January 2025

NEXTCHEM COMPANY PROFILE

NEXTCHEM
MAIRE Sustainable Technology Solutions

01

WHO WE ARE

WHO WE ARE

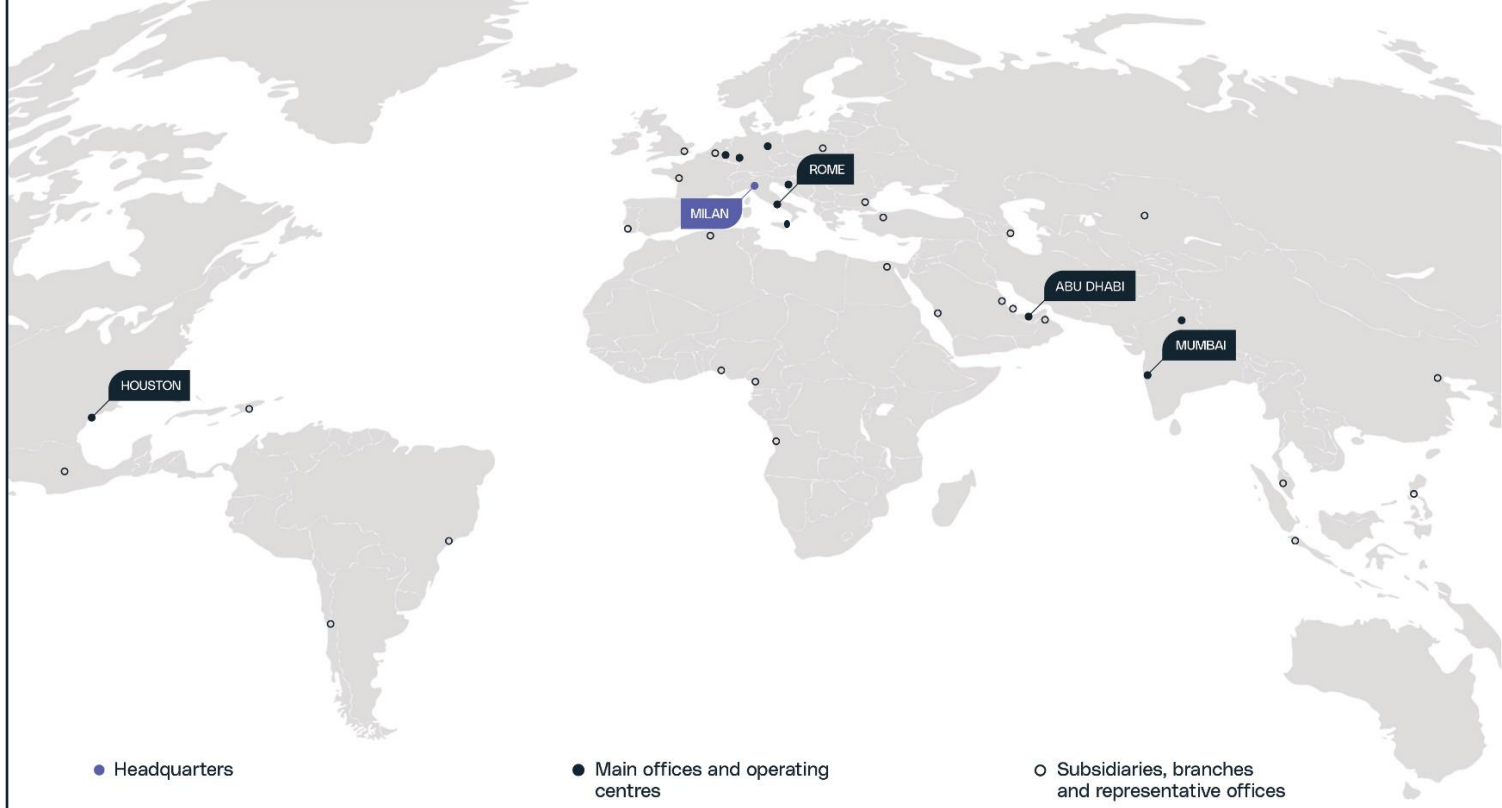
NEXTCHEM is MAIRE's company dedicated to Sustainable Technology Solutions.

We enable energy transition through innovative technologies within our three business lines: Sustainable Fertilizers & Nitrogen-Based Fuels, Low-Carbon Energy Vectors, and Sustainable Materials & Circular Solutions.
At the forefront of innovation, our company is dedicated to shaping a low-carbon future.

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 Technologies Solutions, optimizing conventional processes and creating new ones from non-fossil feedstock and Integrated E&C Solutions, bringing into reality complex plants and frontier project to provide access to the latest technologies.



5.9
Revenues (€ billion)

13.8
Backlog (€ billion)

212.4
Net Income (€ million)

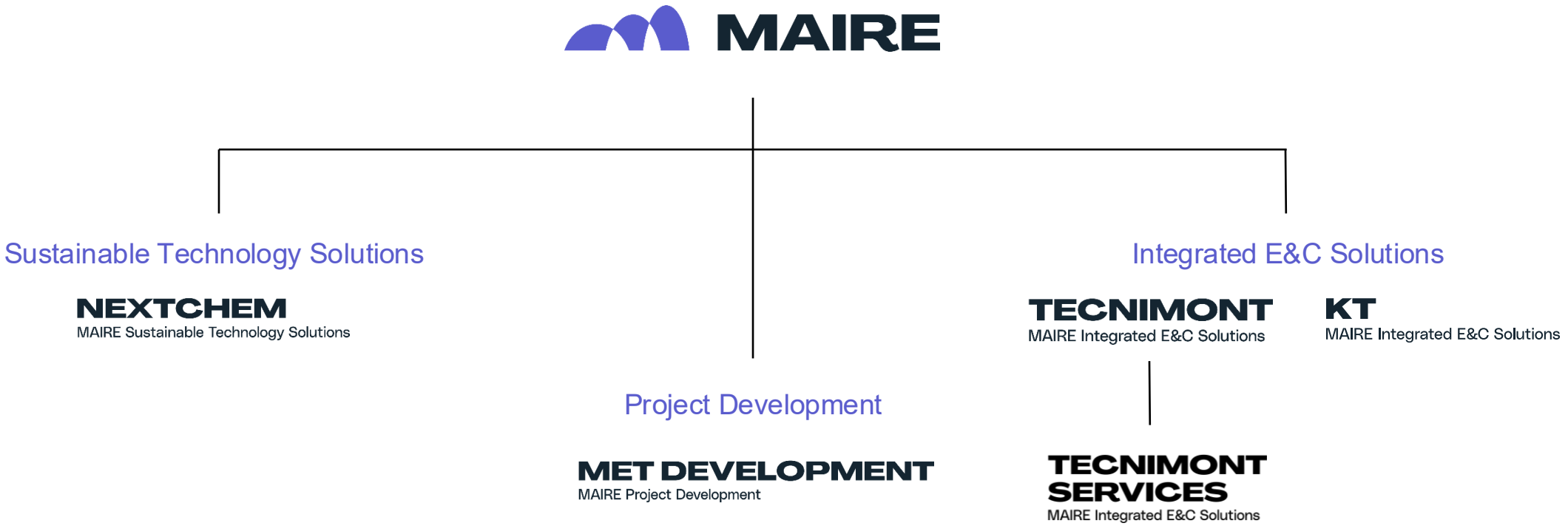
50
Countries

9,800
Employees

~50,000
People engaged worldwide*

Data as of 31st December, 2024
*The data includes employees, collaborators and sub-contractors

MAIRE INTEGRATED ORGANIZATION

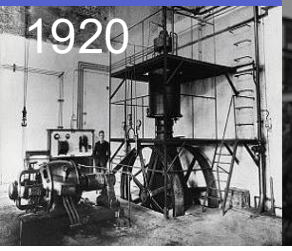


TECHNOLOGY EXCELLENCE STRENGHTENED OVERTIME

Fauser Montecatini pioneers the ammonia production process from renewables.

AMMONIA REVOLUTION

1920



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.

HERE COME THE FERTILIZERS!

1947

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.

FUELING THE FUTURE

1971

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

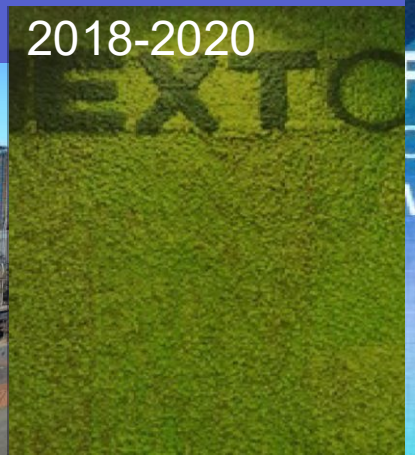
POLYETHYLENE PIONEERS

1992

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.

GREEN CHEMISTRY & UPCYCLING

2018-2020



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.

UNBOXING THE FUTURE

2023

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.

HYDROGEN HORIZONS

2024

MAIRE'S TECHNOLOGICAL ROOTS

NEXTCHEM: THE GREEN ACCELERATION

THE ONGOING BLOOM

02

WHAT WE DO

Technology
Licensing

Process Design Package
Basic Engineering Design

Proprietary Equipment
& Catalysts

Services and
Digital Solutions

Selected Specialty
Solutions

NEXTCHEM
MAIRE Sustainable Technology Solutions

PROVIDING TOMORROW'S TECHNOLOGY

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.

03

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 revolutionize traditional industries such as agriculture, hard-to-abate sectors, 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

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

Low-Carbon Energy Vectors

Advancing low-carbon energy via **hydrogen** and **CO_2 valorization**, powering aviation, shipping, chemicals, as well as **sustainable plastics** innovation

Sustainable Materials & Circular Solutions

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

SUSTAINABLE FERTILIZERS & NITROGEN BASED FUELS

SUSTAINABLE FERTILIZERS & NITROGEN BASED SOLUTIONS

TECHNOLOGIES

NX STAMI Urea™
including Ultra Low Energy design and fluid bed granulation technology

Leaders in fertilizer technology, maximizing energy

NX STAMI Nitrates™

Optimizing nitric acid production

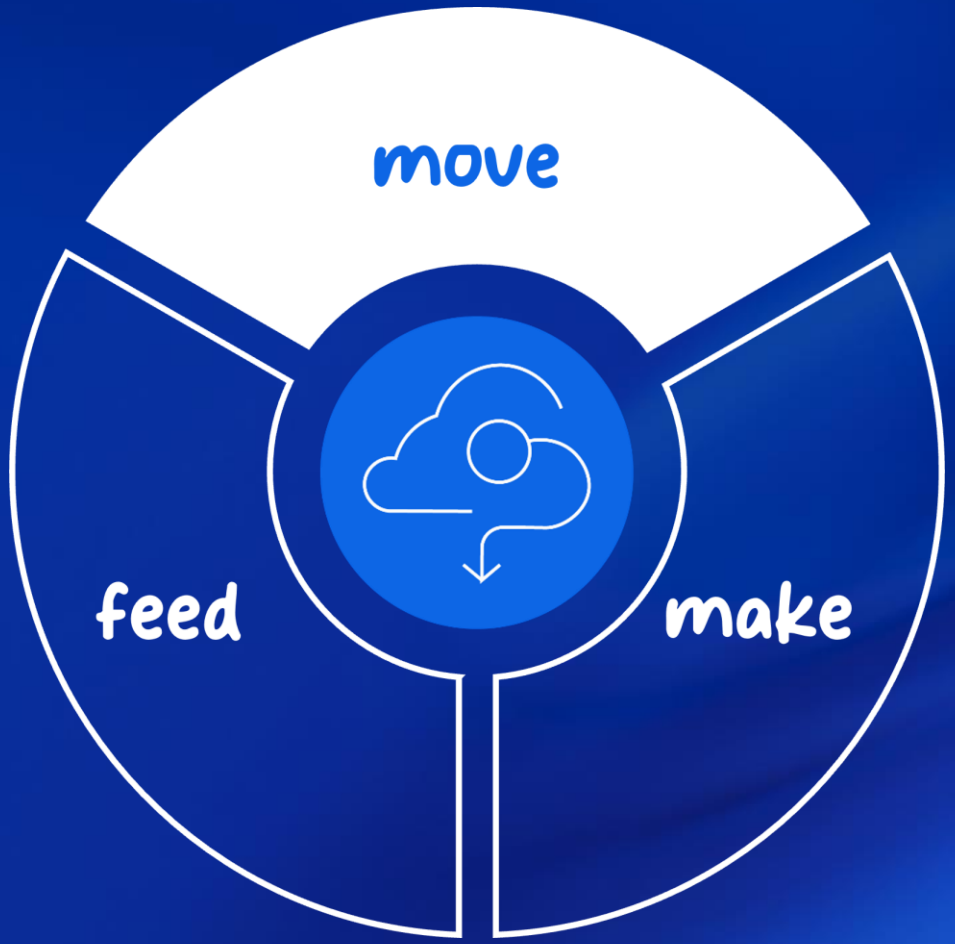
NX STAMI Ammonia

Ammonia from low-carbon hydrogen (through ATR or CPO)[1]

NX STAMI Green Ammonia™

Futureproof carbon-free ammonia production

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



LOW-CARBON ENERGY VECTORS

LOW-CARBON ENERGY VECTORS

HYDROGEN SUITE & LOW-CARBON FUELS TECHNOLOGIES

NX CPO™
Catalytic partial oxidation

Small scale hydrogen production through syngas for hard to abate

NX Reform™
Steam methane reforming

Small-medium scale hydrogen production from gas (available with carbon capture)

NX AdWinHydrogen®
Autothermal reforming

Large scale low-carbon hydrogen from gas with high efficiency and capture rates

NX FHYVE™

Reliable and cost-effective electrolysis modules for green hydrogen

NX AdWinMethanol®
Autothermal reforming

Small scale hydrogen production through syngas for hard to abate

NX SAF™ BIO
HEFA process, also with pre-treat

Unlocking sustainability of aviation through cost-effective small scale plants

NX Decarb™

Optimizing and integrating core carbon capture unit

NX SulphuRec™
Sulphur recovery

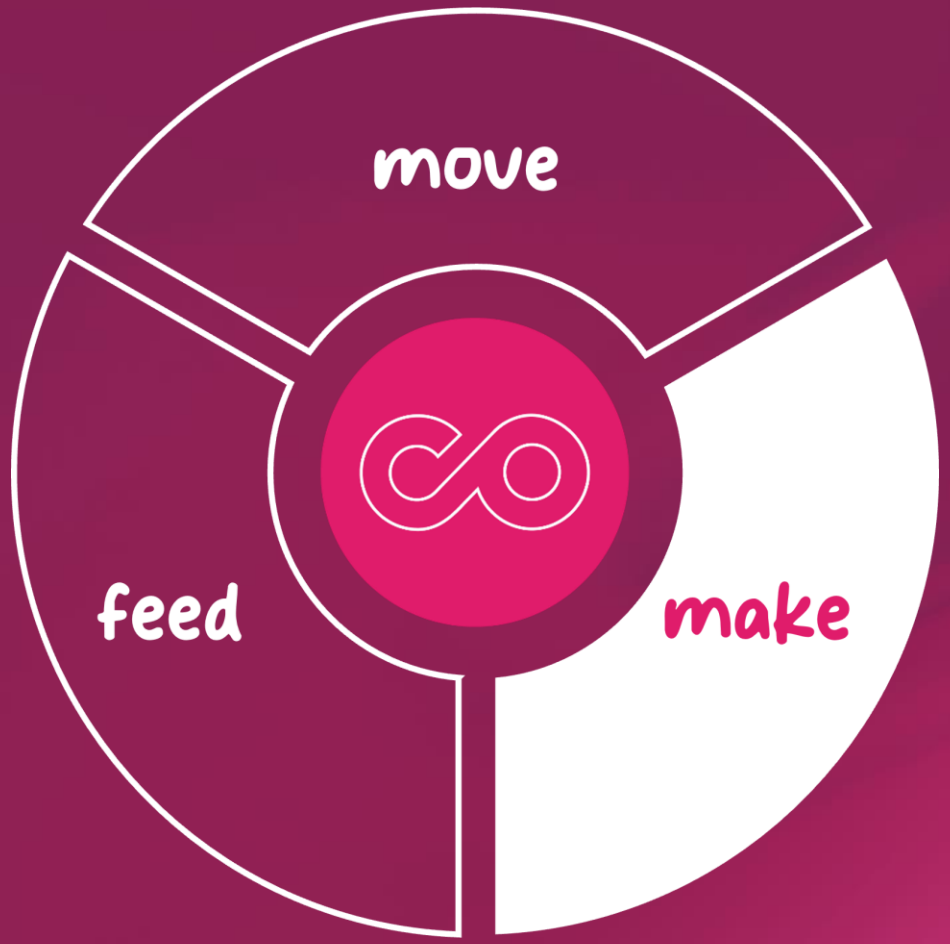
Abate pollutants in refinery and natural gas processing

NX CONSER™

Sustainable processes for fine chemicals production

NX CONSER™ Duetto

Building a sustainable future through biodegradable plastics



SUSTAINABLE MATERIALS & CIRCULAR SOLUTIONS

SUSTAINABLE MATERIALS & CIRCULAR SOLUTIONS

TECNOLOGIES FOR VALORIZING WASTE

NX Circular™

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

NX EnerCircle™

Production of bioenergy from waste biomass

NX Replast™

Upcycling rigid plastic waset into valuable products

NX Re™ Suite

Chemical recycling of plastic waste into monomers

NEXTCHEM