

**Health and Science Series**

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**BIOFUEL BIOMESS BOONDOGGLE**

**EGREGIOUS ETHANOL**

On December 19, 2007, President Bush signed an **energy bill** to increase fuel efficiency. This was a bill which had evolved from failed more wide-sweeping efforts which would have had utilities' electric output increased from cleaner sun and wind. Provisions to repeal oil industry tax breaks and open the Arctic refuge were not included in the final version. (1). **What will the bill accomplish during the next 15 years?**

Faced with the specter of **recession** due to a combination of a sinking housing market consequent to sub-prime lending practices, increased joblessness, lowered consumer sentiment, a failing auto industry and the **prospect of \$100 a barrel oil**, it was evident to all that measures to reduce oil consumption and increase fuel efficiency were sorely needed. The final bill was a compromise acceptable to the auto and oil industries. **Do its provisions, however, change the overall effect on oil consumption and energy costs?**

Although the legislation calls for a 40% increase in fuel efficiency (mandating a 35 miles per gallon average for all vehicles, up from current 25 mpg), by 2020, it is evident that auto manufacturers will not rush to accomplish this because **they sell small cars at a loss now and make more money on the unrestricted sale of large vehicles.** (2).

The U.S. currently uses approximately **140 billion gallons** of gasoline annually and **6 billion** gallons of biofuel. The law **requires 36 billion** gallons of biofuel **by 2022**. The bill also states that **no more than 15 billion** gallons annually can come from corn-based ethanol, recognizing the drastic effect on the price of corn foodstuffs and animal feed. The rest is to come from cellulose, switchgrass and biomass.

Improper means of obtaining biofuels, such as cutting down our forests, would **increase global warming** pollution. Poorly managed biofuel crops can deplete water tables and increase pollution from fertilizers, pesticides and herbicides. **Soil erosion, water pollution and habitat destruction can result from improper biomass harvesting.** (3).

**The new law is not concerned with and does not describe the infrastructure that will be necessary to safely achieve the biofuel targets it defines. That is wherein the danger lies.**

The current rate of increase in usage of gasoline is 1% per year. By 2022 the 140 billion gallons of gasoline used this year, 2007, would be projected at **164 billion gallons of gasoline used for 2022.** The increase of 24 billion gallons of gasoline for 2022 will be only slightly more offset by the additional 30 billion gallons of biofuel. There would be a net substitution of only 6 billion gallons of biofuel annually (3.6%) more in 2022 over the 6 billion annual gallons of biofuel being used this year, 2007.

When examining the economics of biofuel and ethanol replacement of gasoline, one is struck with an array of staggering costs. Extension of the current tax credits, grants and loan guarantees **for the next fifteen years will cost the taxpayers \$140 billion to \$205 billion**, \$18.36 billion in ethanol tax credits in 2022 alone! There is also a \$1 per gallon biodiesel tax credit. (4).

Other objections to use of ethanol include refiners' claims that it costs more to transport and **widespread damage to marine engines**, both large and small, including outboard motors. Rubber hoses and gaskets on old outboards are broken down by ethanol. (5).

Examination and analysis of the energy bill recently signed into law, reveals that although presumably well intended to address the multiple problems of energy conservation, reduction of emissions (with concomitant global warming effects) and economy, it does not bear up under scrutiny. It offers **no immediate savings in fuel or costs.** At best, its long-term outlook is nebulous.

An immediate practical and economical approach to fuel savings and emissions reduction is to **insert available devices** which have been tested

widely in recognized laboratories and in the field, into the fuel filters of gasoline and diesel driven vehicles. Emission and Power Solutions, Inc.'s **Optimizer is an ideal choice.**

## REFERENCES

1. Hargreaves, S.: *Bush signs energy bill*. CNNMoney.com. 12-19-2007.
2. Simon, R. and Neuman, J.: *Bush signs bill to increase fuel efficiency*. Los Angeles Times. December 20, 2007.
3. Natural Resources Defense Council.: *Getting biofuels right*. 5-2007.
4. Morgan, D. and Mufson, S.: *Switching to biofuels could cost lots of green*. Washington Post. June 8, 2007.
5. Barrett, R.: *Ethanol may leave boaters high and dry*. Milwaukee Journal Sentinel. August 25, 2006.