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DE NORA

Italy/ Electrode and Water Technologies
for the Green Economy

BUY

DNR.IM

Price: 6.95€

Target Price: € 10.39

Upside: 49.5%

Dividend Yield: 1.78%

Stock data

Market Capitalization: € 1.38B

Shares Outstanding: 198.7M

Exchange: Italian Stock Exchange

Ticker: DNR.MI

52 week H/L: 6.86 - 16.17

Volume (90d): 198.53K

Stock Performance

(FTSE MIB Comparsion)

Absolute Return: -48.5 %

(Abs. Return FTSE MIB: 76.1%)



Free Float and Liquidity:

The free float represents the number of shares available for public trading, and for De Nora, it amounts to 22.13% of its market capitalization.

This limited portion restricts an investor's ability to enter or exit the stock and potentially creates greater volatility due to the scarce availability of shares, which can amplify price fluctuations in the event of sudden increases in demand or supply.

	KPIs									
(€M)	2020	2021	2022	2023	2024E	2025E	2026E	2027E	2028E	2029E
Revenues	514	655	894	867	841	914	992	1,048	1,108	1,170
EBITDA	81	123	168	176	178	173	196	216	238	261
EBITDAm	15.67%	18.81%	18.80%	20.25%	21.11%	18.93%	19.80%	20.65%	21.48%	22.30%
R&D	1	10	13	16	19	18	20	21	22	23
EBITDA adj	81	133	181	192	197	191	216	237	260	284
EBITDAm adj	15.78%	20.27%	20.25%	22.09%	23.37%	20.93%	21.80%	22.65%	23.48%	24.30%
EBIT	56	88	126	137	141	137	160	180	202	225
EBITm	10.80%	13.37%	14.07%	15.79%	16.80%	14.96%	16.14%	17.19%	18.20%	19.19%
NFP	95	189	-52	-69	-30	-75	-120	-160	-201	-242
EPS	0,16	0,33	0,45	1,16	0,50	0,47	0,59	0,68	0,76	0,86
RoI	7.95%	9.31%	13.57%	15.71%	12.56%	10.83%	13.11%	14.52%	15.99%	17.51%
RoE	7.93%	14.64%	12.04%	25.38%	10.94%	9.63%	11.33%	12.23%	13.11%	13.99%
CapEx/Revenues	11.25%	9.17%	22.24%	6.22%	6.41%	3.97%	3.66%	3.46%	3.28%	3.10%

Sources: company data, team estimates

INVESTMENT SUMMARY

De Nora: A Growth and Profitability Story Led by a Family-Run Business

We initiate our analysis on De Nora with a **BUY** recommendation, setting a year-end 2025 target price of **10.39€** per share, implying an **upside of 49.5%** from the closing price on 6th February 2025. Founded in 1923 by Orazio De Nora, Industrie De Nora S.p.A. is now an Italian multinational corporation specializing in electrochemistry and a leader in sustainable technologies for the **Green Economy**. It is the world's largest supplier of high-performance catalytic coatings and insoluble electrodes for electrochemical and industrial applications. Despite its **IPO** in 2022 (with a free float of **22.13%**, making it a relatively illiquid stock), the company remains family-run, with **53.33%** of shares and **63.95%** of voting rights held by the De Nora family. While the stock's historical performance has been significantly negative (**-48.5%** since its IPO), the company benefits from highly favorable competitive dynamics. This is primarily due to the very high entry barriers, including substantial R&D and capital expenditure requirements, as well as the specialized know-how that the company possesses. These factors enable De Nora to maintain exceptional profitability (with an average adjusted **EBITDAm** of **20.93%** from FY20 to FY24E), leveraging its full production capacity and achieving economies of scale. Below, we present three main investment theses supporting our **BUY** recommendation.

Innovation and Continuous Improvement

Innovation and continuous improvement are foundational elements of De Nora's DNA, as highlighted during the Kick-off of the CFA Italian Research Challenge held at Industrie De Nora's historic headquarters. Luciano Iacopetti, Corporate Applied R&D Director, illustrated how the company transforms research and development investments into tangible value. According to Iacopetti, the cycle from R&D investments to product patenting and commercialization takes an average of five years. To demonstrate the contribution of this process to the company's growth, we conducted a linear regression analysis correlating **R&D** expenses from five years prior with the estimated **revenues** in our evaluation for the period 2019 - 2028. (Exhibit 1) The regression yielded the equation: Revenue = 23,483 * R&D Cost + 701.61 with an **R² = 90.77%**, indicating a strong explanatory power of the linear regression model. Specifically, it shows that approximately **90.76%** of the variation in future revenues is explained by the variation in R&D expenses incurred five years earlier. The equation implies that for every million euros invested in R&D, expected revenues increase by approximately **€23.48M** (slope coefficient) after the completion of the R&D investment lifecycle. If no R&D investments were made, future revenues would amount to **€701.62M** (intercept), representing the revenue component independent of R&D investments.

M&A Strategy: Defense is the best attack

Industrie De Nora has built a robust and flexible M&A strategy aimed at strengthening its leadership in key markets and entering new growth segments, such as the energy transition. With a solid track record of both transformational acquisitions and bolt-on operations, De Nora has expanded its technological portfolio and deepened its penetration in the highest-growth markets it serves. A distinctive feature of De Nora's M&A strategy is the use of targeted acquisitions or joint ventures to counter competition and mitigate the risk of new entrants. By acquiring competitors or relevant assets, the company strengthens its control over strategic markets, reduces market fragmentation, and consolidates its competitive position. This defensive strategy, combined with an offensive growth vision, allows De Nora to maintain a dominant position in a highly competitive industry characterized by significant entry barriers. Moreover, acquisition activities accelerate access to new technologies and geographic markets, with a particular focus on high-value segments such as water disinfection and green hydrogen technologies. This ability to balance organic and inorganic growth, while expanding its value chain, forms a cornerstone of De Nora's strategy and reinforces our **BUY** recommendation for the stock, thanks to its long-term sustainable growth prospects and value creation potential (Annex 1).

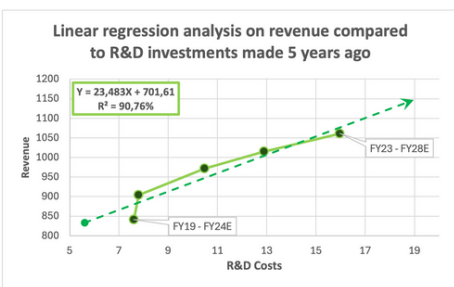
"GIGASTRATEGY"

De Nora's Gigafactory, located in Cernusco sul Naviglio near Milan, represents a strategic project developed in collaboration with Snam S.p.A. within the green hydrogen market. It will be one of the largest large-scale production hubs in Italy, with a capacity of up to **2 GW**. The facility will manufacture electrolyzers for green hydrogen generation, components for water electrolysis, and fuel cells, thereby strengthening the company's technological offering and supporting the global energy transition (aligned with **COP29** and the decarbonization process). Leveraging its proven expertise in electrochemistry and intellectual property, De Nora is well-positioned to capture a significant share of this market opportunity. The company has already secured 1.5 GW of green hydrogen projects, including a contract with H2 Green Steel through its joint venture with Thyssenkrupp Nucera, and boasts a pipeline of 1.3 GW pending, with a potential (according to management) to generate additional revenues of **€122.3M**.

Sources: company data, team estimates

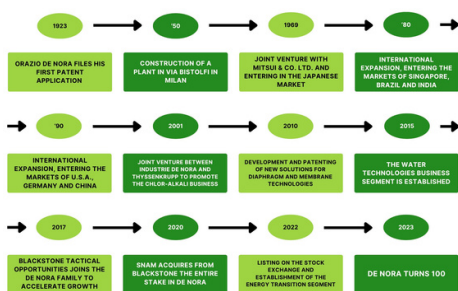
De Nora Initiating Coverage

Exhibit 1



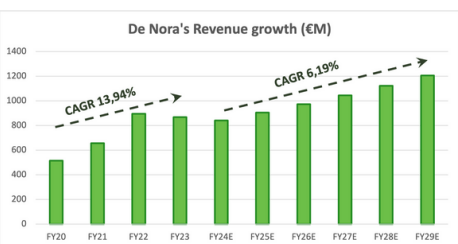
Sources: company data, team estimates

Exhibit 2



Sources: company data, team elaboration

Exhibit 3



Sources: company data, team estimates

Moreover, the Gigafactory is distinguished by its circular economy-oriented approach, which reduces dependence on external resources and recycles waste. This not only lowers operational costs but also enhances De Nora's reputation for sustainability.

Valuation: Solid leadership not adequately valued

Our target price of **10.39€** per share is estimated based on the combined weighting of two different valuation metrics. We conducted an absolute DCF valuation using a three-stage asset-based approach (a forecast period [FY24E-FY26E], a moderate growth period [FY26E-FY29], and a perpetuity) and a relative valuation using market multiples for the **Electrode and Water Technologies** segments (specifically **EV/SALES** and **EV/IC**). Complementing the latter, to emphasize the **Energy Transition sector**, we performed a separate **DCF** to estimate the expected future cash flows from investments in the **Gigafactory**. To support the valuation, the **Monte Carlo Simulation** on the DCF allowed us to better assess the validity of our theses (Exhibit). We assumed organic growth for each segment through drivers identified by market demand. These future growths are primarily sustained by the company's commitment to consolidating and preserving its competitive position, leveraging its expertise and innovative capacity to meet increasing demand across various industrial applications.

BUSINESS DESCRIPTION

Company Profile: Italians Energy Better

De Nora is a century-old Italian multinational specializing in electrochemistry and a leader in sustainable technologies for the **green economy**. Founded by Orazio De Nora in 1923, it has evolved by developing unconventional solutions for the energy transition towards decarbonization, enabling the **hydrogen economy**, and ensuring clean water for all (Exhibit 2). Over the years, it has entered new markets through joint ventures and patents (Annex 3), whose generated volumes have contributed to rapid global expansion. This has allowed the company to establish its technologies as high-value enablers that facilitate transformation processes in various industrial applications worldwide. In the past decade, the Group has demonstrated an exceptional track record of organic growth, driven by innovation, the acquisition by Blackstone (2017: 32.9% of the share capital), later transferred to Snam S.p.A. (a global energy infrastructure operator), and successful **M&A** activities in various countries. It operates 25 companies (Annex 2), five development centers in Italy, the United States, and China, over 280 patent families with more than 2,800 territorial extensions, and employs more than 1,900 people globally. De Nora went public on Euronext Milan in June 2022, with a share price of **€13.5** and a market capitalization of **€2.72B**, enabling it to raise capital for expanding hydrogen-related and sustainability activities. However, today its market capitalization stands at **€1.38B** (data as of February 6), with consolidated revenue of **€856.41M** in FY23 (Exhibit 3). This suggests that the initial stock market valuation was overly generous since revenue and EBITDA margins in FY22 and FY23 did not match the growth pace anticipated by analysts at the time (particularly Mediobanca, which also sponsored the operation). The company is led by **CEO Paolo Enrico Dellachà**, with **Chairman Federico De Nora** personally owning 3.28% of the shares. De Nora S.p.A.'s shareholding structure consists of 53.33% owned by the De Nora family, holding 63.95% of voting rights. Specifically, 44.30% of shares are held by Federico De Nora S.p.A., 5.75% by Norfin S.p.A. (controlled by Michele De Nora, Chairman's older brother). The remaining shares are distributed among management (1.47% with 0.59% of voting rights), Asset Company 10 S.r.l. (21.59%), controlled by Snam S.p.A. (25.99% of voting rights), and institutional and retail investors (22.13% of shares with 8.88% of voting rights). Lastly, treasury shares account for 1.48% with 0.59% of suspended voting rights (For the Corporate Governance Model see Annex 4).

Vision and Mission

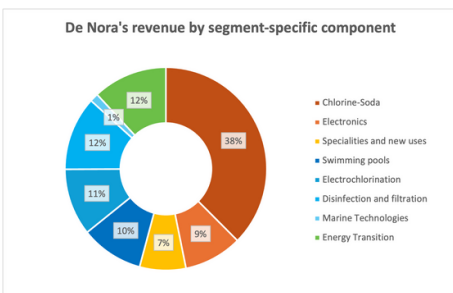
De Nora stands out for its "can-do" approach, tackling environmental challenges with determination through innovation and collaboration. With a vision to empower talent as a catalyst for a sustainable future, the company emphasizes its passion for the planet and teamwork to promote solutions that enable the energy transition, water treatment, and industrial efficiency. Its mission is to generate value through green technologies and operational agility, allowing it to adapt to an ever-changing world. Flexibility, technological excellence, and continuous innovation are the three pillars that underpin its ability to create long-term value, reinforcing its role as a global leader in sustainability.

Historical Stock Analysis: team elaboration



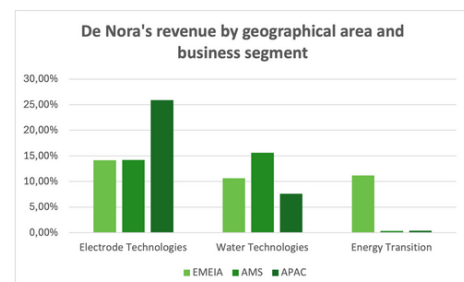
De Nora Initiating Coverage

Exhibit 4



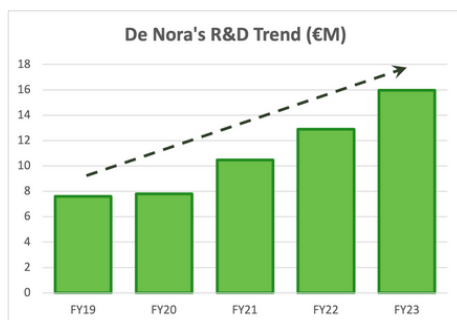
Sources: company data, team elaboration

Exhibit 5



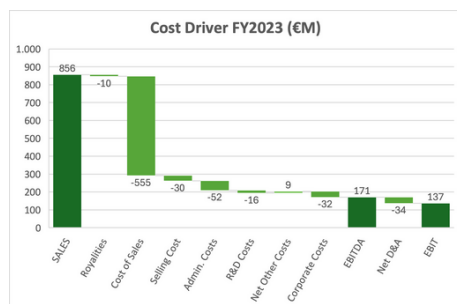
Sources: company data, team elaboration

Exhibit 6



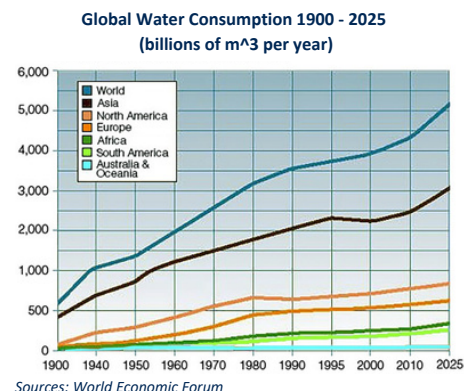
Sources: company data, team elaboration

Exhibit 7



Sources: company data, team elaboration

Exhibit 8



Sources: World Economic Forum

Market Segmentation: Three Divisions, One Soul

In line with IFRS 8 provisions, we have identified three operational business segments, each detailed in terms of offerings and key industrial applications to better understand the company's economic framework (Exhibit 4):

(i) **Electrode Technologies** (€464M 2023 revenue, **9.19% 2019-2023 CAGR**): This segment includes metallic electrodes (anodes and cathodes) coated with special catalysts, electrolyzer components, and systems, with multiple applications, particularly in chlorine and caustic soda production, electronics, lithium battery component manufacturing, non-ferrous metal refining (nickel and cobalt), electroplating, pulp and paper industry, and infrastructure corrosion prevention.

(ii) **Water Technologies** (€289M 2023 revenue, **7.06% 2019-2023 CAGR**): This segment includes water treatment systems, including electrodes, equipment, systems, and plants for the disinfection and filtration of drinking water, wastewater, and process water. Key applications include residential pool disinfection, municipal water disinfection and filtration, industrial water treatment, and marine sector applications.

(iii) **Energy Transition** (€102M 2023 revenue, **130.18% 2020-2023 CAGR**): This segment includes electrodes (anodes and cathodes), electrolyzer components, and systems for hydrogen and oxygen generation via water electrolysis, fuel cells for emission-free electricity generation using hydrogen or other energy carriers (methanol, ammonia), and redox flow batteries.

Business Model & Revenue Drivers

Industrie De Nora S.p.A. operates with a B2B business model, typically supplying critical components for more complex systems and building its competitive advantage on four key pillars:

(i) **"Glocal" Approach**: De Nora has built its reputation by exceeding customer expectations in quality and on-time deliveries. Its global network of production plants leverages local expertise and centers of excellence, continuously sharing improvements across factories in Italy, Germany, the USA, Brazil, Japan, China, and India (Exhibit 5).

(ii) **Innovation**: A fundamental trait since its founding when Oronzio De Nora patented the first electrolytic cell for chlorine-alkali production. Continuous innovation ensures no product obsolescence, maintaining competitive positioning. De Nora invests about 2% of its annual revenue in R&D (Exhibit 6), with an expenditure mortality rate of 60%, aligning with high-innovation sectors.

(iii) **Partner of Choice**: Through continuous information exchange and alignment with client objectives, De Nora strengthens long-term customer loyalty while offering excellent after-sales support, including equipment installation training and 24/7 expert assistance.

(iv) **Partnerships**: De Nora's extensive expertise in electrochemistry enables it to collaborate with partners to develop and market innovative solutions. The company aims to meet the growing demand for green hydrogen through strategic investments, supporting partner expansion in key regions (e.g., the agreement with Japanese tech company Asahi Kasei for small-scale green hydrogen electrolyzers) and optimizing costs via industrial automation and digitalization.

De Nora's backlog (57% Electrode Technologies, 23% Water Technologies, 20% Energy Transition) is a key growth driver, ensuring revenue visibility. In 2023, the backlog stood at €612M, slightly down from €790M in 2022 but still significantly above pre-2022 levels (2020: €350M, 2021: €547M). This indicates sustained product and service demand, although the 2023 decline suggests a potential market consolidation following rapid prior growth.

Cost Drivers

De Nora's primary cost drivers (Exhibit 7) include raw material purchases and personnel costs. Cost of goods sold (€555.16M in 2023) accounts for 64.8% of 2023 revenue, making raw materials such as titanium, noble metals, and specialized components crucial to the company's cost structure. General and administrative costs, along with R&D expenses, represent 6.1% and 1.9% of 2023 revenue, respectively, underscoring the importance of operational management and innovation in maintaining market leadership. By continuously optimizing production processes and centralizing cost management (3.7% of 2023 revenue), De Nora effectively balances its cost structure to sustain long-term profitability.

INDUSTRY OVERVIEW AND COMPETITIVE POSITION

Industry Overview: Global Electrochemical Industry

Industrie De Nora S.p.A. operates in the global market of sustainable technologies and divides its business as follows:

(i) **Electrode Technologies**: focused on chlor-soda applications, electronics, specialties and new uses serving various industrial sectors that rely on electrochemical processes.

(ii) **Water Technologies**: focused on solutions for pool systems, electrochlorination, disinfection and filtration processes and marine technologies with a strong emphasis on water treatment.

(iii) **Energy Transition**: seen as the natural evolution of the Electrode Technologies segment, with a focus on green hydrogen production through advanced electrolysis systems.

The main demand drivers for each sector are explained below (team elaboration).

(i) **ELECTRODE TECHNOLOGIES** (Market size from aggregated revenues € 55B, **CAGR 5.99% 2019-2023**)

The growing adoption of lithium batteries for electric vehicles and energy storage systems (International Energy Agency) represents a significant demand driver for De Nora's Electrode Technologies. Global demand for batteries is expected to increase by 4.5 times by 2030 and more than 7 times by 2035, with electric vehicles accounting for 90% of total consumption in 2023. In addition, global urbanization, projected to increase by 30% by 2040 (The World Bank), and expansion of 5G infrastructure (50% CAGR over 2020-FY25) are fueling the need for advanced electrochemical solutions (Mordor Intelligence).

(ii) **WATER TECHNOLOGIES** (Market size from aggregated revenues € 36.5B, **CAGR 1.81% FY19-FY23**)

The growing need to treat and make drinking water, both in Italy and globally, represents an important demand driver for De Nora's Water Technologies segment. With an average "virtual" consumption per capita of 1300-1500 litres of water per day in developed countries (Exhibit 8) and a world population expected to grow up to 10.3 billion people by the 2080s (according to the UN), the adoption of advanced water and waste water treatment solutions will become essential to ensure sustainability.

De Nora Initiating Coverage

Exhibit 9

SWOT Analysis (Summary)

STRENGTHS

- Leadership position in several strategic markets
- Brand value is further strengthened by institutional support
- Attractive for retail and institutional investors attentive to ESG criteria

WEAKNESSES

- highly dependent on the cost of sales and volatility of commodity prices
- low free float

OPPORTUNITIES

- significantly expand its turnover in the green hydrogen segment
- growing adoption of artificial intelligence in production process

THREATS

- Physical Risks
- Funds withdrawal from the Net Zero Asset Managers

Sources: team elaboration

iii) ENERGY TRANSITION (Market size from aggregated revenues € 2.5T, CAGR 5.88% FY19-FY23)

According to the Energy Transition Commission, in order to meet the targets of the Paris Agreement, hydrogen will have to meet 15-20% of global energy demand by 2050, requiring global investments of USD 15,000 billion over the next 30 years, of which 15% is for electrolysis plants. Green hydrogen, produced by electrolyzers powered by renewable energy, is crucial to this process, but production costs remain a challenge. Currently, in Europe, green hydrogen costs about 6.2 €/kg, compared to 2 €/kg of grey hydrogen. However, optimistic forecasts estimate a calorie at 3-5.9 €/kg by 2030 and 2.1-4.4 €/kg in the long run (Company source). De Nora's systems produce up to five times more hydrogen than Chinese manufacturers and up to four times more than European competitors, ensuring outstanding efficiency and performance.

SWOT Analysis

The SWOT analysis aims to provide a holistic view of the company, offering a strategic vision, as well as stating the factors that influence its evaluation and future (Exhibit 9).

STRENGTHS: Industries De Nora has a global leadership position in several strategic markets, with dominant market share of 51% in the chlor-alkali sector, 60% in the electronic copper laminate market, and 70% in the PCB market. It also demonstrates leadership in the global titanium anode market, with 55% for nickel and 60% for cobalt, as well as almost 80% in the industrial and pool electrical chlorination sector (Roland Berger). Its excellence also extends to green hydrogen generation, where it is positioned as a technology leader. De Nora's brand value is further strengthened by institutional support. In 2023, the Italian Ministry of Enterprise and Made in Italy granted 32.5 million euros for the Gigafactory project, in continuity with the PNRR funds received from the European Union. These awards highlight the company's institutional trust and prestige. Finally, its strong ESG footprint and focus on sustainability are central to De Nora's vision and mission. This green orientation makes it particularly attractive for retail and institutional investors attentive to ESG criteria, consolidating its position as a key player in the energy transition and global sustainability.

WEAKNESSES: Industries De Nora is highly dependent on the cost of sales and volatility of commodity prices, particularly for noble metals such as titanium, iridium, ruthenium, platinum, rhodium and palladium (Company Source). These materials are essential to the production of its electrochemical technologies, but their high cost and market fluctuations can have a negative impact on operating margins. Another critical issue is the low liquidity of the stock on the stock exchange, due to a low free float (about 22% of total shares). This limits the attractiveness of the security for large institutional investors, as the low availability of marketable shares reduces the possibility of making significant transactions without compromising the price. This situation may result in higher volatility of the stock and limited interest from the financial market, penalising the company's investment profile.

OPPORTUNITIES: Industrie De Nora has the opportunity to significantly expand its turnover in the green hydrogen segment, by exploiting new partnerships outside of the Nucera joint venture. The global expansion of the hydrogen market, supported by public and private investments, positions De Nora as a potential leader able to intercept an increasing demand for energy transition solutions. In addition, the growing adoption of artificial intelligence (AI) and digitization is pushing energy demand to unprecedented levels. The rapid growth of data centres in Europe, with capacity growth estimated from 10 GW to 35 GW by 2030, will require infrastructure investments of between \$250 billion and \$300 billion (McKinsey & Company). This scenario provides De Nora with a unique opportunity to position itself as a key supplier of electrochemical technologies to support the increase in global energy capacity.

THREATS: Industries De Nora is facing significant physical threats related to the risk of flooding, fire and other natural disasters that could compromise the continued operation of its plants. The increasing frequency and intensity of these events, linked to climate change, represents a growing challenge for the protection of corporate infrastructures and operational resilience (Team Elaboration - Bloomberg Terminal). Another threat comes from BlackRock's withdrawal from the Net Zero Asset Managers (NZAM) Alliance, which highlights a growing skepticism of financial traders towards sustainable investing (Wsj). This could lead to a statement of financial support for ESG initiatives, reducing access to capital for companies in the sector. Although the energy transition is accelerating due to competition between the US, Europe and China, these political and legal dynamics could slow down the pace of global investment in sustainable technologies.

We have not only limited ourselves to carry out a detailed analysis of the internal and external dynamics specific to the company but we have also elaborated a PEST analysis (Annex 4) to provide an overall view of the external environment.

PORTER'S FIVE FORCES - Industry Attractiveness

(i) Due to her **leadership's position**, De Nora is not effected by bargaining power of suppliers. Moreover, yields electrodes and other key components in house, reducing reliance on external suppliers (Exhibit 10).

(ii) As far as **the threat of new entrants** is concerned, De Nora is not threatened in this field; high R&D costs and fixed assets are "barriers to entry" difficult to overcome for new players that try to enter this sector.

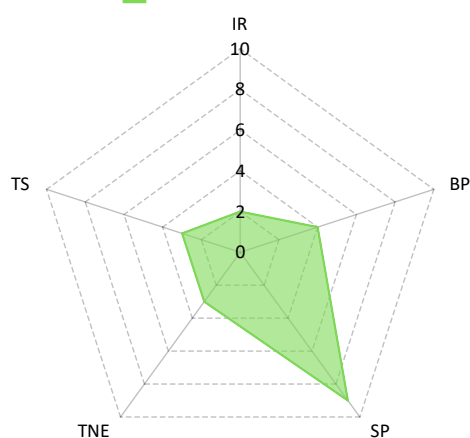
(iii) Threats of **substitute products** are quite low; De Nora competes in highly specialized sector, so is not simple to create an equivalent product for her competitors (Annex 5).

(iv) Since **De Nora operates in the B2B sector**, her customers are companies that belong to chemical, water and energy industries and need extremely customized products. This factor limits the power of customers regarding De Nora, which provides always new and technologically advanced products to fulfill customers' needs and build their loyalty.

(v) **"According to management, De Nora is "not just riding the energy transaction but creating the wave"** Actually, De Nora's peers in Green Hydrogen's market operate with a negative EBITDA margin (-170% on average), highlighting their inability to generate incomes in this sector. Moreover, De Nora's stock market price was always 20€ higher than the best competitor.

Exhibit 10

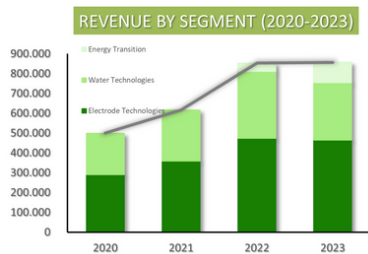
Porter's 5 forces Analysis



Sources: team estimates

De Nora Initiating Coverage

Exhibit 11



Sources: team estimates

Exhibit 12

(Thousands of €)	2020	2021	2022	2023
Revenues	514,332	655,211	894,092	866,998
CAGR		27,39%	36,46%	-3,03%
Electrode Technologies	290,398	358,211	473,444	464,214
CAGR		23,35%	32,17%	-1,95%
Water Technologies	209,056	257,667	336,719	289,962
CAGR		23,25%	30,68%	-13,89%
Energy Transition			42,663	102,235
CAGR				139,63%

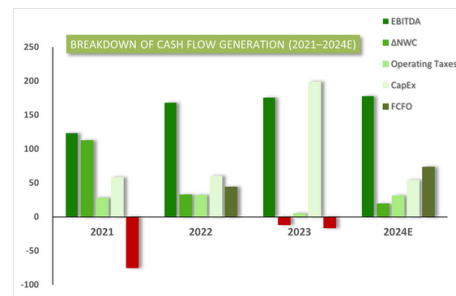
Sources: team estimates

Exhibit 13

MARGINS	2020	2021	2022	2023
EBITDAm	15,67%	18,81%	18,80%	20,25%
EBITDAm adj.	15,78%	20,27%	20,25%	22,09%
RoS	10,80%	13,37%	14,07%	15,79%
RoI	7,95%	9,31%	13,57%	15,71%
RoE	7,93%	14,64%	12,04%	25,38%

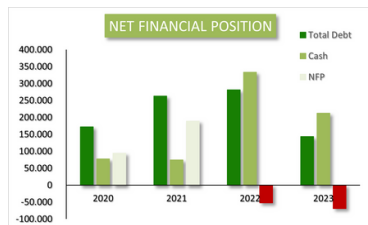
Sources: team estimates

Exhibit 14



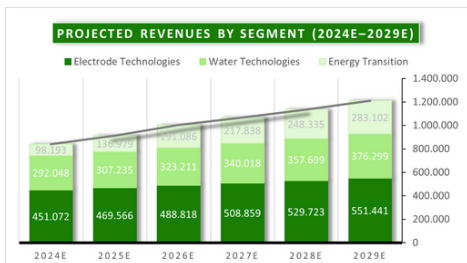
Sources: team estimates

Exhibit 15



Sources: team estimates

Exhibit 16



Sources: team estimates

Exhibit 17

(Thousands of €)	2024E	2025E	2026E	2027E	2028E	2029E
Revenues	841,313	913,779	992,488	1,048,438	1,107,541	1,169,977
CAGR		8,61%	8,61%	5,64%	5,64%	5,64%
Electrode Technologies	451,072	469,566	488,818	508,859	529,723	551,441
CAGR		4,10%	4,10%	4,10%	4,10%	4,10%
Water Technologies	292,048	307,235	323,211	340,018	357,699	376,299
CAGR		5,20%	5,20%	5,20%	5,20%	5,20%
Energy Transition	98,193	136,979	191,086	217,838	248,335	283,102
CAGR		39,50%	39,50%	14,00%	14,00%	14,00%

Sources: team estimates

Exhibit 18

MARGINS	2024E	2025E	2026E	2027E	2028E	2029E
EBITDAm	21,11%	18,93%	19,80%	20,65%	21,48%	22,30%
EBITDAm adj.	23,37%	20,93%	21,80%	22,65%	23,48%	24,30%
RoS	16,80%	14,96%	16,14%	17,19%	18,20%	19,19%
RoI	12,56%	10,83%	13,11%	14,52%	15,99%	17,51%
RoE	10,94%	9,63%	11,33%	12,23%	13,11%	13,99%

Sources: team estimates

FINANCIAL ANALYSIS

Historical Analysis

In the early post-pandemic years, De Nora's revenues experienced significant growth, peaking in FY22 (+38.5%), the year of its stock market listing. However, this growth has since stalled, recording negative growth (-3.03% CAGR FY22-23; -2.96% CAGR FY23-24E), due to a significant contraction in the Pools product line by 46.8%. De Nora forecasts revenue growth for the FY24E-26E period.

Business line breakdown

(i) **Electrode Technologies:** In the FY20-21 period, prior to De Nora's listing on the Italian Stock Exchange, revenues in the Electrode Technologies segment increased by €67.8M (totaling €290M for the segment), recording a 23.4% growth (Exhibit 11). This strong increase was driven by rising noble metal costs; chlorine-soda line growth (+€32M, +15.6%), fueled by increased sales of membranes (+€24.2M) and hydrochloric acid (+€15.3M), partially offset by a decline in diaphragm sales (-€8.1M); a revenue increase in the electrical line (+€17.1M, +29.2%) due to price effects linked to the rise in noble metal costs; and finally, specialties expansion and new applications segment (+€12.9M, +55.6%), driven by increased orders for Electrowinning products and electrodes for special applications. In FY22, revenues reached €473.4M, marking a 35.7% increase over FY21. However, in the following year, revenues slightly declined by 1.9%, settling at €464.2M. This decline was influenced by a different product mix and reduced demand in some market segments.

(ii) **Water Technologies:** During FY20-21, revenues in this business segment increased by €48.6M (+23.3%), rising from €209.1M in FY20 to €257.7M in FY21(Exhibit 12). The main drivers of this growth were an increase in the pools segment (+€33M, +50.5%), boosted by the pandemic-driven "Staycation" effect and rising ruthenium prices; an increase in disinfection and filtration (+€8.9M, +12%), due to higher sales of ozone generators (+€5M) and ultraviolet light technologies (+€4.6M), also benefiting from the acquisition of Calgon Carbon's UV division; and marine technologies expansion (+€5M, +61.7%), driven by higher demand for ballast water treatment systems, spurred by stricter regulations and contributions from acquisitions in North America. In FY22, revenues reached €336.7M, marking a 30.7% growth over FY21. This increase was mainly driven by the "pools" segment and a rise in sales volumes. However, in FY23, revenues decreased by 13.9%, settling at €290M. This decline was attributed to a stabilization of sales in the "pools" segment and a contraction in demand in key markets.

(iii) **Energy Transition:** In the FY22-23 period, De Nora's Energy Transition division experienced significant revenue growth, increasing from €43M in FY22 to €102.2M in FY23, a 139.6% year-over-year increase. The main drivers of this sharp increase were an expansion in production of green hydrogen technologies. In FY23, De Nora produced 1 GW of technologies dedicated to green hydrogen generation, more than tripling production from 0.3 GW in FY22; the effective execution of backlog projects; and increased demand for energy transition solutions.

Margins

Historically, De Nora has reported growing **EBITDAm** from FY20 to FY23 (15.67% in FY20; 20.25% in FY23)(Exhibit 13). The growth in operating margin is primarily attributable to increased revenues and improved operational efficiency. In particular, the strong profitability of the Electrode Technologies segment, with **25.3% EBITDAm adj** in FY23, positively contributed to this trend. The Return on Sales (**RoS**) and post-tax Return on Investment (**RoI**) also saw significant increases during FY20-23, rising from **10.8% to 15.59%** and from **7.95% to 15.71%**, respectively. Similarly, the Return on Equity (**RoE**) followed an upward trend in the same period, rising from **7.93% to 25.38%**. The main drivers of margin growth include revenue growth, improved operational efficiency, extraordinary financial operations such as the listing of Thyssenkrupp Nucera, which had a positive impact on net income, and new strategic investments.

Cash Flow Analysis

Free Cash Flow from Operations (FCFO) fluctuated during the FY20-23 period, recording negative **FCFO** in FY21 and FY23, amounting to **-€74.9M** and **-€16.4M**, respectively(Exhibit 14). The reasons behind these negative cash flows are mainly a sharp increase in Net Operating Working Capital (+€112.5M) and high **CapEx (€198.9M)**, due to investments in the **Gigafactory**. The CapEx-to-sales ratio showed a declining trend in the FY20-23 period, decreasing from 11.25% to 6.22%. However, in FY22, the substantial investments allocated to the Gigafactory project pushed this ratio up to 22.24%.

Capital Structure Analysis

Regarding De Nora's capital structure in the FY20-23 period, there was a notable decrease in Net Financial Position (**NFP**), which fell from **+€94.7M (FY20) to -€68.7M (FY23)**, peaking at **+€188.8M** in FY21(Exhibit 15), mainly due to new loans and outstanding debts, totaling €260M, nearly all maturing in FY21. The negative NFP is attributable to a strong increase in liquidity over the years (**€212.6M** in FY23), demonstrating De Nora's ability to generate and manage cash effectively. Equity also showed a strong increase over the FY20-23 period (rising from **€413M to €910M, +120%**). This growth was primarily driven by a net income increase in FY22-23 (+157.7%, from €89.6M to €231M), non-recurring income of €133M from the listing of Thyssenkrupp Nucera, and improved operational profitability.

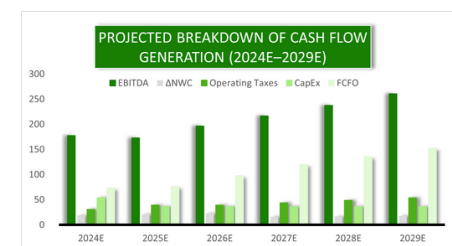
FUTURE ANALYSIS: Revenues by Segment

(i) **Electrode Technologies:** For the FY24E-29E forecast period, we expect the Electrode Technologies segment to grow in line with global **GDP growth (+4.1%)**. This growth is primarily driven by the company's objective to consolidate its market leadership(Exhibit 16). De Nora aims to strengthen its dominant position in the high-performance electrode market, leveraging its expertise and innovation capabilities to meet the growing demand across various industrial applications.

(ii) **Water Technologies:** For the FY24E-29E period, moderate growth is expected in this segment, as it is heavily dependent on demand for swimming pools. This demand is estimated to grow at a **CAGR of 5.2%** over the FY24E-30E period.

De Nora Initiating Coverage

Exhibit 19



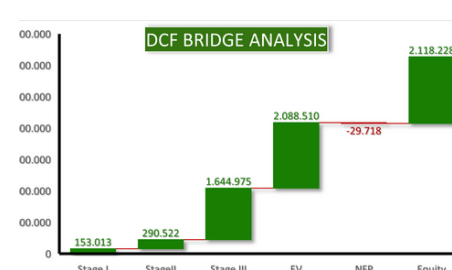
Sources: team estimates

Exhibit 20



Sources: team estimates

Exhibit 21



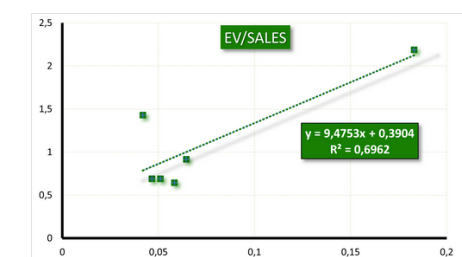
Sources: team estimates

Exhibit 22

CAPM	
Risk free rate	4.447%
β	0.9
$(1+(1+tc)*(D/E))$	1.13
β unlevered	0.8
ERP	5.38%
K_o	8.743%

Sources: team estimates

Exhibit 23



Sources: team estimates

(iii) **Energy Transition:** De Nora forecasts a **40% CAGR** in the Energy Transition segment for FY23-26E(Exhibit 17), driven by increasing demand for green hydrogen production technologies. As of December 31, 2023, the order backlog in this sector amounted to approximately 1.4 GW of green hydrogen production technologies, equivalent to €125M. Additionally, in February 2024, the company received new orders for over 700 MW of alkaline membrane electrolyzers (AWE) for one of Europe's largest green hydrogen production projects, bringing the total segment backlog to 2.2 GW. For the subsequent FY26E-29E period, we estimate more moderate growth, aligning with the previous five-year **CAGR (+14%)**.

FUTURE ANALYSIS: Margins

During the FY24E-29E forecast period, an increase in profitability is expected. In particular, the **EBITDam** is projected to rise from **18.93% (FY24E)** to **22.3% (FY29E)**. This increase is mainly driven by revenue growth and a declining cost of goods sold, which is expected to decrease by 2% annually. One of De Nora's key objectives is optimizing and recycling the noble metals used in its production process. This strategy leads to a structural reduction in metal-related costs by decreasing the need for new metals and minimizing waste, thereby preserving inventory. Consequently, the adjusted EBITDam is also expected to increase, rising from 20.93% in FY24E to 24.30% in FY29E(Exhibit 18). This improvement is also supported by stable **R&D costs**, which are projected to remain at **2% of sales**. Return on Sales (RoS) and Return on Investment (RoI) are expected to grow significantly, primarily due to De Nora's ability to enhance profitability and make strategic investment decisions. Return on Equity (RoE) is also forecasted to increase (from 9.68% in FY24E to 14.47% in FY29E), driven by net income growth that outpaces the increase in equity (Annex 6).

FUTURE ANALYSIS: Cash Flow Analysis

Free Cash Flow from Operations (**FCFO**) is projected to show a steady increase from **€73.4M (FY24E)** to **€152.3M (FY29E)**, representing a CAGR of 12.9%(Exhibit 19). This growth is primarily attributed to higher operating profitability (EBITDam) and stable **CapEx (€36.3M)**. The CapEx-to-sales ratio is expected to decline slightly, maintaining an average of 4% over the forecast period.

FUTURE ANALYSIS: Capital Structure Analysis

De Nora's capital structure is expected to maintain a negative Net Financial Position (**NFP**) (**-€241M in FY29E**), driven by the continuous generation of cash, reaching **€257M in FY29E(Exhibit 20)**. Short-term financial debt is projected to remain stable over time (€15M). As for medium-to-long-term debt, a steady decline is anticipated throughout the explicit forecast period (FY24E-29E). This assumption is made possible by De Nora's substantial cash generation capabilities. Equity is expected to reach €1.215B in FY29E, representing a **+33.9%** increase over the period. This growth is justified by a rise in net income, with an estimated **CAGR of 9.3%**.

VALUATION

Methods

We recommend a BUY for De Nora S.p.A. shares, with a one-year estimated price per share of **€10.39**, reflecting an upside of **49.5%** compared to the closing price on February , 2025, of **€6.95**. This price is derived from the weighting of two different valuation methods. The first is an Asset-Based Discounted Cash Flow (DCF), which we consider the most appropriate valuation method for De Nora, as it best captures the company's growth prospects compared to its competitors. The second method is Multiples Valuation, used to price the Electrode Technologies and Water Technologies segments. The Energy Transition segment was evaluated using a DCF, as the presence of competitors with negative margins made an accurate sector valuation impossible. The multiples used for valuation are EV/SALES and EV/IC. Additionally, Monte Carlo Simulation and Sensitivity Analysis have been employed to validate our investment thesis.

Discounted Cash Flow

We used a three-stage asset-based Discounted Cash Flow (DCF) approach, which includes:

- An explicit forecast period (FY24E-FY26E). The first stage (FY24E-FY26E) assumes a **CAGR of 8.61%** in revenues, obtained by weighting the growth rates of the individual business segments in which De Nora operates (Electrode Technologies, Water Technologies, and Energy Transition).
- A moderate growth period (FY26E-FY29E). The second stage (FY26E-FY29E) expects moderate revenue growth compared to the previous period, with a **CAGR of 5.64%**, calculated as the weighted average of the last 10 years' growth rates of the industries in which De Nora operates.
- A perpetual growth stage. The third stage assumes a **perpetual growth rate of 2.5%**, in line with the market growth rate of De Nora's industry (Exhibit 21).

WACC

In our valuation, the Weighted Average Cost of Capital (WACC) remains constant over the five-year explicit forecast period (FY24E-FY29E). This is a direct consequence of the company's negative Net Financial Position (NFP), which results in the WACC being equal to an unlevered rate, meaning it remains stable over time and is independent of the company's financing policies. We calculated the WACC using the Capital Asset Pricing Model (CAPM):

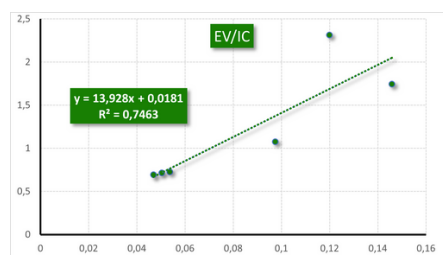
- The risk-free rate was determined by a geographically weighted basket, including German Bunds, U.S. Treasury Bills, and Asian bonds(Exhibit 22).
- The **Beta (β)** used is an unlevered beta, measuring systematic risk without considering the impact of the company's capital structure.

Multiple Valuation

The multiple valuation method, despite the challenges in making direct comparisons due to De Nora's distinctive business model, offers valuable market insights and is used solely to validate the investment thesis. To ensure a reliable peer comparison, a set of comparable companies was selected, each assigned a score based on qualitative and quantitative comparability criteria, with particular emphasis on product mix. Using this peer group as an input for multiples valuation, the tax shield value was subtracted from the Enterprise Value (**EV**) for each comparable company, obtaining a leverage-adjusted enterprise value. The valuation then proceeded by calculating the Enterprise Value-to-Sales Ratio (**EV/SALES**) and the Enterprise Value-to-Invested Capital Ratio (**EV/IC**). Given that De Nora's business segments are capital-intensive, additional calculations were performed for Return on Sales (**RoS**) and Return on Investment (**RoI**) for each peer, allowing the valuation multiples to be adjusted for profitability.

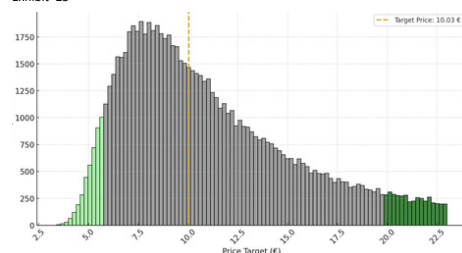
De Nora Initiating Coverage

Exhibit 24



Sources: team estimates

Exhibit 25



Sources: team estimates

Exhibit 26

MARKET RISKS
Macroeconomics conditions risk
Raw materials price risk
Commodity price volatility risk
Exchange rate risk
FINANCIAL RISKS
Risk of dependence on green hydrogen
Credit and Liquidity risk
OPERATIONAL RISKS
Cyber attack risk
Physical risk

Sources: team elaboration

As a result, value maps were developed to correlate market multiples with the appropriate financial indicators. The unlevered Enterprise Value of De Nora was then derived, and since the company's Net Financial Position (NFP) is negative, no tax shield value needed to be added. The adjusted multiples indicated an **EV/SALES**(Annex 7) of **2.09x**(Exhibit 23), leading to an estimated price of **€7.71**, and an **EV/IC of 3.24x**(Exhibit 24), corresponding to a price of **€9.41**. These valuations applied exclusively to the Electrode Technologies and Water Technologies segments. The Energy Transition segment was valued separately using a Discounted Cash Flow (DCF) model, which resulted in a value of **€1.57** per share. Summing these valuations provided a final price range between **€9.27 (EV/SALES)** and **€10.98 (EV/IC)**. The results indicated that De Nora is more favorably valued using EV/IC(Annex 8), reflecting its strong capital investment capability.

Monte Carlo Simulation

In addition to these methods, a Monte Carlo simulation was incorporated into the DCF-based stock price model to account for uncertainty in key financial parameters such as the Weighted Average Cost of Capital (WACC) and the long-term growth rate (G-Rate). Free Cash Flow from Operations (FCFO) was projected for the next five years, and these cash flows, along with the terminal value, were discounted using WACC as the discount rate. Since WACC and G-Rate fluctuate, 100,000 Monte Carlo simulations were run, drawing random values from normal distributions for both parameters. To ensure realistic results, a condition was imposed that required WACC to exceed G-Rate by at least 0.01, preventing unrealistic valuations. Each simulation produced an enterprise value, which was then divided by the number of outstanding shares to determine a target price. After analyzing the initial distribution of target prices, adjustments were made to eliminate extreme valuations, resulting in a more realistic distribution as represented in the final histogram. The final analysis identified three key zones: a **BUY** zone, where the market price is below the 5th percentile, indicating an undervalued stock and a potential buying opportunity; a **NEUTRAL** zone, where the market price is close to the estimated fair value; and a **SELL** zone, where the market price exceeds the 95th percentile, suggesting an overvalued stock and a possible selling opportunity. The gold dashed line in the histogram represents the target price, corresponding to the median of the simulated price distribution. This approach enables a more informed investment decision-making process, avoiding reliance on a single static forecast. By integrating Monte Carlo simulation and normalizing the distribution, the model provides a more accurate fair valuation of the stock, offering strategic guidance for investment decisions (Exhibit 25).

INVESTMENT RISKS

This section identifies the **main risks of the investment** case and **how their variation could affect our BUY recommendation**. The table on the next page summaries the main market, business, and financial risks and provides our view of their impact on our DCF valuation. (Exhibit 26 and Exhibit 27)

Governance and leadership risks

De Nora S.p.A. is a **family-owned company** with **strong strategic direction** defined by its leadership, particularly in the fields of **hydrogen and electrochemical technology**. The presence of the founding family ensures continuity and **long-term vision**; however, a potential over reliance on key data could raise concerns among investors.

If the role of current leadership is reduced due to **unforeseen circumstances**, it could cause **short-term market volatility and affect investor sentiment**. De Nora has a **structured governance model** with an ongoing succession plan, the influence of the founding family remains significant in strategic decisions. In a negative scenario, a change in leadership or misalignment of strategic direction could lead to temporary uncertainties in the execution of growth plans, potentially affecting De Nora's market positioning in the **hydrogen economy**. In addition, challenges in **keeping pace with innovation** and securing key partnerships **could impact long-term profitability**, particularly in achieving expected EBIT margins.

DESCRIPTION	IMPACT
The IMF reports that GDP growth is weak and fragmented : if geopolitical tensions increase, they could affect De Nora's supply chain, which depends on critical raw materials . In addition, the slowdown of Chinese growth and the risk of tariffs or trade restrictions could affect demand for electrodes and water treatment solutions. If inflation remains high, De Nora's operating costs (energy, raw materials) could rise . The EBITDA margin has dropped from 22% in 2022 to 20,5% in 2023 , indicating that cost pressure is already on. Higher interest rates increase the cost of financing new projects, impacting Terminal Value in DCF valuations (Exhibit 28).	HIGH
If the prices of raw materials increase but the company fails to pass on the increase to customers (for example, due to competition or contraction in demand), profit margins would be reduced, This would lead to a decrease in cash flows in the long run (Exhibit 29).	HIGH
Commodity price volatility may also be linked to supply problems or geopolitical instability. If commodity prices rise due to a supply risk (for example, political turmoil in producing countries), the perceived risk by investors would increase making it difficult to predict future cash flows , and consequently the discount rate applied in DCF (WACC) would also increase, leading to a lower terminal value. Case Scenario : if the uncertainty of commodity volatility leads to an increase in the discount rate from 7% to 8%, this reduces the final value by about 9% (assuming that the expected future cash flow is the same).	HIGH

De Nora Initiating Coverage

Exhibit 27

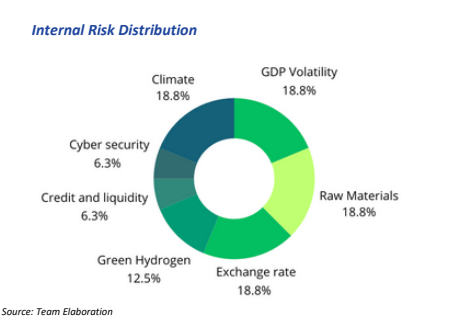


Exhibit 28

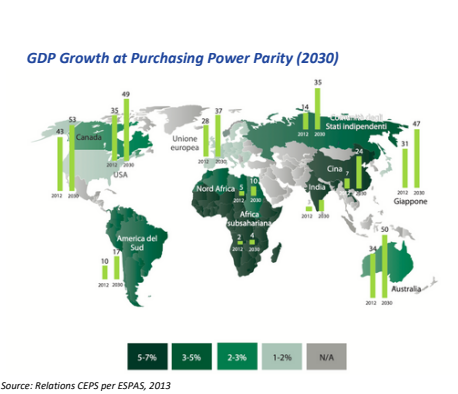


Exhibit 29

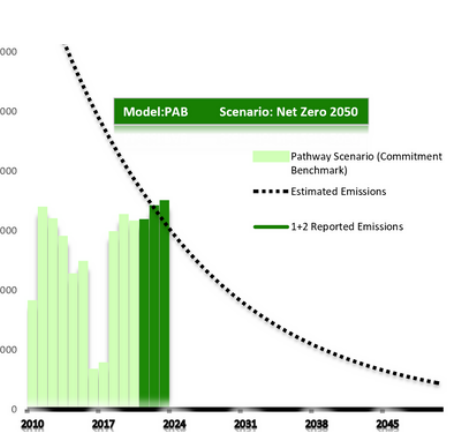


Exhibit 30

	Overall Score	Environ.	Social	Gov.
Bloomberg	2.76/10	3.02	1.84	3.35
Truevalue Labs	76/100			
Morningstar	22.2/40+			
Bloom Team	60/100	38	73	93

Sources: team elaboration

Exhibit 31



The company's Q3 2024 report shows that **revenues** were **negatively affected** by the **depreciation of the Japanese yen**, with a negative exchange rate effect of around €12 million. This **suggests** that the **company is exposed to exchange rate risks**, which **can affect** its **financial performance** if not properly managed, while the Q3 2024 earnings call did not specifically discuss hedging strategies but the **impact of currency fluctuations** on financial accounts **suggests** that the company **may already be using some form of hedge**, although specific tools or strategies were not detailed in the annual report.



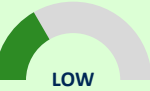
The **green hydrogen market** is currently experiencing a **slowdown in its development due to delays in government regulations**. This affects the timing of the conversion of the company's sales flow into new orders for its Energy Transition sector. Although **green hydrogen is expected to play a key role in decarbonisation**, the market is not developing as rapidly as expected. This results in a mismatch between De Nora's investments and actual market demand, with potential effects on revenue growth.



The company has a **negative NFP**, but is exposed to credit risks arising from **late payments by customers and possible insolvencies of key clients**. 35% of the turnover comes from the top 10 customers, and in 2023 trade credits increased by 15%, with a DSO raised to 102 days. **An extension of the payment time to 130-140 days could create a liquidity deficit of 30-50 million euros, reducing the negative NFP from -90 million to about -40/-50 million**. In addition, a write-down of credit claims for insolvencies could impact EBITDA by 5-10 million euro. Utilities and large industries are under financial pressure and high interest rates, increasing the risk of late payments. At the same time, the company faces liquidity risks related to rising raw material and energy costs, which could further strain cash flows. Higher interest rates also increase the cost of financing, potentially reducing financial flexibility. In addition, investments in green hydrogen require significant capital, while regulatory delays can slow down expected returns. If cash flow generation slows down as working capital requirements increase, **De Nora may need to adjust its financial strategy to maintain adequate liquidity reserves**.



A **cyber attack** on the company's infrastructure **could lead to production disruptions**, data breaches and **financial losses**. The company has recently strengthened its commitment to **IT security** by signing on November 7, 2022, a **Memorandum of Understanding** with the **Department of Postal and Communications Police of Lombardy** to adopt increasingly effective **strategies in preventing and fighting cybercrime**. Given the **strategic importance** of De Nora in the **energy transition**, the **protection of the company's assets** and know-how is crucial. Despite these proactive measures, the increasing integration of digital and **IoT systems exposes** the company to **potential cyber attacks that could compromise business continuity and information security**. In addition, cyber security incidents involving other companies in the sector **highlight the need for constant vigilance**.



Significant numbers of corporate assets are exposed to climate risks that could compromise business continuity and long-term costs. The average risk level for De Nora was rated 89/100, with 69% of assets (9 out of 13) classified as high-risk. This indicates that a substantial part of the company's infrastructure may be vulnerable to the physical impacts of climate change, which could result from extreme weather events such as cyclones, heat waves, fires and floods. **The observed trend shows a progressive increase in risk, which will intensify between 2020 and 2050, putting pressure on the company's capacity to adapt and resilience**.



ENVIRONMENTAL, SOCIAL & GOVERNANCE

De Nora's ESG performance is subject to varying assessments across rating agencies (Exhibit 30), driven by **discrepancies in peer group selection** and evaluation frameworks. To mitigate these inconsistencies and provide a more sector-relevant assessment, we have developed an internal ESG valuation model. Our analysis of material ESG factors indicates that De Nora is **competitive with or outperforms industry peers across key dimensions**. A detailed breakdown of our proprietary scorecard methodology is available in Annex 9.

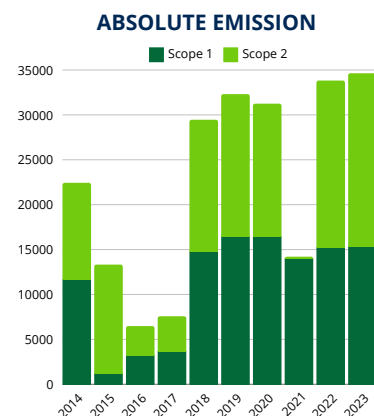
E: Enviroment

Global Sustainability Alignment:De Nora aligns its operations with global sustainability frameworks, including the United Nations' **goals to reduce** greenhouse gas (GHG) emissions **by 50% by 2030** and achieve net-zero emissions by 2050(Exhibit 31). Despite notable progress, challenges persist in **Scope 3** emissions management, which currently **represents over 99% of total emissions**, driven by upstream and downstream activities.

Renewable Energy Transition: De Nora has committed to **increasing** its share of **renewable energy to 40% by 2026** and 100% by 2030. Recent investments in **photovoltaic installations**, which now provide a **capacity of 3.1 GWh**, demonstrate tangible progress. However, the reliance on **non-renewable sources**, accounting for **97.5% of total energy consumption in 2023**, highlights the need for accelerated investments and broader adoption of clean energy solutions.

De Nora Initiating Coverage

Exhibit 32



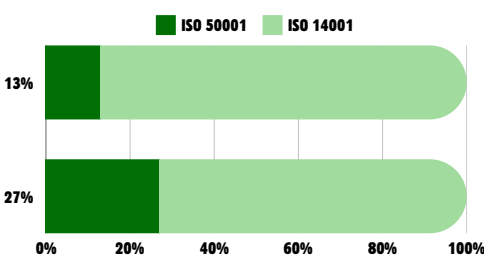
Sources: team elaboration

Exhibit 33



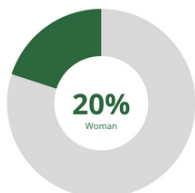
Sources: team elaboration

Exhibit 34



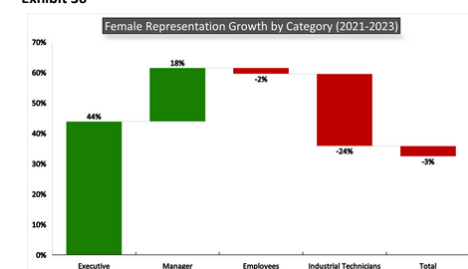
Sources: team elaboration

Exhibit 35



Sources: team elaboration

Exhibit 36



Sources: team elaboration

Exhibit 37



Sources: team elaboration

Circular Economy and Material Efficiency: The company has implemented several initiatives to reduce material waste, focusing on recycled and renewable inputs. For instance, **11.6% of wood and 8.9% of cardboard used in 2023 were sourced from recycled materials**. Additionally, De Nora's initiatives to recover precious metals reduced the need for virgin inputs, aligning with its **commitment to cut noble metal usage by 4% by 2026**.

GHG Emission Reduction Strategies: While De Nora aims to reduce Scope 1 and 2 emissions by 50% by 2030, **emissions rose by 14% in 2023** (Exhibit 32). To counteract this, the company is deploying energy-saving projects (Exhibit 34) such as LED installations and advanced compressor systems, which have collectively contributed to marginal efficiency gains (Exhibit 33).

Waste and Water Management: In 2023, **waste generation increased by 32.5%**, a setback that highlights inefficiencies in the recycling infrastructure, despite the recovery of **46% of generated waste**. On the water side, De Nora **achieved a 5.8% reduction in total withdrawals**, driven by closed-loop systems and sustainable water use practices in stressed regions.

S:Social

The social pillar of De Nora's ESG strategy demonstrates a mixed performance across key sub-pillars, with measurable progress and areas for further improvement.

Employee Health and Safety: De Nora **achieved a 5% reduction** in the number of injuries in 2023 and has implemented initiatives such as periodic **"Gemba Walks"** and **"Safety Days"** in all plants, targeting full implementation by 2025 (Exhibit 35). Training on **mental health modules** and first aid is ongoing, with a target to **cover 100% of employees by 2026**, reinforcing the company's commitment to workplace well-being.

Diversity and Inclusion: The company has made significant strides in addressing gender equity, achieving a **100% elimination of gender pay gaps for new hires in 2023**. Female representation among **new hires increased to 20%**, slightly up from 19.4% in 2022, with further targets to enhance this through structured programs such as Valore D, focusing on mentorship and upskilling (Exhibit 36).

Community Engagement: De Nora **increased donations to local communities by 4%**, reaching €202,000 in 2023, and expanded engagement programs with universities and schools, aiming to **involve over 40% female students by 2026**. The company also facilitates visits to plants and laboratories to foster STEM education, particularly for women and underrepresented groups.

Responsible Supply Chain: Progress was noted in **supplier evaluation**, with **17% of suppliers assessed based on sustainability criteria**, a step toward the goal of evaluating **50% of suppliers by 2030**. Engagement with high-risk suppliers remains ongoing, and pilot audits are scheduled to commence in 2025 to ensure compliance with ESG standards.

G:Governance

Governance Overview: The company's **commitment to transparency and sustainability** is reflected in its evolving governance structure, compensation strategies, and oversight mechanisms. This analysis provides insights into governance performance trends and evaluates De Nora's adherence to its ESG objectives.

Shareholder Structure and Board Composition: De Nora's **shareholder base is diverse**, with **no single entity exerting disproportionate influence**. The board comprises a balanced mix of long-tenured members and new appointees, fostering both experience and fresh perspectives. Notably, **the gender diversity among board members increased from 18% in 2021 to 25% in 2023**, reflecting a **39% growth** in alignment with the company's gender inclusion goals. Additionally, 90% of board members participated in advanced ESG training, ensuring a high degree of competency in governance oversight (Exhibit 37).

Executive Compensation: De Nora incorporates both fixed and variable components, with **72% of the total tied to performance metrics such as EBITDA and shareholder returns**. Over the past three years, the variable pay ratio has consistently **grown**, reaching **75% in 2023**, signaling **stronger alignment with long-term objectives**. However, **benchmarking reveals that total executive compensation remains 12% lower than peers**, indicating a cost-conscious approach while maintaining competitiveness.

Ethics and Anti-Corruption Measures: The company achieved **full adoption of its anti-corruption policy** across all territories in 2023, with **90% of white-collar employees completing mandatory training**. Compared to 2021, when only 65% had completed training, this marks a significant improvement of 38%. Furthermore, the rollout of export control guidelines reached 80% of targeted geographies, showcasing progress towards global compliance goals.

ESG-Linked Performance Targets: De Nora's governance integrates ESG objectives into **remuneration frameworks**. In 2023, **20% of CEO and 10% of top management compensation was directly linked to ESG performance**, meeting internal targets. The emphasis on ESG-driven incentives aligns management's goals with sustainable business practices, reinforcing accountability.

Discrepancies and Improvement Areas: While progress is evident, certain discrepancies remain. For instance, despite committing to **publish disclosures on conflict minerals by 2023**, this initiative remains ongoing, delaying full transparency. Similarly, the **company's target to achieve 100% policy adoption across all regions by 2022** has been deferred to 2024, highlighting executional challenges.

Industrie De Nora S.p.A. - ANNEX

ANNEX 1

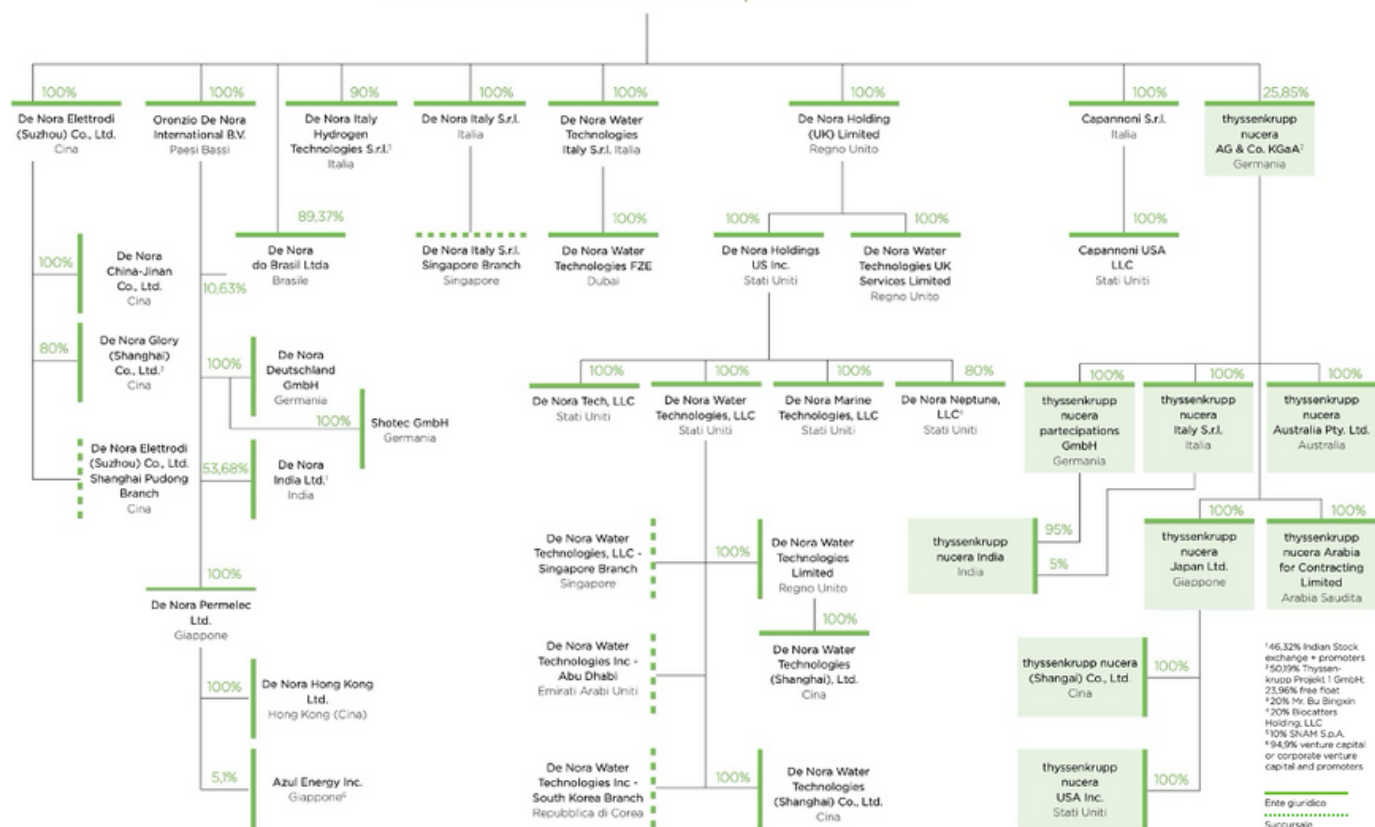
Historical M&A and JV Operations

TARGET COMPANY	PLANT LOCATION	AQUISITION DATE	SEGMENT	ACQUISITION RATIONALE
ELTECH SYSTEMS CORPORATION	USA	2005	ELECTRODE TECHNOLOGIES	EXPAND AND CONSOLIDATE IN EXISTING MARKETS
PERMELEC ELECTRODE LTD	JAPAN	2010	ELECTRODE TECHNOLOGIES	EXPAND AND CONSOLIDATE IN EXISTING MARKETS
CHLORINE ENGINEERS GROUP (MITSUI)	JAPAN	2011	ELECTRODE TECHNOLOGIES	FOCUS ON MEDIUM TO LARGE SIZE TARGETS
SEVEN TRENT WATER PURIFICATION	USA / UK	2015	WATER TECHNOLOGIES	EXPAND AND CONSOLIDATE IN EXISTING MARKETS
OZONO ELETTRONICA INTERNAZIONALE	ITALY	2015	WATER TECHNOLOGIES	ACCELERATE ACCESS TO NEW PRODUCTS
WATER STAR	USA	2018	WATER TECHNOLOGIES	EXPAND AND CONSOLIDATE IN EXISTING MARKETS
MIOX	USA	2019	WATER TECHNOLOGIES	ACCELERATE ACCESS TO NEW PRODUCTS
NEPTUNE	USA	2019	WATER TECHNOLOGIES	ACCELERATE ACCESS TO NEW PRODUCTS
CALGON CARBON UV	USA	2021	WATER TECHNOLOGIES	ACCELERATE ACCESS TO NEW PRODUCTS
ISIA	ITALY	2021	WATER TECHNOLOGIES	ACCELERATE ACCESS TO NEW PRODUCTS
AZUL ENERGY	JAPAN	2021	WATER TECHNOLOGIES	ACCELERATE ACCESS TO NEW PRODUCTS
UV TECHNOLOGIES DIVISION	USA	2021	WATER TECHNOLOGIES	ACCELERATE ACCESS TO NEW PRODUCTS
SHOTEC GMBH	GERMANY	2023	WATER TECHNOLOGIES	FOCUS ON MEDIUM TO LARGE SIZE TARGETS
- JOINT VENTURE - THYSSENKRUPP NUCERA	GERMANY	2001	ENERGY TRANSITION	ENHANCING AND ALTERNATIVE TECHNOLOGIES FOR ENERGY TRANSITION

ANNEX 2

Organizational Structure

Industrie De Nora S.p.A. Italia



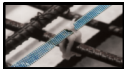
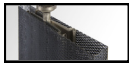
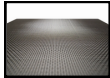
Intellectual Property and Patents

The Group operates through a portfolio of patents and utility models registered in relevant countries. As of 31 December 2023, there are 2,387 patents or utility models already granted in 82 countries. During 2023, 17 new patent applications were filed: 10 in the field of water electrolysis, 1 in chlorine-soda, 2 in electronics electrodes and 4 in the segment of Water Technologies. De Nora aims to protect intellectual property through appropriate national and international procedures and practices, in fact, the company has put adequate policies of identification, protection and exploitation of its intellectual property rights, which result, for example, in the continued filing of patent applications and the provision of appropriate measures to protect the confidentiality of sensitive technical and commercial information, in particular trade secrets. The protection of the Group's rights to its corporate identity, services, products and know-how is essential for maintaining its competitive advantage and market recognition.

In support of this, in 2023, pursuing the objective of continuous improvement, another phase of the "Protection and Management of Trade Secrets" project was completed as well as aimed at and implemented a patent strategy "Patent Strategy" which guides all Group decisions concerning the patent life cycle, from the conception of the invention to the expiry or abandonment of the patent.

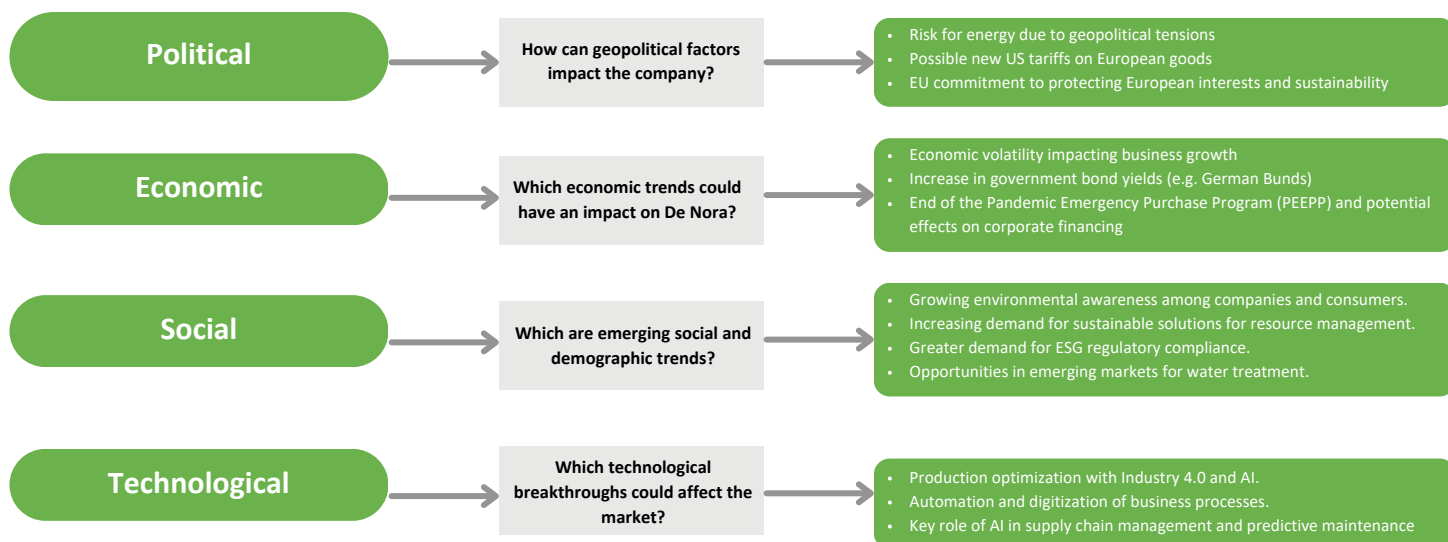
ANNEX 4

Products Overview

PRODUCT	DESCRIPTION	APPLICATION
	DE NORA DEVELOPED METAL ELECTRODES COATED WITH MIXED METAL OXIDE (MMO) IN 1968, REPLACING GRAPHITE ELECTRODES. THIS TECHNOLOGY REVOLUTIONIZED CHLORINE PRODUCTION AND IS NOW THE STANDARD FOR THE CHLOR-ALKALI INDUSTRY.	CHLORINE AND CAUSTIC SODA PRODUCTION IN ELECTROCHEMICAL PLANTS, WATER TREATMENT
	ELECTRODES WITH MIXED METAL OXIDE (MMO) COATING ENHANCE OXYGEN PRODUCTION THROUGH ELECTROLYSIS, REDUCING ENERGY CONSUMPTION AND ADDITIVES. THEY ARE USED IN ELECTROPLATING, COPPER PRODUCTION, AND PRINTED CIRCUITS, IMPROVING ELECTRONIC DEVICES AND BATTERIES.	OXYGEN PRODUCTION IN INDUSTRIAL PLANTS AND WATER TREATMENT, OXYGEN GENERATION IN ELECTROLYSIS PROCESSES USING INORGANIC ACIDS LIKE SULFURIC ACID AND NITRIC ACID
	SYSTEMS FOR PROTECTING METAL STRUCTURES FROM SALT CORROSION USING ELECTRIC CURRENT.	PROTECTION OF PIPELINES, OFFSHORE STRUCTURES, STORAGE TANKS, AND REINFORCED CONCRETE STRUCTURES
	CLORTEC SYSTEMS GENERATE LOW-CONCENTRATION (0.8%) SODIUM HYPOCHLORITE ON-SITE FROM SALT, ENSURING SAFE, RELIABLE, AND COST-EFFECTIVE WATER TREATMENT, WITH UP TO 15% OPERATIONAL COST SAVINGS.	MAKING PUBLIC WATER POTABLE, WASTEWATER TREATMENT
	DE NORA OFFERS WATER TREATMENT SOLUTIONS IN EIGHT KEY AREAS: CONTAMINANT REMOVAL, ADVANCED OXIDATION, BIOFILM CONTROL, COOLING WATER TREATMENT, DISINFECTION, OXIDATION, FILTRATION, AND INSTRUMENTATION.	WATER DRAGONFLY SYSTEM TREATMENT
	AVOID CHLORINE ODOR, EYE IRRITATION, HAIR DAMAGE, AND FADED SWIMWEAR CAUSED BY EXCESSIVE DISINFECTION BYPRODUCTS. USING SALT AND ELECTRICITY, THIS INNOVATIVE APPROACH DELIVERS THE PERFECT CHLORINE DOSAGE FOR SAFE, SIMPLE, AND COST-EFFECTIVE POOL DISINFECTION. IT ENSURES A STEADY CHLORINE SUPPLY, PREVENTING SPIKES AND ALGAE GROWTH.	POOL DISINFECTION
	UTILIZES ALKALINE TECHNOLOGY FOR DECENTRALIZED GREEN HYDROGEN PRODUCTION.	SMALL-SCALE ELECTROLYZERS, MUNICIPAL WATER DISINFECTION
	A FUEL CELL IS AN ELECTROCHEMICAL DEVICE THAT CONVERTS THE CHEMICAL ENERGY OF A FUEL (USUALLY HYDROGEN) AND AN OXIDIZING AGENT (TYPICALLY OXYGEN) INTO ELECTRICITY THROUGH A PAIR OF REDOX REACTIONS.	BATTERIES FOR ELECTRIC VEHICLES

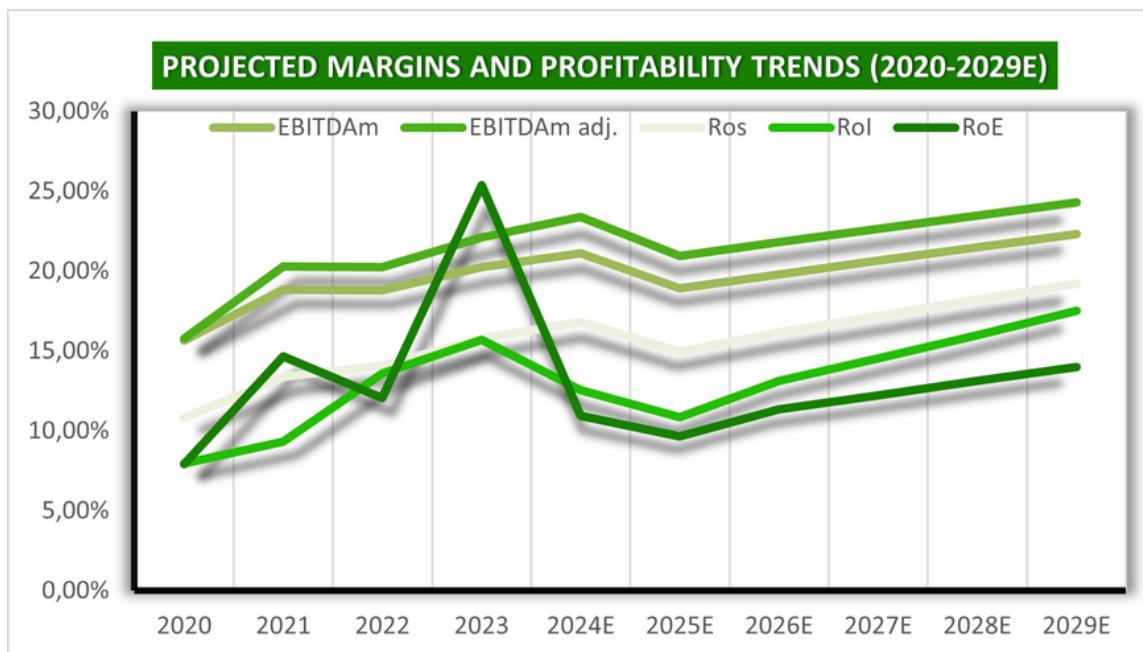
ANNEX 5

PEST ANALYSIS



ANNEX 6

Projected Margins and Profitability Trends



ANNEX 7

EV/ Sales

COMPETITORS	SECTOR	SALES	RoS	EV/SALES
CECO ENVIRONMENTAL CORP	Water Technologies	503.886	4.18%	1.43x
METAWATER CO LTD	Water Technologies	1.057.084	5.84%	0.64x
XINJIANG ZHONGTAI CHEMICAL-A	Electrode Technologies	4.850.065	6.45%	0.92x
TOKUYAMA CORP	Electrode Technologies	2.183.558	4.66%	0.69x
OSAKA SODA CO LTD	Electrode Technologies	603.733	18.30%	2.19x
DE NORA SPA	Water&Electrode Technologies	733.175	17.93%	2.09x

De Nora's revenues and RoS relate to the Water and Electrode Technologies segments.

ANNEX 8

EV / Invested Capital

COMPETITORS	SECTOR	IC	RoI	EV/IC
METAWATER CO LTD	Water Technologies	632.957	9.75%	1.08x
XINJIANG ZHONGTAI CHEMICAL-A	Electrode Technologies	6.224.067	5.03%	0.72x
TOKUYAMA CORP	Electrode Technologies	2.171.033	4.69%	0.69x
ASAHI KASEI CORP	Electrode Technologies	16.908.810	5.36%	0.73x
CHIMCOMPLEX BORZESTI	Electrode Technologies	511.114	11.99%	2.31x
DE NORA SPA	Water&Electrode Technologies	567.656	23.15%	3.24x

De Nora's invested capital and RoI relate to the Water and Electrode Technologies segments.

ESG Rating Methodology

To provide a precise and relevant assessment of Industrie De Nora's ESG performance, we developed a proprietary ESG rating methodology. This internal framework addresses the shortcomings of external ESG ratings, which often use peer groups that are not representative of De Nora's niche business operations. The methodology ensures a more accurate evaluation by focusing on relevant peers and employing robust statistical techniques. A peer group of 16 companies was carefully selected based on operational similarities, market focus, and product offerings. These peers represent the most relevant benchmark for De Nora within the context of its industry. The selection process prioritized companies with comparable environmental, social, and governance challenges to ensure meaningful comparisons.

Raw data for ESG metrics were obtained from multiple reliable sources, including company sustainability reports, annual disclosures, data from third-party ESG rating providers, public filings and industry databases.

This multi-source approach ensures that the dataset is comprehensive, reliable, and suitable for detailed analysis. Additionally, binary variables (e.g., TRUE/FALSE) were incorporated into the assessment framework for specific qualitative metrics, such as compliance with international standards or the presence of anti-corruption policies.

To standardize the data and make it comparable across metrics, a structured approach was followed. The raw performance data of each company was ranked relative to the selected peer group to generate percentile scores ranging from 0 to 100. This ranking system provides an indication of how a company performs within its peer set in each sub-category, allowing for a clear comparative assessment.

$$\text{Formula for Percentile Rank: } \frac{\text{Rank}(x) - 1}{n - 1} \times 100$$

Where x represents the raw value for a specific metric and n denotes the total number of companies in the peer group.

To further refine the evaluation, Z-scores were calculated to measure deviations from the peer group mean, expressed in terms of standard deviations. This step helps to identify outliers and quantify how significantly a company's performance deviates from the average.

$$\text{Formula: } Z = \frac{x - \mu}{\sigma}$$

Where x represents the raw value for a specific metric and μ denotes the total number of companies in the peer group.

To harmonize the percentile scores and Z-scores, the Z-scores were normalized to match the 0-100 scale, ensuring a consistent basis for comparison.

$$\text{Formula for Z-score normalization: } Z_{\text{norm}} = \frac{Z - Z_{\text{min}}}{Z_{\text{max}} - Z_{\text{min}}} \times 100$$

The normalized Z-scores and percentile rankings were then aggregated into a single score for each sub-category using weighted coefficients.

$$\text{Weighted Sub Category Score} = \omega_p \times \text{Percentile} + \omega_z \times Z_{\text{norm}}$$

The weights for each pillar (Environmental, Social, and Governance) were determined by calculating the contribution of each subcategory and applying a predefined weighting scheme. This allocation was informed by established frameworks, such as the Sustainable Development Criteria Ranking (SDCR) and the EU taxonomy guidelines, ensuring a balanced representation of the pillars' relevance and their alignment with industry standards. This approach guarantees that the weighting system captures the strategic importance and real-world impact of each subcategory within the ESG assessment.

De Nora's final ESG score of 60 places is moderately above the average of its peer group. While its Environmental score of 38 suggests opportunities for improvement in areas such as emissions reduction and resource efficiency, its strong Social and Governance scores of 83 and 84 demonstrate significant strengths. Compared to its peers, De Nora performs exceptionally well in governance-related areas such as board gender diversity, anti-corruption policies, and adherence to international standards, placing it in the top quartile. Similarly, its Social pillar score highlights leadership in employee welfare and green project initiatives.

However, in the Environmental pillar, De Nora's performance is in the lower quartile relative to peers. This indicates a clear area for strategic improvement, particularly in addressing Scope 1 and Scope 2 greenhouse gas emissions and energy efficiency metrics.

Environmental Pillar (E)	Score		Weighted average		Weight (%)
	DNR	Average Peers Score	DNR	Average Peers Score	
Scope 1 GHG emissions	39	28	157	112	4
Scope 2 GHG emissions	39	37	158	147	4
Scope 3 GHG emissions	24	21	122	105	5
Total GHG emissions	9	9	22	21	2
Subtotal (Scope 1&2) GHG emissions	47	39	111	92	2
Total GHG emissions / EVIC	6	12	12	23	2
Total GHG emissions / Revenue	30	16	60	31	2
Hazardous Waste Ratio	20	16	40	32	2
Nitrogen oxides (NOx)	41	34	32	27	1
Ammonia (NH3)	70	37	140	75	2
Sulfur oxide (SOx)	35	46	28	37	1
Volatile organic compounds (VOCs)	28	21	23	17	1
Total Air Pollutants	46	36	37	28	1
Natural gas	30	25	24	20	1
Oil	37	30	30	24	1
Total water consumed (2)*	46	33	109	77	2
Non-Recycled Waste Ratio	18	26	18	26	1
Total energy consumed (4)*	45	30	90	59	2
Total energy consumed from non renewable sources	50	57	101	114	2
Total energy consumed from renewable sources	53	31	105	63	2
Percentage of non renewable energy sources compared to renewable energy sources	30	32	26	27	1
Total energy consumed from undefined sources	45	26	45	26	1
Energy consumption intensity for high climate sector: Manufacturing	74	34	148	68	2
Total amount of hazardous waste generated (3)*	31	37	31	37	1
Activities negatively affecting biodiversity-sensitive areas	20	80	20	80	1
Brief 2030 Renew Shr Tgt Cntry Rsk	59	42	59	42	1
SDG 6 Cln H2O Potntl Rev Expr Pct	40	46	40	46	1
SDG 7 Cln Enrg Potntl Rev Expr Pct	28	56	21	42	1
SDG 12 Consum Potntl Rev Expr Pct	49	31	49	31	1
SDG 11 Citis Potntl Rev Expr Pct	36	50	36	50	1
			1892	1579	50
			38	31	

ESG SCALE MAP		
☐	90-100	= Leader
☐	70-89	= Above Average
☒	50-69	= Average
☐	30-49	= Below Average
☐	0-29	= Laggard

Social Pillar (S)	Score		Weighted average		
	DNR	Avarage Peers Score	DNR	Avarage Peers Score	Weight (%)
Diversity, Equity, and Inclusion (DE&I) (3)*	40	46	200	228	5
Employee Health & Safet (2)*	69	62	207	185	3
Community Engagement & Responsible Supply Chain	90	64	304	218	3,4
Leadership Overview	63	51	251	204	4
Operation and suppliers significant risk of incidents or compulsory labour	100	90	360	324	3,6
Op child labour	100	90	300	270	3
Does the company operate sites located in high water stress areas? (2)*	50	50	100	100	2
SDG 8 Wrk Potntil Rev Expsr Pct	51	62	154	187	3
Community Impact and Social Responsibility (3)*	100	78	300	234	3
			2176	1950	30
			73	65	

Governance Pillar (G)	Score		Weighted average		
	DNR	Avarage Peers Score	DNR	Avarage Peers Score	
Ethics and Anti-Corruption (5)*	100	90	700	630	7
Board Oversight and Accountability (3)*	90	73	360	292	4
Supply Chain Oversight (2)*	90	80	180	160	2
Controversial Activities (2)*	100	90	300	270	3
Transparency and Reporting (3)*	79	58	316	232	4
			1856	1584	20
			93	79	

	Score		Weight (%)	Weighted average	
	DNR	Avarage Peers Score		DNR	Avarage Peers Score
E	38	31	50%	19	16
S	73	65	30%	22	20
G	93	79	20%	19	16
				60	51

EXTRA ANNEX (BS and P&L)

(€m)	2020	2021	2022	2023	2024E	2025E	2026E	2027E	2028E	2029E
Fixed Assets	415.406	437.591	455.364	615.576	633.173	633.173	633.173	633.173	633.173	633.173
Inventory	123.776	233.033	295.476	257.146	268.805	291.959	317.106	334.983	353.867	373.815
Trade Receivables	90.905	220.224	203.619	246.611	247.289	268.589	291.724	308.170	325.542	343.894
Cash & Cash Equivalents	77.258	74.321	333.165	212.676	182.503	200.757	218.050	230.342	243.327	257.044
Total Assets	707.345	965.169	1.287.624	1.332.009	1.331.770	1.394.478	1.460.053	1.506.667	1.555.909	1.607.926
Equity	413.118	453.962	744.804	910.188	907.997	974.887	1.042.634	1.098.750	1.156.478	1.215.909
Medium/Long term Debt	154.755	3.784	267.544	133.716	137.619	110.095	82.571	55.048	27.524	0
Short term Debt	17.274	259.363	13.655	10.199	15.166	15.166	15.166	15.166	15.166	15.166
Trade Payables	122.198	248.240	261.621	277.906	270.988	294.330	319.682	337.703	356.741	376.851
Total Liabilities	294.227	511.387	542.820	421.821	423.773	419.591	417.419	407.917	399.430	392.017
Total Equity and Liabilities	707.345	965.349	1.287.624	1.332.009	1.331.770	1.394.478	1.460.053	1.506.667	1.555.908	1.607.926

(€m)	2020	2021	2022	2023	2024E	2025E	2026E	2027E	2028E	2029E
Electrode Technologies	290.398	358.211	473.444	464.214	451.072	469.566	488.818	508.859	529.723	551.441
Water Technologies	209.056	257.667	336.719	289.962	292.048	307.235	323.211	340.018	357.699	376.299
Energy Transition	-	-	42.663	102.235	98.193	136.979	191.086	217.838	248.335	283.102
Other Revenues	14.878	39.333	41.266	10.587	-	-	- 10.627	- 18.277	- 28.215	- 40.865
Total Revenues	514.332	655.211	894.092	866.998	841.313	913.779	992.488	1.048.438	1.107.541	1.169.977
Raw Materials	- 216.217	- 289.578	- 399.904	- 357.991	- 318.612	- 384.013	- 408.472	- 422.582	- 437.180	- 452.281
Labor costs	- 106.586	- 116.067	- 154.561	- 143.982	- 152.131	- 165.237	- 179.470	- 189.587	- 200.275	- 211.565
Service costs	- 110.956	- 126.295	- 171.495	- 189.433	- 192.937	- 191.549	- 208.048	- 219.776	- 232.166	- 245.254
EBITDA	80.573	123.271	168.132	175.592	177.633	172.980	196.499	216.492	237.921	260.877
EBITDAm	15,67%	18,81%	18,80%	20,25%	21,11%	18,93%	19,80%	20,65%	21,48%	22,30%
Depreciations & Amortisations	- 25.049	- 35.678	- 42.323	- 38.674	- 36.305	- 36.305	- 36.305	- 36.305	- 36.305	- 36.305
EBIT	55.524	87.593	125.809	136.918	141.327	136.675	160.193	180.187	201.616	224.572
EBITm	10,80%	13,37%	14,07%	15,79%	16,80%	14,96%	16,14%	17,19%	18,20%	19,19%
Operating taxes	- 15.153	- 27.798	- 31.769	- 4.728	- 31.013	- 39.244	- 39.314	- 43.868	- 48.767	- 54.032
NOPAT	40.371	59.795	94.040	132.190	110.314	97.430	120.879	136.319	152.849	170.540
Financial Income/Costs	- 15.260	- 2.874	- 4.183	122.928	- 13.692	- 4.634	- 3.616	- 2.597	- 1.579	- 561
Tax Shields	3.662	690	1.004	- 29.503	3.286	1.112	868	623	379	135
Extra Income	3.991	8.834	- 1.196	5.435	- 544	-	-	-	-	-
Net Profit	32.764	66.445	89.665	231.050	99.365	93.909	118.131	134.345	151.649	170.113

We utilized Bloomberg and FactSet platforms for data collection and analysis, along with internal company sources, including financial statements and other internal materials, to evaluate the company's performance and key financial metrics.