



WATER TECHNOLOGIES

Executive Summary



Leader in attractive market niches

Leading position in key water and wastewater segments



Well-diversified revenue stream supported by global footprint

Balanced geographic footprint with diverse technology offering



Growth driven by increased regulatory and sustainability requirements

Higher regulatory-driven water requirements;
Resource scarcity



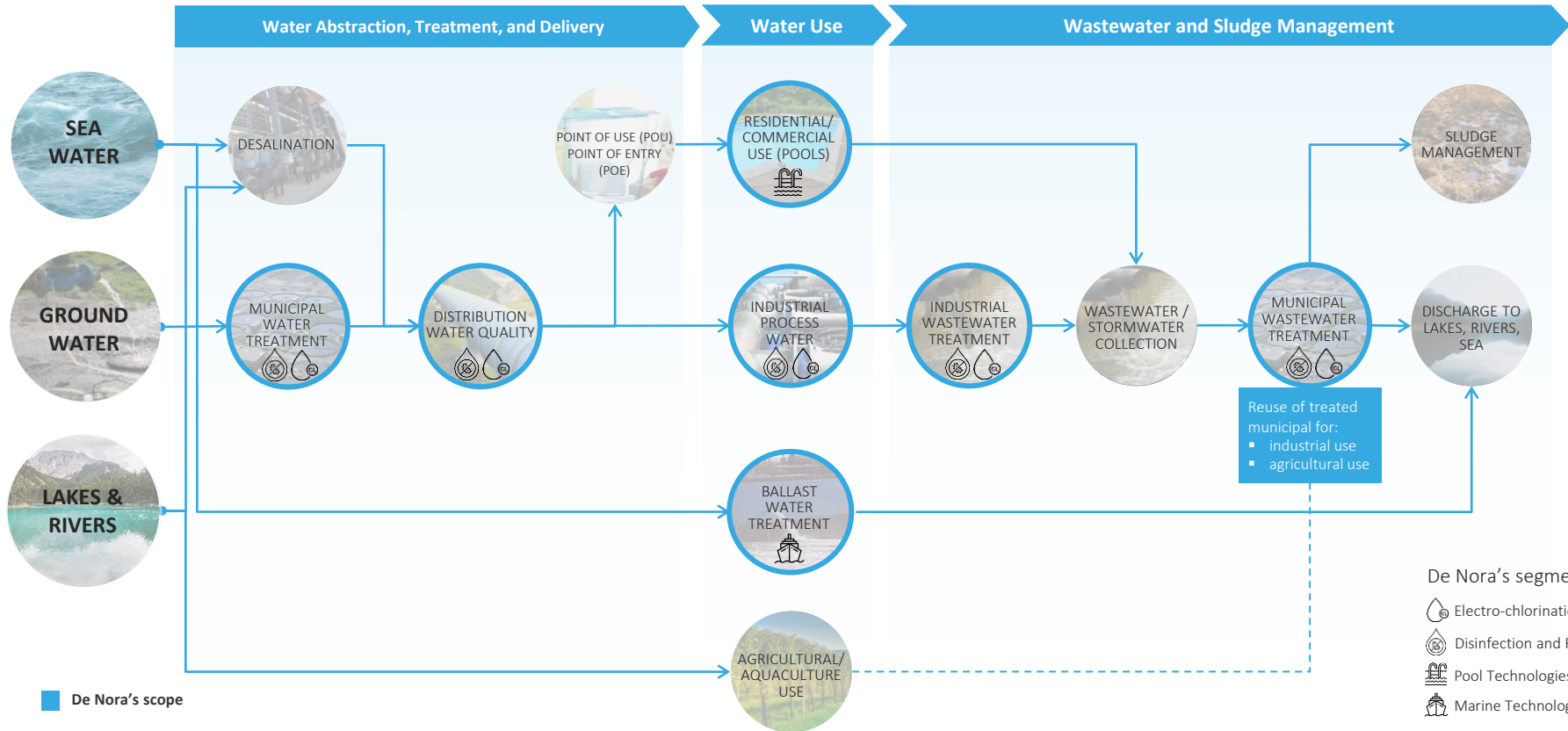
Replacement service boosted by growing installed base

Serving the largest installed base of electrochlorination solutions



WATER TECHNOLOGIES

Today De Nora provides water treatment technologies for municipal, residential, industrial, and marine end users





POOL TECHNOLOGIES



TECHNOLOGIES

Self-cleaning metal-coated titanium electrodes for salt chlorinators.

APPLICATION

- Disinfection of swimming pools

KEY END MARKETS



in Pool Technologies¹



DISINFECTION & FILTRATION



TECHNOLOGIES

Gas feed chlorination and Ozone systems.
Chlorine dioxide treatment and Ultraviolet treatment.
Gravity and pressure media filtration.
Ion exchange.

APPLICATION

- Chemical removal or reduction of microorganisms in water
- Separation of inorganic and organic solids from water and wastewater

KEY END MARKETS



in Municipal Disinfection¹



in Municipal Filtration¹



in Industrial Disinfection & Filtration



ELECTRO-CHLORINATION



TECHNOLOGIES

Seawater, onsite and advanced electro-chlorination plants and systems.

APPLICATION

- Production of chlorinated solutions

KEY END MARKETS



in Industrial Chlorination¹



in Municipal Chlorination



MARINE TECHNOLOGIES



TECHNOLOGIES

Electro-chlorination and Ultraviolet based Ballast Water treatment applications.
Marine sewage treatment.

APPLICATION

- Ballast water tankers, bulk carriers, and other vessels
- Wastewater applications for cruise ships

KEY END MARKETS



in Marine

1. Source: Amare Advisors. Market positioning based on global presence and reach and broadness of portfolio technologies.



POOL TECHNOLOGIES

De Nora's innovative technologies are increasingly taking share from traditional systems



KEY SOLUTIONS OFFERING



SALT CHLORINATOR

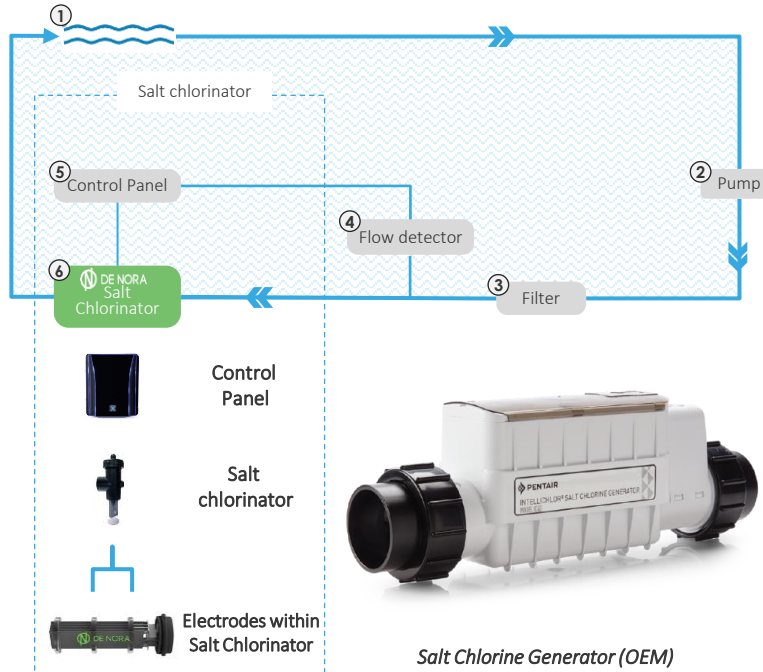
DESCRIPTION

De Nora is a **manufacturer of coated blades electrodes, a key component for the salt chlorinators** that are used for water disinfection in swimming pools.

ADVANTAGES VS. TRADITIONAL CHLORINATION

- Better water quality, kinder to skin, eyes, and hair
- High reliability of the system
- Lower maintenance cost
- Residual disinfectant

How salt chlorination in a swimming pool works¹



DE NORA'S DIFFERENTIATING FACTORS

- ✓ High-quality products
- ✓ Production capacity & timely delivery
- ✓ Collaboration in R&D, established and trusted relationships

1. Source: Amane Advisors.



DISINFECTION & FILTRATION

De Nora has the full suite of disinfection and key filtration solutions to address evolving customer and market needs

KEY SOLUTIONS OFFERING

DISINFECTION



Systems for disinfection

through gas feed chlorination, chlorine dioxide, ozone, and ultra-violet technologies



Instrumentation to monitor, measure and control water processes (e.g., gas/leak detectors)

FILTRATION



Advanced filtration systems for removal of complex contaminants



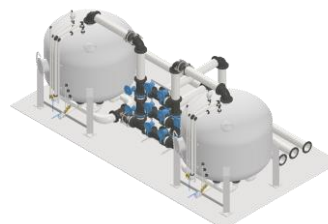
Filtration technologies to remove and/or absorb pollution agents



De Nora TETRA® mDBF Filters
Southern Water, Tangmere WTW, UK



Capital Controls® UV Disinfection



SORB™ FX Contaminant Removal (PFAS)

DE NORA'S DIFFERENTIATING FACTORS

- ✓ Innovative combination of technologies for a multi-barrier approach
- ✓ High efficiency, uptime, and yield
- ✓ Brand recognition, customer intimacy, and global reach with pre and post-sales product support
- ✓ Safe and reliable product design coupled with long-life equipment
- ✓ De Nora as a pioneer of chlorine gas and onsite generation



ELECTRO-CHLORINATION

De Nora is a global leader¹ with an extensive product portfolio



KEY SOLUTIONS OFFERING



Systems producing biocides from salt water (seawater or brine) through an electrochemical process



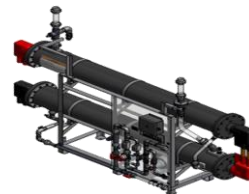
Equipment, systems and complete plants for onsite oxidants generation (onshore and offshore)



Electro-chlorination units for biofouling control in power plants, cooling towers, LNG terminals, and desalination facilities



SANILEC® Seawater Electro-chlorination



ClorTec® On-Site Hypochlorite Generator



SEACLOR® Electrolyser
EDF Dungeness Nuclear Power Plant, UK

DE NORA'S DIFFERENTIATING FACTORS

- ✓ Proven standard products with highest efficiency, safe operations, and regulatory compliance
- ✓ Manufacturer of own cell plates using market-leading technology, including only self-cleaning cell technology available
- ✓ Largest installed base, driving aftermarket potential



MARINE TECHNOLOGIES

De Nora provides two key technologies for ballast water treatment as well as novel sewage treatment solutions

KEY SOLUTIONS OFFERING



Provider of **ballast water solutions** based on **electro-chlorination technologies** for larger tanks and ships



Provider of **ballast water solutions** based on **ultraviolet technologies** for small and medium sized ships



Provider of **sewage treatment solutions**



BALPURE®
Ballast Water Management



Hyde GUARDIAN®
Ballast Water Management System



MARINER™ Series 55 installed onboard
Australian Royal Navy, Cape Class

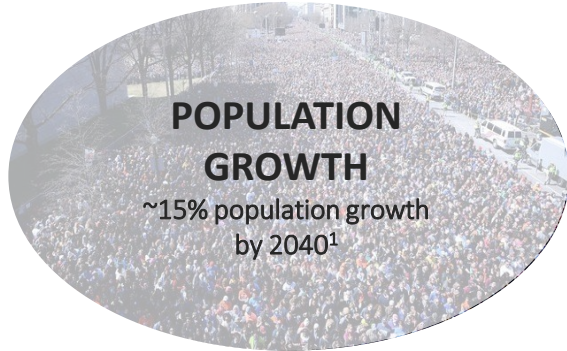
DE NORA'S DIFFERENTIATING FACTORS

- ✓ Ability to serve a large portion of the market through ultraviolet and electro-chlorination technologies
- ✓ Worldwide market presence
- ✓ Existing relationship with end users (e.g., shipyards)



WATER TECHNOLOGIES

Strong megatrends providing tailwinds for the demand of water technologies



INCREASED DEMAND FOR



Advanced systems for water and wastewater treatment

BY



Industrial Clients



Upgrades and expansion of aging infrastructure



Residential Clients



Solutions with higher efficiency, uptime and yield



Municipalities



«Positioning De Nora for profitable growth through value additions and efficiency enhancements.»



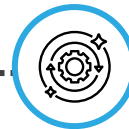
MARKET
PENETRATION

- Leveraging leading position in Pool Technologies
- Geographic and market expansion of products and services
- Growing aftermarket contribution



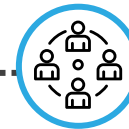
PORTFOLIO
ENHANCEMENT

- Improved differentiation through product enhancements and cost reduction
- New Product Development



OPERATIONAL
EXCELLENCE

- Enhanced Project execution
- Global Supply Chain optimization
- Tighten cost management and streamline OPEX



FUTURE-READY
ORGANIZATION

- Agile organization fitted for growth
- Maximize synergies with Group functions



DE NORA

discover more

