

### Historical challenge

Nitrogen in the soil is essential for plants to grow. After crops are harvested, nitrogen in the soil must be replenished. This is done via ammonia.

### The solution

From 1909-1913, Fritz Haber and Carl Bosch developed a process to make ammonia from air.

Today, Haber-Bosch-produced fertilizers feed half of the world's 8.2 billion people!

### Today's challenge

95% of ammonia comes from grey hydrogen production generating over 680 million metric tons of CO<sub>2</sub> per year, or the equivalent of over 100 million gas-powered cars on the road.

Shifting to water-electrolysis, we can produce ammonia without CO<sub>2</sub> emissions.

4 billion people rely on ammonia-based fertilizers for their food supply.

It's time to make it green. With renewable energy, we can continue to feed the world without producing greenhouse gases.

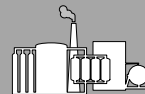
**CLEANPOWER**



Fossil H<sub>2</sub>  
**95%**



Natural Gas



Steam Reformer



Haber-Bosch

**NH<sub>3</sub>**  
Grey Ammonia

Green H<sub>2</sub>  
**5%**



Water



H<sub>2</sub> Electrolyzer



Haber-Bosch

**NH<sub>3</sub>**  
Green Ammonia

Feeding half the world

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