NX AdWinHydrogen®

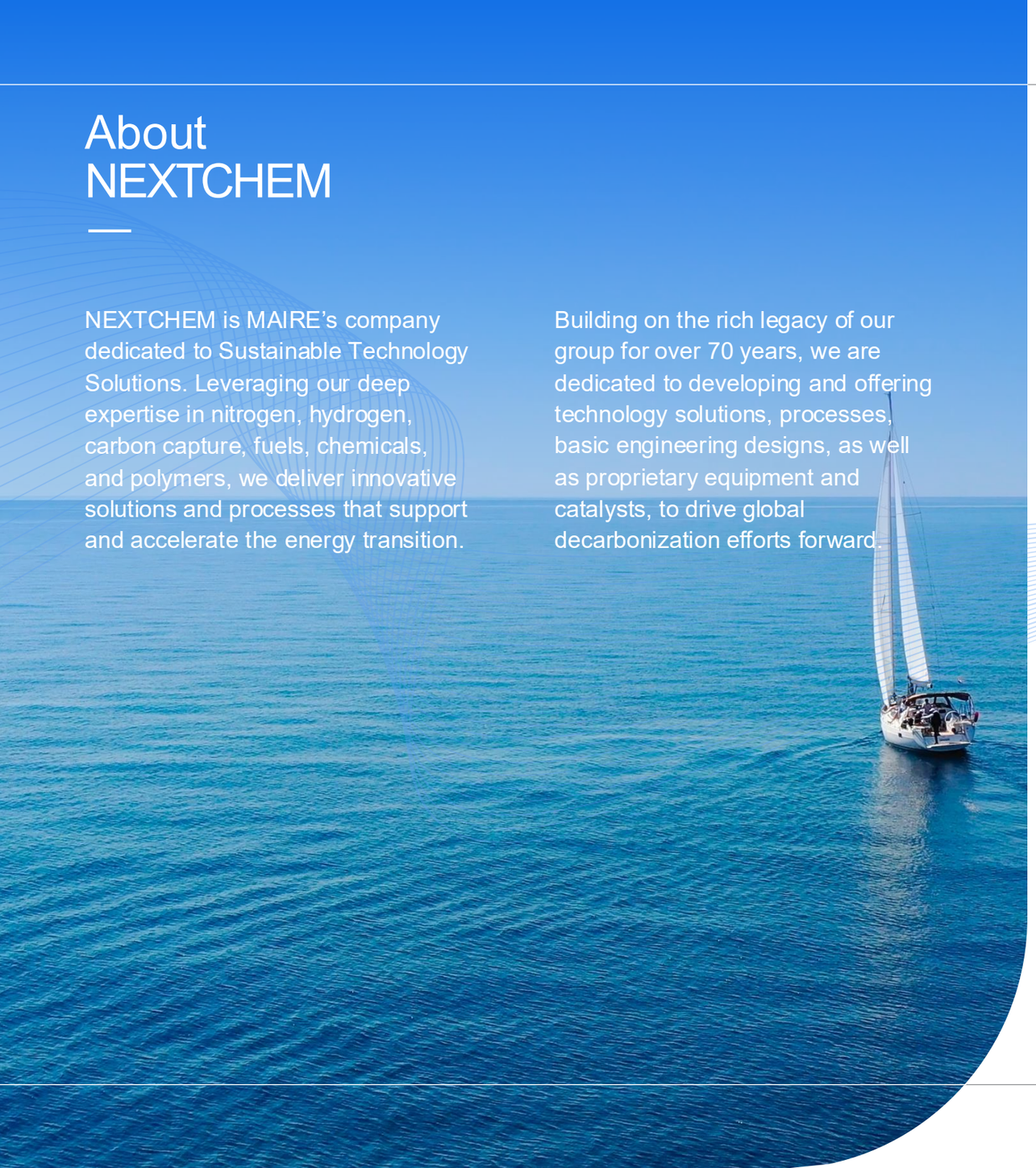
The most efficient way to produce Low-Carbon Hydrogen

NEXTCHEM
MAIRE Sustainable Technology Solutions

About NEXTCHEM

NEXTCHEM is MAIRE's company dedicated to Sustainable Technology Solutions. Leveraging our deep expertise in nitrogen, hydrogen, carbon capture, fuels, chemicals, and polymers, we deliver innovative solutions and processes that support and accelerate the energy transition.

Building on the rich legacy of our group for over 70 years, we are dedicated to developing and offering technology solutions, processes, basic engineering designs, as well as proprietary equipment and catalysts, to drive global decarbonization efforts forward.



Value from the new energy vector

In today's scenario, hydrogen is key lever to decarbonize different industrial sectors: transports, hard-to-abate industries (such as steel production and cement) and fertilizers.

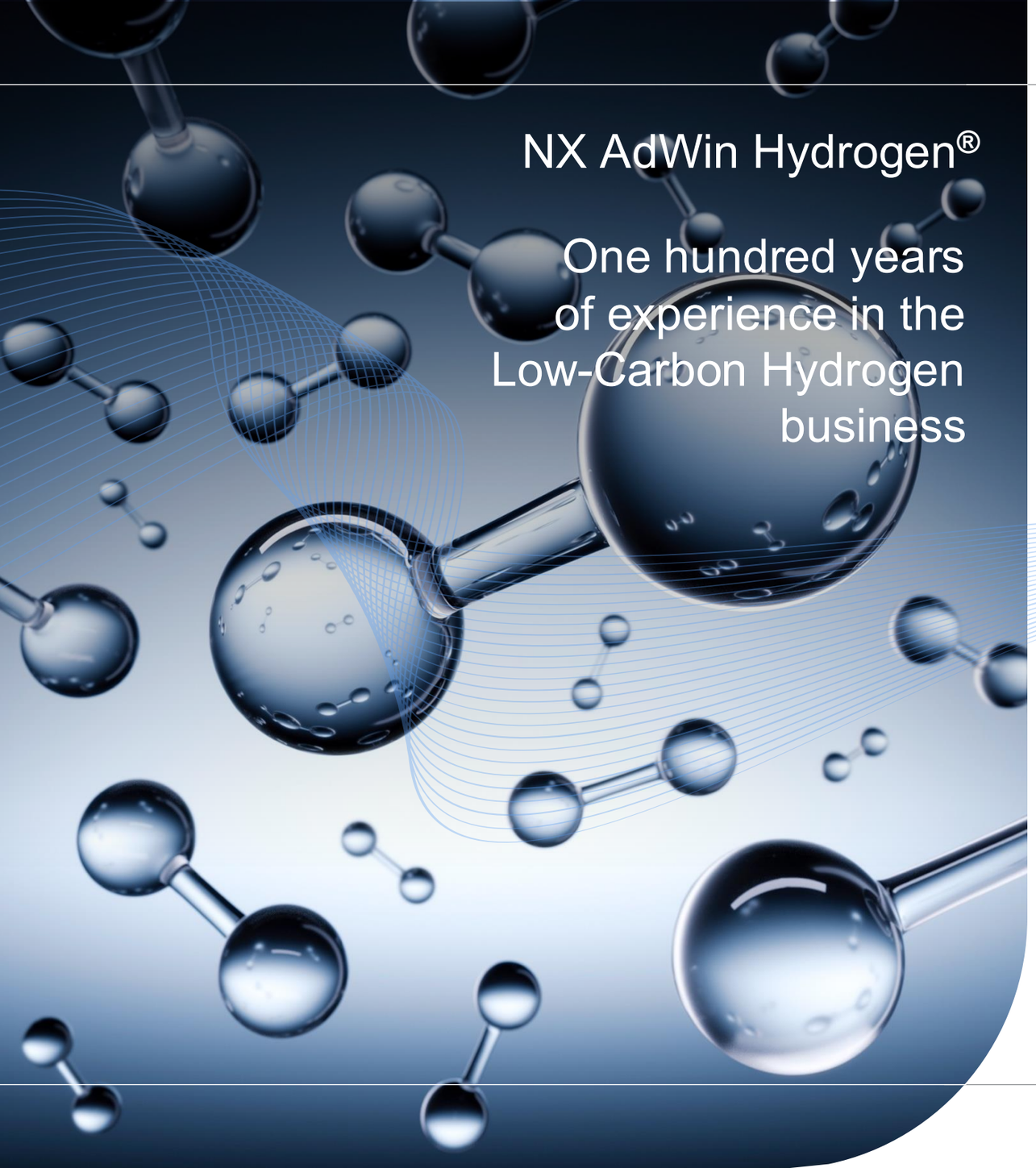
In this context, low carbon H_2 acts both as energy vector and chemical building block contributing in a multitude of industrial applications.

The most efficient way to produce Low Carbon Hydrogen

NX AdWinHydrogen® technology is applied for converting hydrocarbon (C1 to C10) into hydrogen.
This technology leverages an autothermal reformer operating at high pressure (60+ bar) for producing hydrogen.

NX AdWinHydrogen® is best designed for production of Blue Hydrogen, Blue ammonia and Low Carbon Methanol.

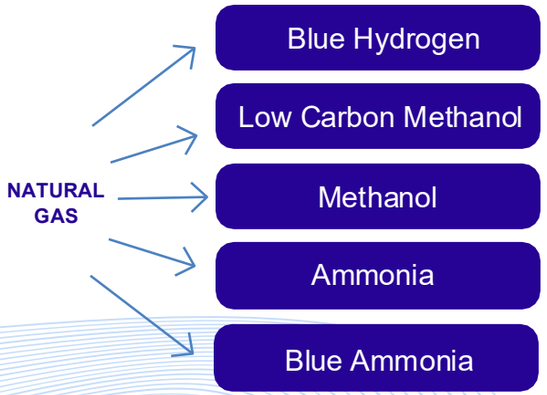
NEXTCHEM offers license, process design package (PDP), proprietary equipment (PEQ), digital & post-PDP services.



NX AdWin Hydrogen®

One hundred years of experience in the Low-Carbon Hydrogen business

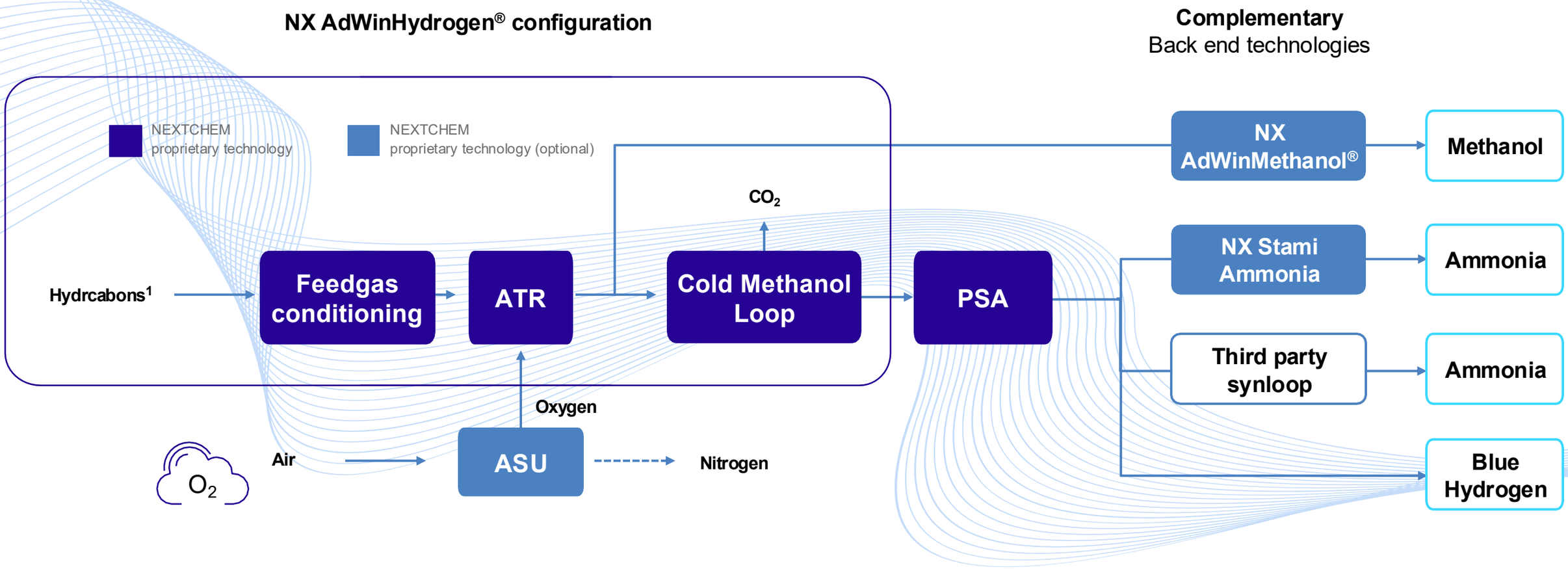
Applications



Your benefits

1. High operating pressure reduces Capex (ca. 10% lower vs other top players)
2. Very large scale syngas production units in a single train
3. Flexible feedstock intake from natural gas to heavier hydrocarbons mixtures (C1-C10)
4. Up to 98% Carbon capture rate via proprietary and integrated Cold Methanol Loop technology
5. Robust and proven equipment integrated in a well-established syngas production unit

Technical overview



1. C1 to C10 feedstock