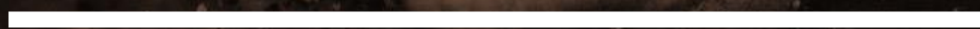




Local Nitrates, Powered by Renewables

Modular plasma technology for nitric acid production
and other derived nitrate-based products

N2



Applied

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About N2 Applied



Overview

- **Norwegian** technology company
- **Plasma-based nitrogen fixation** and its applications in various industries
- **15 years of R&D** has placed us at the forefront of the field



Locations



- HQ in Asker (**Norway**)
- Technology centre on farm outside Kongsberg (**Norway**)
- Regional office in York (**UK**)
- Regional office in Wageningen (**Netherlands**)



Team

- ~30 highly competent employees
- Experts in plasma and absorption processes, engineering and business development

From fossil-based ammonia to electricity-based nitrates

Current system:
Fossil based, centralized production

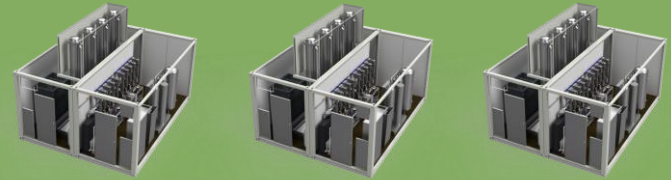


- 1 Few, centralized ammonia plants, **dependent on long supply chains**
- 2 Inflexible production reliant on **stable fossil fuel prices**
- 3 Responsible for **significant GHG footprint**

Market drivers

Increasing geopolitical instability
Rapid growth of renewable energy
Rising costs of GHG emissions

Future system:
Electricity based, local production



Our solution

- 1 **Cost-efficient, modular units scaled to local demand**
- 2 **Flexible operations optimized to run on intermittent renewable energy**
- 3 **Low operational GHG-emissions**

N2 has developed a market leading plasma technology for electric and distributed nitrate production

NitroGen One (27 kW)

The world's most efficient and robust plasma reactor for nitrogen fixation



Market leading plasma technology

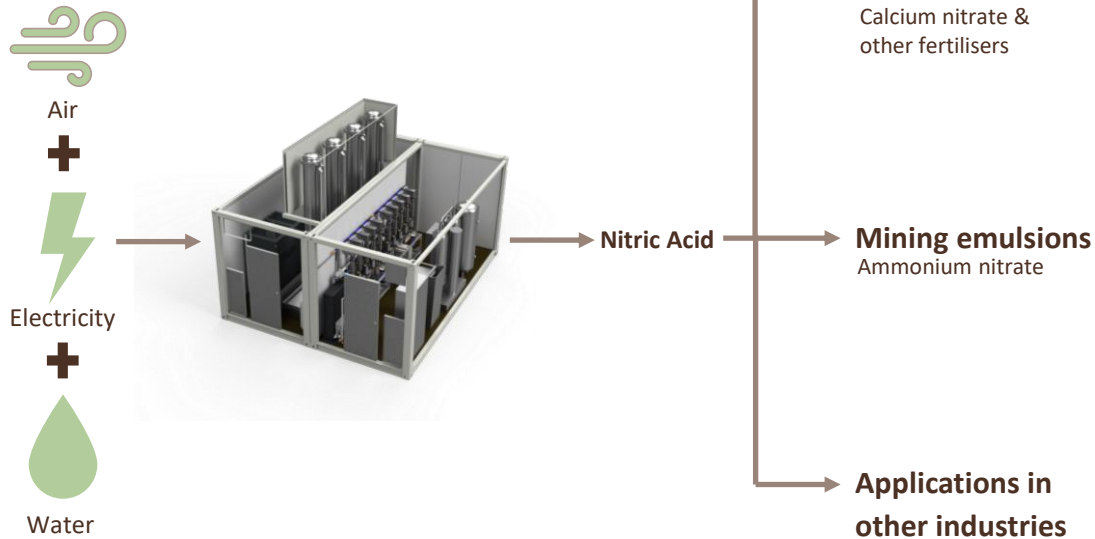
Specialized in **plasma-based nitrogen fixation** and its applications in various industries.

NitroGen One generates a plasma gas using **electricity and air**;
Absorbing this gas in water forms nitrate and produces **nitric acid**.

Nitric acid as key input to existing processes, or precursor for nitrate-based products in **fertiliser, mining, and other industries**.

Flexible and ramp up or down within seconds, well suited to variable **renewable electricity**.

Underlying technology for a broad range of use cases



Advantages summarized

Converting **air** and **water** using **electricity** to produce pure, highly concentrated **nitric acid**.

Precursor for **nitrate fertilisers** and use by existing or new industry players to produce granular fertilisers.

- Modular and CAPEX-friendly system
- Electric and local production
- Fast start/stop operation
- Suited for variable renewable power
- Reduces reliance on fossil-based supply and long supply chains
- Scaling capacity to local demand.

A scalable containerized solution

300 kW

30 MW

300 kW building block

Electric and local

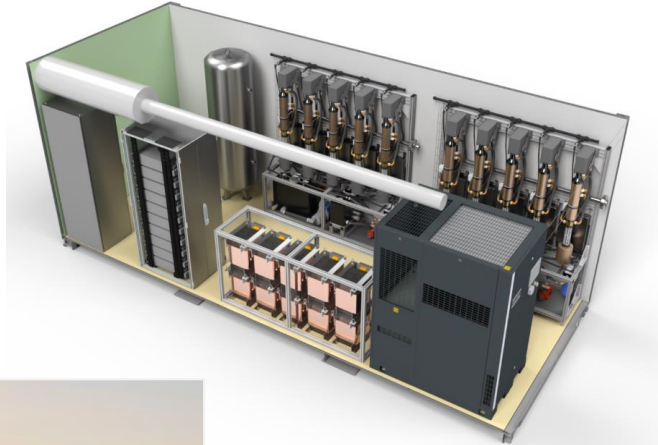
Sustainable and scalable

Flexible with fast ramp up
& ramp off times

Production of liquid nitrate
-based fertilisers

Power-to-Nitrogen

Safe and simple





Using the Power of renewable electricity

- ✓ Combines plasma technology and renewable electricity
- ✓ Flexible and intermittent operation, fast ramp-up and ramp-down times
- ✓ Ideal for dynamic applications and integration with varying energy sources
- ✓ Operation when sufficient electricity is available (Power2N)

Liquid fertiliser for fertigation systems



For both open and covered cultivation systems



**Our technology enables
local high quality
fertiliser production**

N2 Applied's plasma-based production system provides pure and highly concentrated product, sustainably produced with water, air and electricity.

The nitric acid that is produced is a precursor for making calcium nitrate and potassium nitrate fertilisers. It can also be used by current or new industry players to make granulate fertilisers.

The liquid products are highly suitable for fertigation through e.g. drip irrigation, sprinkler and pivot systems and foliar application. The products are easy to handle and apply and enables rapid absorption and targeted nutrient delivery.

The transition to electric fertilizer production is inevitable

N2 is best positioned to lead the way

European fertilizer industry is at a crossroad

- Average age of ammonia plants is 40 years
- Plant lifetime is estimated at <50 years
- Significant upcoming investment decisions needed

Legacy production methods fail to meet modern demands

- Not suited for leveraging flexible renewable energy
- Heavily reliant on stable and low energy & gas prices
- Grey ammonia price pressure from EU ETS and CBAM

Surging renewable energy penetration

- By 2035 in Europe:
 - >70% renewables in the energy mix
 - 120-170 TWh annual curtailed energy
 - >50% of total hours below 10 EUR/MWh

N2 Applied has the leading technology for electric & distributed nitrate production

- 15 years of R&D, superior technology performance
- Flexible and cost-effective scaling concept
- Perfect technology for utilizing curtailed energy, enabling cost competitive production

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