

Linde Green Nitrogen Produced with 100% Carbon-Free Energy



Energy generation from certified renewable sources like wind turbines provides electricity for the manufacturing process.

Striving to meet sustainability targets, seeking to reduce atmospheric pollutants, or being a steward for future generations are goals of most responsible companies today. Linde can help address those challenges.

Current Production Requirements

Nitrogen is sourced from the air you breathe. However, it requires a significant amount of energy to separate that nitrogen from the other constituents that make up air. Following separation, liquefaction of the gas is needed to allow cost effective delivery. Production of a standard molecule of liquid nitrogen (LIN) results in carbon emissions from the energy producer.

How it Works

We can provide liquid nitrogen certified to be carbon free providing you with the knowledge that you are doing your part to help our environment

- → Linde purchases carbon-free power from certified sources
- → That carbon-free power is allocated to the production of specific products
- → The carbon footprint of those products is essentially carbon-free
- → An audited program tracks power sources and production allowing Linde to certify the liquid nitrogen was produced with 100% carbon-free power

Traditional Industrial Gas Supply Chain



Traditional production of industrial gases utilizes energy from the grid and uses that energy to produce the product you need. Linde can ensure that energy is purchased from a non-carbon based source such as wind, hydro-electric or solar. Same nitrogen, same quality specifications, same reliability just without the carbon footprint in the production process.

Supply Chain With Carbon-free Energy



^{*} no change to delivery mechanism using diesel- based fuels

Linde Green - Nitrogen Specifications

	Specification
Minimum Purity	<u>></u> 99.998%
Oxygen	<u><</u> 8 ppm
Moisture	<u><</u> 4 ppm
CO ₂ e (in production)	<pre>≤1 kg/Mcf</pre>

Standard - Nitrogen Specifications

	Specification
Minimum Purity	<u>></u> 99.998%
Oxygen	
Moisture	<u><</u> 4 ppm

Features

- → The same quality nitrogen that you expect from Linde
- → The source of the energy used to produce the product is renewable
- → Audited process to ensure low carbon gas production

Benefits

- → Supports reduced carbon footprint strategies
- → Options for low carbon energy industrial gas sourcing
- → Meet low carbon demands of your customers
- → Same product reliability as standard nitrogen

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