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Energizing our Future: How Disinformation and Ignorance are Misdirecting Our Efforts JOHN WILSON, TMG Energy, Incorporated, Detroit, Michigan

Most of the energy-source choices that are being considered or implemented for future use by governments and by a wide variety of would-be manufacturers are driven by assumptions that are often uninformed and sometimes intentionally misinformed. These dangerous assumptions relate to "drivers" that range from the causes (and proposed fixes) of Global Warming to the myth of "Peak Oil" to the dubious viability of Hydrogen as a vehicle fuel to the uncertain feasibility of replacing most of our conventional fossil energy supplies with fuels such as Ethanol derived from Renewable Resources. Regrettably, many of these misinformed assumptions and misplaced beliefs are being used as the basis for major decisions involving huge investments in technologies that simply cannot do the job, a potential catastrophe. There is no place for what we will call "Faith-Based Science" in major business decisions of this kind. This talk will examine some of the key beliefs that are driving our current energy decision-making process and will expose the uncomfortable facts that dictate that fossil fuels, like it or not, should and will remain our primary energy source for many years to come, at least until solar energy becomes economically viable. For example, it will be shown that biomass-based fuels can, at best, be only a minor contributor to meeting the world's future energy needs; that the use of nuclear power, whether or not we consider it environmentally attractive; will be severely limited by a shortfall in nuclear fuel supplies; and that hydrogen as a transportation fuel will at best be a niche player and perhaps not a player at all. As we re-activate, improve and implement the many "clean" fossil-fuel technologies that were developed 25 years ago, we must also focus intensely on developing the energy technologies that really can replace fossil fuels in the years following 2050 or so when their availability will really be in decline. It will be argued that the optimum choices then will clearly be a combination of the various forms of solar energy and, of course, wind energy.