

LEST WE FORGET....
by Ronald H. Miller

The other day I was talking to a friend when I mentioned the Oil Embargoes of the 1970's. She was 7 years old in 1973 and has little remembrance of the long gas lines or the "odd" and "even" license plate days just to qualify getting into those long lines. It dawned on me that the post-Boomer generations have no real idea as to the trauma that is inflicted when our oil supply is shut off. As we watch the current events unfold in the Middle East, we must wonder whether possible regime change will take us back to those tumultuous days of four decades ago. Could it even be worse?

From a dependency standpoint things are worse. In the 1970's we imported about 30% of our oil, today it is around 60%. Things would be even worse if it were not for 10% of the gasoline barrel now being provided by domestic biofuels. That's about one million barrels a day of secure domestic production not subject to regime change. It is also \$100 million per day that stays in the U.S. economy instead of heading to the Middle East.

As I was pondering this concern I was struck by two articles written by our friends at *The Wall Street Journal*. The first, written during the height of demonstrations in Cairo, suggested that a closure of the Suez Canal would add ten days steaming time on crude oil tankers destined for the U.S. thus causing a sharp spike in oil prices here due to supply disruption. Fortunately the Canal did not close but now we have armed Iranian warships cruising through the Suez inviting increased tensions in that volatile region. The second article noted that ExxonMobil is having a harder time finding oil and is only keeping its reserves up by growing its natural gas reserves through transactions such as buying XTO. Strategically that information is more worrisome than an Iranian destroyer on the loose.

This year will be an interesting one on Capitol Hill as members of both parties juggle to deal with the economy, the deficit and politics in general. Some Members, mostly from southern and oil producing states, are attempting to reverse the gains in renewable fuel use made to date because of the rise in commodity prices. Yes prices are up. Since I entered the business, crude oil is up about five-fold and corn is up about three-fold. And yes, renewable ethanol has been a factor in both. About three percent of the global coarse grain supply goes to ethanol. Keep in mind that corn is made up of carbohydrate, protein and oil. Only the carbohydrate fraction goes to energy production. The protein and oil fractions remain in the food chain. A recent economic study noted that the use of ethanol impacted food prices between 0.5% and 0.8%. The reverse is true for ethanol's impact on gasoline. Ethanol keeps gasoline prices down and a sudden grab for one million barrels per day of high octane gasoline from overseas will make the Suez concern seem like child's play.

One other interesting aspect shows up in the commodity price changes. Note that the relative increase in corn prices over the period is less than for oil even with the shift in demand from hydrocarbon energy to carbohydrate energy. Oil is very important to us but it is a finite resource and it is getting more costly and harder to find. It is not sustainable. Biofuels on the other hand are sustainable. In the case

of corn, genetics continue to play a strong role in increasing yields and supply each year which is the primary reason the rise in corn prices have been quite moderate in real terms.

Going back to 1973, the modern biofuels industry began because of oil supply disruption. America remains too dependent on foreign energy to stop progress in domestic renewable fuel use or roll back gains made to date. Under current law we will move the renewable content in motor fuel from 10% to 25% in next decade and all of that gain will come from *advanced* biofuels - biofuels that are environmentally "green" and not tied to food production. That is another one and half million barrels a day of foreign oil that won't be needed, or putting it another way, another \$150 million per day, at today's prices, that stays in the good old USA instead of funding the War on Terror from the wrong side.

Those who forget history are doomed to repeat it. We have a choice to put our faith in American ingenuity or an Iranian destroyer captain. If you lived through the embargoes you may want to think about that. If you were too young to drive, talk to your elders and learn from them.

Ronald H. Miller is Managing Director and co-founder of Prisma Advisors, LLC, a management advisory firm specializing in biofuels and biotechnology. Prior to forming Prisma, Miller was President and CEO of Aventine Renewable Energy Holdings, Inc., a Fortune 1000 producer of biofuels and food products from agricultural feedstocks.