Green Ammonia Value chain



Renewable Power



Hydrogen Production



Ammonia Production



Storage and Export



Decomposition to

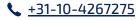


Local Distribution



Ammonia **Applications**







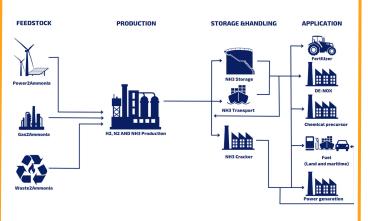


Your trusted partner for the green ammonia value chain and energy solutions



What we do

Proton Ventures specializes in ammonia technology and covers the entire (green) ammonia value chain. This includes small- and large-scale green ammonia production, electrolysis, storage, handling, decomposition (cracking), and various ammonia applications such as de-NOx, fertilizer, and ammonia-to-power. With expertise in terminal design and operational reference projects in countries like Estonia, Bulgaria, and Morocco, we offer services from feasibility studies to engineering, procurement, and construction management (EPCm). Additionally, we have experience in developing decomposition technology, allowing us to integrate cracking licensor's technology into the terminal design and advise clients on optimal configurations. Our in-house ammonia experts offer commissioning, start-up support, and training for Operations & Maintenance personnel, ensuring efficient operations for end-users and operators.



About us

Proton Ventures' know-how of ammonia operations (production & storage) has been in its DNA since its inception. Back in the 90's, the founder of Proton Ventures, Hans Vrijenhoef, was the Kemira ammonia plant & terminal manager and later co-owner of the (Microchemie) terminal which today is OCI's ammonia terminal in Rotterdam. Since starting in 2001, Proton Ventures has gathered talented engineers specializing in ammonia technology and has grown to a team of nearly 70 employees today.

PRODUCTION

Small & large scale from 1 - 100 - 2,000 KTPA Includes N2, H2 NH3 production, intermediate storage and BoP.





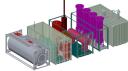
STORAGE & HANDELING

Refrigerated storage of 5-100 KTon Includes tanks, Main & holding compressors, Marine (un)loading & Railcar & truck (un)loading & BoP Part of new PSG 12 work group

CONVENTIONAL APPLICATIONS

Applications are varying from Aqueous ammonia. Urea & Nitric Acid facilities. UAN. DeNOX. Scrubbers and (zero emission) flares. Cooling facilities among other applications.





INNOVATIVE APPLICATIONS

Applications are varying from Ammonia Combustion, Decomposition (cracking), purification, off-shore (un)-loading among other applications.



Start up, training, Operation,

Maintenance services

Implementation Stage

Detailed Design, Procurement & Construction (EPC or EPC-M)

Project screening & (FEL 1 / FEL 2 / Pre-FEED)

Engineering & financial Close Stage

> **Engineering for FID** (FEED(+), BEP, Engineering review)



International team of specialists



Entire green ammonia value chain knowhow



In house engineering disciplines & certifications



22 years pioneers and developers in (green) ammonia



Technology agnostic engineering & system integrator