December 2023

NEXTCHEM CORPORATE PROFILE

NEXTCHEM

WHO WE ARE

NEXTCHEM is the MAIRE’s company dedicated to Sustainable Technology Solutions. Thanks to the extensive know-how of nitrogen, hydrogen, carbon capture, fuels, chemicals and polymers, we offer innovative solutions and processes to fully enable the energy transition.

02

OUR GROUP

PURPOSE

We believe in a future where humanity, industries, and the planet can all thrive.

MAIRE
AT A GLANCE

We are a technology and Engineering Group that develops and implements innovative solutions to enable the Energy Transition. We offer Sustainable Technology Solutions and Integrated E&C Solutions in nitrogen fertilizers, hydrogen, circular carbon, fuels, chemicals and polymers.

3.5
Revenues (€ billion)

8.6
Backlog (€ billion)

45
Countries

~1,500
Total delivered projects

90.4
Net Income (€ million)

7,000
Employees

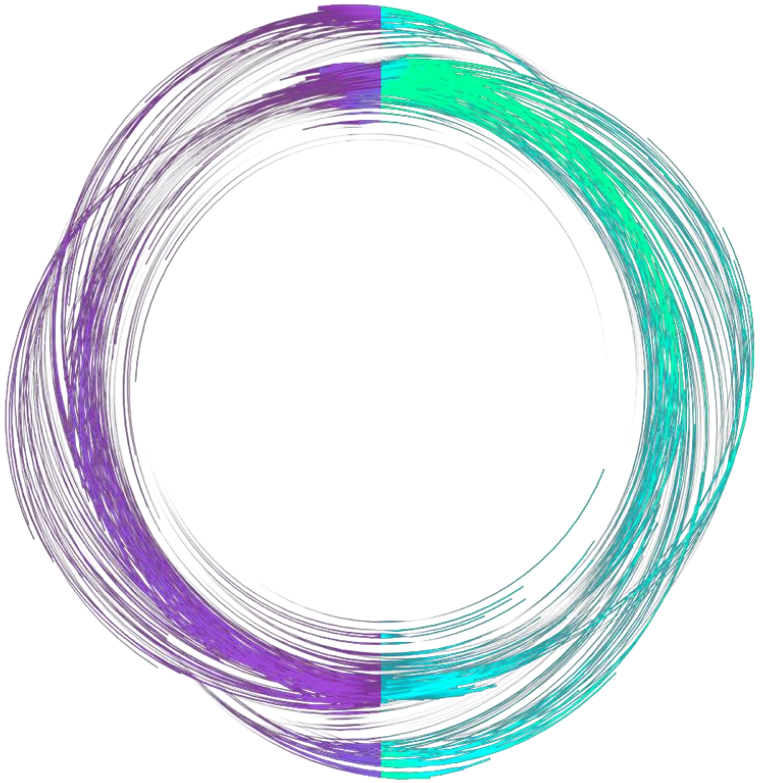
20,000
People engaged worldwide

MAIRE CORE BUSINESS

HOME TO THOSE WHO MAKE TO INSPIRE

SUSTAINABLE TECHNOLOGY SOLUTIONS

We offer **Sustainable Technology Solutions** to fully **ENABLE** energy transition. Innovative and sustainable processes, optimizing conventional ones and creating new processes from non-fossil feedstock.



INTEGRATED E&C SOLUTIONS

We **MAKE** energy transition happen through our **Integrated E&C Solutions**. We bring into reality complex plants and frontier projects designed to provide access to the latest technologies.

PROJECT DEVELOPMENT

PROVIDING TOMORROW'S TECHNOLOGY

NEXTCHEM

MAIRE SUSTAINABLE TECHNOLOGY SOLUTIONS

Technology Licensing

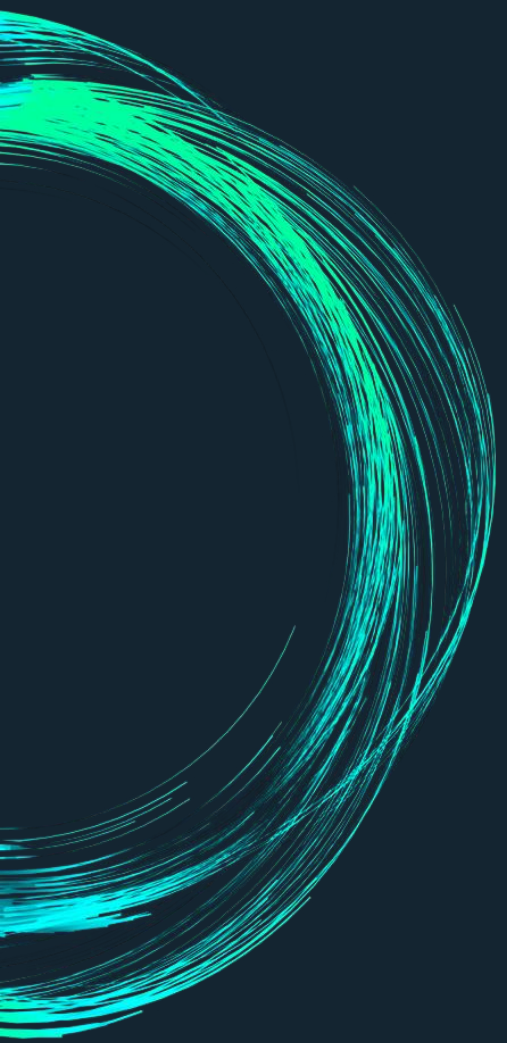
Process Design Package
Basic Engineering Design

Proprietary Equipment & Catalysts

Services and Digital Solutions

Selected Specialty Solutions

DELIVERING FUTURE-PROOF PLANTS



TECNIMONT
MAIRE INTEGRATED E&C SOLUTIONS

Front End
Engineering Design

Engineering
& Procurement

Engineering, Procurement
& Construction (management)

Upgrading
& Revamping

Operations
& Maintenance

PROJECT DEVELOPMENT REMARKS
OUR DISTINCTIVENESS

Investors & Financial
Sponsors Involvement

Capital Structuring

Project Structuring:
Feedstock, EPC, Offtake

Public Funding
& Grants Coordination

Co-Development
& Partnering

03

NEXTCHEM

TOGETHER, WE PROPEL THE WAY FORWARD.

Our technology solutions are designed to make the energy transition happen by slashing the environmental impact of traditional industries, leveraging our consolidated know-how in hydrogen and carbon-capture technologies, transforming waste into valuable resources like chemicals, fuels, and recycled plastic, finding new processes from non-fossil feedstock.

04

OUR SUSTAINABLE TECHNOLOGY SOLUTIONS

05

NITROGEN

NITROGEN

We have over 75 years of expertise in the fertilizer industry with a market share of more than 50% in Urea. We offer proprietary technologies to produce fertilizers from Urea to Nitrates.

We are also evolving in the offer of clean Ammonia technology, for non-fertilizer use such as energy carrier and maritime fuels.

STAMI Urea

As the world market leader in design, licensing and development of urea plants for the fertilizer industry, we apply our expertise, knowledge and experience for many solutions; fertilizer production technologies, emission reduction technologies and all technologies for the integration of urea and adjacent processes.

STAMI Nitric Acid

Stamicarbon offers mono- and dual-pressure nitric acid production processes for a wide range of plant capacities. Both processes are characterized by high tail gas temperature and designed for maximum energy recovery, reliable operation and minimal greenhouse gas emissions.

STAMI Green Ammonia

Stamicarbon offers small and medium scale green ammonia technology for new and existing plants. This technology can be used in combination with urea production based on carbon recycling, or in combination with nitrate fertilizers

06

HYDROGEN & CIRCULAR CARBON

HYDROGEN AND CIRCULAR CARBON

With a legacy of over 50 years of experience in Hydrogen Tech, we stands as a trustworthy and proficient player in this fast evolving market.

Our hydrogen and circular carbon technology solutions will make a positive impact, helping to decarbonize industry while accelerating the energy transition.

NX Reform

Steam Methane Reformer (SMR) allows cost-effective production of syngas via steam reforming of hydrocarbons at high temperature.

This well-proven and highly-referenced SMR technology is used to produce hydrogen with very high purity, implementing all Best Available Techniques at lower costs compared to other technologies thanks to high hydrogen yield, feedstock flexibility, simple design, smooth operation and very high reliability.

NX Reform Hydrogen
Grey Hydrogen production for several industrial sectors including refineries, steel manufacturing, fertilizers production

NX Reform Blue Hydrogen
SMR combined with carbon capture technology for Blue Hydrogen production to decarbonize several industrial sectors.

NX eReform eBlue
Blue Hydrogen production for industrial applications and for the utility sector with high potential for production of low-carbon hydrogen.

NX CPO

The Catalytic Partial Oxidation (CPO) is a revolutionary technology for production of syngas via direct natural gas oxidation.

This technology leads to 40-50% lower emissions for hydrogen production compared to classic SMR and lower costs due to its compact design and simple process.

NX CPO Hydrogen
Low carbon hydrogen production for refineries and heavy industries decarbonization including steel manufacturing.

NX SulphuRec

Highly-referenced system relying on modified Claus and Tail Gas Treatment technology for abatement of sulphur bearing contaminants in acid and tail gases and co-production of liquid sulphur as valuable product.

NX SulphuRec
This technology is widely applied for reducing the environmental impact of crude oil refining and cleaning of natural gas and can be properly upgraded for decarbonization.

NX Circular

Chemical conversion of carbon and hydrogen contained in waste (non-recyclable plastics, RDF and dry fraction) by partial oxidation and subsequent purification to low carbon syngas.

Our "Waste-to-X" technology converts the syngas produced into circular chemicals and fuels bridging two sectors such as waste management & chemicals and fuels manufacturing, with substantial CO2 savings from avoided waste incineration while decarbonizing the downstream sectors.

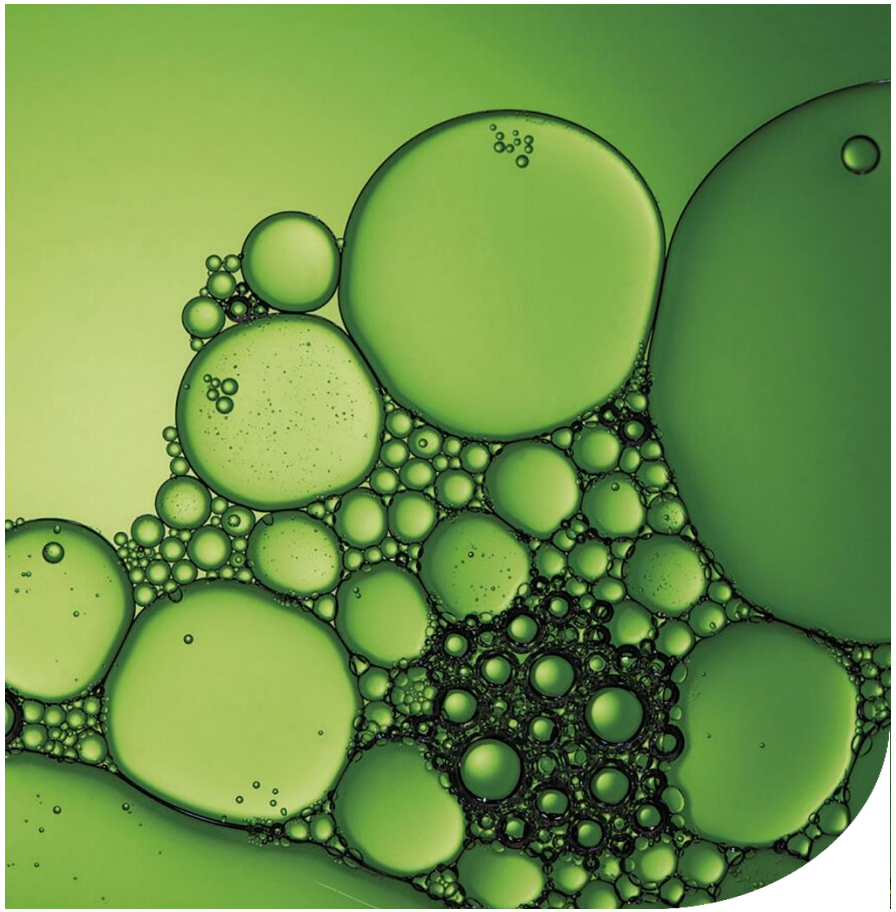
NX Circular Hydrogen
Waste-to-H2 solution leverages on internal know-how for syngas upgrading to Hydrogen for the Hard-to-Abate Industries.

07

FUELS & CHEMICALS

FUELS AND CHEMICALS

In order to fight global warming, we need alternative and innovative fuels and chemicals obtained, for example, through a circular model where waste is finally considered a valuable feedstock. Leveraging MAIRE know-how in hydrotreating and hydrocracking, we are now applying our expertise to offer bio-fuels such as SAF, synthetic fuels, chemicals. Anticipating as well the coming development of e-fuels production from renewable energy.



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NX Circular Methanol
Waste-to-methanol solution aims to produce circular methanol as sustainable maritime fuel.

NX Circular Ethanol
Waste-to-ethanol solution aims to produce circular ethanol as fuel or as feedstock for circular chemicals, such as polyethylene

NX Circular SAF
Waste-to-SAF solution leverages on syngas conversion to circular Sustainable Aviation Fuels.

NX Circular Urea
Waste-to UREA solution integrates STAMI proprietary technology for syngas conversion to Urea.

NX Purify

Hydrogenation of fats, oils and greases to renewable diesel and further hydrocracking to SAF. The technology is offered in 4 sizes at relatively small scale: 30, 60, 90 and 120kton/y.

This solution represents the best available technology for Small production of SAF, unlocking the opportunity of a sustainable aviation industry.

NX Purify technology allows the purification of contaminants present in bio-derived fats, oils and greases via hydro-treatment and/or silica absorption for further upgrading to renewable diesel and SAF.

NX Purify Fuels
Production of Renewable Diesel and SAF as treatment of fats, oils and greases for further hydrogenation and/or hydrocracking to SAF and RD.

NX CPO

The Catalytic Partial Oxidation (CPO) is a revolutionary technology for production of syngas via direct natural gas oxidation.

This technology leads to 40-50% lower emissions for hydrogen production compared to classic SMR and lower costs due to its compact design and simple process.

NX CPO SynFuels
High-yield low-carbon fuels production: applied as performance enhancer for Fischer Tropsch processes for synfuels/synchemicals production.

08

POLYMERS

POLYMERS

New energy carriers are necessary in order to fight global warming, through sustainable polymers obtained, for example, through a circular model where waste is finally considered a valuable feedstock.

Our technology offering in Sustainable Polymers is extensive and comprehensive: Plastic Upcycling and Compounding, Chemical Recycling, and Biodegradable and compostable polymers. Starting from the downstream market demand in terms of polymer quality, we can transform a plastic waste into a secondary raw material with physical and chemical characteristics and mechanical properties similar to those of virgin polymers, replacing polymers derived from fossil feedstock.

NX Replast

A complete solution for a fast deployment of new advanced Mechanical Upcycling plants to maximize the valorisation of plastic waste into circular r-polymers, based on the experience gained in the development and industrial operations of MyReplast Industries' reference plant.

NX Remono

Innovative technology for chemical recycling of polymethyl methacrylate (PMMA).

Depolymerization of PMMA to its basic monomer that can be used for production of new plastics with identical quality of the polymers produced from virgin fossil-based monomers. This solution represents a new step towards a circular economy overcoming the problems of lower quality of the mechanical recycled plastics, at the same time enabling access to lower quality feedstock such as end-of-life PMMA good.

FOR MORE INFO

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