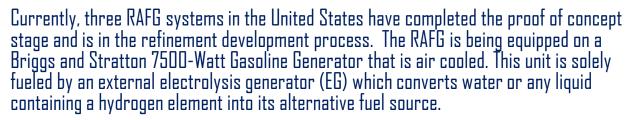


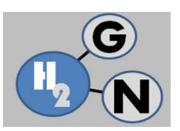
## **Expandable Alternative Fuel Generator - Launch**

## **Renewable Alternative Fuel Generator (RAFG)**



Current power requirements for the RAFG show the engine can self power itself, but for how long will take testing. Once this technology has been refined, we anticipate over 220 vertical market applications into hybrid vehicles or Auxiliary Power Units, (APU).

Current refinement focus is towards the improvement of spark timing. While some components used in the construction of the RAFG are domain, there are several components when combined with the domains which will allow IP to be filed with the support of Christian Brothers University – Engineering School in Memphis Tennessee.







Briggs & Stratton Generator to convert over RAFG – 7500 Watts to produce 3000 – 5000 Renewable



## **Evolution NanoSeal Highgrade 90 - Launch**

The proposal addresses a new and novel approach to significantly enhancing the lubrication value and protection capabilities of engine oils in regards to combating any adverse effects of hydrogen fuel in a gaseous state being injected into a ordinarily aspirated engine whether it be gasoline, diesel or other gaseous fuels which may cause unwanted effects on internal parts that the Hydrogen would come in contact. Several issues need in regards debuting these engines will be addressed that will help understand the need for alternative lubrication for Hydrogen fueled generators.

Hydrogen, when combusted, has higher energy rates than gasoline, diesel or natural gas. It is very effective at removing carbon, varnish and other by-products of fuel combustion. It also eliminates the oil film from the cylinder walls, pistons, rings, and valves. Overextended period accelerated wear can be produced and cause premature failure of the engine or part replacement. The hydrogen can also lead to a "nitrating" effect on the metal parts causing the metals to become brittle and fatigued again causing premature failure or expensive part replacement.

We have based on unique boron based derivative couple with a new carboxyl ate compound that is reacted with an intermediate, then finally blended with other compounds and a polymer that will form a complex interlocking film structure to the size of 1-micron thickness or less on all metallic and non-metallic part surfaces. This material encapsulates the surfaces it comes in contact with forming a "ceramic like coating" but has the ability to expand and contract through heat cycles normally associated in a internal combustion engine that will not become brittle and has greater flexibility than ceramic coatings and greater friction, wear and heat reduction capabilities than any lubricant or coating currently available for the lubrication arena.

ECT has a preliminary formulated "additive package" that has shown to be very effective at eliminating potential negatives with the use of hydrogen and we are taking it to the next step to further improve performance. These new concept formulations have shown great levels of confidence in proving our theory and initial gains of improvements are in the range of 80-120% improvement in lubrication value over the top full synthetic oils currently on the market. Combining Hydrogen on Demand can extend "Constant Speed Generator" engine life expectancy by 300% when applied adequately with additive packages.

These preliminary results also show that improvement over current additive enhancement packages are very impressive an average of 25-80% improvement can be seen with combining with existing oil additives. Additional testing needs to be performed along with formulation adjustments to perfect the final version; this will require extra time, resources and cost which can be reduced with Christian Brothers University and ECT's 501 (C)(3) Program Related Investment Partnership.



