player like Suez or Veolia."

"Severn Trent's acquisition positioned De Nora as a stronger system integrator in the water segment."

Source: Team elaboration

B. INDUSTRY OVERVIEW AND COMPETITIVE ANALYSIS

B1. PROPRIETARY MODEL: Unveiling Cost Leadership in Electrolysis LOWER TCO

CAPEX Dragonfly	
System Power	7.5 MW
Operating Hours	4,200 h/year
Density of H2	0.098 kg/Nm³
H2 production	1,500 Nm³/h
Yearly H2 Production	566,244 kg H₂/year
Energy consumption per kg H2	0.0536 MWh/year
Electricity price	100 €/MWh
Electricity cost	3m €/Year
Discounted cost of Energy	€29 m
TCO DNR	€42.6 m
CAPEX DNR	€8.5 m
TCO/MW	€56 m

Source: Team Elaboration

DNR's strategic advantage is clear—minimizing TCO for clients. To evaluate this competitive edge, we developed a proprietary model that benchmarks DNR's latest advancements, including its next-generation electrodes for the energy transition and the Dragonfly electrolyzer.

Modeling TCO for DNR

Energy costs are the dominant driver TCO in electrolysis, accounting for 70% of the Dragonfly electrolyzer's lifetime TCO at €100/MWh, while CAPEX represents 20% (source: company presentation). Using the electrolyzer's efficiency and estimated operating hours, we back-calculated TCO to determine CAPEX. To validate, we applied the industry-standard formula with these assumptions: (i) non-energy-related OPEX was estimated as 3% of CAPEX per year (IEA data estimation) (ii) Electrolyzer lifespan of 20 years (iii) 4200 operating hours per year (considering renewable energy availability).

$$TCO = CAPEX + \sum_{t=1}^{20} \frac{OPEX + EnergyCost \times OperatingHours}{(1+r)^t}$$

The results were consistent, reinforcing the robustness of our approach.

Scaling the Model: Scalum Electrolyzer & JV Assumptions

DNR's JV electrolyzers utilize the same core technology (DNR AWE electrodes), making a CAPEX/MW parity assumption reasonable. Given the 20MW Scalum electrolyzer's larger scale and technological consistency, we applied its performance metrics to estimate TCO per MW, where economies of scale and operational efficiencies drive further reductions.

Benchmarking Against the Industry

To assess competitiveness, we compared DNR's CAPEX/MW with European Hydrogen Observatory benchmarks for PEM and AWE electrolyzers. Although DNR operates at a smaller scale compared to industry benchmarks (~100MW systems), its technological advancements offset this limitation through: (i) smaller footprint reducing infrastructure costs, (ii) higher current density able to reduce stack dimensions, (iii) noble-metal-free catalysts slashing upfront material costs. Next, we gathered efficiency data from DNR's key competitors in both PEM and AWE technologies. With CAPEX, OPEX, and energy expenses now accounted for, we calculated the TCO for each competitor. The results highlighted DNR and NCH₂ as industry leaders, reinforcing their technological edge in delivering low-cost, high-efficiency electrolyzers.

Conclusion: Technology-Driven Cost Leadership

Our proprietary model underscores DNR's CAPEX efficiency and TCO advantage. This leadership stems from superior engineering, material innovation, and scale efficiencies, positioning DNR as a cost leader in the hydrogen electrolysis market.

	Dragonfly	Nucera	PEM competitor	AWE competitor	
System Power	7.5	20	10	19.4	MW
Operating Hours	4,200	4,200	4,200	4,200	h/year
Density of H2	0.08988	0.08988	0.08988	0.08988	kg/Nm³
H2 production	1500	4000	2020	3800	Nm³/h
Yearly H2 Production	566 k	1,509 k	762 k	1,464 k	kg H₂/year
Energy consumption	0.0536	0.0508	0.0532	0.058	MWh/kg
Electricity price	100	100	100	100	€/MWh
Electricity cost	3 m	7.6 m	4 m	8.5 m	€/Year
CAPEX/ Mw	1.1 m	1.1 m	1.9 m	1.6 m	€/MW
CAPEX	8.5 m	22.7 m	19.7 m	32.3 m	€
OPEX	255 k	681 k	591 k	969 k	€/Year
TCO	40.8 m	104.7 m	65.3 m	125.2 m	€
TCO/MW	5.4	5.2	6.5	6.4	€/MW

Source: Team Elaboration

ESTIMATING MARKET ADAPTABILITY OF GREEN HYDROGEN

To assess the market adaptability of gH2, we developed a proprietary model that distinguishes between two key markets: the USA and the EU. This distinction is crucial, as energy and gas prices remain significantly higher in the EU, directly influencing the competitiveness of hydrogen production.

Currently, the Levelized Cost of Hydrogen (LCOH) for a 20 MW electrolyzer equipped with DNR electrodes stands at €7.15/kg in the EU and €5.03/kg in the USA. In contrast, grey hydrogen remains significantly cheaper at €2.5/kg in the USA and between €3 and €5/kg in the EU, Australia, and Asia, where natural gas prices are higher. Given this cost gap, green hydrogen is not yet economically viable without substantial policy support or subsidies.

$$LCOH = \frac{CAPEX \times CRF + OPEX + ElectricityCost}{AnnualHydrogenProduction}$$

By 2030, our model projects a significant shift driven by economies of scale and technological advancements, which are expected to reduce capital expenditure by up to 30%, alongside a substantial decline in renewable energy costs. Renewable electricity prices are forecasted to reach €30/MWh in the USA and €50/MWh in the EU (source: Energy transition outlook, IEA, team estimation), making green hydrogen considerably more competitive. Under these conditions, the projected LCOH would drop to €2.6/kg in the USA and €4/kg in the EU, marking a substantial improvement in its cost position relative to grey hydrogen. This shift would represent a critical milestone in the transition to a hydrogen-based economy, significantly enhancing the economic viability of green hydrogen in industrial and energy applications. This shift would make green hydrogen a more accessible and competitive option, allowing for the adoption of this more sustainable alternative without requiring major economic sacrifices

	2024 EU	2024 USA	2030 EU	2030 USA	
System Power	20	20	20	20	MW
Operating Hours	4,200	4,200	4,200	4,200	h/year
Density of H2	0.08988	0.08988	0.08988	0.08988	kg/Nm³
H2 production	4,000	4,000	4,000	4,000	Nm³/h
Yearly H2 Production	1.5 m	1.5 m	1.5 m	1.5 m	kg H₂/year
Energy consumption per kg H2	0.0508	0.0508	0.0508	0.0508	MWh/kg
Electricity price	100	60	45	30	€/MWh
Electricity cost	7.6 m	4.6 m	3.4 m	2.3 m	€/Year
CAPEX/ MW	1.1 m	1.1 m	794 k	794 k	€/MW
CAPEX	22.7 m	22.7 m	15.9 m	15.9 m	€
OPEX	681 k	681 k	476 k	476 k	€/Year
Capital Recovery Factor	0.10	0.10	0.10	0.10	
LCOH	7.06	5.03	3.67	2.91	€/kg

Source: Team Elaboration

C. FINANCIAL ANALYSIS

C1. MOLECULE BY MOLECULE

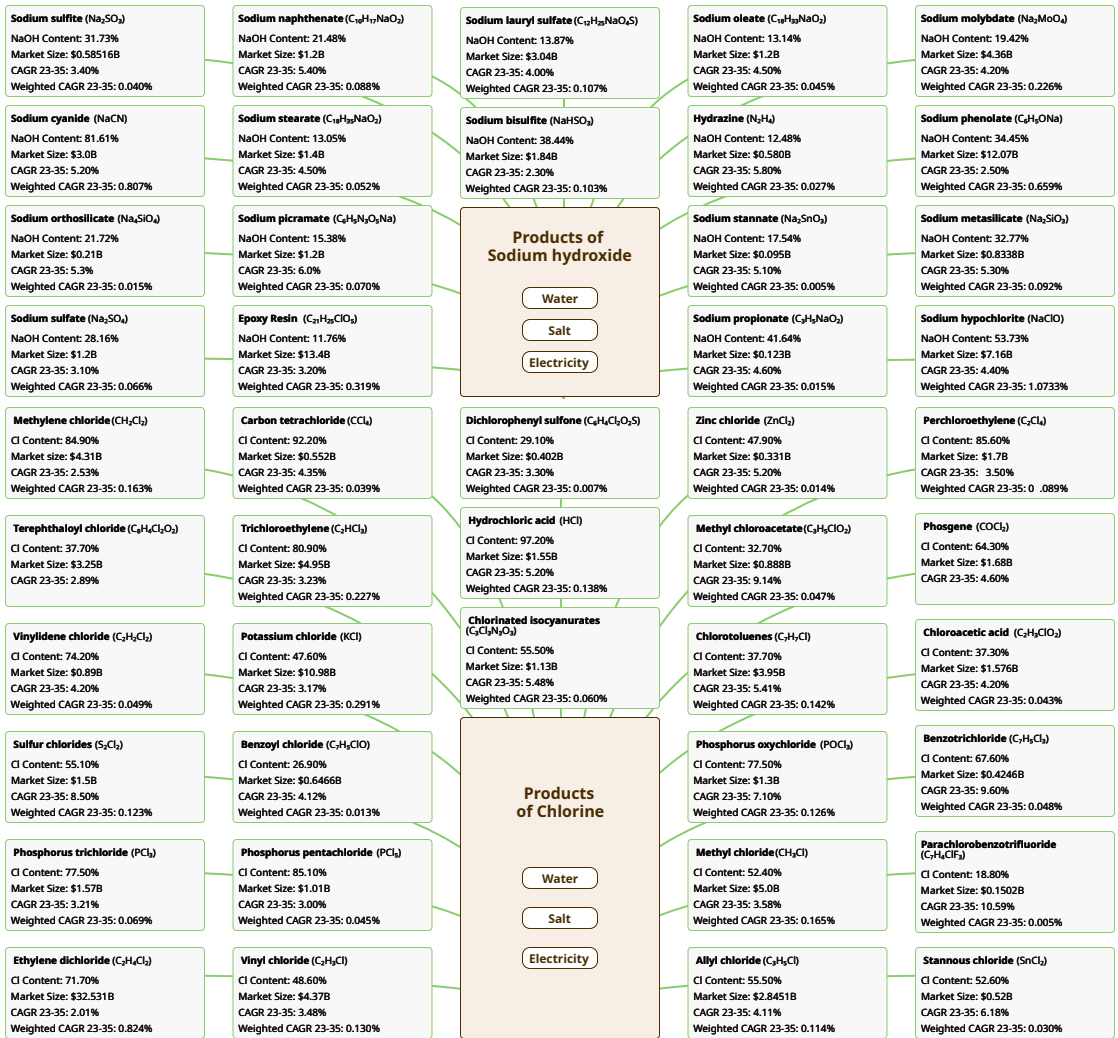
Chlor-Alkali Market Growth Projection

The CA segment serves as the financial backbone of DNR, contributing 37.44% of FY24E revenues. However, the market's fragmentation—driven by diverse industry applications—creates forecasting challenges. To address this, we developed the CA Proprietary Model, a bottom-up approach designed to provide a demand-driven forecast of market expansion. Our proprietary model systematically quantifies the growth of the CA market by analyzing the consumption patterns of its primary products: chlorine (Cl₂) and caustic soda (NaOH). Hydrogen (H₂), a byproduct of the chlor-alkali process, is excluded from valuation due to its negligible impact. This approach allows us to construct a granular forecast that reflects real-world demand dynamics.

Understanding Chlorine & Caustic Soda Demand

Chlorine is essential across industries, from chemicals to pharma. Instead of broad estimates, we quantified its exact role, calculating its molar mass share in each end compound (Source: PubChem). Caustic soda, a key reactant, drives reactions rather than just being a component. We measured its real market impact through stoichiometric ratios, assessing its required input in chemical processes (Source: Kirk-Othmer Encyclopedia).

To project growth, we weighted the CAGR and market size (Source: Dataintel) of each industry using chlorine and caustic soda. Given the natural output split of the chlor-alkali process—47.02% chlorine and 52.98% caustic soda—we applied weighted growth rates to derive the overall market expansion. This resulted in a projected CAGR of 3.49% from FY23 to FY35E.



C2. MARKET GROWTH

Market [mC]		CAGR FY22-FY35	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	2034E	2035E
ET	Chlor-alkalis	3.5%	840.21	869.62	900.06	931.56	946.16	997.91	1,032.84	1,069.99	1,106.40	1,145.12	1,185.20	1,226.69	1,269.62
	Electronics	9.22%	12,643.54	13,154.41	14,370.11	15,700.72	17,157.26	18,751.83	20,497.42	22,409.48	24,503.11	26,796.13	29,307.80	32,059.23	35,073.59
	Electrowinning	5.96%	1,085.97	1,163.08	1,245.66	1,334.10	1,428.82	1,530.26	1,638.91	1,755.28	1,879.90	2,013.37	2,156.32	2,309.42	2,473.39
WT	Pool Technologies	8.50%	1,200.00	1,238.40	1,278.03	1,318.93	1,361.13	1,404.69	1,449.64	1,496.03	1,543.90	1,593.30	1,644.29	1,696.91	1,751.12
	Disinfection & Filtr.	7.50%	2,300.00	2,472.50	2,657.94	2,857.28	3,301.95	3,301.95	3,549.59	3,815.81	4,102.00	4,409.65	4,740.37	5,095.90	5,478.09
	Electrochlorination	5.40%	362.23	381.79	402.41	424.14	471.18	471.18	496.62	523.44	551.79	581.50	612.90	646.00	680.88
ETr	Energy Transition	22.22%	1,229.21	1,502.34	1,836.16	2,244.16	3,352.26	3,352.26	4,097.13	5,007.51	6,120.18	7,480.09	9,142.16	11,173.55	13,656.31

C3. COMPARABLES

	Size		Growth		Profitability		Liquidity					Geographical Mix (%)				
	Mkt Cap.	Rev. FY23A [€]	Rev. CAGR FY13-FY20	Rev. CAGR FY20-FY23	EBITDAm [avg FY22-23]	NPm [FY22-23]	ROCE [avg FY22-23]	DSO [avg FY20-23]	DDO [avg FY20-23]	NFP [FY23E]	CAPEX/ Rev. [FY23]	EMEA	APAC	EME		
DNR		1,391.63	856.41	6.02%	19.69%	21.36%	10.97%	12.77%	95.55	163.71	45.31	-71.94	10.20%	39.70%	38.34%	21.96%
Asahi Kasei		8,864.23	17,763.00	3.08%	1.39%	11.39%	-0.90%	7.92%	57.62	115.94	34.95	3,589.49	6.17%	61.90%	15.50%	22.60%
INEOS		-	14,885.00	-3.81%	9.61%	12.45%	5.82%	9.57%	43	40.04	11.65	8,391.10	9.78%	-	-	-
Osaka Soda		1,311.98	603.12	0.42%	-8.49%	16.67%	9.12%	12.83%	113.02	58.52	67.56	-187.86	5.05%	89.20%	7.70%	3.10%
Xylem & Evoqua		30,452.04	6,814.26	5.24%	16.82%	16.08%	7.34%	9.30%	68.48	72.02	67.2	1,241.12	2.24%	17.60%	26.60%	55.80%
Pernascand		-	39,263.10	-	-0.24%	14.60%	8.61%	16.12%	71.43	124.02	40.03	2,011.50	16.27%	76.83%	0.00%	23.17%
Pentair		15,864.19	3,796.54	-8.66%	12.77%	20.55%	13.45%	14.61%	53.01	85.34	47.22	1,669.49	1.72%	12.30%	14.80%	72.80%
Ecobal		68,796.58	14,170.73	-3.27%	11.07%	19.05%	8.33%	12.42%	72.56	66.05	62.07	6,688.45	4.99%	14.00%	23.50%	62.50%
Fluidra		4,417.86	2,083.50	18.47%	11.31%	19.23%	6.02%	10.15%	49.84	106.84	57.31	1,061.64	2.95%	15.00%	43.00%	42.00%
DuPont de Nemours		31,236.54	11,162.54	-16.44%	-14.55%	23.99%	5.93%	24.47%	71.42	172.67	94.86	4,602.36	-5.18%	43.00%	18.30%	38.70%
Dow		26,019.14	41,274.03	-6.12%	6.88%	12.85%	4.65%	11.72%	60.65	57.89	40.74	9,334.18	5.08%	20.90%	30.20%	48.90%
Hayward		3,140.44	917.99	-	6.13%	25.54%	10.89%	10.51%	67.49	120.33	38.79	813.63	3.06%	10.70%	5.40%	83.90%
Kurita		3,791.87	2,454.54	6.02%	4.25%	19.60%	6.72%	50.72%	126.51	22.8	45.29	173.80	8.32%	9.60%	73.90%	16.50%

	Mkt Cap. [€]	Revenues FY24E	Rev. CAGR FY13-FY20	Rev. CAGR FY20-FY23	EBITDAm [avg FY22-23]	CAPEX/Rev. [avg FY22-23]	
DNR		1,391.63	106.12	6.02%	203.92%	8.90%	29.77%
Nel		330.52	147.10	40.36%	39.75%	-50.58%	37.24%
ITM Power		1,152.64	19,171.19	12.90%	58.72%	-1,022.51%	186.89%
McPhy		33.32	18,774.00	28.48%	11.09%	-246.68%	106.06%
Plug Power		1,694.64	824.46	23.61%	45.29%	-97.79%	72.05%

C4. REVENUES AND EBITDA ESTIMATIONS

Revenues Estimation		2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	2034E	2035E
ET	DNR	856.41	864.33	900.14	958.14	1,030.54	1,122.65	1,231.13	1,351.36	1,469.55	1,576.17	1,669.39	1,743.06	1,800.50
	Growth yoy	0.42%	0.92%	4.20%	6.39%	7.56%	8.94%	9.66%	9.77%	8.75%	7.26%	5.91%	4.41%	3.30%
	Chlor-Alkali	320.91	323.60	330.08	338.33	348.48	360.64	373.22	386.25	399.73	413.68	427.54	441.01	454.24
	Growth yoy	0.55%	0.84%	2.00%	2.50%	3.00%	3.49%	3.49%	3.49%	3.49%	3.49%	3.35%	3.15%	3.00%
	Electronics	79.90	62.82	66.90	71.59	76.74	82.42	89.01	96.58	102.66	108.00	112.43	115.80	119.28
WT	Growth yoy	-9.49%	-21.38%	6.50%	7.00%	7.20%	7.40%	8.00%	8.50%	6.30%	5.20%	4.10%	3.00%	3.00%
	Electrowinning	63.41	77.02	80.80	85.00	89.84	95.14	101.33	107.51	112.73	117.51	121.77	125.42	129.18
	Growth yoy	-3.33%	21.48%	4.90%	5.20%	5.70%	5.90%	6.50%	6.10%	4.80%	4.24%	3.62%	3.00%	3.00%
	Swimming pools	86.04	94.02	101.54	110.17	119.54	129.70	140.72	152.69	162.31	170.75	177.75	183.08	188.57
	Growth yoy	-46.81%	9.28%	8.00%	8.50%	8.50%	8.50%	8.50%	8.50%	6.30%	5.20%	4.10%	3.00%	3.00%
Etr	Water treatment Systems	192.29	192.19	205.64	220.04	236.32	255.23	277.43	301.57	320.93	337.88	351.86	362.42	368.57
	Growth yoy	17.49%	-0.05%	7.00%	7.00%	7.40%	8.00%	8.70%	8.70%	6.42%	5.28%	4.41%	3.00%	3.00%
	Disinfection & Filtration	11.63	8.55	-	-	-	-	-	-	-	-	-	-	-
	Growth yoy	2.93%	-26.47%	-100%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	Green H2	102.24	106.12	115.67	133.02	159.62	199.53	249.41	306.77	371.19	428.35	478.04	515.33	535.54
	Growth yoy	139.63%	3.80%	9.00%	15.00%	20.00%	25.00%	25.00%	23.00%	21.00%	15.40%	11.60%	7.80%	4.00%

EBITDA Estimation [m€]		2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	2034E	2035E
ET	DNR	176.49	151.54	163.94	176.78	195.64	217.86	241.41	267.63	294.96	319.95	344.72	367.63	390.35
	EBITDam	20.61%	17.53%	18.20%	18.45%	18.88%	19.41%	19.61%	19.80%	20.07%	20.30%	20.65%	21.09%	21.68%
	ET	121.41	104.27	107.98	112.34	118.46	125.40	131.87	139.91	148.25	154.69	161.46	168.51	176.38
	EBITDam ET	26.15%	22.50%	22.60%	22.70%	23.00%	23.30%	23.40%	23.70%	24.10%	24.20%	24.40%	24.70%	25.10%
	WT	42.61	47.16	51.91	57.79	62.81	68.52	77.36	86.31	93.26	100.58	107.25	113.05	119.12
Etr	EBITDam WT	14.69%	16.00%	16.90%	17.50%	17.65%	17.80%	18.50%	19.00%	19.30%	19.78%	20.25%	20.73%	21.20%
	ETr	1.08	0.11	4.05	6.65	14.37	23.94	32.17	41.41	53.45	64.68	76.01	86.06	94.86
	EBITDam ETr	12.20%	0.10%	3.50%	5.00%	9.00%	12.00%	12.90%	13.50%	14.40%	15.10%	15.90%	16.70%	17.70%

D. VALUATION

D1. WACC

COST OF EQUITY

We estimated the cost of equity using the Fama and French Three-Factor Model, incorporating size and value effects. However, the multiple linear regression indicated no statistically significant relationship between the HML factor and the other two variables. Despite this, we chose to retain the size effect, as it provided significantly better explanatory power for DNR stock: the resulting betas demonstrated strong correlations with both returns and volatility. Based on this approach, we derived a Keof 9.89%.

Risk-free rate

Average yield of Euro Zone AAA countries' ten-year bonds (ECB statistical warehouse, updated 6th February 2025).

B – Market and Size Beta

Beta coefficients were calculated using a multi-linear regression of DNR returns against the STOXX600 (SXXP) and a Custom Portfolio Index, incorporating all available weekly data 27.90% the IPO (30th June 2022). The Custom Portfolio Index was derived by estimating the difference between the MSCI Europe Small Cap and MSCI Europe Large Cap indexes, serving as a potential proxy for the spread between small and large cap companies. This analysis resulted in a β_{Mof} 1.0385 and a β_{SMB} 1.3360, both displaying statistically significant results.

ERP – Equity risk premium

According to A. Damodaran, relying on historical equity risk premiums for European markets is inaccurate due to their limited or highly volatile history. Therefore, we have chosen to use the implied equity risk premiums provided by the scholar for each region where DNR operates (EMEA, APAC, and AMS), weighting them based on their relevance in terms of revenue contribution. With this approach we obtained an ERP equal to 5.71%.

SMB – Small minus Big Premium

SMB's premium was computed as the average value of the SML factor for a European Index portfolio, accounting for premium return of small-cap stocks vs large-cap stocks for the last three decades (1990-2024), yearly data (annual European SMB from K. R. French data library).

COST OF DEBT

Given that DNR holds bank loans with variable interest rates and has no publicly traded bonds, we estimated its cost of debt by adding a risk premium to the risk-free rate (rf) to reflect DNR's financial risk (ICR SPREAD), along with an additional premium to account for country risk (CRP), obtaining a value amounting to 4.29%.

Interest coverage ratio spread

We assessed the risk by artificially rating the Company considering its ICR and comparing it with the average market borrowing spread for companies with similar ICR (A. Damodaran). By this method, we estimated an A rating for DNR (given by the ICR of 5.29). Low D/E ratio (0.16) and high cash balance (216 mm€ in FY2024E) support DNR as a creditworthy company. After a comparison with comparable companies covered by rating agencies, we confirmed the A rating, which resulted in a 77bps spread.

Country Risk Premium spread

Given DNR's international presence, we calculated the average country risk premium based on the regions in which the Company operates. First, we determined the country risk premium for each macro-region in which the Company operates by using the GDP of each country in the region as a weight. Then, we calculated DNR's total country risk premium by taking a weighted average of the macro-regions risk premiums based on DNR's revenue in each region. The final CRP spread is 104bps.

WACC OPTIMISATION

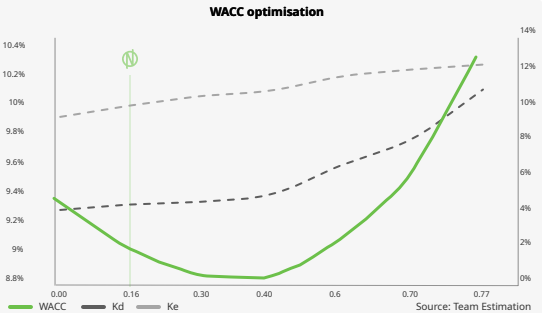
Encouraged by DNR's low financial leverage and strong cash position, we analyzed the capital structure that minimizes WACC and maximizes enterprise value (EV). Specifically, we assessed how changes in the debt-to-equity (D/E) ratio impact the cost of equity, cost of debt, and, ultimately, WACC. In our calculations, we assumed a constant tax rate of 27.9% and an unlevered market beta of 0.9329.

As leverage increases, the Company is perceived as progressively riskier, leading to a higher spread on new debt issuances. To quantify this effect, we examined how the evolving leverage ratio influences the Interest Coverage Ratio (ICR), following Damodaran's rating tables. The result of this process is that DNR would optimize its cost of capital (WACC optimal 8.71%) by increasing its D/E ratio to 0.4.

While an optimized WACC could enhance DNR's valuation, we do not anticipate a strategic shift aimed at achieving it. This is further supported by the company's recent deleveraging strategy following its IPO and the fact that the potential upside (+€113.7min EV) would not be substantial enough to justify such a move.

To account for the most extreme risk scenario, we considered a NFP/EBITDA ratio of up to 3.5, a level at which DNR would be deemed insolvent by banks, effectively signaling a default. The overall scenario presented in this section further reinforces the improbability of such a scenario and underscores the company's solid financial position.

WACC	9.01%
Cost of equity	9.89%
Risk-free rate	2.48%
Beta Market β	1.0385
Beta Size β	1.3360
Market premium	5.71%
SMB	5.71%
Tax rate	1.11%
Cost of Debt	4.29%



D/E	Debt	NFP/Adj. EBITDA	Beta_market	Ke	ICR	Rf	Spread	Kd	Tax Rate	WACC
0	0	-1.4	0.9329	9.29%	14.6	2.48%	0.45%	3.97%	28%	9.29%
0.1	97.4	-0.8	1.0002	9.67%	10.17	2.48%	0.45%	3.97%	28%	9.05%
0.2	194.8	-0.4	1.0675	10.06%	5.09	2.48%	0.85%	4.37%	28%	8.91%
0.3	292.2	0.5	1.1347	10.44%	3.39	2.48%	0.95%	4.47%	28%	8.78%
0.4	389.6	1.2	1.2020	10.83%	2.54	2.48%	1.20%	4.72%	28%	8.71%
0.5	487.0	1.8	1.2693	11.21%	2.03	2.48%	1.83%	5.35%	28%	8.76%
0.6	584.4	2.4	1.3365	11.59%	1.70	2.48%	3.00%	6.52%	28%	9.01%
0.7	681.8	3.1	1.4038	11.98%	1.45	2.48%	4.42%	7.94%	28%	9.40%
0.77	746.2	3.5	1.4483	12.23%	1.33	2.48%	4.42%	7.94%	28%	9.41%

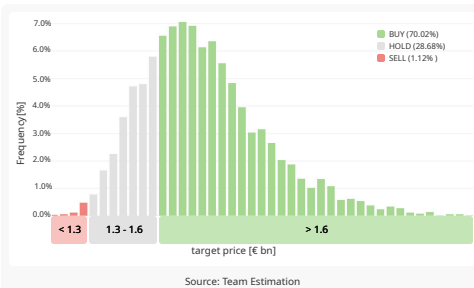
D2. DCF

[m€]	FY2023	FY2024E	FY2025E	FY2026E	FY2027E	FY2028E	FY2029E	FY2030E	FY2031E	FY2032E	FY2033E	FY2034E	FY2035E	TV
Revenues	856.4	864	900.6	958.1	1,030.5	1,122.7	1,231.1	1,351.4	1,469.6	1,576.2	1,669.4	1,743.1	1,800.5	
Growth	0.42%	0.92%	4.20%	6.39%	7.56%	8.94%	9.77%	8.75%	7.26%	5.91%	4.41%	3.30%		
EBITDA	176.5	151.5	163.9	176.8	195.6	217.9	241.4	267.6	295.0	319.9	344.7	367.6	390.4	
EBITDAm	20.61%	17.53%	18.20%	18.45%	18.98%	19.41%	19.61%	19.80%	20.07%	20.30%	20.65%	21.09%	21.69%	
D&A	39.5	37.2	39.6	43.1	46.4	50.5	55.4	60.8%	66.1	70.9	75.1	78.4	81.0	
EBIT	137.0	114.4	124.3	133.7	149.3	167.3	186.0	206.8	228.8	249.0	269.6	289.2	309.3	
EBITm	15.99%	13.23%	13.80%	13.95%	14.48%	14.91%	15.11%	15.3%	15.57%	15.80%	16.15%	16.59%	17.18%	
Net Profit	231.1	80.3	87.5	94.2	105.5	118.5	131.9	147	162.8	177.4	192.2	206.3	220.9	
NpM	26.98%	9.29%	9.71%	9.83%	10.23%	10.55%	10.72%	10.87%	11.08%	11.25%	11.51%	11.84%	12.27%	
Tax Rate	12.90%	27.90%	27.90%	27.90%	27.90%	27.90%	27.90%	27.90%	27.90%	27.90%	27.90%	27.90%	27.90%	
NOPAT	119.3	82.5	89.6%	96.4	107.6	120.7	134.1	149.1	165.0	179.5	194.4	208.5	223.0	
Net capex	87.4	72.5	78.8%	78.8	81.3	84.6	88.5	88.2	80.8	86.7	91.8	95.9	99.0	
Change NWC	-14.67	11.27	10.89	17.25	21.72	27.63	32.54	36.07	35.46	31.99	27.97	22.10	17.23	
FCFF	86.1	35.9	39.6	43.5	51.0	58.9	68.5	85.6	114.8	131.8	149.7	169.0	187.8	
WACC	-	9.01%	9.01%	9.01%	9.01%	9.01%	9.01%	9.01%	9.01%	9.01%	9.01%	9.01%	9.01%	
Disc. FCFF	-	32.9	33.3	33.6	36.1	38.3	40.8	46.8	57.6	60.6	63.2	65.4	66.7	1,141.8

Terminal growth (g)	3.0%
EV (excluding option premium and NCH2) [m€]	1,717.0
Call option premium [m€]	70.7
Net cash position [m€]	63.1
Equity value (excluding NCH2) [m€]	1,780.1
DNR's 25.85% Stake In NCH2 [m€]	293.0
Equity value [m€]	2,073.1
Outstanding shares [m]	201.7
Target Price [€]	10.63

D3. Monte Carlo Simulation

To assess the robustness of our BUY recommendation, we ran a Monte Carlo simulation on seven variables, including revenue CAGR (ET, WT, ETr), avg EBITDA margins (FY25E-35E), and WACC. The result shows a 70.02% probability of BUY, 28.86% HOLD, and 1.12%SELL.



Variable	Business Unit	Distribution	Mean [%]	Std. Dev. [%]	Up.-low. bound [%]
Revenue CAGR	ET	Normal	3.87	1.42	0.61-7.16
	WT	Lognormal	6.22	2.26	2.01-13.15
	ETr	Lognormal	12.41	3.96	5.05-25.02
EBITDAm	ET	Normal	23.74	0.61	22.34-25.18
	WT	Lognormal	18.72	0.82	16.95-20.80
	ETr	Lognormal	12.33	1.16	10.10-15.62
WACC		Normal	9.11	0.2	8.66-9.58

Revenue growth for ET and WT proves most influential, thanks to higher margins and lower CAPEX needed. For ETr, focusing on only revenue growth or margin expansion alone proves insufficient to meaningfully increase the target price, particularly in early periods marked by modest margins. During the later stages, CAPEX requirements weigh heavily on free cash flows. Over time, these capital-intensive investments overshadow modest revenue improvements, sharply limiting ETr's valuation potential. Maximizing ETr's upside depends on simultaneous growth in revenues and margins, expected to improve as service offerings expand. Overall, this analysis reinforces our confidence in the upside potential, providing further validation for our BUY stance.

D4. Bull & Bear Scenarios

In a world where clean water has never been a guarantee and energy systems must be reimagined to meet urgent climate goals DNR rises to the challenge, addressing two critical issues: water scarcity and renewable energy.

In a world thirsty for solutions DNR meets the demand through strategic M&A [CAGR Revenues 25-30 WT +1.5p.p.and avg EBITDAm +1p.p.relative to our base case.: DTP = +0.71€]

Across the United States, alarm bells are ringing over PFAS contamination—the so-called “forever chemicals” that threaten drinking water safety. In response, regulators have introduced strict new standards in 2024, giving companies just five years to comply. With the clock ticking, DNR's management has signaled its readiness to make a move, preparing to acquire a technology capable of not just removing PFAS, but destroying them entirely—a critical gap in existing solutions. PFAS destruction technologies fall into three categories: thermal, chemical, and electrochemical methods. DNR positions itself in the electrochemical space, integrating electro-oxidation technology into its contaminant removal solutions. The U.S. market, shaped by stringent regulations and widespread contamination, is poised to lead PFAS destruction M&A activity. The EPA has proposed some of the strictest PFAS limits globally, including a 4 ppt cap for PFOA and PFOS in drinking water. With PFAS-related expenditures exceeding \$1.2b annually, the U.S. accounts for over 70% of global demand for PFAS destruction solutions—making it a more attractive market than the EU or China, where adoption is slower. With regulatory pressure creating urgency, our bull case is a strategic acquisition in the U.S. PFAS market, allowing DNR to close the technology gap and capture rising demand for PFAS destruction solutions. We expect this move to be imminent, supported by DNR's strong net cash position of €63.1m in FY2024E, which provides ample financial flexibility to accelerate inorganic growth. DNR's inorganic growth strategy follows a clear trajectory, (i) prioritizing rigorous technology scouting to secure patents and enhance product diversification, often through startups and scale-ups, and (ii) executing targeted M&As in high-growth, high-demand regions.

Target Company	Establishment Year	N° Employees	Headquarter	Revenues FY2023	Technology
	2017	29	Massachusetts, USA	€ 1.016k	Octa™ System

Moreover, DNR and Aclarity have signed a Memorandum of Understanding, aiming to integrate Aclarity's PFAS destruction technology with DNR's SORB™ FX product line to eliminate PFAS from groundwater. This collaboration positions Aclarity as a particularly promising acquisition target for DNR. By entering the PFAS destruction market, DNR achieves vertical integration, enhancing its market share and reinforcing its leadership in the U.S. As regulatory pressure mounts and demand surges, the electro-oxidation market is projected to double from \$1.6b in 2024 to \$3.2b by 2029 (Source: GreenPlanner Magazine), positioning DNR to meet growing demand from EPC/OEM firms that currently lack electro-oxidation capabilities.

From water to watts: DNR powers the green hydrogen revolution [CAGR Revenues 25-30 ETr +10p.p.relative to our base case.: DTP = +€0.73]

As industries adapt to evolving sustainability goals, backed by regulations, subsidies, and rising fossil fuel costs, green hydrogen is cementing its role as a key driver of decarbonization. DNR is positioned in the most profitable segment of the value chain—electrodes—giving it a structural advantage as demand surges. The low-emissions hydrogen market is set to expand rapidly, with global consumption projected to hit 150 Mtpa by 2030, 45% of which will be low-emissions hydrogen (Source: IEA). If investment in hydrogen infrastructure accelerates alongside policy support and cost reductions, this share rises to 55%, further strengthening industrial adoption. While current electrolysis projects target 520 GW of capacity by 2030, a scenario of faster permitting and technological advancements could push it to 750 GW, unlocking a €10-20b incremental market for electrode manufacturers. This is where our bull case takes shape. With first-mover advantage and existing scale, DNR is positioned to capture market share as demand intensifies. As policy momentum builds and industrial adoption scales, its production flexibility ensures it can adapt swiftly, meeting the needs of an expanding hydrogen economy.



Setting the pace, securing the prize [CAGR Revenues 26-35 DNR +2.5p.p.relative to our base case: DTP = +€1.11]

In a scenario where DNR leads the shift toward non-noble metal coatings, the company could unlock a transformational opportunity across gH2, chlor-alkali, electronics, and electrowinning, securing dominant market share in high-value industries. By replacing volatile, high-cost metals like platinum and palladium with cost-efficient alternatives (manganese oxides, cobalt), DNR could disrupt industry cost structures, making its technology the preferred choice. This shift would position DNR at the center of the \$60.56b gH2 economy by 2030, while cementing leadership across electrode-driven sectors. Another upside catalyst could emerge: DNR, on the brink of a breakthrough, would be set to commercialize high-performance, non-noble metal coatings—redefining industry standards as the undisputed leader. Its partnership with H2U Technologies would accelerate this edge, leveraging AI-driven catalyst discovery to fast-track innovation and outpace competitors.

A Critical Juncture: Lead or Lag [CAGR Revenues 26-35 DNR -7.5p.p.relative to our base case: DTP = -€2.67]

If DNR fails to drive the transition to non-noble coatings, it could lose market share to faster-moving innovators across critical markets. Competitors introducing cost-effective alternatives first would disrupt the industry, turning DNR's reliance on expensive noble metals into a liability. In markets where cost and efficiency dictate adoption, customers would pivot to more advanced, lower-cost solutions, eroding DNR's position. Falling behind would allow competitors to set new industry standards—leaving DNR struggling to remain the first customers' choice while racing to close the technological gap.

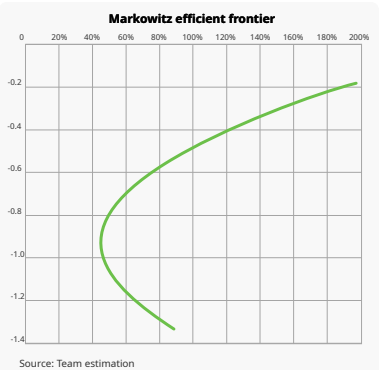
D5. Real Option Valuation

To better assess both the uncertainty and potential of the ETr segment, we used a real option valuation approach to estimate the premium this segment adds to our DCF valuation, obtaining a value amounting to 0.35 €/share. The DCF valuation provides a static assessment of ETr based on current market conditions, but it does not fully capture the segment's optionality. Given the uncertainty and disruptive potential of gH2, a real option approach allows us to quantify the premium associated with DNR's ability to leverage this emerging market at a future optimal time.

From an investment perspective, while DNR remains primarily driven by its established ET and WT segments, its exposure to the hydrogen sector effectively embeds a long position in a call option on gH2. This optionality adds asymmetric upside potential to an otherwise solid industrial business, offering investors exposure to a high-growth emerging market without the full downside risk typically associated with pure hydrogen companies.

CALCULATING VOLATILITY: A SOLID FOUNDATION

	Plug Power	Nel	ITM Power	Ballard	Ceres Power	McPhy
Plug Power	151.29	53.21	60.04	74.85	53.46	33.40
Nel	53.21	69.01	49.56	38.89	41.27	38.74
ITM Power	60.04	49.56	92.79	44.46	54.84	41.69
McPhy	33.40	38.74	41.69	28.25	37.02	84.62
Ceres Power	53.46	41.27	54.84	43.54	90.00	37.02
Ballard	74.85	38.89	44.46	65.40	43.54	28.25



The variance-covariance matrix was constructed using weekly historical returns from January 2021 to January 2025 to estimate that our volatility estimate captures recent market conditions, regulatory developments, and supply chain disruptions affecting the hydrogen sector.

In order to obtain the volatility of the hydrogen market, represented by the customized portfolio, we identified the minimum variance portfolio. It has been chosen to provide a conservative and risk-adjusted measure of expected volatility.

The minimum variance portfolio was chosen to estimate volatility, as it represents a conservative approach to capture sector risk in an emerging and volatile market.

The results, as visible in the table x, is that the portfolio is composed of a higher concentration of less volatile firms (e.g. NEL) and a lower concentration of more volatile firms (e.g. Plug Power).

The resulting portfolio variance was 45.18%, consistent with benchmark studies of emerging energy markets.

Plug Power	NEL	McPhy	ITM Power	Ballard	Ceres Power
-15%	26%	24%	3%	51%	11%

In order to estimate the volatility of the underlying, we built a custom portfolio composed of six global hydrogen-focused companies, which are diversified both in terms of geography (North America, Europe and Asia) and technology (covering production, storage and distribution). Our process followed the Markowitz's Modern Portfolio Theory, which allowed us to optimize asset allocation based on risk and return:

METHODOLOGY AND ASSUMPTIONS OF THE BLACK & SCHOLES MODEL: BALANCING VOLATILITY AND ARBITRAGE-FREE PRICING

We modelled the call option based on the Black & Scholes model, which provides a framework to value it.

The model includes the following key assumptions:

- efficient and liquid markets, ensured by global gH2-focused companies composing the portfolio
- constant volatility, estimated rigorously from historical data
- absence of arbitrage, supported by the construction of an efficient minimum variance portfolio
- European-style option: The model assumes that the call option can only be exercised at expiration, aligning with the strategic nature of DNR's investment in the hydrogen sector. Given the long-term development cycle of green hydrogen technologies, early exercise would not be optimal, reinforcing the appropriateness of this assumption.

Here is a breakdown of the key components of the model:

Spot Price (S0): it represents the current estimated value of the ETr segment. It has been obtained through a DCF valuation tailored on this BU

Strike Price (X): it has been set at 1.5x the spot price to ensure a coherent valuation that properly accounts for volatility while preventing arbitrage opportunities.

[m€]	FY2023	FY2024E	FY2025E	FY2026E	FY2027E	FY2028E	FY2029E	FY2030E	FY2031E	FY2032E	FY2033E	FY2034E	FY2035E	TV
Revenues	102.2	106.1	115.7	133.0	159.6	199.5	249.4	306.8	371.2	428.4	478.0	515.3	535.9	
Growth	139.63%	3.80%	9.00%	15.00%	20.00%	25.00%	25.00%	23.00%	21.00%	15.40%	11.60%	7.80%	4.00%	
EBITDA	12.1	0.1	4.0	6.7	14.4	23.9	32.2	41.4	53.5	64.7	76.0	86.1	94.9	
EBITDAm	11.83%	0.10%	3.50%	5.00%	9.00%	12.00%	12.90	13.50%	14.40%	15.10%	15.90%	16.70%	17.70%	
D&A	4.2	4.6	5.1	6.0	7.2	9.0	11.2	13.8	16.7	19.3	21.5	23.2	24.1	
EBIT	7.9	-4.5	-1.0	0.7	7.2	15.0	21.0	27.6	36.7	45.4	54.5	62.9	70.7	
EBITm	7.77%	-4.20%	-0.90%	0.50%	4.50%	7.50%	8.40%	9.00%	9.90%	10.60%	11.40%	12.20%	13.20%	
Tax Rate	12.90%	27.90%	27.90%	27.90%	27.90%	27.90%	27.90%	27.90%	27.90%	27.90%	27.90%	27.90%	27.90%	
NOPAT	6.9	-3.2	-0.8	0.5	5.2	10.8	15.1	19.9	26.5	32.7	39.3	45.3	51	
Net capex	31.3	43.5	47.3	47.3	40.6	33.9	35.4	35.3	20.4	23.6	26.3	28.3	29.5	
Change NWC	18.4	1.9	0.6	3.7	13.1	12.6	15.7	17.9	20.1	17.7	15.3	11.5	6.2	
FCFF	-38.7	-44.0	-43.5	-44.5	-41.4	-26.7	-24.7	-19.5	2.7	10.8	19.2	28.7	39.4	
WACC	9.01%	9.01%	9.01%	9.01%	9.01%	9.01%	9.01%	9.01%	9.01%	9.01%	9.01%	9.01%	9.01%	
Disc. FCFF	-	-40.4	-36.6	-34.4	-29.3	-17.3	-14.7	-10.6	1.4	4.9	8.1	11.1	14.0	290.2
Terminal Growth (g)														4.0%
EV (excluding call option premium and NCH2) [m€]														146.3

Given the 64.53% volatility of the hydrogen sector, setting a lower strike would lead to a too high probability of exercise, making the option behave more like a simple equity adjustment rather than a true contingent claim. This would misrepresent the segment's uncertainty and overstate its contribution to DNR's valuation. At the same time, raising the strike price too much would introduce arbitrage, violating core assumptions of Markowitz's Modern Portfolio Theory and the Black & Scholes model.

Markowitz's framework requires an efficient risk-adjusted return structure. An excessively high strike would lead to an option mispricing that could be exploited by investors.

The Black-Scholes model assumes arbitrage-free pricing, meaning an option's value must reflect realistic probabilistic exercise conditions. A strike price set too high would artificially suppress its value, making it inconsistent with volatility-adjusted expectations.

By calibrating X at 1.5x, we balance these constraints, ensuring a probability of exercise at 16%, which accurately reflects the uncertainty of the hydrogen market. This prevents an overstatement of optionality while keeping the model internally consistent, arbitrage-free, and aligned with financial theory.

Black & Scholes Model											
Spot Price (S0) [m€]	Strike Price (X) [m€]	Time to maturity [y]	rf	rf c.c.	Variance	d1	d2	N(d1)	N(d2)	Call Premium [m€]	In the Money probability
146.3	219.5	5	2.48%	2.45%	45.18%	0.5631	-0.9398	0.7133	0.1736	70.66	0.35

This choice is not arbitrary but a necessity to ensure that the valuation remains robust, reflecting both the upside potential and the risks inherent to the sector.

- **Time to expiration (T):** 5 years, aligned with the regulations and most reliable projections about the entire industry
- **Risk-free rate (r_f):** derived from AAA-rated 10-year European government bonds, same as DCF to ensure consistency
- **Volatility (σ):** obtained from a minimum variance portfolio including six global hydrogen companies

CRITICAL ANALYSIS AND CONCLUSIONS

In conclusion, this valuation framework enabled us to conduct a comprehensive assessment of the ETr business unit, capturing its potential with a more tailored and dynamic approach. While the ET and WT segments independently justify our recommendation—confirmed by the valuation obtained for ETr—the exposure to g-h₂ embedded in DNR's stock is incorporated as an additional premium. **The optionality embedded in ETr enhances the upside potential, strengthening our investment thesis. This reinforces DNR's distinctive positioning, highlighting its unique investment profile in the energy transition landscape.**

D6. Relative Valuation

To account for market perspective, we performed a peer relative valuation, whose result has been used as a check for our DCF analysis.

ET: Starting from the analysis of ET market main players and focusing on value drivers (i) geographical presence, ii) material science, iii) focus on technology manufacturing and iv) lower TCO, we selected the following comparables: Atlas Copco, Johnson Matthey and Umicore, Rotork, Entegris, Chart Industries and Axalta.

	Mkt Cap [€]	Country	Revenues FY24E	EBITDAm FY24E	Z Score	Material Science	DNR Stage of Value Chain	Lower TCO	APAC	EMEA	AMS	Comparables
DNR ET	-	IT	4634	22.5%	5.2	YES	YES	YES	3670%	3320%	3010%	
Atlas Copco	76,358.69	SE	15,376	26.22%	7.20	YES	YES	YES	3650%	3290%	3070%	✓
Epirc	21,211.72	SE	5,417	24.82%	6.70	YES	NO	YES	28.00%	32.30%	39.60%	x
KONE	25,613.19	FIN	10,932	14.33%	4.60	YES	NO	NO	36.40%	41.00%	22.60%	x
Rotork	3,448.22	UK	868	24.40%	13.9	YES	YES	YES	32.00%	40.20%	27.90%	✓
Spirax Group	6,894.32	UK	1,931	23.86%	4.80	NO	YES	YES	21.20%	42.70%	36.00%	x
Umicore	2,333.16	BE	18,266	20.90%	3.20	YES	YES	YES	22.80%	52.40%	24.80%	✓
Element Sol.	5,977.63	USA	2,168	22.05%	2.10	YES	YES	NO	34.60%	32.30%	33.10%	x
Entegris	15,210.76	USA	3,269	28.73%	3.5	YES	YES	YES	63.30%	11.40%	25.30%	✓
Victrix	1,036.74	UK	307	30.08%	0.11	YES	YES	NO	45.30%	25.00%	30.19%	x
Johnson Mat.	2,905.90	UK	14,882	16.67%	3.30	YES	YES	YES	22.50%	51.80%	25.70%	✓
Legrand	24,882.15	FR	8,417	22.99%	3.20	NO	NO	YES	15.60%	43.30%	41.10%	x
Chart Industries	10,421.48	FIN	3,101	24.28%	1.40	YES	YES	YES	25.20%	27.20%	47.60%	✓
Alfa Laval	17,709.37	SE	5,541	19.51%	4.10	YES	NO	YES	39.00%	36.60%	24.40%	x
Asahi Kasei	8,864.23	JAP	17,763	12.07%	2.00	YES	YES	NO	61.90%	15.50%	22.80%	x
Chemours	2,693.78	USA	5,574.8	1.36%	1.80	YES	YES	NO	24.30%	19.80%	55.90%	x
Axalta	7,981.49	USA	4,795.1	21.03%	2.40	YES	YES	YES	15.10%	34.20%	50.70%	✓
Osaka Soda	1,311.98	JAP	603	19.34%	5.90	YES	YES	NO	89.20%	7.70%	3.10%	x
Cummins	49,380.96	USA	31,493	15.57%	3.60	YES	NO	YES	21.20%	17.60%	61.20%	x

WT: For what concerns WT market segment, value drivers considered were i) step of the value chain, ii) product mix and iii) market exposure balance. As mentioned in the Competitive Analysis, WT is a fragmented market and DNR's peers distinguish in broad-focus global players (Xylem & Evoqua, Pentair, DuPont de N, Dow and Hyward), Fluidra, which slightly differs from the previous players in terms of end markets, is comparable to DNR in the specific product segment of swimming pools, which represents a highly important sub-segment for the Group, as highlighted in the Industry Overview.

	Mkt Cap [€]	Plug & Play Solutions		Product mix			Market exposure balance			EBITDAm FY24E	CAGR sales FY24E-FY28E	CAGR EBITDA FY24E-FY28E	Z Score	Comparables
		Pools	Disinfection & Filtration	Electrochlorination	Developed Countries	Emerging Countries	Frontier Countries							
DNR WT	-	YES	YES	YES	YES	3700%	33.00%	1170%	16.00%	5.84%	10.69%	470		
Xylem & Evoqua	30,452.04	YES	YES	YES	YES	25.90%	19.40%	52.10%	20.41%	3.25%	9.39%	5.00	✓	
Ecolab	68,796.58	YES	NO	YES	NO	78.80%	14.50%	4.90%	22.69%	2.88%	7.69%	410	x	
Pentair	15,864.10	YES	YES	YES	NO	86.60%	10.40%	2.00%	24.98%	2.64%	8.67%	410	✓	
Fluidra	4,417.86	YES	YES	YES	NO	77.50%	16.50%	3.00%	22.71%	3.64%	8.53%	234	✓	
Veolia	20,119.45	YES	YES	YES	YES	66.90%	25.60%	5.00%	14.56%	2.68%	5.87%	0.90	x	
DuPont de N.	31,236.54	YES	YES	YES	NO	53.70%	33.10%	7.30%	25.32%	3.32%	8.45%	130	✓	
Dow	26,019.14	YES	YES	YES	NO	63.20%	21.50%	7.90%	12.79%	2.45%	11.67%	210	✓	
Hayward	31,440.44	YES	YES	NO	NO	91.40%	5.80%	1.90%	25.82%	4.89%	10.77%	210	✓	

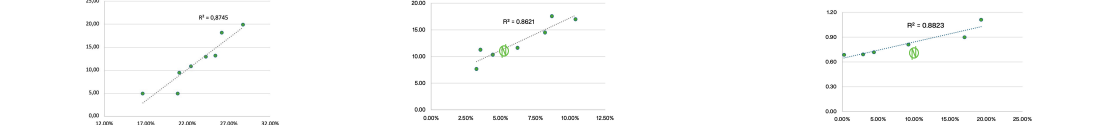
ETr: DNR focuses on components, with only a small-scale involvement in electrolyzers. Therefore, we selected peers based on their role in providing innovative components for the green and renewable sectors, which are currently facing market uncertainty but have strong growth potential. The selected peers are Varta, SGL carbon, FTC Solar, Mersen, Seri Industrial and FuelCell. In contrast, peers focused on H₂ production and electrolyzers production like Nel and PlugPower, are considered comparable to NCH₂.

	Mkt Cap [€]	Country	Revenues FY24E [€]	Sales CAGR FY23-FY28E	Similar Market Scope	Tech & Innovation Focus	Proprietary Tech	Comparables
DNR ETr		IT	1061	917%	YES	YES	YES	
Varta	34.75	DE	790.29	4.3%	YES	YES	YES	✓
SGL carbon	460.32	DE	1,049	0.24%	YES	YES	YES	✓
TPI composites	70.67	USA	1196	7.4%	YES	YES	NO (wind turbine blade)	x
Albemarle	9,041.72	USA	5,998	-12.93%	YES	YES	YES	✓
FTC Solar	51.07	USA	52.91	19.26%	YES	YES	YES	✓
Pioneer Power Sol.	38.63	US	31.60	5.97%	YES	YES	NO (electrical infrastr.)	✓
Mersen	518.53	FRA	1,227	2.89%	YES	YES	YES	✓
Siemens Aktien.	160,195.50	DE	77,285	2.80%	YES	YES	YES	✓
Seri Industrial	12.174	ITA	16,602	21.64%	YES	YES	YES	✓
Daqo New Energy	1,960.98	CN	1,200.78	-1.01%	YES	YES	NO (polysilicon solar pan.)	x
FuelCell Energy	152.50	USA	103.17	16.96%	YES	YES	YES	✓

For the three industries we focused on 2 main multiples (i) EV/EBITDA with EBITDAm FY24E as regressor for ET and with sales growth rate for FY23 as regressor for WT, typical of machinery industry and (ii) EV/Sales with for ETr, since peers in H₂ industry are often in early-stage development with negative EBITDA and may experience high growth phase. Performing Ordinary-least-squared (OLS) linear regression between multiples and their respective regressor, we focused on the relation between i) EV/EBITDA vs EBITDAm FY24 for ET, ii) EV/EBITDA vs sales growth rate for FY23 for WT and iii) EV/Sales vs sales growth rate for FY23 for ETr. Finally, we obtained an EV of €1125 m for ET, €458.67 m for WT and €836 m, resulting in an overall EV of €1,670 m and a FY25E TP of €8.28.

We further employed a SOTP Relative Valuation on NCH₂. DNR's 25.85% stake in NCH₂ contributes €199 to DNR TP, resulting in an overall TP of 10.27 €/share.

ET	EBITDAm FY24E	EV/EBITDA FY24E	WT	RevCAGR FY23-26E	EV/EBITDA FY24E	ETr	RevCAGR FY23-26E	EV/Sales FY24E
Atlas Copco	26.22%	18.09	Xylem & Evoqua	10.36%	1700	Varta AG	4.39%	0.72
Rotork	25.40%	13.15	Pentair	8.67%	1756	SGL Carbon	0.24%	0.69
Umicore	20.90%	4.94	Fluidra	3.54%	1127	FTC Solar	19.26%	1.11
Entegris	28.73%	19.90	Hayward	8.17%	14.51	Mersen	2.86%	0.69
Johnson Matthey	16.67%	4.91	Dupont de N.	6.20%	1162	FuelCell Energy	19.96%	0.90
Chart Industries	24.26%	12.88	Dow	3.26%	785			
Axalta	21.06%	9.47						



Nucera

NCH2, given its strategic and financial relevance, has been separately valued through a DCF approach, considering its alignment with DNR's value drivers. DNR's 25.85% stake in NCH2 contributes by €1.44 per share to the TP, again supported by a market-based relative valuation to cross-validate our assumptions and ensure a robust valuation framework.

To forecast NCH2's growth trajectory, we integrated the same key drivers identified for CA and gH2 in DNR's industry overview , while adjusting for NCH2's specific dynamics. Given the strong contractual interdependence between the two companies (Toll Manufacturing Agreement), their growth trajectories are expected to be closely aligned, although we have accounted for NCH2's unique operational and market factors. Notably, we accounted for the inherent uncertainty in the AWE segment, as revenues generated from NEOM —currently the company's largest revenue contributor —will cease from FY2026 onwards. However, AWE trajectory growth towards FY2030 is expected to accelerate at a 13.58% CAGR. To project CA future growth, we leveraged on our Molecule by molecule proprietary model. In FY2024, the company provided segmental EBIT data for the first time. The CA division delivered exceptional performance, achieving a 18.3% EBITm, primarily driven by (i) enhanced production efficiency and (ii) a favourable revenue mix, with a higher contribution from services relative to new installations. However, we expect profitability to normalize over time, with EBITm converging to a long-term average of 15.10% in FY25E-30E. For what concerns AWE, NCH2 reported negative margins (the reasons have already been

Item\	2023	2024	2025E	2026E	2027E	2028E	2029E	2030E	TV
Revenue	661.0	862.0	908.1	917.7	972.9	1,075.4	1,208.9	1,383.9	
Growth yoy	72.52%	30.41%	5.34%	1.06%	6.01%	10.53%	12.41%	14.48%	
of which CA	-44.08%	1.50%	17.50%	-4.00%	-1.00%	4.00%	3.49%	3.49%	
of which AWE	556.85%	59.76%	-2.50%	5.00%	11.00%	15.00%	17.50%	20.00%	
EBITDA	31.0	-8.0	33.4	59.9	74.8	91.3	107.5	129.6	
EBITDAm	4.69%	-0.93%	3.68%	6.53%	7.69%	8.49%	8.90%	9.37%	
D&A	6.0	6.0	8.17	11.9	14.1	15.6	17.5	20.1	
EBIT	25.0	-14.0	25.2	48.0	60.7	75.7	90.0	109.6	
EBITm	3.78%	-1.62%	2.78%	5.23%	6.24%	7.04%	7.45%	7.92%	
of which CA	N/A	18.34%	16.00%	14.00%	14.50%	15.00%	15.30%	15.80%	
of which AWE	N/A	-14.50%	-7.50%	-1.00%	1.00%	2.50%	3.50%	4.50%	
Net Profit	24.0	11.0	13.0	22.4	47.4	59.3	67.6	80.8	
Npm	3.63%	1.28%	1.43%	2.44%	4.87%	5.51%	5.59%	5.84%	
Tax Rate	33.33%	8.33%	32.45%	32.45%	32.45%	32.45%	32.45%	32.45%	
Net Capex	4.0	13.0	14.5	17.4	19.5	21.5	24.2	27.7	
NOPAT	16.7	-12.8	17.0	32.4	41.0	51.1	60.8	74.0	
Change NWC	9.0	57.0	5.9	33.4	17.4	3.7	12.3	19.0	
FCFF	9.7	-76.8	4.8	-6.4	18.3	41.5	41.9	47.4	
WACC	-	-	11.17%	11.17%	11.17%	11.17%	11.17%	11.17%	
Discounted FCFF	-	-	4.3	-5.2	13.3	27.2	24.7	25.1	364.1

RELATIVE VALUATION - NUCERA

We employed a SOTP relative valuation to analyze NCH2 given its strategic and financial relevance as for the DCF method, benchmarked with market peers. We conducted two relative valuation because of the different market value drivers for its two segments: CA and AWE. Regarding CA, we selected peers based on companies operating as OMEs and EPC in the chemical and industrial sectors. We employed the FY24 EV/EBIT multiple, reflecting the capital-intensive nature of the market, where EBIT offers a clear view of operational performance unaffected by the financing structure. We applied R&D/Sales FY24 as a regressor, as maintaining a competitive edge in an efficiency-driven market like CA is crucial. We derived an EV/EBIT of 11.69multiple. For the AWE segment, we selected peers according to the fact the companies behave as EPC and OEMs for H2 industry and have a similar business model to NCH2. We utilized EV/Sales multiple, as revenue growth is a key value driver in a market still in its early growth stages, where profitability is yet to fully mature. We performed a weighted average based on GW of production capacity, resulting in a multiple of 0.28.

AWE	EV/Sales	GW Production Capacity	CA	R&D/Sales	EV/EBIT 2024E
Plug Power	3.73	2.5	Technip Energies	1.18%	10.04
ITM Power	-0.24	1	Saipem	0.20%	8.57
McPhy	0.94	1.3	Krones	3.64%	9.81
Nel	1.18	1	Cummins	4.40%	13.14
Ballard	-1.80	1	Taishisha	0.40%	7.6

Finally, we calculated 25.85% of the total E of NCH2 (reflecting DNR's 25.85% stake in NCH2) contributes by €1.91to DNR TP. Consequently, the total TP (DNR + 25.85% NCH2) stands at €10.27, confirming our BUY recommendation.

E. INVESTMENT RISKS

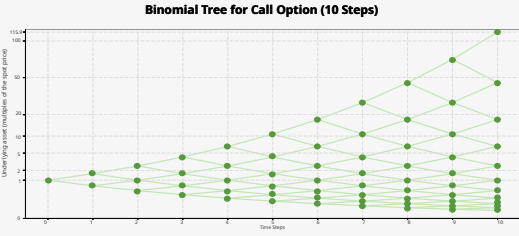
E1. THE NUVERA EXPERIENCE: A TESTAMENT TO DE NORA'S RESILIENCE

In the late 1990s, DNR bet big on hydrogen, pouring billions of liras into Nuvera Fuel Cells - a JV with Arthur D. Little and Hess Corporation - to push the boundaries of fuel cell innovation. However, the anticipated boom never materialized. By 2008, DNR made the strategic decision to divest its stake and sell the patents, cutting losses in a stagnating market. Years later, recognizing the latent value of this innovation, DNR reacquired the same patents and re-entered the hydrogen sector with revived determination. DNR's ability to adapt, pivot, and reassess opportunities defines its corporate culture. From its founder, Oronzio De Nora, to his successors, the company has built a legacy of staying ahead of the market curve, tackling challenges head-on, and making bold, calculated exits when necessary. Today, DNR's German division stands as a leader in producing cutting-edge fuel cell electrodes, a testament to the company's resilience and strategic foresight. Its track record proves that while investments like its Italian gigafactory should be re-evaluated, DNR has the strength to absorb tough calls and the agility to adjust its course of action, safeguarding its future. Backed by flexible manufacturing capabilities, DNR is primed to respond to shifting market dynamics. Should hydrogen investments fall short, the company can swiftly pivot to alternative technologies, ensuring it remains abreast of evolving demand.



E2. ASSESSING GREEN HYDROGEN'S RISK AND POTENTIAL: A BLACK-SCHOLES ANALYSIS

Given the strategic importance of green hydrogen for the company under analysis, we carried out a detailed study using the Black-Scholes model to assess the associated risks and their potential implications. We developed a binomial tree model to simulate the potential payoffs for an investor holding a call option on the hydrogen market opportunity, across five years (split into ten time steps). This model calculates the option's payoff at each node, representing different possible future scenarios for the underlying asset, which in this case is the hydrogen opportunity. The payoffs are expressed as multiples of the spot price, so that the risk-return trade-off is clearly visible. The probability of achieving a positive outcome (i.e. a profitable payoff) remains relatively low when considering the extended time horizon for the derivative. However, when such favourable scenarios materialize, the potential returns are substantial. This modelling approach provides a systematic framework to quantify the considerable uncertainty surrounding the hydrogen market. At the same time, it underscores the significant disruptive potential of the hydrogen industry, capturing both the market's volatility and the asymmetric risk-reward profile inherent in such emerging opportunities.



Source: Team Estimation

F. ENVIROMANTAL, SOCIAL & GOVERNANCE (ESG)

F1. ESG score

The objective of our competitive ESG analysis is to evaluate DNR's ESG performance in comparison to 12 industry peers. To achieve this, we identified 108 critical ESG factors across Environmental (35), Social (36), and Governance (37) dimensions, refining our selection to 39 key ESG metrics—13for Environment, 15for Social, and 11for Governance—specifically relevant to DNR's industry dynamics

WACC	11.17%	Fama & French two-factor model
Cost of equity	11.17%	$K_E = r_f + \beta \times \text{ERP} + \beta_{SMB} \times \text{SMB}$
Risk-free rate	2.48%	Return of AAA 10Y government bonds
Beta market β_M	1.2982	Obtained through a multi-linear regression of NCH2 historical returns (weekly data since IPO in July 2023) against MSCI Europe Small Mid Cap index and a custom portfolio which accounts for SMB obtained through the difference between the returns of MSCI Europe Small Cap and MSCI Europe Large Cap indexes
Beta size β_{SMB}	2.0749	
Market premium	4.93%	Equality risk premiums provided by A. Damodaran for each region where NCH2 operates (Germany, Italy, Japan and China), weighting them based on their relevance in terms of revenue contribution.
SMB	1.11%	1990-2024 average value of the SMB factor for a European Index portfolio, accounting for premium return of small-cap stocks vs large-cap stocks, yearly data (annual European SMB from K. R. French data library).
Tax rate	32.45%	Sum of Corporate Income Tax (Körperschaftsteuer), Solidarity Surcharge (Solidaritätszuschlag) and Trade Tax (Gewerbesteuer)
Capital structure (D/E)	0	The company has no debt issued

Terminal growth (g)	4.0%
EV [m€]	453
Net Cash position [m€]	680
E [m€]	1,133
DNR's 25.85% stake	293
# shares [m€]	202
DNR's 25.85% stake in NCH2	1.45 €

2023 data extracted from Sustainability Reports, Governance Reports, Balance Sheets, and other official documents, we calculated the scores for these metrics for both DNR and its peers. The second phase involved calculating the final score for each ESG pillar. For every metric, a percentile score was derived by comparing DNR's performance with that of its peers. The average percentile scores for the metrics associated with a particular factor were then aggregated to obtain a composite percentile score for each factor. These percentiles were converted into scores on a ten-point scale, which were further adjusted using pre-assigned weights that reflected the significance of each factor within its respective pillar (35% environment, 20% social, 45% governance). Finally, these numeric scores were translated into letter grades (e.g., CCC, B, BB, BBB, A, AA, AAA) based on an evaluation framework aligned with leading ESG rating agencies like MSCI. Our result is 6.40 score for the environmental pillar, 5.67 score for the social pillar and 6.03 for the Governance pillar. **Overall, DNR's ESG score for 2023, which was rated as A for Environmental and Governance pillar and BBB for Social pillar following MSCI score-letter criteria.** Similar computations were performed for the peer group. Below, we present the comprehensive data collected for DNR for 2023, including the industry average as well as the best- and worst-performing scores for the year.

ENVIRONMENTAL: RATING A, SCORE: 6.40 – WEIGHT 35%

	Environmental Highlights				
	Key Factors	DNR 2023	Industry 2023	Best 2023	Worst 2023
Environmental Policies	Resource Reduction Policy	TRUE	100%T - 0%F	TRUE	FALSE
	Policy Environmental Supply Chain	TRUE	100%T - 0%F	TRUE	FALSE
Environmental Targets	Resource Reduction Targets	FALSE	43.3%T - 56.7% F	TRUE	FALSE
	Targets Water Efficiency	FALSE	43.3%T - 56.7% F	TRUE	FALSE
Emissions	Targets Energy Efficiency	FALSE	26.6%T - 73.4%F	TRUE	FALSE
	Policy Emissions	FALSE	66.6%T - 33.3%F	TRUE	FALSE
	Targets Emissions	TRUE	93%T - 7%F	TRUE	FALSE
	Emission Reduction Target Percentage	50.00%	46.00%	75.00%	31.25%
	Estimated CO2 Equivalents Emission Total/employee	16 metric tons/employee	70 metric tons/employee	4.46 metric tons/employee	135.21 metric tons/employee
Innovations	Scope 1 Estimated Total	5,519 tons	2,793,099 tons	8,312,177 tons	1,714 tons
	Scope 2 Estimated Total	17962,16 tons	610,794 tons	1,766,242 tons	4,236 tons
	Renewable/Clean Energy Products nt goes here	TRUE	80%T - 20%F	TRUE	FALSE
	Green Capex	TRUE	33%T-66%F	TRUE	FALSE

SOCIAL: RATING BBB, SCORE: 5.67 – WEIGHT 20%

	Social Highlights				
	Key Factors	DNR 2023	Industry 2023	Best 2023	Worst 2023
Policies of development	Health & Safety Policy	TRUE	100%T - 0%F	TRUE	FALSE
	Policy Employee Health & Safety	TRUE	100%T - 0%F	TRUE	FALSE
	Policy Supply Chain Health & Safety	TRUE	93%T - 7%F	TRUE	FALSE
Employee Diversity & Satisfaction	Employee Satisfaction	73.00%	77.00%	82.00%	71.00%
	Salary Gap	18	35.44	16	59
	Net Employment Creation	4.2	9.00	14.49	0.07
	Gender Pay Gap Percentage	95.20%	95.02%	94.55%	95.61%
	Women Employees	20.00%	24.28%	26.05%	21.84%
	Total Injury Rate Employees	2.81	10.49	2.6	26.14
	Policy Minimum Wage	TRUE	60%T - 40%F	TRUE	FALSE
Community Engagement	Policy Working Hours	TRUE	33.3%T - 66.6%F	TRUE	FALSE
	Donations / Million in Revenue	235.52	1,220.13	2,332.7	107.5
	Corruption Due Diligence	TRUE	46%T - 54%F	TRUE	FALSE
Product responsibility	Policy Cyber Security	TRUE	100%T - 0%F	TRUE	FALSE
	ISO 9000	TRUE	93%T - 7%F	TRUE	FALSE

GOVERNANCE: RATING A, SCORE 6.03 - WEIGHT 45%

	Governance Highlights				
	Key Factors	DNR 2023	Industry 2023	Best 2023	Worst 2023
Bard Structure	Policy Board Diversity	TRUE	93%T - 7 %F	TRUE	FALSE
	Policy Board Experience	TRUE	100%T - 0%F	TRUE	FALSE
Board Characteristic	Board Size	13	11	13	9
	Board Background and Skills	TRUE	100%T - 0%F	TRUE	FALSE
	Board Gender Diversity, Percent	30.00%	29.67%	28.00%	37.00%
	CEO Chairman Duality	FALSE	7%T - 93%F	TRUE	FALSE
	CEO Board Member	TRUE	80%T - 20%F	TRUE	FALSE
	Chairman Is ex-CEO	FALSE	20%T - 80%F	TRUE	FALSE
Executive Compesation	Executive Compensation Policy	TRUE	100%T - 0%F	TRUE	FALSE
Shareholders	Shareholder Rights Policy	TRUE	100%T - 0%F	TRUE	FALSE
	SDG 9 Industry, Innovation and Infrastructure	TRUE	80%T-20%F	TRUE	FALSE

F2. Board of Directors

Name	Current Role	Age	Education	Background
Federico De Nora	Chairman	56	-	Grandson of the company's founder Oronzio. From 2000, CEO of DNR Impianti S.p.A., Chairman of DNR Elettrodi S.p.A., DNR Tecnologie Elettrochimiche S.p.A., Udenora S.p.A. Sole Administrator of Federico De Nora S.p.A. Currently Chairman of the Board of Directors, holding the majority stake.
Paolo Dellachà	CEO	56	Degree In Electronic And Management Engineering	CEO of DNR since 2010, key role in establishing the NCH2 JV, where he serves as Deputy Chairman of the Supervisory Board. Led multiple acquisitions in the ET and WT sectors.
Stefano Venier	Non-Executive Director	61	Degree In IT And Master In Energy And Environmental Management	CEO of Snam, with over 30 years of experience in energy and utilities. Former CEO of Hera, also held leadership roles at A.T. Kearney, Eni, and Electrolux.
Alessandro Garrone	Independent Non-Executive Director	61	Degree In Economics	Executive Vice President of ERG SpA and Chairman of the Strategic Committee, with prior roles including CEO of ERG SpA (2002-2012) and Chairman of ERG Renew (2012-2016).
Maria Giovanna Calloni	Independent Non-Executive Director	60	Degree In Business Administration	Director at Merrill Lynch in New York (1992-2002). Serves on the boards of DNR, Euro Group Laminations, Philogen, CYGate, and Tec Cyber, and has held past director roles at Pirinifarina, Credito Valtellinese, and CAD IT.
Mario Cesari	Non-Executive Director	57	Degree In Industrial Engineering	Held leadership roles at Valeo, McKinsey & Co., Berkshire Partners, Vestar Capital, and Thyssen Bornemisza Group. In 2022, mr. Cesari founded Ischyra Europa GmbH, serves on several other boards, including Plovna, Carel, and De Agostini Group.
Michelangelo Mantero	Non-Executive Director	56	Degree In Monetary Economics	Previously at Merrill Lynch in New York and partner at Vestar Capital Partners. In 2013, founded GenCap Advisory and in 2020 raised the Xenon Small Cap fund.
Elisabetta Oliveri	Independent Non-Executive Director	61	Degree In Electronic Engineering	Leadership roles at Sirri Group, Gruppo Fabbri Vignola, and Sagat SpA. Served on several boards, including Snam SpA, GEDI SpA, and Eutelsat S.A. Now Independent director at ERG SpA, Trevi Finanziaria SpA, and Stella SpA. President of the Furio Solinas Foundation.
Giovanni Toffoli	Independent Non-Executive Director	56	Degree In Business Administration	Joined Kappa SpA in 1998. In 2000, founded Adriatica SpA and became its CEO in 2012. Has been President of Delfrichemica Assofertilizzanti since 2018.
Paola Bonandrini	Independent Non-Executive Director	50	Degree In Civil Engineering And Master's Degree In Energy And Environmental Management And Economics	First female District Head at Snam. In 2014, Deputy Managing Director at Teréga and returned to Snam in 2018 as Senior Vice President of Facilities. Since 2019, she has been on Teréga and, Scogat and Mariconisul boards.
Giorgio Metta	Independent Non-Executive Director	52	Degree And PhD In Electronic Engineering	Scientific Director of the Italian Institute of Technology (IIT). Led the development of the iCub robot. Author of 300+ publications and contributed to Italy's AI Strategic Agenda and the G7 AI Forum.
Anna Chiara Svelto	Independent Non-Executive Director	56	Degree In Law	Held leadership roles at UBI Banca, Pirelli, Edison, and Shell Italia. Served on the boards, including Enel, ASTM, and Technoprobe. Currently board member of Credito Emiliano, Interpump, and Avvale.