



ADNOC Launches Blue Ammonia Exports

The UAE has announced that it has reached an agreement with Japan for the export of its first batch of blue ammonia to the far eastern country. The deal has been struck between the state-owned Abu Dhabi National Oil Company (ADNOC), its Dutch partner OCI NV and Japanese firm Itochu Corporation.

Although the deal is expected to be the first of many, no facts, figures or exact timelines were released along with the announcement. However, the move is a signal of intent from ADNOC and the UAE that they are keen to explore cleaner and more sustainable forms of energy exporting in the future.

What is blue ammonia?

With a growing emphasis on the environmental consequences of energy generation, major fossil fuel companies have been investigating ways in which they can pivot their business towards an eco-friendlier approach. Hydrogen is one of the main gases involved in this new branch of thinking, since it can comprise a clean form of fuel that doesn't produce unwanted by-products other than water.

Although ammonia is a substance that can be [damaging or dangerous](#) if an individual is exposed to it over a prolonged period, it's also highly useful. Hydrogen, for example, is generally converted into ammonia to make it suitable for transportation. The process of doing so normally generates carbon dioxide emissions, which results in so-called "grey ammonia".

However, the implementation of carbon capture and storage (CCS) technology into the process means that these carbon emissions are removed at the point of source and repurposed, creating "blue ammonia". On the other hand, "green ammonia" involves the use of renewable energy to power the process, thus removing unwanted emissions from the entire supply chain.

An historic deal

The blue ammonia in the UAE is being developed in a joint venture with OCI and will be sold to Itochu Corp for use as fertiliser. Meanwhile, the carbon that is collected during the process is will be sent to the country's existing oilfields and injected underground, in a bid to enhance future yields from extraction efforts.



The arrangement follows a similar accord made by the Saudi Arabian fossil fuel company Saudi Aramco, who sold a shipment of blue ammonia to a Japanese interest last year. Both ADNOC and Saudi Aramco are hoping to take advantage of their existing connections within the industry to position themselves as global leaders of blue ammonia production and exportation. However, the latter company said that they do not expect to be dealing in orders of significant volumes until the turn of the decade at the earliest.

Nonetheless, it could promise to be an astute move by both powers. Hydrogen is increasingly sought-after as an alternative fuel source, despite the fact that the costs involved in its production and processing are far higher than those associated with oil or gas. Therefore, establishing a functional supply chain now could help to reduce those costs and give the countries in question a pioneering role in this burgeoning new market.