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by

Doug O’Brien

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Doug O’Brien
Research Assistant Professor of Law and Interim Co-Director,
University of Arkansas National Agricultural Law Center
Staff Attorney,
Drake University Agricultural Law Center

The burgeoning renewable fuels industry has the potential to radically reshape production agriculture. Because of certain federal and state policies, as well as the high price of petroleum, people are looking to renewable fuels to provide for a greater proportion of U.S. energy needs. The result is that the renewable fuels sector is currently one of the most significant growth industries in the country, and especially in rural America.

Farmers obviously have an important role to play in this movement. Whether as producers of renewable feedstock, investors in renewable fuel plants or consumers of the renewable fuels, farmers have a direct interest in how the sector develops. The renewable fuel boom has implications across the agricultural sector—from the land use choices such as the possibility that Conservation Reserve Program acres will be drawn into use for renewable energy to the livestock sector that will need to compete for feedstuffs. These indirect effects will ripple across farm country. The focus of this article, however, is on some of the direct policy and legal issues advisors should think about in considering how to advise those who want to participate in the renewable energy industry. The article will first show a snapshot of the sector and then go on to describe some of most significant federal renewable energy policies. The article will then focus on direct legal issues, in particular some business organization issues.

I. Background of the Renewable Fuels Industry

People began to focus on renewable fuels, and in particular biofuels, during the 1970’s energy crisis. The general public’s interest waned during the 80’s and 90’s, largely because petroleum was once again relatively inexpensive. With the higher energy prices of the early 2000’s, interest again peaked.

1 See generally U.S. Dept. of Energy and USDA, Biomass as Feedstock for Bioenergy and Bioproducts Industry, (Apr. 2005), http://www1.eere.energy.gov/biomass/pdfs/final_billionton_vision_report2.pdf (forecasting the possibility of harvesting one billion tons of biomass for energy uses and describing some of the market and environmental concerns related to such a possibility).

2 Beyond the scope of this article, but very important to the broader biofuels debate, is the affect that biofuels will have on the livestock industry. With the exploding demand for corn and soybeans to supply ethanol and biodiesel plants, questions remain on the impact on cattle, swine, and poultry feeders, all who rely on corn and soybeans as their primary feedstuffs. Some of the livestock industry, in particular cattle feeders who live close to ethanol plants, may be able to take advantage of a coproduct from ethanol plants known as dried distiller’s grain (DDG). Meanwhile, other livestock feeders will need to contend with increasing crop prices resulting from the competition from the renewable fuel sector.

3 See Joel Severinghaus, Demand Elasticity Impacts Markets for Beer, Ethanol, and Pork, IOWA FARM BUREAU SPOKESMAN (July 27, 2006) (discussing the competition for corn from ethanol plants, hog farmers and brewers).

4 While states have been active in promoting renewable fuels, a discussion of state policy is beyond the scope of this article. For a table generally indicating the different state policies, see Renewable Fuels Association, Legislative Actions: State (last visited Aug. 18, 2006) http://www.ethanolrfa.org/policy/actions/state/.
In general, renewable energy can include any type of energy that is “naturally replenishing, but flow limited.” Examples include “biomass, hydro, geothermal, solar, wind, ocean thermal, wave action, and tidal action.” Biomass includes energy derived from plants, such as ethanol from corn or biodiesel from soybeans, the primary subjects of this article. Meanwhile, many project that the preferred renewable energy source in the future will be other biomass used to produce cellulosic ethanol – for instance perennial tall grasses or fast growing trees. In yet another example, around 90 farms in the country are already producing methane from animal waste by using anaerobic digesters in their manure storage facilities.

To gain a sense of the significance of the biofuels movement to the corn sector, one can look at some of the projections of corn usage and ethanol production over the next five years. The Food and Agriculture Policy Research Institute (FAPRI) July 2006 Baseline update reports that in the 2005/2006 crop year about eighteen percent of the corn crop was used to produce fuel alcohol. The same report projects that by the 2010/2011 crop year, nearly thirty-two percent of the corn crop will be devoted to fuel alcohol. In 2005, U.S. processors produced about 3.9 billion gallons of ethanol; Iowa is by far the leading ethanol producer with 1.7 billion gallons of capacity online or under construction. Other leading states include Nebraska, Illinois, South Dakota and Minnesota. Meanwhile, about 400 million gallons of biodiesel were produced last year, with a possibility of up to a 714 million gallon capacity if all currently planned projects are completed.

As mentioned earlier, one of the main reasons for the quick growth in this area are certain federal laws and programs. The next section will summarize some of the more significant policies.

II. Important Federal Laws and Programs

The development of the biofuels industry owes a great deal to certain federal policies that (1) subsidize the cost of production of renewable fuels with the use of certain tax credits and (2) spur demand by mandating the fuel industry use a certain amount of renewable fuels. This significant

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5 Department of Energy, Energy Information Administration, Glossary (last visited August 14, 2006), at http://www.eia.doe.gov/glossary/glossary_r.htm (defining “renewable energy sources”).

6 Id.

7 Biomass goes beyond just the grain or oilseed to include all plant and plant derived material, including the grasses, stalks and animal manure. U.S. Dept. of Energy and USDA, Biomass as Feedstock for Bioenergy and Bioproducts Industry, Executive Summary (Apr. 2005), http://www1.eere.energy.gov/biomass/pdfs/final_billionton_vision_report2.pdf. The supply is so plentiful that the federal government hopes to replace 30% of the country’s petroleum consumption by 2030. Id. The federal government has determined to spur the development of cellulosic ethanol with loan, grant and credit trading programs to encourage private industry to take part in the sector. See Renewable Fuels Association website, Cellulosic Ethanol (last visited Aug. 17, 2006), http://www.ethanolrfa.org/resource/cellulosic/.


10 Id.


government involvement presents industry participants with regulatory risk. Farmers and others need to understand these policies because, as with all laws, they are subject to change. As has been proven by legislative successes over the last few years, there is widespread support for renewable fuels at present. Yet there is no guarantee Congress will continue to support the industry in exactly the same way in the future. For a state example, one can look to what occurred in Minnesota as a result of budget problems in that state. Prior to 2003, the state offered incentives to locally owned ethanol facilities in the form of twenty cents per gallon of ethanol produced for up to fifteen million gallons. In 2003, the state reduced the subsidy to thirteen cents per gallon and only to the first three million gallons. The simple point is that by relying on certain policies, one is exposed to the regulatory risk of a policy change. To understand this regulatory risk, one must first understand the underlying policies.

Renewable Fuels Standard. The RFS essentially sets a mandate for demand of renewable fuels into the future. The RFS requires oil refineries, fuel blenders, and oil importers to use a certain number of gallons of renewable fuels in the nation’s motor vehicle fuel supply. The applicable volume of motor fuel for 2006 is four billion gallons and ramps up to 7.5 billion gallons by 2012. For purposes of the RFS, renewable fuels means fuel “produced from grain, starch, oilseeds, vegetable, animal, or fish materials including fats, greases, and oils, sugarcane, sugar beets, sugar components, tobacco, potatoes, or other biomass; or ... is natural gas produced from a biogas source, including a landfill, sewage waste treatment plant, feedlot, or other place where decaying organic material is found.” The Environmental Protection Administration Administrator may waive the RFS requirements for one or more states upon a determination that the RFS will severely harm the economy or environment, or that a sufficient supply does not exist. As far as enforcement, EPA in The RFS is extremely important to the biofuels industry because it essentially guarantees a certain level of demand for renewable fuels so participants now are assured a certain segment of the transportation fuel market. The big question is what happens if and when the sector exceeds the RFS – will the market continue to support the extra gallon of ethanol or biodiesel?

14 Although support for the production of biofuels has been broad, it has not been unanimous. One presidential candidate at the Iowa State Fair, the most likely place for one to proclaim support for ethanol subsidies, recently stated that he supports the use of ethanol but is opposed to subsidizing the fuel. Jonathon Roos, McCain Praises Timing, Clout of Iowa Caucuses, DES MOINES REGISTER (Aug. 16, 2006).


16 See David Coltrin and Eric Dean, Risk Factors in Ethanol Production, Agricultural Marketing Resource Center, at 20 (undated), http://www.agmrc.org/NR/rdonlyres/0ED97642-88CB-458F-B315-7DE44AF5FADF/0/ethanolriskfactors.pdf (highlighting the government or regulatory risk involved with ethanol production and focusing on the Renewable Fuels Standard and the possibility of more stringent environmental regulation).

17 42 U.S.C. § 7545(o).

18 Id. § 7545(o)(2)(B). “Subject to clauses (iii) and (iv), for the purposes of subparagraph (A), the applicable volume for calendar year 2013 and each calendar year thereafter shall be determined by the Administrator, in coordination with the Secretary of Agriculture and the Secretary of Energy, based on a review of the implementation of the program during calendar years 2006 through 2012, including a review of--(I) the impact of the use of renewable fuels on the environment, air quality, energy security, job creation, and rural economic development; and (II) the expected annual rate of future production of renewable fuels, including cellulosic ethanol.” Id. Clause (iii) of this section states that for the years after 2012, the ratio of renewable fuels versus non-renewable fuels should be the same as it was in 2012.


20 Id. § 7545(o)(7).
Blender Excise Tax Credit. The Jobs Act of 2004\textsuperscript{21} modifies the special treatment blenders of ethanol and biodiesel receive to continue to encourage the fuel industry to utilize biofuels.\textsuperscript{22} Blenders are those who produce an alcohol fuel mixture.\textsuperscript{23} Blenders who use ethanol are eligible for an excise tax credit of fifty-one cents for every gallon of alcohol used in an ethanol blend,\textsuperscript{24} and those who use biodiesel are eligible for a one dollar credit for every gallon of agri-biodiesel and fifty cents for every gallon of other types of biodiesel used.\textsuperscript{25} The ethanol tax credit is authorized through 2010,\textsuperscript{26} while the biodiesel tax credit is authorized through 2008.\textsuperscript{27} These tax credits act as a direct subsidy to the cost of ethanol and biodiesel and play a large part in the profitability of the production of ethanol. The major regulatory risk involved with these tax credits is whether they will be extended upon their expiration. A number of factors will go into this determination, including the federal budget deficit, the continued desire to support domestic renewable energy and possible shifts of Congressional support to other types of renewable fuels.

Small Ethanol Producer Tax Credit. Special tax credit provisions exist for small producers (as opposed to blenders) of ethanol and biodiesel. The Small Ethanol Producer Credit provides a credit of ten cents per gallon of grain alcohol used by producers who have an annual capacity of less than thirty million gallons per year.\textsuperscript{28} The credit may only be applied to the first fifteen million gallons of production per year.\textsuperscript{29} A similar credit exists for small agri-biodiesel producers who produce less than sixty million gallons per year.\textsuperscript{30} The credit is limited to the first fifteen million gallons. For small ethanol and biodiesel producers that are Subchapter T cooperatives, the coop may choose to pass on the credit to its patrons.\textsuperscript{31} “The credit is allocated among the patrons on the basis of the quantity or value of the business done with or for the patrons for the tax year.”\textsuperscript{32}

Other Federal Programs That Spur Demand for Renewable Fuels and Biobased Products. The 2002 Farm Bill included a provision that requires that those who purchase on behalf of the federal government must prefer products that have the highest percentage of biobased products practicable.\textsuperscript{33} The law applies to purchases of over $10,000. The law does not require the preference if the products “fail to meet the performance standards set forth in the applicable specifications or fail


\textsuperscript{22} 26 U.S.C. § 6426.


\textsuperscript{24} 26 U.S.C. § 6426(b)(2).

\textsuperscript{25} Id § 6426(b)(3). “Agri-biodiesel means biodiesel derived solely from virgin oils, including esters derived from virgin vegetable oils from corn, soybeans, sunflower seeds, cottonseeds, canola, crambe, rapeseeds, safflowers, flaxseeds, rice bran, and mustard seeds, and from animal fats.” IRS Pub. No. 378, ¶5 (April 2004).

\textsuperscript{26} 7 U.S.C. § 6426(b)(5).

\textsuperscript{27} Id. § 6426(c)(5).

\textsuperscript{28} IRS Pub. No. 378, ¶6.

\textsuperscript{29} Id.

\textsuperscript{30} 26 U.S.C. § 40A(b).

\textsuperscript{31} Id. §§ 40(g)(6); 40A(e)(6).

\textsuperscript{32} Id. § 40A(b).

\textsuperscript{33} 7 U.S.C. § 8102.
to meet the reasonable performance standards of the procuring agencies; or . . . are available only at an unreasonable price."34 Also included in the 2002 Farm Bill is a program providing grants to state agencies, rural electric cooperatives, or other nonprofits to assist farmers, ranchers and rural small businesses in "becoming more energy efficient and in using renewable fuels."35 The money can be used for the recipient to perform energy audits on farms or to educate farmers on the availability of programs such as the Renewable Energy Systems program.36 Yet another program designed to subsidize the cost of biofuels production is the CCC Bioenergy Program.37 This program pays biofuels producers to increase their consumption of most agricultural commodities in the year that they increase production and is targeted to smaller producers.38 The program is set to expire this year.39

The Renewable Energy Systems Program and Energy Efficiency Improvements Program. This program provides the Secretary of Agriculture the authority to provide grants, loans and loan guarantees to farmers, ranchers and rural small businesses to purchase renewable energy systems and to improve energy efficiency.40 The first three years of the program saw USDA providing over $66 million in grants.41 In 2005, grants ranged from $7000 to $500,00 and supported a myriad of biomass, wind, solar, geothermal and conservation technologies.42 Specific examples include wind turbines, methane digesters on dairy manure storage lagoons and solar energy projects. Grant requests cannot exceed twenty-five percent of the cost of the project, while loan requests cannot exceed fifty percent of the cost of the project. In determining which projects to fund, the Secretary must look at factors such as the amount of energy to be generated by the system, the environmental benefits, the extent to which the system will be replicable, the amount of energy savings expected from operation of the system and the estimated amount of time it will take for the system to pay for itself.43

34 Id. § 8102(c)(2).
35 Id. § 8105(a).
36 Id. § 8105(b)(2).
37 Id. § 8108; 7 C.F.R. Part 1424.
38 Section 8108(b)(3) targets the payments to producers with a capacity of less than $65 million.
39 7 U.S.C. § 8108(c) (providing funding only through 2006).
40 Id. § 8106; see also 7 C.F.R. part 4280. As the USDA website states, the regulations provide that for a project to be eligible it must be:
   · for a pre-commercial or commercially available and replicable technology.
   · technically feasible.
   · owned and operated by the applicant. A qualified third-party operator may be used to manage the operation and/or maintenance of the proposed project.
   · based on satisfactory sources of revenues in an amount sufficient to provide for the operation and maintenance of the system or project.
43 7 U.S.C. § 8106(c)(2).
**Value Added Producer Grants.** Although not exclusively focused on renewable energy, another program used by the biofuels sector is the VAPG program. As provided on the USDA website on the program:

Grants may be used for planning activities and for working capital for marketing value-added agricultural products and for farm-based renewable energy. Eligible applicants are independent producers, farmer and rancher cooperatives, agricultural producer groups, and majority-controlled producer-based business ventures.

“Value-added” is broadly defined to capture products that have been physically altered from their original state, has a greater value than the original product, expands the original customer base and provides a greater portion of the income from the processing and marketing to the producer than the status quo. The majority of the recipients do not involve renewable energy, but a number of ethanol and bio-diesel start ups have successfully sought funds. The 2002 Farm Bill authorized up to forty million dollars annual funding for VAPG, but except for the first year (2003) funding has been between fifteen and twenty million dollars per year.

This section examined some of the most important federal policies affecting the biofuels industry. As has been discussed, these policies result in subsidized production costs and mandated demand for ethanol and biodiesel. These policies, along with the high price of oil, have made the biofuels industry an attractive investment for farmers and nonfarmers alike. The result has been furious activity around organizing and forming ethanol and biodiesel plants. The next section will look at some specific issues farmers should think about as they consider whether to participate in a renewable fuels project.

**III. Business Organization Issues**

Whenever people decide to participate in some type of joint venture, they acquire certain rights and responsibilities. The type of business organization – a sole proprietorship, partnership, corporation, limited liability company, or cooperative – will dictate many of these rights and responsibilities. In particular, the type of business organization will affect liability, tax treatment, control and the firm’s ability to raise capital.

**LLC’s.** The limited liability company form has emerged as the clear favorite for renewable energy projects. This is not surprising considering ethanol and biodiesel plants require a significant amount of capital. The LLC form is well-suited to raising capital because it offers limited liability for

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44. Id. § 1621 note; 7 C.F.R. part 4284.
46. 7 U.S.C. § 1621 note (a)(1).
48. See Renewable Fuels Association, *From Niche to Nation: Ethanol Industry Outlook 2006*, at 8 to 9 (Feb. 2006). The publication lists the U.S. fuel ethanol refineries. Out of 107, 73 are organized as LLC’s.
49. Filings with the Security and Exchange Commission by ethanol and biodiesel ventures indicate that the cost of the plants are in the tens of millions of dollars, and can well exceed $100 million. For instance, the estimated cost for a 30 million gallon biodiesel plant in Lamoni, Iowa is between $40 and 56 million. Southern Iowa Energy, LLC, Pre-Effective Amendment 4 to Form SB-2, at i (May, 2006). The estimated cost for a 100 million gallon ethanol plant in New Hampton, Iowa is $159 million. Homeland Energy Solutions, LLC, Form SB-2, at 1 (July 21, 2006).
investors, allows them to be taxed as a partnership (and thus income is generally only taxed once) and allows investors a degree of control commensurate with their investment. With this greater ability to attract outside investment comes the possibility that the company’s profits and future will be in the hands of people outside the community. At any rate, LLC’s are the most flexible type of business structure, and because of this and their relative newness, LLC’s require more deliberate thought in the planning stage.

Cooperatives. Many of the early generation ethanol plants organized as cooperatives or closed cooperatives. Cooperatives share some of the advantages of LLC’s – single level taxation and limited liability – but have some very unique characteristics. Certain types of cooperatives enjoy exemptions from certain Security and Exchange Act requirements and antitrust laws. In return for these advantages, the coop must generally be governed by democratic principles providing the users of the coop with voting rights. In other words, only people who use the coop control the cooperative business, and the vote is not determined by the amount of capital one contributes; rather the vote is determined on a one-person/one-vote basis.

Securities Regulation. One of the major considerations for those who decide to organize as an LLC is securities law. Securities law at both the state and federal level is designed to protect the interests of and provide full disclosure to those who are considering investing in a firm. In general, securities are broadly defined as any type of instrument that facilitates an investment, such as a “note, stock, treasury stock, security future, bond, debenture, evidence of indebtedness, certificate of interest or participation in any profit-sharing agreement.” If something is a security, it cannot be sold unless it is registered under the securities laws, which involves significant time and money.

A number of exemptions apply that may allow a group to circumvent the registration requirements of securities laws, such as if the group organizes as a section 521 cooperative, a special type of farmer cooperative. As a practical matter, although an ethanol plant controlled by farmers could be eligible for section 521 status, very few, if any, of the ethanol and biodiesel plants organize as a 521 coop. Most of these groups find the requirements associated with a section 521 coop too onerous for the ethanol venture. In particular, section 52 cooperatives limit the amount of dividends to eight percent.

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51 For an excellent discussion of cooperative principles and issues, see James R. Baarda, Current Issues in Cooperative Finance and Governance, Cooperative Programs, Rural Development, USDA (April 2006).


54 See Goforth, supra note 52, at 13-14 (discussing the impacts on sellers if their financial instrument is defined as a security).


or the applicable state statutory rate, and at least 85 percent “of the voting stock must be owned by producers who have used the cooperative’s services in the past year.” Another exemption from the federal laws has been utilized by a number of ethanol and biodiesel groups is the “intrastate offering exemption.” The exemption is only available to transactions where every security is offered and sold to actual residents of the same state where the issuer is doing business. To use this exemption, the issuer needs to be very careful about the residency of the purchasers and that it conducts its predominant business within the state.

To broaden their possible pool of investors, many ethanol and biodiesel ventures choose to go through the onerous Security Exchange Commission filings so they may seek non-farmer and out-of-state investors. SEC filings are available on the SEC website known as EDGAR. One of the requirements of some of the filings is that the ethanol venture disclose the risks associated with investing in the venture. Two of the most obvious risks are that the price of the end product (ethanol or biodiesel) may fall or the price of the feedstock (corn or soybeans) may increase given the rapidly growing ethanol and biodiesel sectors. Another significant risk is that many of the ventures rely heavily on outside companies for construction and marketing expertise, and there are very few companies who have this expertise. This provides the construction or marketing company significant leverage and if necessary, it may be very difficult to find replacement expertise.

Yet another risk is that a member may not be able to sell his or her interests. One of the features of many of the ethanol and biodiesel ventures is that the membership units (LLC terminology for the investment vehicle or stocks) may not be transferred without the express written approval of the directors. This restriction can severely limit the value of someone’s investment because the directors have the discretion of when and to whom the member’s interest can be sold.

Local Ownership and Control. Whether the venture is organized as a cooperative or LLC, one of the big questions many ask is whether it is locally controlled. Much of the buzz around ethanol and biodiesel is that it provides economic opportunities for rural communities. These opportunities come in the form of greater demand for farmers’ products, jobs at the plant and economic returns for the local investors. Obviously, the last point holds true only if the production facility is actually owned by people in the area. In the early years of ethanol production, the vast majority of the plants were owned by an outside corporation. Then throughout the 90’s and early 2000’s more of the capacity was built by majority farmer-owned initiatives. “By 2004, of the 92 ethanol plants in operation in the

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58 Fredrickson, supra note 56, at 4.
60 See Goforth supra note 52, at 18 to 20 (discussing the intrastate offering exemption).
62 See e.g. Southern Iowa Energy, LLC, Pre-Effective Amendment 4 to Form SB-2, at 7 (May 2006) (available on file with the author or on SEC EDGAR website).
63 See e.g. Operating Agreement of Homeland Energy Solutions, LLC ¶9.2 (effective March 9, 2006) (on file with author and available on SEC EDGAR website). These LLC’s need to be especially wary of acting in such a way as would cause the IRS to deem the LLC as a “publicly traded partnership,” and thus exposing it to being taxed as a corporation. See 26 U.S.C. § 7704 (stating that a publicly traded partnership shall be taxed as a corporation).
United States, 44 were owned by farmers, or 48 percent.65 The trend, however, has reversed. One industry observer reports that less than thirty percent of the ethanol plants were farmer owned in early 2006, and as much as ninety percent of the new ethanol production capacity over the next three years will not be farmer owned.66

A significant policy question exists on whether federal and state laws should promote local ownership, and if so, how this should occur. Some argue that the most effective way to support local ethanol production would be to target the subsidies to actual producers of ethanol as opposed to blenders and to provide greater incentives to those plants majority-owned by farmers.67 Around fourteen states already have some type of producer incentive program.68 The incentive could work by paying the producer a certain amount per gallon of production. To encourage smaller facilities, many states have limited the number of gallons the subsidy will support.69 Prioritizing farmers or local residents raises some obvious legal issues, such as who is a farmer and who is truly a local resident. The efficacy of such targets might also be hampered by the fact that the restrictions limit access to capital outside of certain communities.

IV. Conclusion

The biofuels movement promises to alter the agriculture sector. In terms of policy and legal issues, an attorney advising farmers and others in the agriculture and biofuels sectors must grasp the crucial role that federal policy has on this industry to take advantage of these policies and manage the regulatory risk. In part because of federal policies, many in rural America are choosing to participate in an ethanol or biodiesel plant. Some of the most significant legal issues on which attorneys will need to focus include his or her client’s rights and responsibilities in relation to the firm. On a broader scale, one of the larger societal and policy issues is whether these new entities are locally controlled.


66 Id.

67 Id. at 9.


69 See e.g. Minn. Stat. § 41A.09.