Advanced Fuel and Engine Efficiency Workshop

Session Four: Alternative Fuels

February 26, 2014

Hyatt Regency Inner Harbor Baltimore, MD

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What's an alternative fuel?

Alternative fuels, known as non-conventional or advanced fuels, are any materials or substances that can be used as fuels, other than conventional fuels. Conventional fuels include: fossil fuels (petroleum (oil), coal, propane, and natural gas) http://en.wikipedia.org/wiki/Alternative_fuel

Alternative transportation fuels are those fuels not derived from petroleum

But when considering any alternative fuel, it’s worth remembering that, in the U.S., we use nearly 400 million gallons of gasoline every day – more than 4400 gallons per second. So, until an alternative-fuel plant can produce at least a million gallons per day – consistently and efficiently – it’s just another lab or backyard experiment.

Clean diesel, biodiesel, synthetic diesel, E85, CNG, hydrogen

http://environment.about.com/od/fossilfuels/tp/top_alt_fuels.htm

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End-use aspects: fuel, engine and the exhaust after-treatment systems

A sustainable transportation system with advanced, alternative, and renewable fuels, with reduced emission of greenhouse gases and air contaminants, meeting needs for personal mobility and the movement of goods on a local and a global scale. International Energy Agency Implementing Agreement on Advanced Motor Fuels

Advanced Motor Fuels encompass alternative fuels as well as advanced petroleum-based fuels.