

A photograph of an industrial ammonia plant at dusk. The scene is dominated by a large, circular blue overlay that contains the text. In the background, two workers in hard hats and safety gear stand on a metal platform, looking towards the right. The plant's complex structure of pipes, tanks, and scaffolding is visible, with some parts illuminated by warm lights. The sky is a deep blue, suggesting twilight. The overall mood is industrial and focused on sustainable production.

Spotlight on: Sustainable ammonia

Ammonia (NH_3) is a **key component in fertilizer production** and can also be used as:

a fuel for transport



for power generation



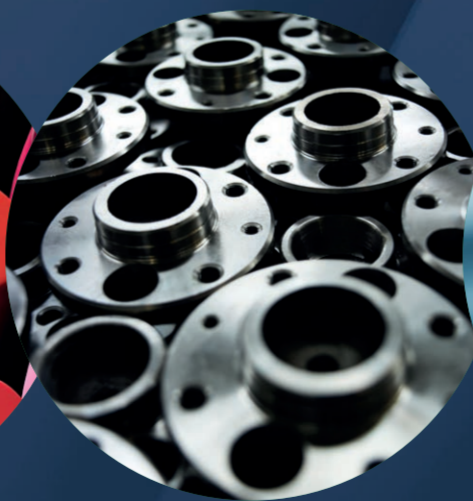
and is a building block for many everyday products, including:



Textiles



Cosmetics



Automotive parts



Healthcare equipment



Plastics & Resins

Ammonia can be more sustainably produced using renewable and low carbon feedstocks, or using natural gas with carbon capture. It is a versatile product that is an important part of the decarbonization journeys of several hard-to-abate industries.

Ammonia applications

Fertilizer production:

As nitrogen-based fertilizer production accounts for 80% of demand for ammonia, sustainably produced ammonia has the potential to decarbonize a critical industry that will feed our growing population.



Chemical feedstock:

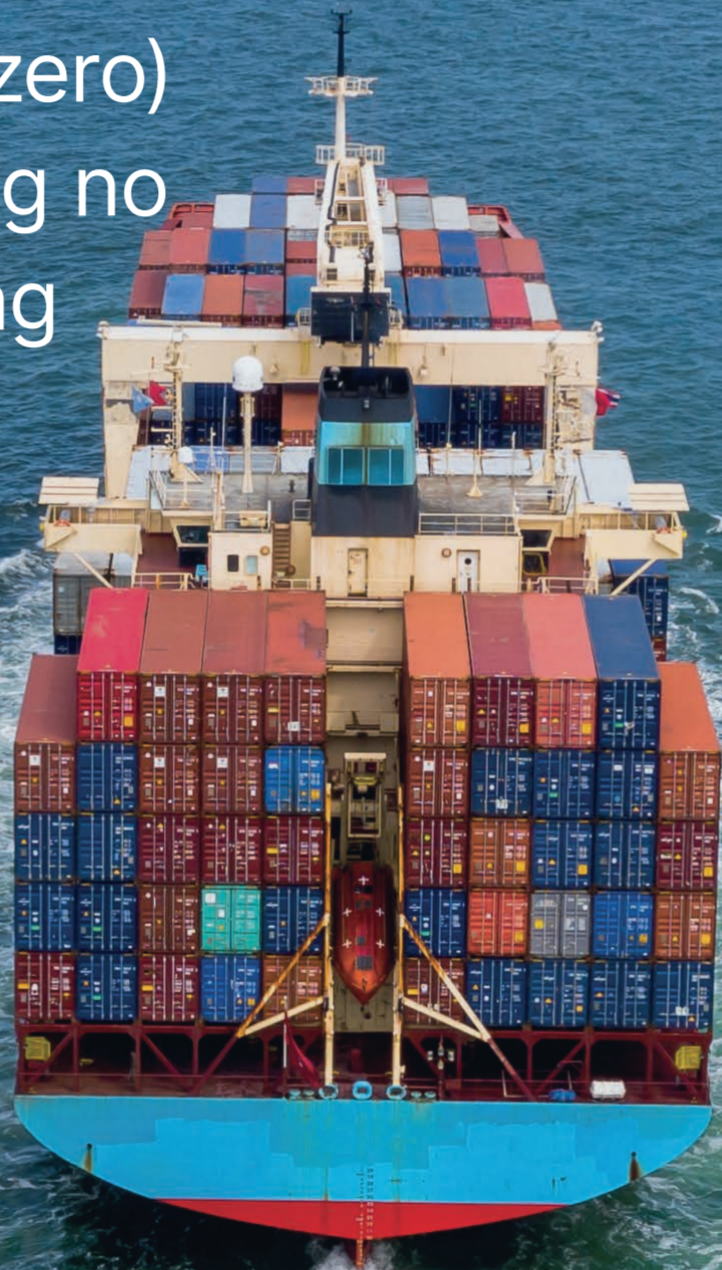
Ammonia is used in the production of countless everyday products including plastics, dyes, pharmaceuticals and cleaning products, meaning sustainably produced ammonia can help reduce the carbon footprint of a wide range of products.


Ammonia as a fuel:

Renewable and low carbon ammonia can be used as a liquid fuel.

It is a zero (or near zero) carbon fuel, meaning no CO_2 is emitted during combustion.

It is a particularly important alternative to fossil fuels in sectors such as maritime which are harder to electrify.





It is energy dense with a similar density to methanol, more favorable than hydrogen.

The technology to produce it from zero carbon hydrogen is efficient and fully scaled.

Energy demand areas:

Co-firing

By retrofitting coal power plants to replace a portion of the coal with ammonia, plants can generate power with lower emissions.

Energy storage and hydrogen carrier

Ammonia is one of the most efficient ways to transport and store hydrogen which is difficult to transport and store on its own due to its low boiling temperature.



How can we accelerate the transition?

To realize the potential of renewable and low carbon ammonia in the energy transition, there are still several things that need to be done including the development of the necessary technology, investment in infrastructure, and securing the product's economic viability through supply and demand.

OCI Global

OCI Global is committed to being part of the solution, accelerating the transition to more sustainable fuels by investing in the production of more sustainable fuels and helping to support the new regulation and infrastructure needed.