

NEW BEGINNINGS:
FINANCING BIODIESEL

RENEWABLE ENERGY
FINANCE & INVESTMENT
SUMMIT

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U.S. Biodiesel Industry

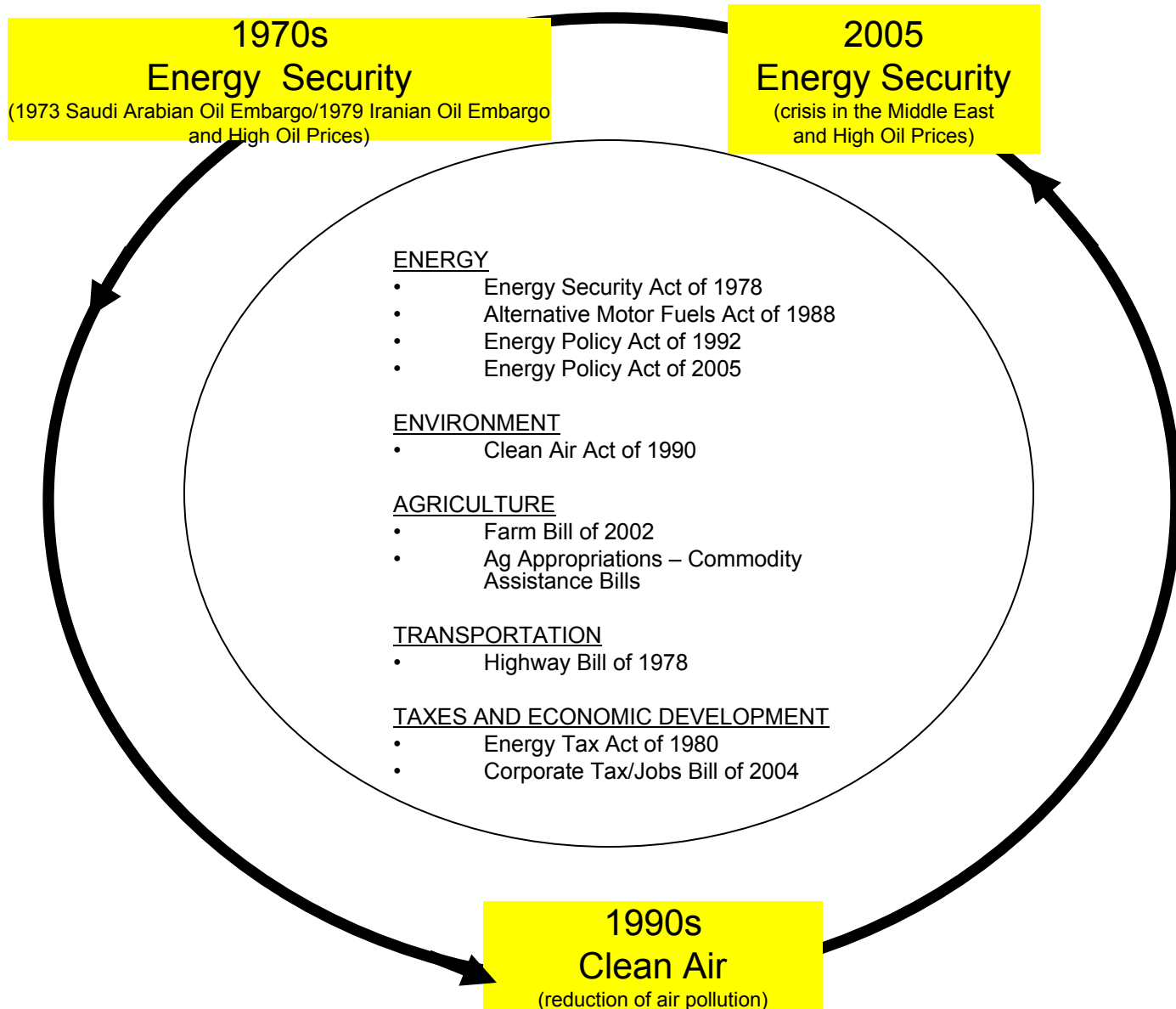
- After more than 5 years of deliberation, the Energy Policy Act of 2005 (“EPACT”) finally established a Renewable Fuels Standard (or the “RFS”) to mandate the purchase of biofuels, including biodiesel and fuel ethanol!
- For the first time ever, a course has been charted that ensures sustained biodiesel and ethanol development. Not Goals, Not Targets, but *Mandated, Required* levels of biofuels/biodiesel use.
- This presentation will examine (i) where we have been, where we are now, and where we are going with biofuels and (ii) what deal structures are required to develop, finance and construct biodiesel manufacturing facilities and expand the biodiesel industry.

U.S. Biodiesel Industry

- In just a few short years, the U.S. Biodiesel industry has accomplished the following:
 - The supply of biodiesel could exceed 1 Billion Gallons by 2015. Today, the current number of operating biodiesel plants are approximately 137 at an existing capacity of nearly 300 Million Gallons, expecting to reach more than 400 Million Gallons per year by the end of 2007 (or about 1% of the then-expected U.S. diesel fuel consumption), as a result of nearly 179 new plants coming on line (100 of which are now in construction) (The U.S. ethanol industry consists of 114 operating facilities at approximately 5.6 Billion Gallons/year (approximately 4% of the current U.S. gasoline usage of 143 Billion Gallons), with approximately 80 new facilities under construction and which will add another 6 Billion Gallons/year of capacity in the near term).
 - Over 800 biodiesel retail pumps are available.
 - Extended biodiesel's partial excise tax exemptions through December 31, 2008 with current bills seeking an extension until 2017.
 - American Trucking Association has endorsed the use of biodiesel up to 5%.
 - USDA confirms that biodiesel is less toxic than table salt and biodegrades as quickly as sugar.
 - Biodiesel has become the darling of politicians at all levels – federal, state and local.
 - Biodiesel is likely to increase U.S. gross revenue by nearly \$7 Billion and cause \$1 Billion to move directly to the bottom line of U.S farm income over a five(5) year period.
 - Biodiesel has become a *major* force in Energy Policy and American politics.

How did this happen?

Biofuels have Come Full Circle



Factors for Growth

- **Need for energy independence**
 - Political instability in the Middle East.
 - High Petroleum prices.
 - Impacts National Security.
- **Benefits to the environment and economy**
 - Increased economic activity and creation of jobs.
 - Emission reductions cause reductions in cancer and lung disease.
- **Incentives – both federal and state**
 - Tax Incentives.
 - RFS.
 - Emissions Reduction Credits/Renewable Energy Certificates under State Renewable Portfolio Standards.
- **Cost Competitiveness**
 - As per the Energy Management Institute Survey, alternative fuels are more cost competitive than their hydro-carbon based counterparts – biodiesel is 29.2% more cost competitive while ethanol is 17.4% more cost competitive.

Advantages of Biodiesel Over Other Alternative Fuels

- Most diesel engines can run on pure biodiesel (B100) with no/limited modifications, and it raises the cetane rating of petrodiesel which enables the fuel to ignite more easily. Most U.S. biodiesel blends will range from B2 to B50.
- Biodiesel's significant natural lubricity (i.e. the higher the fatty acids, the higher the lubricity) keeps internal engine components in working order and replaces lubricity lost when blended with the new ultra-low sulphur diesel mandated under federal law.
- Biodiesel does not require investments into new fuel infrastructure – it can use the current existing fuel distribution and infrastructure systems.
- Biodiesel can be mixed at any percentage with petrodiesel.
- Biodiesel contains the highest energy content (BTU) than any other alternative fuel.
- Biodiesel evidences immediate and dramatic effects by reducing harmful emissions (CO₂, Carbon Monoxide, hydrocarbon emissions and particulate matter) by more than 50%, as compared with petrodiesel.
- Biodiesel is the only alternative fuel to have passed health effects testing under the Clean Air Act (1990).

Challenges to Biodiesel Growth

- Destabilizing Legislation/Regulation – IRS Notice 2007-37 (March 2, 2007).
- Decreases versus increases in oil prices.
- Feedstock (e.g. soybean oil, rapeseed oil, canola oil, palm and coconut oils, fish oil, algae, jatropha oil, restaurant oils and greases, animal fats/tallow and animal parts, etc.) Issues:
 - Shortage of feedstock – Farmers are planting more corn – a record 90 Million acres for 2007 versus 78 Million acres in 2006, and decreasing their soybean acreage.
 - Highest cost factor in biodiesel production at 80% of production costs.
 - Profitability depends on whether the increase in petroleum diesel prices will outpace increase in oils and fats prices.
 - The use of low-cost palm oil causes problems with environmentalists worldwide.

Challenges to Biodiesel Growth (cont.)

- Construction time frames that were previously 12 months are now taking 18-24 months due to shortages of critical components among other problems.
- Expiry of Federal Tax Incentives on December 31, 2008.
- Need for increased Consumer Acceptance – includes the fact that although prices of biodiesel may be higher than petroleum diesel, the goal is to reduce dependence on foreign energy sources and support U.S. jobs and farmers.
- Biofuels generally require tremendous amounts of water which cause problems with environmentalists worldwide.

Challenges to Biodiesel Growth (cont.)

- Problem of use or demand for Glycerol/Glycerine (a by-product of biodiesel production) – finding new uses or improvements on existing uses.
- Ensuring fuel quality for use, as the suggested quality standard – ASTM 7651 is not mandatory.
- Monitoring fuel quality during storage – in many cases biodiesel must be stored during long periods of 6 months; current methods for analyzing quality are time-consuming and expensive.

Challenges to Biodiesel Growth (cont.)

- Imported lower-cost biodiesel is not subject to custom duties due to adverse WTO considerations, but is able to be blended multiple times in the U.S., Canada and European Union in order to take advantage of each jurisdiction's tax incentives. (Similar to U.S. domestic industry's fuel ethanol concerns, where anhydrous imported ethanol can circumvent the long-standing 54 cents/Gallon customs duty (which expires on December 31, 2009) by first paying duty, then exporting jet fuel in lieu of the imported ethanol, and keeping ethanol in the U.S. after claiming a 99% refund on the duty paid through U.S. duty drawback procedures.)
- Lack of mandatory U.S. industrial carbon legislation to enable the development of new revenue streams through the monetization of carbon offset credits, as found in Kyoto Protocol compliant countries.

How To Get Increased Presence

Lessons Learned From 20+ Years of Biofuels (fuel ethanol and biodiesel) Incentives

- Tax Incentives have been important to the biofuels industries:
 - Successful in making biofuels competitive
 - Critical element of project financing of biofuels projects.

BUT

- Economics, alone, have been an insufficient market driver – because biofuels price swings have been too volatile.
- The most effective incentives are those tied to “market assurance”.
- Historically, although critically necessary, tax incentives never drove the biofuels markets like “assured” demand. Just because the biofuels industries had tax incentives did not mean that customers would purchase biofuels.
- However, once the demand was assured, then production took off.

Clean Air Programs Also Have Not Been Sustainable As A Demand Driver

- Despite significant environmental success in reducing air pollution, etc. . . .
 - Intense opposition by the oil industry;
 - Improved auto technology;
 - Advances in fuel technology.

Back to the drawing board?

Establishment Of The Renewable Fuels Standard (EPACT Section 1501)

- Tax incentives, although critical to project finance/project closings, never built out the biofuels markets as did assured market demand from a statutorily-enacted/required RFS through EPACT 2005.
- Legislation establishes the RFS for biofuels (including biodiesel) at the following levels:

2006 - 4.0 Billion Gallons	
2007 - 4.7 Billion Gallons	
2008 - 5.4 Billion Gallons	- 700 mill gal/yr increase for years 1-5
2009 - 6.1 Billion Gallons	
2010 - 6.8 Billion Gallons	
2011 - 7.4 Billion Gallons	- 600 mill gal/yr increase in year 6
2012 - 7.5 Billion Gallons	- 100 mill gal/yr increase in year 7
- The required amount in 2013 is to be determined, but it will not be less than that used in 2012. The U.S. Secretary of Energy will make this determination in consultation with the U.S. Secretary of Agriculture and the U.S. EPA Administrator. However, current bills before Congress, if passed and enacted, could increase the mandated annual gallonage substantially. Experts predict that, at the current growth levels, biodiesel will grow over 1 Billion Gallons/year and fuel ethanol will grow to over 16 Billion Gallons/year before 2015.

RFS Details

- The regulations for the RFS under the EPACT were issued on April 10, 2007 and the program is to be governed by the EPA.
- Subsequent years' refiner requirements are determined by the amount of gasoline ÷ amount of biodiesel (approximately 3 percent). For example, a refiner producing 100 Million Gallons of gasoline must buy 3 Million Gallons of biodiesel or purchase credits.
- Use of the above base amount results in the accumulation of credits – a gallon of (B-100) biodiesel = 1.5 RFS credit. (One gallon of grain-derived ethanol = 1 RFS credit; One gallon of renewable diesel = 1.7 RFS credit; One gallon of cellulosic ethanol = 2.5 RFS credit; One gallon of either grain-derived ethanol, biodiesel or renewable diesel produced in a plant recovered on 90% or more non-hydrocarbon-based fuel will receive 2.5 RFS credits.)

RFS Details (cont.)

- Credits are transferable/saleable. Generally, at least for ethanol, 1 credit is attached to the physical gallon sold; while the balance of any amount of the total per gallon credit, if any, can be stripped off and monetized by the producer. So long as the RFS mandate is set higher than the available physical biofuels gallons in a particular year, then these RFS credits will command potentially a significant price.
- Initially, these credits are designed to ease refiner compliance with the RFS purchase requirements:
 - Refiners could conceivably meet the RFS purchase obligations without purchasing any “wet” gallons of biodiesel.
 - This “flexibility” for the refiner to effect compliance with the RFS standard is exactly the reason for the enactment of the RFS into law.
- S.987, moreover, would qualify renewable fuels used as boiler fuels and home-heating fuel for these valuable RFS credits, in addition to the current motor fuel use.
- A Biodiesel set-aside for RFS is a good idea but likely too hard to obtain – ethanol and renewable diesel industries would want their own independent set-asides.

Carbon Credits

- In Kyoto Protocol compliant countries you also can monetize carbon credits produced in offshore biofuels projects on an annual basis:
 - every 1.3 Million Gallons of biodiesel produce 10,000 CERs (Certificate of Emission Reductions or tons of carbon offset); and
 - every 2.1 Million Gallons of ethanol produce 10,000 CERs.
- These are currently monetized at approximately Euros 17 for Phase II CERs and approximately Euros 1.5 (once as high as Euros 40) for Phase I CERs and in India at approximately U.S.\$ 8 - U.S.\$ 14/CER.
- Between 2009 and 2012, we will have mandatory carbon credits programs commencing in California and seven (7) New England States, with the possibility of similar legislation in additional states, if not under federal law.
- In addition to revenue streams, as the certification process for credits becomes streamlined/mature, the industry will be able to better use credits as security for debt.

Tax Related Provisions Under The 2005 EPACT

- Biofuels tax credits.
 1. 50 cents/Gallon blended into diesel for “biodiesel” derived from plant, animal or other non-virgin matter.
 2. \$1/Gallon blended into diesel for “agribiodiesel” derived solely from certain virgin oils and animal fats.
 3. They expire on December 31, 2008.
 4. Fuel ethanol has the 51 cent/Gallon Volumetric Ethanol Excise Tax Credit (VEETC) which expires on December 31, 2010.
 5. Renewable diesel has a \$1/Gallon blended into diesel, expiring on December 31, 2008. It can be made from virgin or non-virgin feedstock, giving refiners a 50 cent per gallon competitive edge over biodiesel blenders of non-virgin feedstocks.

Tax Related Provisions Under The 2005 EPACT (cont.)

- Creates a Small AgriBiodiesel Producer Payment Credit for biodiesel facilities up to 15 Million Gallons/year. Small AgriBiodiesel Producer is defined as having an annual production capacity at all times in such year of up to 60 Million Gallons of any type of biodiesel, including biodiesel not eligible for the credit. The credit expires on December 31, 2008. This incentive is similar to the earlier-provided Small Producer Credit created for small fuel ethanol facilities (which qualification was increased from 30 Million Gallons/year to 60 Million Gallons/year) providing a 10 cent /Gallon credit up to a maximum of \$1.5 Million per producer through December 31, 2007 (with a carry-forward to December 31, 2008.)
- Alternative Fuel Refueling Tax Credit for installation of certain qualifying fueling infrastructure that dispense alternative fuel including biodiesel blends B20 and higher.

Some State Initiatives

- Approximately 45 U.S. States have some type of biodiesel incentive. At least 12 U.S. States are considering legislation to mandate a minimum amount of biodiesel to be sold. For example,
 - In 2005, Minnesota enacted the first ever state wide law requiring the states diesel fuel to comprise of 2% biodiesel.
 - Texas has instituted a Biodiesel Production Incentive Program that entitles producers to net a grant of 16.8 cents per gallon for the first 18 million gallons produced each year.
 - California is working on a renewable diesel bill requiring 2% renewable diesel statewide by 2008, increasing to 5% by 2010.
 - Illinois provides a 20% state sales tax exemption on biodiesel blends up to 10% and complete exemption for blends above 10%.
 - Oregon is considering a 5% biodiesel mandate.
 - Washington State is considering a bill to exempt alternative fuels from taxation if manufactured in-state.

New Laws Impacting Biodiesel

- In 2006, EPA mandated that diesel fuel's sulphur emission be lowered to a 15 ppm standard known as "Ultra Low Sulphur Diesel" (ULSD) – removing sulphur reduces lubricity which is essential for engine efficiency and lifespan – biodiesel solves the problem by increasing lubrication by 65%.
- New IRS Notice 2007-37 (March 2, 2007, published April 3, 2007) for renewable diesel potentially adversely impacts the biodiesel industry –
 - The Notice, under its new broad definition of "thermal depolymerization", enables refiners to by-pass biodiesel manufacturers and, thus, purchase virgin and non-virgin feedstock directly from its feedstock producers and then introduce such feedstock directly into a refinery's hydrotreating units to create essentially the same product as biodiesel. However, the renewable diesel product, unlike biodiesel, has a cetane number of nearly 100 and is entirely pipeline fungible (even satisfying purchasers of pipeline purchased jetfuels).

New Laws Impacting Biodiesel (cont.)

- Existing tax incentive law for renewable diesel makes no distinction between renewable diesel derived from virgin feedstock and non virgin feedstock, providing producers of renewable diesel, from either virgin or non-virgin feedstock, a \$1 tax credit in contrast to the distinction made between “Agribiodiesel” (from virgin feedstock) and “Biodiesel” (from non-virgin feedstock) where the latter only receives a 50 cent tax credit and the former receives a \$1 tax credit.
- Thus, refiners are incentivized to pay feedstock producers a higher price in competition with biodiesel manufacturers for the same already-costly feedstock.
- The refiners also then would control the product they otherwise would have to purchase from the biofuels industry to meet their expensive RFS obligations and, thus, would have met these obligations outright. Furthermore, the tremendous emissions reductions inherent in biodiesel would now be available to refiners through their renewable diesel product and would enable them to qualify for monetizable emissions credits.

New Laws Impacting Biodiesel (cont.)

- Also, producers of coal-to-liquids, gas-to-liquids and biomass-to-liquids using oils in their Fischer-Tropsch processes may qualify for the credit.
- The oil industry has tried for more than 30 years to eliminate the ethanol industry and has failed to do so. However, in one fell swoop, the IRS has served up the “knock-out punch” to undercut severely, if not to kill, the biodiesel industry in the United States.
- A Board member for the National Biodiesel Board described it “as standing on a bridge to nowhere.”
- The alternatives are to sue the IRS or to seek a legislative fix immediately. With the rush of biofuels tax bills presently before Congress, with a new Democratic Congress and an Administration now touting biofuels, a legislative fix immediately is the best path. However, it must be accomplished this year, because no tax bill likely will be passed/enacted next year in an election year. Simultaneous pressure on the Secretary of the Treasury and his legislative counsel also should be vigorously pursued.
- Within two weeks of the IRS issuance of this severe ruling, Conoco and Tysons Foods announced on April 16, 2006, a major agreement to produce 175 million gallons of renewable diesel by 2009, with each company investing more than \$100 Million. Tysons will provide Conoco pork, poultry and beef fats to refine into Conoco’s refineries for ultimate pipeline shipment and sale.

Recent Legislative/Regulatory Actions

- President Bush's State of the Union address in January 2007 called for the creation of an "Alternative Fuel Standard" (AFS) as opposed to the "Renewable Fuel Standard" (RFS), thus expanding the scope of such mandate which could include a host of other fuels including gas-to-liquids and coal-to-liquids. The Bush plan, recently sent to the House Energy and Commerce Committee along with a letter by U.S. Energy Secretary Sam Bodman and Environmental Protection Agency head Stephen Johnson, calls for 35 Billion Gallons to be met by these alternative fuels (including biodiesel and fuel ethanol) by 2017, or extending the current 7.5 Billion Gallon/year by 2012 RFS, by nearly 27.5 Billion Gallons/year of the additional capacity in a 5-year time frame.

Recent Legislative/ Regulatory Actions (cont.)

- In a similar vein, in the last week of March 2007 Senator Jeff Bingaman (D-NM), Chairman of the Senate Energy Committee and Senator Pete Domenici (R-NM) introduced S.987 requesting a “Renewable Fuels Standard” (RFS) mandating 36 Billion Gallons of domestically-produced renewable fuels be used by 2022 (or about 21% of the then-projected U.S. gasoline usage). This bill requires biofuels, as opposed to alternative fuels, to expand the current 7.5 Billion 2012 RFS.
- U.S. DOE recently committed \$385 Million in grants to six (6) cellulosic ethanol projects, three (3) of which will use thermo-chemical (i.e. gasification-catalyst technology) processes and three (3) of which will use bio-chemical (i.e. enzymatic hydrolysis technology) processes. These six (6) plants will require approximately \$1.2 Billion to develop/construct with the U.S. DOE assuming nearly one-third of the cost.

Recent Legislative/ Regulatory Actions (cont.)

- US DOE has been appropriated \$89 billion to promote energy crops including research to enhance bioenergy feedstocks, rise of renewable fuels from forestry and agricultural biomass.
- US DOE has been appropriated \$24.3 billion to promote the production and research of biofuels.
- US DOE has announced \$8.4 million in loan guarantees for clean energy technologies as a part of its 2008 fiscal budget.
- Further favorable biofuels appropriations are expected over next several months.
- A bill, S. 872, has been introduced to extend the current federal excise tax credits and income tax credits for biodiesel to 2017.

Deal Structure

- **Financing Biodiesel Projects**

- Investors ideally seek a 25%-30% ROI. However, increased CAPEX, feedstock costs and construction time frames, along with decreased product prices and oil prices have challenged this expected ROI significantly.
- Substantial Funding Needed – Equity and Debt. The biodiesel standard CAPEX has been approximately \$1/gallon constructed (some recent technology advancements are reducing biodiesel CAPEX to below 50 cents/gallon constructed). Approximately eighteen (18) months ago, fuel ethanol was \$1/gallon constructed and now it exceeds \$2/gallon constructed due to the lack of recognized highly-qualified process engineers, substantial increases in the price of steel generally and stainless steel specifically, increased costs for concrete and asphalt, increased labor costs, shortages of critical components such as heat exchangers, pumps and distillation columns. These same increased cost factors also are driving biodiesel CAPEX costs upward.

Deal Structure (cont.)

- Debt- Equity ratios for biodiesel at best are 50%:50% (ethanol was 70%:30%, then moved to 60%:40% and today is closer to 50%:50% for a conventional dry-mill facility) (cellulosic ethanol plants will require even considerably higher percentages of equity). Wall Street banks are capping equity at a maximum of \$125 Million; increases in project capital costs, thus, will require increasingly more equity.
- Andrews Kurth recently closed a 50 Million Gallon biodiesel project in India at a total cost of \$21 Million initially on an all-equity basis (subsequently seek to project finance the project with debt including an additional 50 Million Gallon/year expansion thereto). The project has nearly 400,000 monetizable carbon credits at up to \$14 per credit per year or nearly \$5.6 Million in additional annual revenues currently unavailable in the U.S. for projects, as the U.S. has not signed or ratified the Kyoto Protocol.

Deal Structure (cont.)

- Managing Risk – e.g. shift technology risk to construction contractor through performance warranties.
- Investing in company versus project level. (This approach is seen through the recent use of venture capital and private equity funding and/or capital markets funding through reverse mergers into public vehicles accompanied by private investments into public enterprises (PIPES) at the company level.)
- Engage a very capable design-build team at very reasonable price and assemble a highly-capable management team.
- Estimate the project's initial seed capital needs for six (6) months to a year – Seed capital can be used towards:
 1. development of a feasibility study and business plan. These documents, among other requirements, will determine if any deal-breakers exist and how to surmount them.
 2. site development, pre-engineering and permitting.
 3. legal and accounting expenses.

Deal Structure (cont.)

- Equity funding is relatively straightforward, and the parties will negotiate the terms of the investment, including liquidation preferences, board seats and other preferential rights.
- Typical debt funding requirements are:
 1. lender having a first mortgage on all real estate.
 2. no other party having a prior security interest in any of the assets.
 3. legal opinions regarding enforceability of the loan agreements and required permits and governmental authorizations have been obtained.
 4. Delivery of collateral assignments of significant contracts to the lender.
 5. Periodic delivery of financial information.
 6. Satisfaction of certain financial requirements, such as an appropriate debt service coverage ratio, debt-to-equity ratio, tangible net worth ratio and others.

Deal Structure (cont.)

- **Critical Contract Issues**

- Strong Feedstock Supply Contract with terms of 3-5 years – Attracts financing.
- Delays - Force Majeure clause; liquidated damages; limitations on liabilities.
- Well-negotiated Offtake Agreement with terms up to 5 years – including a determination of whether the buyer or seller arranges the rail transportation.
- Commodity Risk Management –
 1. ability to intelligently manage commodity risk is invaluable for preserving margins and surviving market swings.
 2. Hedging risks through tolling arrangements, over-the-counter options, futures etc.
- Purchasing Insurance
 1. insurance to cover property, testing, builders risk, a delay in start-up, general liability, automobiles, business interruption, crime, or workers compensation, pollution coverage among others.
 2. IMA Financial Group Inc., an insurance brokerage company recently has begun to offer a biodiesel insurance program providing a complete package of necessary insurance to projects.
 3. In foreign projects, one must obtain political risk insurance and insurance to pay winners of arbitration awards where enforcement of such award is difficult or impossible – the U.S. Overseas Private Insurance Corporation provides such insurance policies and products.

Deal Structure (cont.)

- **Construction of a Biodiesel Plant** – generally a greenfield plant takes approximately 12 months from project capitalization to commercial operation, although this timeframe is increasing.
 - **Conducting a Feasibility Analysis**
 1. In depth feedstock market analysis including availability and suitability of feedstock – feedstock is the single largest cost component of biodiesel production at 80% of total production costs.
 2. analyze the local/state policy supporting incentives for biodiesel.
 3. analyze the diesel fuel market segment and potential customers.
 4. select the most appropriate process technology.
 - **Plant Considerations**
 1. Size - recommended minimum size is 80,000 MT - 100,000 MT of biodiesel/year (approximately 30 Million Gallons/year) when using virgin oils and not less than 40,000 MT of biodiesel/year (approximately 13 Million Gallons/year) when using recycled oils. We are seeing biodiesel plant sizes increasing to 50 Million Gallons/year to 100 Million Gallons/year in the U.S. and abroad.
 2. It is preferable to have multi-feedstock producing capability and deep-water access (to move feedstock/products into and out of the manufacturing facility easily and to reduce rail congestion risks.)

Deal Structure (cont.)

- **Construction Related Agreements**

- Design & Engineering – Once “full-wrap” agreements (ensuring a fully integrated plant would be constructed on time, according to specifications, and would produce the desired functionality) including “balance of plant” provisions (providing for all facilities from feedstock receiving to fuel storage, etc.) were regularly provided. However, industry expansion has strained the capacity of processing engineers to provide full wraps. As such, owners have had to be creative to bridge the gaps between design and construction. Thus, the scope of work must be fully specified in the design and construction agreements, with identical consolidated mediation/arbitration provisions designed to draw the engineers, constructors and owners into a single action to resolve disputes quickly.
- Equipment Procuring.
- Performance guarantees – in the form of bonds or payment guarantees.
- Warranty –
 1. Usually heavily negotiated - term of warranty and limitations on warranty.
 2. Producers should insist on three (3) fundamental warranties - yield, throughput and specifications (quality).
- Insurance arrangements and Indemnities – personal injury, general commercial liability, automobile; use risk management specialist to determine amounts.

Deal Structure (cont.)

- **Other Agreements**

- **Feedstock Agreements**

1. Need to align with a recognized, credit-rated, oils and energy commodities entity that will sell domestic and internationally sourced feedstock.
2. Pricing based on a published commodity price index to enable hedging of forward price risk exposure against established exchange-traded and OTC financial products.

- **Off-take Agreements**

1. Need to align with a recognized, credit-rated, oils and energy commodities entity that will purchase refined biodiesel.
2. Sell at prices based on a published commodity price index to enable hedging of forward price risk exposure against established exchange-traded and OTC financial products.

Deal Structure – Location of Project

- Location of Feedstock –
 - proximity of feedstock to plant.
 - transportation costs.
- Location of customers – such as proximity to diesel producers and blenders.
- Transportation
 - railroad, highway and deep navigable water access.
 - analysis of these transportation alternatives.
 - loading and unloading infrastructure providing access to facility by rail, road, vessel and barge to facilitate efficient feedstock sourcing and biodiesel distribution.

Deal Structure – Location of Project

- **Permits and Local Land Use**

- Permitting can commence up to one (1) year before construction and continue throughout the construction cycle.
- Ease in obtaining permits impacts time schedules. There is no generic list of permits for a typical biofuels project. Such list is specific to the project design, site and host state/municipality. Often, these projects will require more than 40 permits and/or governmental approvals. Also the ease in obtaining permits/governmental approvals varies widely. It may prove more difficult in one state to obtain one approval/permit than obtaining multiple ones in another state. For example, Minnesota requires one area permit for several kinds of air discharges that another state might require individual permits to cover each type of discharge.
- Local rules may prohibit certain uses.
- Environmental, air, water and other issues -- some permits include approvals for air emissions, water discharge, stormwater, erosion control, wetlands, endangered species, cultural resources, local site development, zoning, rail etc. Ethanol production also requires approval from the U.S. Alcohol and Tobacco Tax and Trade Bureau prior to selling denatured ethanol.

Deal Structure – Location of Project

- Occupational Health and Safety Administration (OSHA) requires Process Safety Management (PSM) – employees of the facility know about the use of hazardous chemicals in the workplace.
- EPA uses PSM in a different context to inform public about the presence and use of highly hazardous chemicals in their vicinity.
- **Water supply**
 - environmental issues on any effluent discharge.
- **Form of ownership of land**
 - flexibility in lease with landlord, i.e. minimum prior approval requirements (for example, terms of 20 years with multiple 10 year extensions);
 - obtain necessary easements.

Deal Structure

- **Proven Management**

- Strong track record and experience of management team (Board of Directors, Board of Advisors, Officers/Managers) is a must.
- The management team must be able to create new revenue streams (e.g. monetize emissions, RFS, RECs, tax and other revenue generating/debt securitizing credits) and reduce front-end project costs – in other words, seek the greatest possible reward for the least amount of risk.

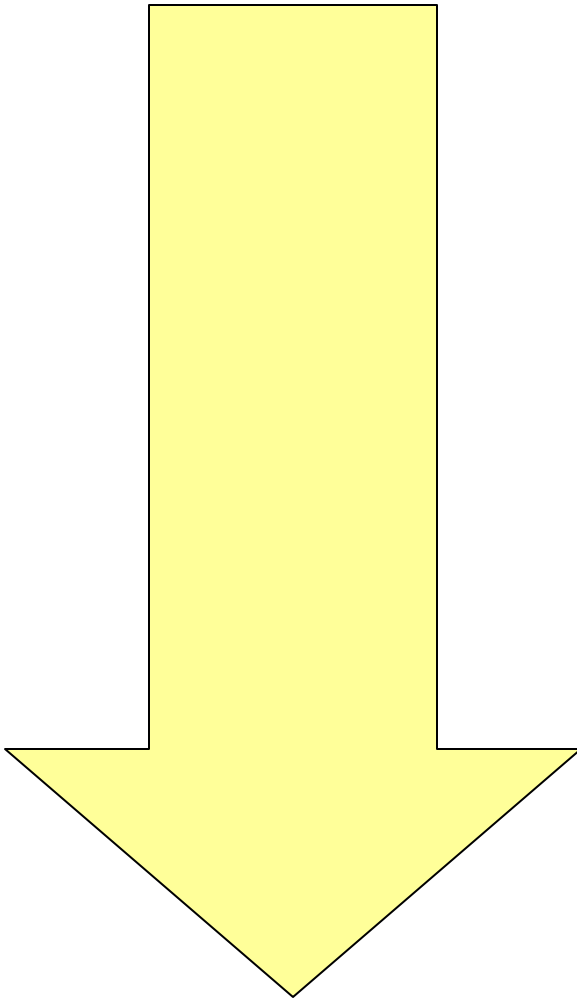
- **Proven Operational Experience**

- Expertise in all areas of plant management including logistics, client relationships, quality control, marketing and administration.

Implications of Biodiesel Growth

- Changes in the *Business* of Biodiesel:
 - Meeting the RFS will require \$\$ Billions \$\$ in Investment.
 - By virtue of the mandate, biodiesel moves from an unknown to a known.
 - New, major sources of funds are seeking to invest into the industry (e.g., venture capital, private equity, and public listings through reverse mergers with accompanying PIPEs or to raise fresh funds for projects or acquisitions (special purpose acquisition companies (SPACs)).
 - Investment community is becoming comfortable with a commodity-based, tax & regulatory driven industry.
 - A growing ROI is clearly possible in light of an increased RFS and additional market acceptance/consumer use.

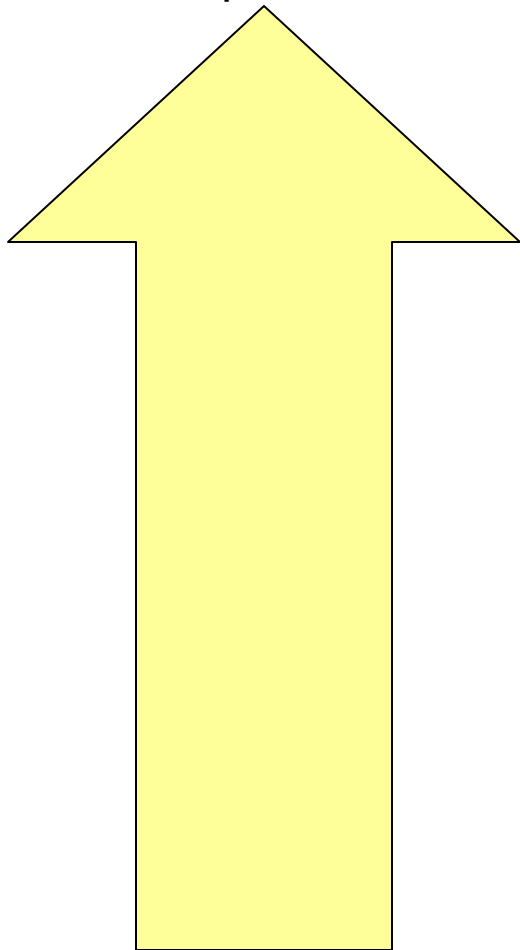
What's Next? Is it all Wine and Roses for U.S. Program from Here?



- **Challenges remain:**
 - High energy costs to power facilities, increased feedstock costs, lower product prices.
 - Decreasing co-product prices.
 - Oversupply always an issue.
 - Environmental issues.
 - Financing – need larger pool of lenders.
 - Equity – VC/Private Equity, Capital Markets – U.S. versus AIM (London Stock Exchange), Dubai Stock Exchange, Deutsche Borsche.
 - Maintaining small versus large plants.
 - Maintaining/Extending current tax incentives.
 - Destabilizing tax rulings (e.g., IRS Notice 2007-37 (March 2, 2007)).
 - Imports (lack of duties).
 - Low demand for By-products such as Glycerine.
 - Funding for new technologies.
 - Limitations of construction, fabrication, services.

What's Next? (Continued)

Up Side



- American public finally “gets it” -- demanding action.
- Energy crisis.
- Gasoline prices to stay high.
- Biodiesel = a domestic, renewable, job creating, imported oil fighting, supply extending fuel.

There is no question that we can meet and exceed the RFS.

Thank you!

For more information log on to

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