

2009 Biodiesel Outlook

Although the short term outlook is challenging to predict, the longer term view remains bullish for the price of oil. Here are some thoughts as you consider the value of starting a biofuel division for your meatpacking operation.

Two Factors Have Affected Oil Prices In The Last 6 Months

1. The demand for oil-based products is down between 10 to 15% in the last 6 months, as a result of the global economic downturn.
2. The production of oil from OPEC is only down a few percentage points. That means the supply of oil is exceeding the demand and that is putting downward pressure on prices. Any further tension between countries in the Middle East could cause oil prices to rise if supply is interrupted, but otherwise the prices will likely remain weak until OPEC reduces oil production significantly or demand returns to levels that existed in the first half of 2008.

Long Term Trends Are Clearer

First-world economies have been growing slowly, but economies in China, India, and many other Asian countries have been very strong. Though their growth has slowed along with the rest of the economy, standards of living are rising and that typically equates to higher per capita oil usage. World population is continuing to grow at a rapid rate. On the demand side, it appears that at the end of this recession we will see increases in world demand for oil at a rate faster than world population growth.

Existing mature oil fields are becoming less productive. We have seen some reports of oil production down 9% per year for the last 3 years in some major world oil fields.

There are two significant sources of oil which are not being tapped today.

1. **Shale Oil:** This represents a tremendous amount of oil. The fields in Alberta and the Congo are believed to each hold more oil than all of Saudi Arabia. However the cost to recover this oil is about \$80 a barrel and could be higher if carbon credit offsets are required. Many shale oil projects have been cancelled or put on hold due to weak oil prices. It will take time before these sources contribute any meaningful percent of world oil production.
2. **Offshore Oil:** The easy fields are all in production. The remaining "proven reserves" are in areas that are either illegal to use (i.e. California Coast) or too expensive to use.

Peak Oil

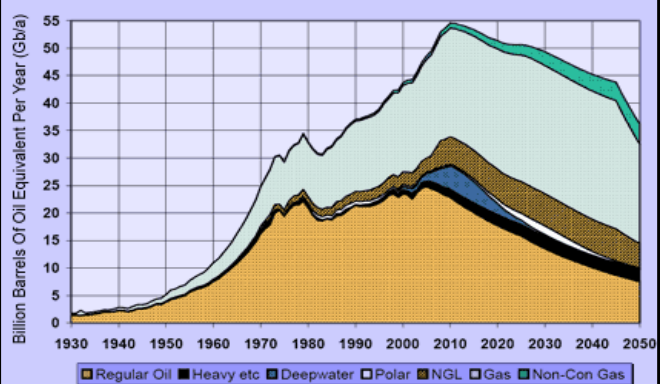
Most oil market experts agree that we will soon enter an era of "peak oil" in which oil production worldwide will plateau and then inexorably decline. This does not mean that conventional oil supplies will run out tomorrow, but it does mean that energy consumers the world over will be forced to turn to alternative energy sources in coming decades.

During a recent press conference in December 2008, Qatar's Energy Minister, Abdullah Bin Hamad Al Attiyah, argued that lower oil prices would discourage investment in new capacity. "A price of \$70 per barrel is needed to avoid any supply shock in the future," he said, explaining that this price level should be sufficient to encourage companies and oil producers to continue investing in capacity expansion projects.

Now that the price has fallen dramatically to below \$50, this could discourage investment in finding new deposits and extracting them from difficult places. "So this is our concern that when the economic crisis is over and demand starts to pick up again, then the world will face a big shortage of supply," Al Attiyah said.



Oil & Gas Production Profiles ASPO 2006 Scenario



The Call For Alternative Energy

The conclusion that can be reached is that oil prices will likely continue to fluctuate at low levels until the economy recovers and then should start increasing when demand once again outstrips the ability of the oil industry to find new inexpensive sources of oil. The only solution is to use this period of time to develop alternative energy business models which can reduce our dependence on foreign oil and provide clean, low cost fuel to replace the eventual shortfall of fossil fuels available to provide energy for a growing world economy. Providing alternative energy products to an energy hungry world could be the growth industry of the next 20 years.

Barack Obama Plans To Double Production of Alternative Energy In Next Three Years

President-elect Barack Obama's recent speech on the economy at George Mason University underlined that alternative energy would be a top priority during his administration. "To finally spark the creation of a clean energy economy, we will double the production of alternative energy in the next three years. . . In the process, we will put Americans to work in new jobs that pay well and can't be outsourced, jobs building solar panels and wind turbines, constructing fuel-efficient cars and buildings, and developing the new energy technologies that will lead to even more jobs, more savings, and a cleaner, safer planet in the bargain. . ."

The Benefits of Biodiesel

Having a stake in the production of renewable fuels will allow meat packers and poultry processors to capitalize on one of the fastest growing and most profitable sectors in our economy today.

Biofuels accomplish four things for meat and poultry processors who are looking to improve their profitability:

1. It allows them to realize the full value of their byproduct and increase the overall income they earn per head.
2. It provides them with a hedge against oil prices. As oil prices rise and meat packers are unable to pass along rising costs to their customers, a biofuel capability can actually increase monthly income and profits.
3. It can provide a lower cost access to diesel fuel for their own operations.
4. It's good for the community and the country.

This newsletter is courtesy of R3 Biofuels

www.r3biofuels.com

For inquiries contact:

Morghan Laswell Tel: (206) 248-5000

morghan@r3biofuels.com

