FuelPositive Corp. (“FuelPositive” or “the Company”) (TSXV: NHHH, OTCQB: NHHHF) is a Canadian technology company committed to providing commercially viable and sustainable, clean energy solutions for use across a broad spectrum of industries and applications.

Our lead product is an onsite, containerized Green Ammonia production system that takes air, water and sustainable electricity and converts it into Green Ammonia. The system includes an electrolyzer to produce hydrogen from water, a nitrogen generator to produce the nitrogen from air, and a novel, patent-pending ammonia synthesis converter to produce Green Ammonia from the nitrogen and hydrogen.

Our first customers will be farmers who use ammonia to fertilize their crops. Farmers use 80% of the traditional grey ammonia produced today, and ammonia is a critical player in other sectors, including mining, textiles, chemicals production, cleaning materials, pharmaceuticals, water treatment and refrigerants.

Russia’s war in Ukraine has heightened global food security concerns already raised by the COVID-19 pandemic and climate change, given the amount of food, fertilizer and fuel annually sourced from Ukraine and Russia.

FuelPositive’s onsite, containerized, Green Ammonia production system is a perfect solution for decentralizing production and reducing reliance on foreign-controlled supply chains.

Beyond decarbonizing the production of ammonia, our model liberates farmers and offers both energy and food security.

If you don’t know FuelPositive, you should.
The Problems with Grey Ammonia

Traditional (grey) ammonia is one of the most produced chemicals on the planet, with 200 million tonnes consumed annually. In fact, it is considered to be one of the four building blocks of modern society along with steel, cement and plastic.

The industrial process used to produce ammonia has been hailed as one of the most important inventions of the 20th century. Introduced over 100 years ago, it saved the world from famine through the mass production of ammonia for use as fertilizer. Called the Haber-Bosch system, it made it possible to produce ammonia in large quantities that could be transported to farms – giving us food security.

Emissions-Intensive

The problem is that the Haber-Bosch method, still used in massive fossil fuel-powered refineries, is one of the most emissions-intensive manufacturing processes in the world. For every single metric tonne of traditional or grey ammonia produced globally, almost three metric tonnes of greenhouse gases are emitted.

Unreliable Supply Chain

Also, these refineries are centralized, with a small number of them providing all the ammonia used around the planet. The resulting ammonia needs to be transported vast distances from the point of production to the point of use. That supply chain is wildly unreliable. Farmers, for example, never know exactly when they will get their delivery, how much they will get, and how much they will have to pay. Prices have skyrocketed making traditional grey ammonia unaffordable for many. And with the war in Ukraine, it is getting a lot worse.

2.867 Tonnes (Global Average) of CO2e are Emitted for Every Tonne of Ammonia Produced

Plus CO2e Emissions from Fossil Fuel Extraction and Refining

Direct CO2e Emissions From Combustion of Coal, Naphtha and Natural Gas

Huge Emissions From Transport

Train

Trucking

Pipeline

Pipeline Spills Cause Severe Environmental Damage
Green Ammonia Solves the Emissions Problem

The possibility of producing Green Ammonia – with no carbon emissions – is drawing attention globally. It can replace the grey ammonia used by all of the traditional sectors, significantly reducing carbon emissions worldwide.

Market Potential
But even more exciting, because its production eliminates carbon emissions, Green Ammonia is now being considered for new applications. It is an ideal fossil fuel replacement for powering vehicles and other internal combustion engines. Green ammonia is a viable and sensible alternative to hydrogen for fuel cells. It can also be used for grid storage and as a practical and economical carrier of hydrogen for the hydrogen economy.

With the advent of Green Ammonia, the industry is poised for a dramatic upward shift in demand and market size. Approximately 200 million tons of traditional, grey ammonia are produced yearly around the world with an annual market value of about $70 billion U.S. and compound annual growth rates of about 5% per year. In contrast, a number of recent projections suggest compound annual growth rates over the next decade of 50% or more for the ammonia market, because of the additional applications made possible by Green Ammonia.

Now add to that the income to be derived from carbon credits. Two years ago, the concept of ammonia being associated with carbon credits was absurd.

Green Ammonia changes that. FuelPositive is working on an ammonia-specific carbon credit protocol and policy tied to emission reductions to address this opportunity in a targeted manner. The significant revenue we expect to generate will fund future growth and investment in new carbon-conscious technologies. It will also help to offset the cost of our systems for our customers.
FuelPositive’s Containerized Model Solves Supply Chain Problems

Just replacing grey ammonia with green is only part of the solution. Well before the terrible events in Ukraine, the inventors of our technology were thinking: what if we could produce ammonia economically without polluting, and what if we could solve the supply chain and price problems, too? That’s exactly what we’ve done.

Beyond decarbonizing the production of ammonia, our onsite containerized, modular and scalable system liberates farmers from the supply chain problems of the past and offers both energy and food security. The Green Ammonia is produced on site, where it is used. End users will have energy security and a reliable supply of Green Ammonia when they need it, in the amount they need, and at a steady, affordable price. Our systems are easy and quick set-up, stop and re-start, with near-zero maintenance requirements over decades of use.

“We pre-bought our ammonia for this fall at around $1,200 a tonne, and I understand that the price is double that now. The volatility is what we don’t like in the market. It’s scary. The FuelPositive system will give us stability. That’s what we like about it. It’s stabilizing the supply and stabilizing the price.”

Manitoba farmer Curtis Hiebert, March, 2022.

FuelPositive has signed a letter of intent to demonstrate its first system on the Hiebert farm in Manitoba, Canada.
System Operation
The FuelPositive onsite, containerized Green Ammonia production system has been designed to make its operation simple, despite its advanced technology. Customers will receive onsite training, but there will be little for them to do because we’ve designed it to be monitored remotely. FuelPositive will monitor it, optimize it and maintain it from our location and use our machine learning and AI software to keep things running smoothly.

We expect the lifecycle of our systems will be several decades, with periodic upgrades, ensuring customers a solid return on investment.

The system technology will be continually advancing. And due to its modular design and remote connectivity, each customer will be able to take advantage of new technologies as they become available.

Ammonia saved the world over 100 years ago. It’s about to do it again, but this time it will be Green Ammonia, produced onsite, where it is needed. FuelPositive’s containerized Green Ammonia production technology is exactly what the world needs now to solve the problems of carbon emissions, failing supply chains and food insecurity.

Timing
The first demonstration system will be fully validated in November 2022, before being set up on the farm of Tracy and Curtis Hiebert in Manitoba. Batch manufacturing will carry through 2022 and into 2023, before we shift to serial, assembly-line manufacturing. Pre-sales were opened August 10, 2022.

Please click on the link below to see our Pre-sales webpage:
https://fuelpositive.com/pre-sales/
Meet the FuelPositive Team

We will succeed because of our technology, our decentralized model and our team. For the past year, we have been bringing on the best people with the best experience to get us there. From engineering, manufacturing and robotics experts, to sales, marketing and carbon credit leaders. Each person invited to join the team shares our values and provides specific knowledge and skills to guide us as we achieve our mission.

Marek Warunkiewicz – Independent Board Member, Advisor – Marketing
Rob Tocchio – Independent Board Member
Jing Peng, CPA – Chief Financial Officer
Ibrahim Dincer, BSc, MSc, PhD, PEng – Co-Inventor, Lead Technologist
Ghassan Chehade, BEng, MSc, EIT, PhD – Co-Inventor, Lead Project Engineer
François Desloges, BEng – Senior Business and Technology Analyst
Luna Clifford – Director, Strategic Partnerships and Alliances
Jennifer Spencer – Director, Communications
André Mech, BEng, MBA – Advisor, Carbon Credits and Emissions Reduction
Derek Boudreau, BEng, MBA – Strategic Advisor, Agricultural Implementation
Jeanne Milne, Advisor, Government Relations
Claudia Wagner-Riddle, BSc, MSc, PhD - Advisor, Agriculture
Leith Deacon, BA, MSc, PhD – Advisor, Market Research
Tracy and Curtis Hiebert, Demonstration Project Partners

Please click here to take you to our website’s section on our Leadership Team!

June 6, 2022