

2050 Motors, Inc. to Introduce Hydrogen-Rich Alcohol Fuel Engines to the United States

2050 Motors, Inc. to introduce to the United States a new technology that allows existing internal combustion engines to operate at higher compression ratios producing much higher efficiency and significantly reducing emissions.

Las Vegas, Nevada (<u>PRWEB</u>) August 03, 2015 -- Michael Hu, President of 2050 Motors, Inc. (OTCQB: ETFM), announced today that the Company signed an agreement to introduce hydrogen-rich alcohol fuel (HRAS) technology to the U.S. Automobile Industry.

The HRAS technology was developed in China and has successfully been incorporated into taxi fleets in China. The HRAS system uses a proprietary catalyst in the fuel together with a patented conversion system device that allows existing automobiles to run on 70% methanol (or ethanol) and 30% water.

Since methanol in China, as in the U.S., sells for \$1.35 USD per gallon, the fuel savings for taxi fleets in China are quite significant. They are experiencing nearly the same fuel mileage on the methanol/water fuel mixture as the original gasoline powered vehicles. The fuel efficiency is provided by the conversion of part of the alcohol/water fuel to hydrogen generated by the special proprietary catalyst and waste heat from the exhaust system.

Independent dynamometer tests in China confirmed these remarkable mileage results. 2050 Motors and its Chinese partners are in the process of converting a new Honda Fit automobile that will be used to certify these amazing results. Mileage verifications on the Honda Fit will be conducted at a U.S. certified test facility.

Wall Street and the investment community will soon realize that methanol can become a new fuel of choice in the United States very soon for the following reasons:

1) Methanol presently is made from natural gas and the United States has one of the greatest reserves and existing supplies of natural gas in the world.

2) Analysts project that natural gas prices in the United States will remain at present levels until at least the year 2030. The number of new methanol facilities being built in the U.S. should therefore increase significantly since methanol can be derived from natural gas.

3) Lawmakers in the U.S. Congress understand this opportunity and presently have sponsored several bills which are now being studied in committees to allow methanol fuel to be used across the United States.

4) Methanol burns cleaner than gasoline and diesel, and reduces car emissions significantly. Although methanol contains roughly half the energy of gasoline compared by volume (56,000 BTU/gallon versus 116,000 BTU/gallon), costwise it is less expensive than gasoline even when compared by unit energy basis. It is also a better fuel because methanol has a high effective octane rating (91 octane for premium gasoline versus 107 octane for methanol); has a higher flame speed than gasoline, leading to higher efficiency; has a higher latent heat of vaporization (3.7 times higher than gasoline), cooling the engine during fuel injection; burns cleaner than gasoline; and is a safer fuel than gasoline in the case of fire since it is more difficult to ignite, releases less heat when it burns and methanol fires can be extinguished with plain water. It can also be used in current cars



blended with gasoline and diesel (M85 and e-diesel).

5) Methanol can be produced from many sources including natural gas, landfill gas, biogas and coal. It can be produced as a renewable fuel from farm waste, wood chips or any other suitable agricultural or municipal waste material.

6) The United States has one of the largest natural gas reserves in the World. Natural gas automobiles have a range problem, methanol fueled vehicles do not.

7) Methanol produced from renewable sources can be a substitute for petroleum. It's a liquid that can be transported through existing petroleum distribution systems; and is already used today on a large scale as a raw material to produce numerous chemical products and materials. In addition, methanol can be readily converted to produce synthetic hydrocarbons and their products, currently obtained from petroleum and natural gas. Accidental release of methanol in a spill on the environment would cause much less damage than a comparable gasoline or crude oil spill because it is water soluble, which easily dilutes its concentration in the environment, and is biodegradable by common microorganisms.

8) Chemical production pathways for methanol are fully developed. These processes do not compete for food resources like ethanol produced from corn. Cellulosic ethanol processes, which can derive alcohol from agricultural waste, are still under development with no commercial plants in operation.

9) In the HRAS process a modified internal combustion engine is first started with a conventional fuel; hydrogen fuel is released from water via a catalyst utilizing waste heat from the vehicle exhaust; and finally, the methanol-water-hydrogen fuel mixture is combusted in the engine with high efficiency and low emissions.

Mr. Hu stated, "We are in the initial stages of a paradigm shift to clean, inexpensive, abundant fuel and cleanfueled, highly efficient engines for automobiles, trucks and especially fleets that refuel at central locations such as taxi cabs."

Higher compression ratios in internal combustion engines increase efficiency because more air is being combusted and there is a bigger volume in the expansion chamber for hot gasses to release their energy. Present automobile engines have lower efficiencies because their low compression ratios (10 to 1 compression ratio) are limited by the octane of gasoline even for costly premium gasoline. However, due to the cooling effect of methanol and its anti-knock properties, it is now possible to design engines with much higher compression ratios to give better efficiencies and lower emissions. Many R&D teams at universities including the prestigious Massachusetts Institute of Technology (MIT) agree that when water is added to methanol higher compression ratios are possible, approaching and exceeding those of normal diesel engines (with a 20 to 1 ratio). The capabilities of these new high compression engines include:

- 1) Efficiencies higher than diesel engines
- 2) More powerful engines per cylinder displacement volume
- 3) Extremely low emissions
- 4) Significantly lower fuel costs not dependent on oil prices



5) Methanol is produced from natural gas here in the United States and will also eventually be produced from renewable sources.

It is interesting to note that Wikipedia states: "Methanol may be viewed as a compact way of storing hydrogen. One m3 of methanol at ambient pressure and temperature contains 1660 Nm3 (normal cubic meters) of hydrogen gas (H2). This may be compared to liquid hydrogen where one m3 of liquid hydrogen (LH2) at -253 °C contains only 788 Nm3 of hydrogen gas."

The methanol economy is a suggested future economy in which methanol replaces fossil fuels as a means of energy storage, ground transportation fuel, and raw material for synthetic hydrocarbons and their products. It offers an alternative to the proposed hydrogen economy or ethanol economy.

Things are shifting toward methanol fuel in the European Union also. Recently, Stena Line CEO Carl-Johan Hagman said the company wants to pursue change and development in this industry because methanol could be the "maritime fuel of the future." Stena Line is a family owned business that has a fleet of 120 ships, including 52 tankers and 58 giant ferries. A report by Stena stated, all the attributes stated above, including converting to methanol would be considerately less extensive than converting to LNG. And methanol can be stored on board as a liquid at room temperature and needs neither cryogenic or high pressure tanks. Methanol requires significantly less infrastructure costs to mention a few of its attributes, including that it has great biodegradable properties and significantly reduces carbon footprint.

In conclusion, it is easy to envision a bright future for the methanol industry in the United States as is already happening in China. 2050 Motors has the exclusive rights to introduce the HRAS system to the U.S. market. The company will certify these results at a US EPA certified test laboratory in the near future.

2050 Motors is interested in strong lightweight vehicles that can be used as pure electrics, hybrids, fuel cell or high efficiency alternative fuel vehicles. Our focus is on low carbon footprints for today's cars. That vision does not include pure hydrogen cars since hydrogen is not an energy source it is an energy carrier. It does though include the more widespread use of methanol in our country as a more mainstream fuel (a potential methanol economy if you will).

About 2050 Motors, Inc.

2050 Motors, Inc., <u>http://www.2050motors.com</u> and <u>http://www.etfm.com</u>, is a publicly traded company incorporated in Nevada in 2012. 2050 Motors was founded to import, market, and sell electric and gas powered carbon fiber vehicles engineered and designed in Italy and China. 2050 Motors also has the rights to assemble these vehicles in the United States as a future enterprise. 2050 Motors has entered into an agreement with Jiangsu Aoxin New Energy Automobile Co., Ltd., located in Jiangsu, China, for the distribution in the United States of a new electric automobile, known as the e-GO EV (electric vehicle). The e-GO EV is a revolutionary new concept in the ever evolving world of electric vehicles. It will be the only production line electric car with a carbon fiber body and parts manufactured by a new process using robotic machines which significantly reduces the fabrication time and cost of carbon fiber components. The e-GO EV will seat five passengers, have a long battery life, and high energy efficiency rating up to 150+ MPG-E energy equivalent in urban driving due to the light weight of the vehicle. The company is fully reporting under the SEC EDGAR system.

Disclosure Statement

Statements in this press release about our future expectations, including without limitation, the likelihood that 2050 Motors will be able to leverage capital markets to execute its growth strategy, meet US DOT

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requirements, meet minimum sales expectations, will be successful and profitable in the US market, and will bring significant value to 2050 Motors' stockholders, constitute "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, Section 21E of the Securities Exchange Act of 1934, and as that term is defined in the Private Litigation Reform Act of 1995. Such forward-looking statements involve risks and uncertainties and are subject to change at any time, and our actual results could differ materially from expected results. The Company undertakes no obligation to update or release any revisions to these forward-looking statements to reflect events or circumstances after the date of this statement or to reflect the occurrence of unanticipated events, except as required by law.



Contact Information George Hedrick 2050 Motors http://www.2050motors.com +1 7025916029

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