



WPPENERGY
World Power Production

DISRUPTIVE ENVIRONMENTAL TECHNOLOGIES

Established in 2009, WPP ENERGY is a Swiss Company that over the last ten years has established itself as a repository for disruptive energy and environmental technologies.

WPP ENERGY AT A GLANCE

WPP has executed 25 year global exclusive licenses that represent patented disruptive technologies in the conversion of water to hydrogen for clean renewable electricity production and a patented solution to the Global Waste Management Problem converting all types of wastes to green renewable electricity.

WPP has numerous alliances in place around the world with major equipment producers, power plant manufacturers/ OEM's, engineering firms and more than 3 dozen authorized WPP distributors globally, now serving over 50 countries.

INTRODUCTION TO WPP ENERGY

WPP ENERGY is a Swiss Company that over the last ten years has established itself as a repository for disruptive energy and environmental technologies through exclusive global licenses. WPP seeks to exclusively license, develop and own technologies to create green renewable electricity and convert waste to green energy. WPP has also spent the last ten years developing alliances with world class manufacturers of equipment, EPC contractors, project development teams and government agencies throughout the world. WPP intends to utilize these relationships to build and in some cases own and operate electricity producing facilities using hydrogen or waste as its fuel source.

The WPP team is well recognized around the globe as having extensive technical expertise and business success in mergers, acquisitions, joint ventures and licensing proprietary technologies.

WPP'S DISRUPTIVE GREEN SOLUTIONS: W2H2 & VORAX.

WHAT IS W2H2?

WPP is in the process of developing a groundbreaking Hydrogen Generator and a Hydrogen-Fired Power Generation system that produces environmentally friendly and low cost energy using fuel from an inexhaustible source (water) that will help address the environmental, economic, and social-cultural aspects of the earlier mentioned challenge currently faced by the power generation industry all over the world with the following salient points:

1. The Power Generation System uses WPP's innovative **W2H2** hydrogen generator to convert fresh water (including desalinated seawater) into hydrogen fuel for use by a power plant. The **W2H2** Hydrogen Generator consists of a multi stage system that generates hydrogen gas by using these instruments in the following order: magnetic field, resonance frequency field, laser optical field. The reactions in the first two stages end up reinforcing each other on purpose to cause the covalent bonds of the water molecules to be in a state of pre-collapse; after which, these unstable molecules are sent to the laser optical field where the hydrogen atoms are split from their corresponding oxygen atoms and are finally synthesized as hydrogen gas respectively.

As all of these stages happen very quickly, their combined effects to dissociate the water molecules into their element constituents of hydrogen and oxygen atoms require much less energy than electrolysis. The **W2H2** system is projected to consume much less electrical energy to produce 1kg of H₂ versus 40-55kWh for Electrolysis while also being able to produce high volumes of hydrogen. Furthermore, the cost of the hydrogen fuel is considered to be "low cost" when the desalination plant that produces **W2H2** fuel generator's fresh water feed is part of the power plant's operations. This "low cost" cost of fuel for the **W2H2** power plant is a massive advantage over fossil fuel fired power plants.

2. Since the Power Generation System burns hydrogen, it produces "zero" carbon emissions and instead produces environmentally friendly water vapor emissions with controlled amounts of NO_x emissions which are created during the combustion process. The water vapor emissions then go to the Earth's atmosphere where they undergo the various steps of the Earth's Water Cycle enabling them to eventually, in various amounts, replenish the water resources in the land and the abundant water resources in the sea and because this process will be repetitive during the course of the power plant's operation, this form of power generation can then be considered clean and sustainable. Since It is a zero-carbon power generation technology, it is not a potential candidate to become a stranded asset as the world engages in a fossil fuel phase out.
3. When fresh water from large lakes or rivers or desalinated seawater is the source of hydrogen, there will be no concerns with the security of energy supply as either source is free and available but more so with seawater as it is abundant and assuredly available for the use of all for the very long term. Also, when fresh water from large lakes or rivers or even from desalinated seawater is the source of hydrogen there will be no need for supply and transportation agreements with fuel suppliers.
4. Finally, the **W2H2** Power Generation System can utilize either a diesel genset/engine, compatible gas turbine or boiler burner to burn the low cost hydrogen gas to produce low cost electricity for the end-users at a high degree of reliability and availability like their fossil-fueled counterparts. They are capable of producing base-load power unlike other green energy power generators such as wind and solar that have variable energy outputs.

WPP's **W2H2** hydrogen generator is currently under research and development and is anticipated to be on the market in 2023. WPP is exploring small capacity power plant projects using either the diesel genset option, the gas turbine option or boiler burners capable of burning 100% hydrogen. In the case where the clients existing equipment is not compatible with Hydrogen WPP offers a retrofit service.

WPP is fully capable of providing turnkey services for **W2H2** power plant projects all over the world since it has numerous partnerships in place around the world with major equipment producers, power plant manufacturers/OEMs, engineering firms and more than 3 dozen authorized WPP distributors globally, now serving over 50 countries.

The W2H2 future product line up includes a MAX version for thermal electric conversion applications and a MINI for diesel generator conversion applications.

While W2H2 is still under development we are now open to pilot project discussions with very early adopter type prospective clients.



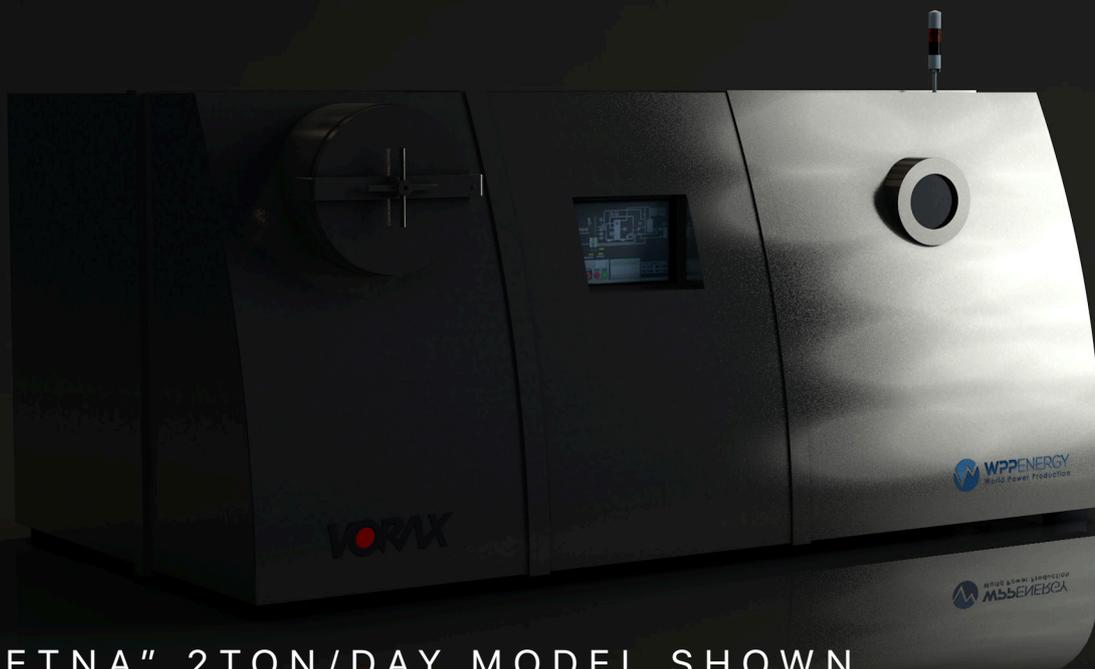
WHAT IS VORAX?

VORAX is a scientific breakthrough in the treatment of nearly all types of Waste such as MSW/Urban, Medical/Hazardous, Plastics, Industrial, Pasty/Sludge, Liquid, Tires. There are 12 different models of Vorax which have capacities ranging from 2 Tons of Waste per day to our largest model which can treat 400 Tons of Waste per day, solving the global landfill problem. Models from 22T/day and up also have steam power generation packages available to create electricity, demonstrating **VORAX**'s Waste to Energy capability.

VORAX is in a technological classification of its own after more than 10 years of R&D from a brilliant team of scientists and in the invention of DuoTherm technology which puts **VORAX** ahead of plasma, Incineration, Gasification and also traditional pyrolysis. **VORAX** is thought of as a quantum leap over traditional Pyrolysis in part because two thermal processes, one at 900 °C and the other at 1600 °C, forming a thermal gradient, liquifying all solids completely, even inert materials such as sand or iron.

VORAX completely destroys the garbage effectively and safely, without combustion or an auxiliary equipment. **VORAX** requires no combustion of waste and disintegrates as a whole, completely destroying infectious, pathological and organochlorined materials.

The technology is patented in over 40 countries and is now available for distribution globally by WPP Energy after initially being deployed in Brazil.



"ETNA" 2TON/DAY MODEL SHOWN.

A REVOLUTIONARY ENVIRONMENTAL WASTE TREATMENT TECHNOLOGY

All Vorax models come with a complete warranty and service. Please inquire for details.



WPPENERGY
World Power Production

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