

October 2024

# NEXTCHEM COMPANY PROFILE

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# WHO WE ARE

## WHO WE ARE

NEXTCHEM is 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.

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# OUR GROUP

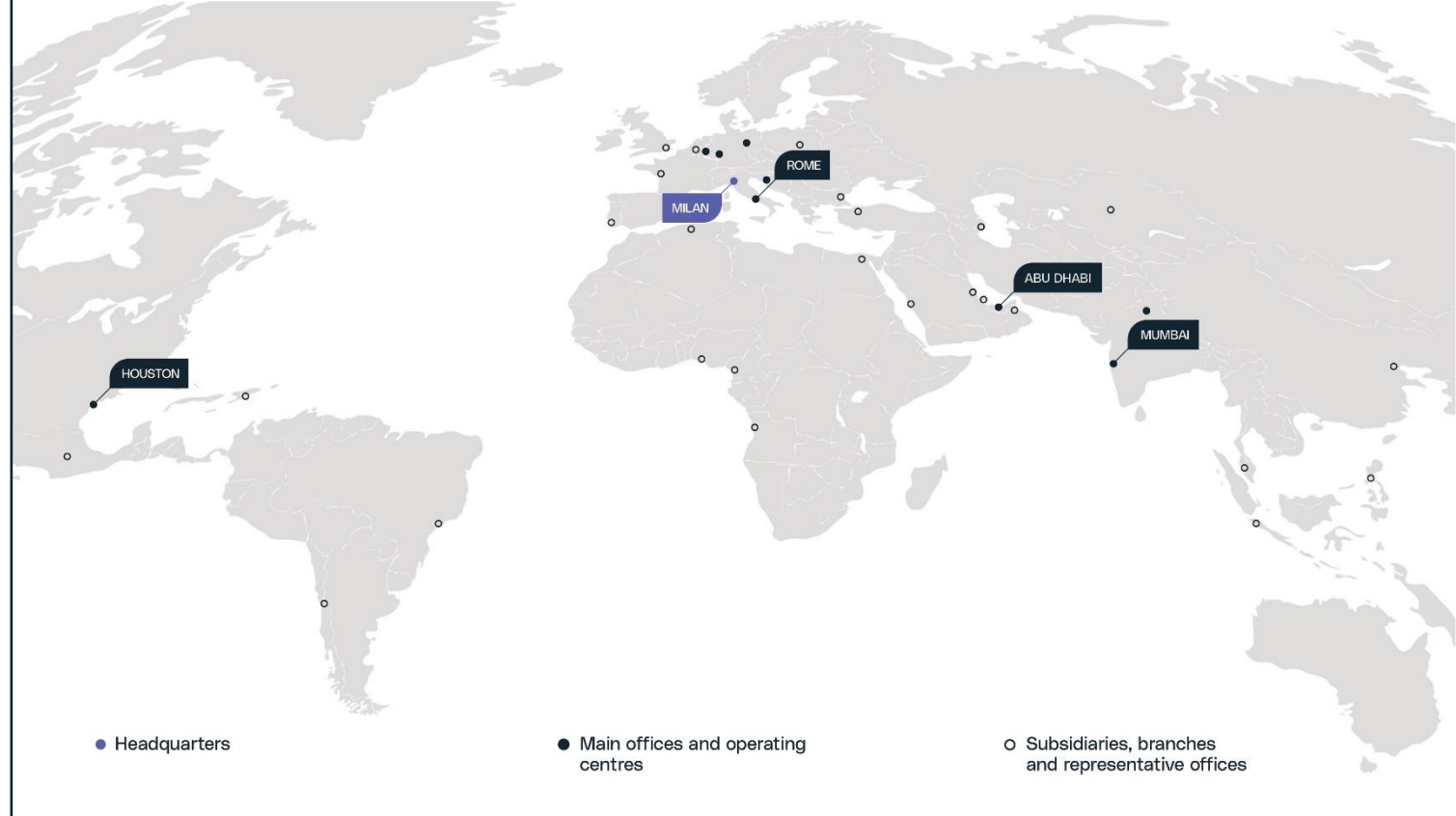
# PURPOSE

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.



4.3

Revenues (€ billion)

15.0

Backlog (€ billion)

129.5

Net Income (€ million)



~45

Countries



~8,300

Employees

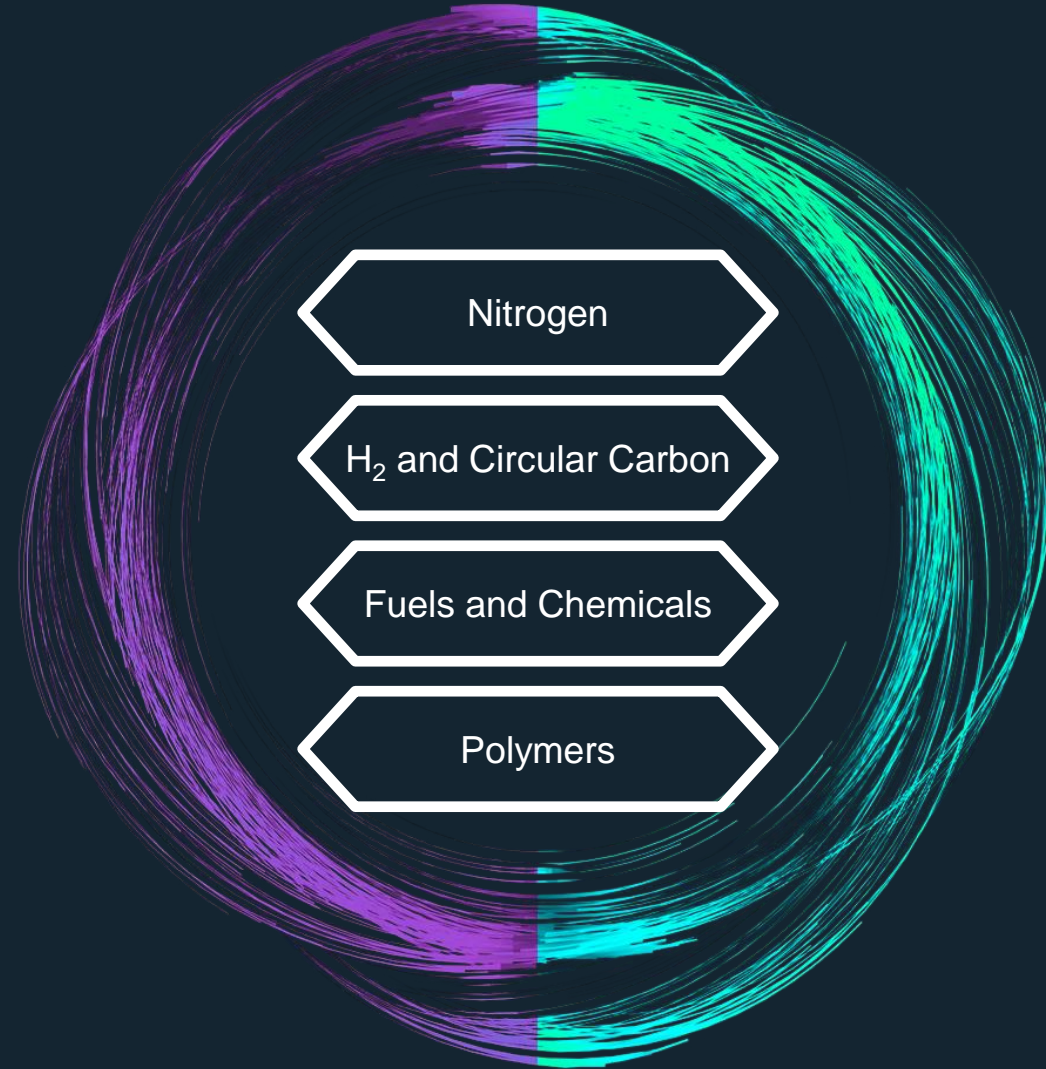
29,000+

People engaged worldwide\*

Data as of 31<sup>st</sup> December, 2023

\*The data includes employees, collaborators and sub-contractors

# MAIRE CORE BUSINESS



# HOME TO THOSE WHO MAKE TO INSPIRE

## SUSTAINABLE TECHNOLOGY SOLUTIONS

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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

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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

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Technology  
Licensing

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Process Design Package  
Basic Engineering Design

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Proprietary Equipment  
& Catalysts

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Services and  
Digital Solutions

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Selected Specialty  
Solutions

# DELIVERING FUTURE-PROOF PLANTS



**TECNIMONT**

MAIRE Integrated E&C Solutions

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Front End  
Engineering Design

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Engineering  
& Procurement

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Engineering, Procurement  
& Construction (management)

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Upgrading  
& Revamping

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Operations  
& Maintenance

# PROJECT DEVELOPMENT REMARKS

## OUR DISTINCTIVENESS



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Investors & Financial  
Sponsors Involvement

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Capital Structuring

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Project Structuring:  
Feedstock, EPC, Offtake

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Public Funding  
& Grants Coordination

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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.

# TECHNOLOGY EXCELLENCE STRENGTHENED OVER TIME

**Fauser Montecatini** pioneers the ammonia production process from renewables.

**Stamicarbon** is established in the Netherlands, bringing crucial technological and engineering skills. This marks the start of a journey towards global leadership in the fertilizer market.

The Italian engineering company Selas Italia (later known as KTI) is founded. Specializing in high-temperature technologies, **KTI** brings expertise in customized, advanced solutions for hydrogen and syngas production.

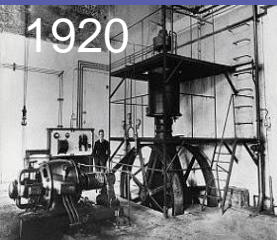
**TPI** is established, focusing on high-end know-how in planning plants for low-density polyethylene (LDPE) production.

The green acceleration begins: **NEXTCHEM** is launched, spearheading green chemistry and energy transition. The acquisition of **MyReplast Industries** and the creation of **MyRechemical** enhance the group's position in plastic upcycling and waste-to-chemical technologies.

The "Unbox the Future" **Strategic Plan** is announced. A new unit lights a new phase in the industrial cycle: Sustainable Technology Solutions is formed under **NEXTCHEM**. Acquisitions of **Conser** and **MyRemono** expand **expertise** in biodegradable plastic and chemical recycling.

**NEXTCHEM** continues its growth with the acquisition of **HyDEP** and **GasConTec**. **HyDEP** pioneers proprietary solutions for green hydrogen production, while **GasConTec** excels in low-carbon hydrogen, ammonia, and methanol technologies.

## AMMONIA REVOLUTION



## HERE COME THE FERTILIZERS!



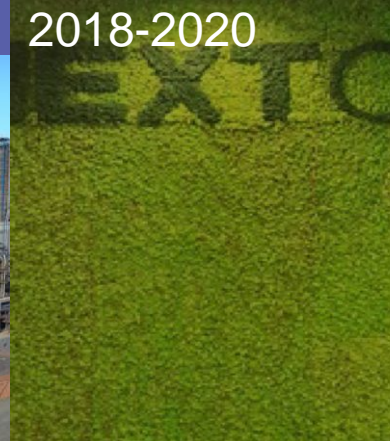
## FUELING THE FUTURE



## POLYETHYLENE PIONEERS



## GREEN CHEMISTRY & UPCYCLING



## UNBOXING THE FUTURE



## HYDROGEN HORIZONS

2024



MAIRE'S TECHNOLOGICAL ROOTS

NEXTCHEM: THE GREEN ACCELERATION

THE ONGOING BLOOM

04

# INTRODUCING OUR BUSINESS LINES

# AT THE FOREFRONT OF INNOVATION, OUR COMPANY IS DEDICATED TO SHAPING A LOW-CARBON FUTURE:

Our expertise is seamlessly integrated into our three business lines providing end-to-end solutions from feedstock to final product.

Together we want to revolutionizing tradition industries such as agriculture, hard to abate, transportation, energy, and manufacturing.



# A STREAMLINED STRUCTURE

THREE BUSINESS LINES SERVING MAJOR DRIVING FORCES



**Sustainable Fertilizers  
& Nitrogen-Based Fuels**

**FEED**



**Low Carbon  
Energy Vectors**

**MOVE**



**Sustainable Materials  
& Circular Solutions**

**MAKE**

# DRIVING INNOVATION ACROSS THREE CORE PILLARS

TO SEIZE THE DECARBONIZATION OPPORTUNITY



**Sustainable Fertilizers & Nitrogen-Based Fuels**



**Low Carbon Energy Vectors**



**Sustainable Materials & Circular Solutions**

Driving sustainable nitrogen solutions in **fertilizers**, leveraging our leadership in **urea**, while innovating in **ammonia** for hydrogen transport

Advancing low carbon energy via **hydrogen** and **CO<sub>2</sub> valorization**, powering aviation, shipping, chemicals, as well as **sustainable plastics** innovation

Enhancing **circularity** by transforming waste into valuable resources, while using **chemical** and **mechanical recycling** for sustainable material recovery



# SUSTAINABLE FERTILIZERS & NITROGEN-BASED FUELS



**NEXTCHEM**

MAIRE Sustainable Technology Solutions

# SUSTAINABLE FERTILIZERS

## NITROGEN-BASED SOLUTIONS

### Technology solutions

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#### **NX STAMI Urea™**

including Ultra Low Energy design  
and fluid bed granulation technology

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Leaders in fertilizer technology, maximizing  
energy efficiency

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#### **NX STAMI Nitrates™**

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Optimizing nitric acid production

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#### **NX STAMI Ammonia**

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Ammonia from low carbon hydrogen  
(through ATR or CPO)<sup>1</sup>

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#### **NX STAMI Green Ammonia™**

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Futureproof carbon-free  
ammonia production

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1. ATR – “Auto Thermal Reforming” and CPO – “Catalytic Partial Oxidation”.



# LOW CARBON ENERGY VECTORS



**NEXTCHEM**

MAIRE Sustainable Technology Solutions

# LOW CARBON ENERGY VECTORS

## HYDROGEN SUITE, LOW CARBON FUELS AND CARBON CAPTURE, SULPHUR RECOVERY AND ADVANCED POLYMERS

### Technology solutions

<b>NX CPO™</b> Catalytic partial oxidation	Small scale hydrogen production through syngas for hard to abate	<b>NX Decarb™</b>	Optimizing and integrating core carbon capture unit
<b>NX Reform™</b> Steam methane reforming	Small-medium scale hydrogen production from gas (available with carbon capture)	<b>NX SulphuRec™</b> Sulphur recovery	Abate pollutants in refinery and natural gas processing
<b>NX AdWinHydrogen®</b> Autothermal reforming	Large scale low carbon hydrogen from gas with high efficiency and capture rates	<b>NX MAN</b>	Sustainable processes for fine chemicals production
<b>NX HyDEP</b>	Reliable and cost-effective electrolysis modules for green hydrogen	<b>NX CONSER™ Duetto</b>	Building a sustainable future through biodegradable plastics
<b>NX AdWinMethanol®</b> Autothermal reforming	Large scale methanol synthesis from gas for a new low carbon fuel		
<b>NX SAF BIO™</b> HEFA process, also with pre-treat	Unlocking sustainability of aviation through cost-effective small scale plants		



# SUSTAINABLE MATERIALS & CIRCULAR SOLUTIONS



**NEXTCHEM**

MAIRE Sustainable Technology Solutions

# SUSTAINABLE MATERIALS & CIRCULAR SOLUTIONS

## VALORIZING WASTE

### Technology solutions

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#### **NX Circular™**

Valorization of waste through gasification and conversion of syngas into hydrogen, methanol, ethanol, or SAF

#### **NX BioEnergy**

Production of bioenergy from waste biomass

#### **NX Replast™**

Upcycling rigid plastic waste into valuable products

#### **NX Re Suite™**

Chemical recycling of plastic waste into monomers





**NEXTCHEM**