

Nuclear technology specialist Core Power plans to use floating offshore production platforms to supply green ammonia.

[Gary Howard](#) | Feb 01, 2022

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The company said that while the largest 17,000 ships may not find economic value in hydrogen-derived green fuels, that still leaves a significant portion of the world fleet that could benefit from using green ammonia.

In a report titled "[The New Alchemy: Affordable green fuel from water and air – Floating advanced atomic production of green ammonia for shipping](#)", Core Power laid out its concept of combining marinised atomic power and a power conversion system on one offshore platform, close to an offshore ammonia production and storage facility.

Using next generation molten salt reactors, Core Power said its approach would exceed the safety and efficiency of existing reactors.

"Core Power modelling shows that with current technology it is possible to produce one million tonnes of ammonia per year using 1.2 GW of electric power, on each floating production platform, reducing to 0.9 GW by 2050. This is the equivalent of 440,000 tonnes of very low sulphur fuel oil (VLFSO) and it would allow the decarbonisation of a considerable number of vessels," the company said.

Core Power pitched its solution as superior to renewable energy, which lacks the scale and reliability for widespread ammonia production. Its proposed setup also allows for flexibility in the output mixture of electricity, hydrogen and ammonia, opening up use for other industrial applications.

Having reactors at sea saves costly civil engineering, said Core Power, replacing the need to create custom nuclear plants for a site with a more repeatable approach to nuclear power plant building. The company also plans to lean on the expertise of shipyards and the offshore oil and gas sector.

"Moving to shipyard construction will allow even further reduction in costs. By reducing the size of the reactor and moving the reactor construction to specific factories, it will be possible to implement modular manufacturing methods including the increased use of automation as well simplification of the logistics of the reactor components supply chain," said Core Power.

Taken from:

[https://www.seatrade-maritime.com/sustainability-green-technology/core-power-proposes-floating-atomic-offshore-green-ammonia?NL=ST-005&Issue=ST-005_20220203_ST-005_887&sfvc4enews=42&cl=article_3&utm_campaign=STRADE News Seatrade%20Maritime%20News%20Weekly%20Headlines News NL 02032022 2877&utm_emailname=STRADE News Seatrade%20Maritime%20News%20Weekly%20Headlines News NL 02032022 2877&utm_medium=email&utm_source=Eloqua&utm_MDMContactID=fdfe0520-3f05-4343-b692-7495766c7d68&utm_campaigntype=Newsletter&utm_sub=The%20top%2010%20stories%20this%20week&eM=befac2bbce377550a823e10d7996ebdcbb1ab3dc467da26bdc528f81f4c715ea&eventSeriesCode=ES_SEATRDMTMCTNT&eventEditionCode=MTM00SCC&sessionCode=S_STRDMTNWSWKLY](https://www.seatrade-maritime.com/sustainability-green-technology/core-power-proposes-floating-atomic-offshore-green-ammonia?NL=ST-005&Issue=ST-005_20220203_ST-005_887&sfvc4enews=42&cl=article_3&utm_campaign=STRADE%20News%20Seatrade%20Maritime%20News%20Weekly%20Headlines%20News%20NL%2002032022%202877&utm_emailname=STRADE%20News%20Seatrade%20Maritime%20News%20Weekly%20Headlines%20News%20NL%2002032022%202877&utm_medium=email&utm_source=Eloqua&utm_MDMContactID=fdfe0520-3f05-4343-b692-7495766c7d68&utm_campaigntype=Newsletter&utm_sub=The%20top%2010%20stories%20this%20week&eM=befac2bbce377550a823e10d7996ebdcbb1ab3dc467da26bdc528f81f4c715ea&eventSeriesCode=ES_SEATRDMTMCTNT&eventEditionCode=MTM00SCC&sessionCode=S_STRDMTNWSWKLY)