



FuelPositive
Fuel For A Mindful World



Fact Sheet - Ammonia Safety

- Ammonia is well known to pose a risk to human health via direct contact and inhalation. However, with 200 million metric tonnes of NH₃ used per year, primarily in agriculture, the regulations, infrastructure and practices already exist for safe and extensive use of ammonia.
- As a fossil fuel replacement, there are a number of studies that have been done to illustrate the safety of ammonia relative to other fuels, for example it has been determined that ammonia is far safer than highly flammable fossil fuels, and more stable than hydrogen.
- FuelPositive's carbon-free NH₃ will not contribute to pollution. When used properly, in agriculture or as a fossil fuel replacement, the only discernable emissions will be water vapor, or in the case of agriculture, some hydrogen emissions which are completely inert. Nitrous Oxide (NO_x) emissions, associated with traditional ammonia, will be avoided by using a modified catalytic convertor in engines and by injecting the liquid fertilizer deep into the ground (already standard practice) in farming.

Details

- Green NH₃ is significantly safer than anything else we have now.
- It ignites at extremely high temperature (651C) – much higher than gasoline, diesel or propane, meaning it requires much more heat to ignite, which reduces the risk.
- Because it is lighter than air, it rises when released, dissipating into the atmosphere without polluting.
- Its detectable smell alerts people to go downwind. This makes it safer than potentially harmful chemicals that can leak without being detected.
- NO_x can be avoided with catalytic convertors and deep fertilizer injection (see at left).
- The resultant emission from FuelPositive's carbon-free NH₃ fuel is water vapor.

¹ Government of Canada, [Common Air Pollutants](#).
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