

LAW OF BIOFUELS
The Most Critical Contracts:
—Supply, Offtake and Hedging Agreements—

Richard L. Goldfarb
Stoel Rives LLP
600 University Street, Suite 3600
Seattle, WA 98101
206-386-7639
rgoldfarb@stoel.com

Why the Most Critical Contracts. Building an ethanol or biodiesel plant is a delicate process. Siting, permitting, EPC, finance and other arrangements are all not only important, but mistakes in any of them can scuttle the project. Why, then, are the supply, offtake and hedging operations even more critical? Because even if a developer does everything else perfectly, a failure to execute on these important operations correctly will mean failure.

A Clash of Three Worlds. Today's biofuels plants are financed by outside sources largely independent of the plants' developers. Venture and other funds make up a very well-established community with its own terminology and its own way of doing business. Far older, far more established and far more set in its ways, the agricultural community has been around as long as civilization itself. And although the community of buyers of fuels and fuel additives is not as old as agriculture, it too has its traditions.

The supply, offtake and hedging functions of a biofuels plant are where these three worlds collide. Feedstock suppliers are used to forms of contract and ways of doing business that have been successful for them for generations. Fuel buyers also have their own formulas for success. Venture money speaks a language different from both of them but controls the purse strings toward, in the former case, an expanded market for agricultural goods and, in the latter, a promising new source of supply.

The goal for each of the three worlds is to find a way to accommodate the needs, goals and fears of the other two in a manner that allows contracts to be entered into that will satisfy all three.

The End of a Stereotype. It is easy to stereotype the early ethanol and biodiesel plants. But the stereotype contains a ring of truth and understanding it goes a long way to understanding the way the sellers and marketers of feedstocks have long done business.

The ethanol stereotype goes like this: The early ethanol plants were usually located not only near a firm source of supply, their investors and owners were the same persons as the suppliers. Either the plant was organized on a cooperative basis, requiring the members to contribute a certain amount of corn to the operation, or else it was located near a storage silo that collected all the corn in the vicinity. Corn availability was thus never an issue. The local farmers were quite literally invested in the plant, and since the transportation cost to the ethanol plant was so low, even in times of shortage the plant would be adequately supplied from local sources. Hedging the corn price was unnecessary because the suppliers formed a natural hedge: if the price of corn increased, the farmers got paid more for it, making the price to the ethanol plant of less concern to them. Offtake was taken care of by political pressure in the Farm Belt that ensured someone would buy all the ethanol they could produce with tax subsidies that kept up the price.

The biodiesel stereotype goes like this: Hobbyists and true believers had been making home-brew biodiesel from local supplies, such as yellow grease from the neighborhood café, for years.

The development of the Internet put these hobbyists in touch with one another, and they invested together to pool their supply resources. Offtake was simple, since the hobbyists tooling around in their VW's could use all they could produce. Price was no object, this was a crusade!

These are stereotypes and probably no plant has a history that matches either stereotype entirely. But the older plants share many characteristics with the stereotypes. On the other hand, today's plants exist in a world

completely foreign to these stereotypes. Whether the plants are located in the Midwest or on the coasts, the investors in the plants are financial people, not farmers. The plants are being built to make money for their investors, with no object to increase the well-being of farmers. The intent is to take advantage of an understanding that ethanol and biodiesel will be sold in new and emerging markets—not just to hobbyists, true believers and those with a political stake in increasing farm production, but essentially to all Americans.

As a result, a new paradigm is needed. Contracts that may have been adequate for the old situation cannot be used in the new one. All sides must learn new terminology and accept new terms if there is to be a convergence of interests toward a mutual desire to maximize everyone's profits.

The Financeable Supply Agreement. If there is one characteristic that is common to written contracts used in American agriculture today, it is that they are brittle. A brittle contract is one that can readily be terminated for the slightest breach by either party. Brittle contracts make sense in agriculture. The parties are each dealing in a commodity, so they reserve the right to choose their counterparties with care. If they are wrong, they would rather have the right to move on to another counterparty than be required to work together to fix the situation. Moreover, everyone is operating on the same expectations. Most terms are well-understood by farmers, brokers, merchants and food industry end-users. Everyone understands the other side's needs in terms of when delivery is to be made, when payment is due and what the quality must be. Everyone also understands the challenges posed by the weather, government action and uncontrollable market forces—and everyone probably has suffered through the same forces together. A contract that is brittle by its terms may not mean exactly what it says, but it will be understood by the parties to place the risk on one party or the other that some failure of performance may mean that they will need to find a new counterparty for the next transaction, or agree to an adjustment in this one. The aggrieved party may choose to be magnanimous, but it may also choose to move on.

In venture finance, a brittle contract governing a critical function of a project simply won't work. Much as a developer will demand that an EPC contractor obtain a parent guaranty or a performance bond to ensure that it will be available to complete the project no matter what, so venture capitalists will demand that a supplier of feedstock—whose market is being expanded by a well-capitalized plant that will consume millions of bushels of corn or millions of gallons of vegetable oil a year—step up to the plate to agree on a more flexible contract.

The Fuels Industry: Market-Price Based Heaven. For the most part, the fuels industry has operated on the basis that it can pass on the price of fuel and additives to consumers, an expectation that has been proven correct by the recent run-up in fuel pump prices. Accordingly, buyers of fuel are ordinarily only interested in buying and selling at the market.

Offtake agreements based solely on the current market price present serious issues in financing a biofuels plant. Prices may be high today, but these are historic highs—and historic lows, adjusted for inflation, occurred fairly recently. Moreover, there is a basic conundrum attached to biofuels investment: the prices of the commodities that go into biofuels—mainly corn and natural gas (or, increasingly, coal) for ethanol, and vegetable oil and methane for biodiesel—have historically fluctuated, as have the prices of the commodities produced. However, there is essentially no correlation in the fluctuations in these prices. Thus, it is as likely at one point in time that corn will be high and ethanol low or vice versa. A buyer of ethanol at the market that can pass its price along to consumers may be happy with this situation, but a financier of an ethanol plant buying high-priced corn to sell as

low-priced ethanol will not be. Essentially, the financier wants to assure a profit when corn prices are high as well as when they are low, and when gas prices are low as well as when they are high.

Solving the Dilemmas: Informed Negotiation. Obviously, none of the three parties is going to get exactly what it wants. Who will get most of what it wants will depend on the relative negotiating strength of the parties as well as their understanding of the process. Each negotiation will be different.

A well-informed party will bring to the table not only its understanding of the relative economic standing of the parties—critical for being able to leverage that position into concessions—but also the relevant legal tools. Among these tools are:

- Article 2 of the Uniform Commercial Code, adopted in some form in all the states but Louisiana, and governing transactions in goods within the United States
- The United Nations Convention on the International Sale of Goods (the CISG), effective in most commercially important nations, including the United States (but excluding Great Britain, Japan and India), and, unless excluded by agreement of the parties, governing transactions in goods between persons whose principal place of business is in different member states.
- Various forms of hedging, including forward contracting using publicly traded futures, options, puts and calls, as well as privately traded futures, floors, caps and collars.

Article 2: One-Stop Shopping for Domestic Sales Law. Article 2 of the Uniform Commercial Code is in effect in some form in every state except Louisiana. It applies by its terms to transactions in “goods,” which will include everything bought and sold in supply and offtake agreements. It is thus both the best resource for the meaning of these agreements and the opportunities to find common ground among suppliers, offtakers and the developers and financiers of biofuels projects.

Article 2 contains default provisions that apply when the parties have not agreed to cover the term, which can even include a price term. A general principle of Article 2, however, is freedom of contract. With limited exceptions, the parties are free to alter the default provisions of Article 2 to suit their own agreements. It is important to note that the default provisions for the most part protect the buyer of goods, as sellers are expected to be able to protect themselves by written contracts.

Among the most important provisions of Article 2 as applied to supply and offtake agreements are the provisions on output and requirements contracts, contained in Section 2-306. Generally, an ethanol plant will seek to find a single supplier for all its requirements of corn or oil, and one or more purchasers that will together take all the output of the plant, including secondary products such as distillers’ grains and glycerine. Section 2-306 gives meaning to the words “requirements” and “output” by limiting the amount that must be supplied or bought to being reasonably proportionate to estimates, or to ordinary commercial expectations, in each case also implying an obligation of good faith.

Take a typical ethanol plant with a nameplate capacity of 60 million gallons. Under 2-306, the corn supplier would be liable to supply not only enough corn for 60 million gallons, but for the excess capacity that might be achieved by a commercially reasonable debottlenecking of the plant. On the other hand, the supplier might only be required to supply less than the full nameplate capacity based on reasonable fluctuations for preventive

maintenance. The offtaker that agrees to buy output would be subject to the same fluctuations. On the other hand, if the developer were to double the plant's size, a requirements contract would not require the corn supplier to supply the doubled capacity.

Another critical provision is section 2-612. This relates to breach of installment contracts. Essentially, all output and requirement contracts will be installment contracts. Section 2-612 concerns whether a breach of a single installment allows for damages for breach of that installment only, or goes to the entire contract. This section goes directly to the question of how brittle a supply or offtake agreement might be.

Typical contracts in the agricultural industry will allow a termination (more properly, a cancellation) of the contract for any breach, regardless of whether the breach is simply a late payment or delivery or a full repudiation of the contract. Section 2-612 will allow that cancellation provision to be enforced, if that is what the parties desire. The advantage of 2-612, though, is that it provides readily understandable standards for when cancellation would or would not be imposed if the parties did not want such a brittle provision as the one contained in that standard contract. Instead, if the parties want to distinguish between situations in which the breach should result only in damages and situations in which cancellation could be imposed, simple reference to "breach of an installment" and "breach going to the whole contract" will provide standards that can be readily understood by both parties and can be readily enforced by a court.

The CISG: Traps for the Unwary. The CISG is an international treaty to which the United States is a party. As such, it has the force of federal law under the Supremacy Clause of the Constitution. By its terms, the CISG applies to sales of goods if the parties to the contract for sale have their chief executive offices in different countries, both of which are member states of the CISG. Member states include Canada, Mexico, China, Australia, all of Europe (including Russia) except for Great Britain, Portugal and Albania, and much of South America. Other important nonmember states include Japan, India, southeast Asia (apart from Singapore) and Brazil.

A critical thing to remember is that the CISG applies if the parties are in different member states unless they have expressly agreed that it not apply. A typical choice of law clause in a contract between parties in New York and Canada might agree that the applicable law will be "the laws of New York" or even "the laws of New York excluding its choice of law principles." Nonetheless, the CISG would apply, even if the parties did not realize it would. It can only be excluded by specific language such as "the laws of New York excluding the U.N. Convention on International Sale of Goods."

When the CISG applies, it will sometimes lead to results that are very different from results under Article 2 of the Uniform Commercial Code. One thing to remember is that the CISG has definitive versions in all six United Nations languages: English, French, Spanish, Chinese, Russian and Arabic. Thus words that might seem to have clear meanings in English may have different meanings in a different language. An important term to add to any international agreement is one that makes a particular language, presumably English, the language of any dispute resolution.

A critical distinction between Article 2 and the CISG is in the question of whether a breach of an express term will lead to a remedy. Under Article 2's "perfect tender rule," a buyer of goods has the right to reject goods that do not conform to the contract, regardless of the size of the breach (note that in the case of an installment contract, this may not lead to the right to cancel the whole contract, but only that one installment). Under the

CISG, on the other hand, unless a breach is determined to be a fundamental breach, the buyer has no recourse at all.

Biodiesel plants often use feedstocks from abroad, including canola from Canada, palm oil that may be transshipped from Singapore or soy oil from South America. If the biodiesel is to be sold domestically, the buyer of the feedstock may find itself in the middle of a bad situation, in breach of the domestic offtake agreement because of the flaws in the feedstock but without recourse against the seller. It is important to draft international contracts with these issues in mind.

Force Majeure: Another Trap for the Unwary. Typical supply and offtake agreements will include force majeure clauses, excusing performance when a party is unable to perform due to causes beyond its control. These clauses are important and should ordinarily be included in all supply and offtake agreements.

The problem is making them mesh. If the supplier is unable to perform, it is imperative that its nonperformance be considered force majeure in the offtake agreement, and vice versa. If not, the plant may find itself either with a build up of unusable feedstock, or with no supply and a claim for breach by the offtaker.

Have You Been Working With the Railroad? All the well-negotiated supply and offtake agreements in the world will avail you nothing at all if you, or your supplier or offtaker, are unable to procure adequate rail transportation to meet your needs. As the number of ethanol and biodiesel plants increases, the need to move either the supply or the offtake or both by rail becomes more critical, exactly at a time when rail capacity is at a premium and the ability even to obtain rail cars can be extremely limited. For most ethanol and biodiesel developers, the best choice is to put the onus on the supplier to deal with the railroad, as the supplier most likely will have far better leverage due to far greater volume. In any event, allocating the responsibility of dealing with the railroad is critical.

Direct relations with the railroad are governed by law outside the Uniform Commercial Code. On the other hand, there are terms in the UCC that will allocate the risk of obtaining transportation. Section 2-319 defines the term "F.O.B." in connection with domestic sales of goods. Regardless of whether the contract specifies F.O.B. place of origin or place of destination, it is the seller's responsibility to procure (as opposed to pay for) transportation. Also note that in international trade, the term FOB, as defined in INCOTERMS, has a somewhat different meaning and may require appropriate substitution.

Hedging: Just Another Form of Risk Management. It is remarkable to those who understand hedging how frightened the inexperienced are about the concept. Hedging is, in essence, just another form of insurance. People who would never think of not buying insurance, and who would never consider the premium wasted even if that the insured events did not occur, nonetheless think that if they entered into a proper hedge of their supply or offtake, and prices moved in a different direction, that they had somehow lost profits they had somehow "earned."

But there really is no meaningful difference between the expense of an appropriate insurance program and the expense of an appropriate hedging program.

Hedging Comes in Many Forms. Commodities hedging often invokes a mental image of the floor of a commodities exchange such as the Chicago Board of Trade with colorfully dressed buyers using hand gestures to

gain the attention of market makers until the closing bell. This is an accurate image of how futures trading occurs, but it is not the only way to hedge.

The simplest and most complete hedge is a tolling arrangement. One party agrees to supply the plant and buy the offtake, leaving the plant operator with a guaranteed profit, regardless of movements in commodities pricing. There are significant advantages to tolling. It provides certainty and takes away risk. The counterparty is responsible both for the supply markets and the offtake markets, both as to availability and pricing. If those markets change radically for the worse, the plant operator will be unaffected, at least so long as the tolling partner remains solvent.

The flip side, of course, is that the plant operator's profits will be limited to the agreed margin, regardless of the direction of the markets. During a high price environment, such as we are experiencing in the spring of 2006, it is the counterparty and not the plant operator that is raking in huge profits.

Another way to deal with risk is to buy over-the-counter options or collars. If the plant operator is concerned about a particular cost, such as the cost of natural gas to run a plant, rather than entering into a futures contract for delivery of the natural gas at a particular cost, it instead buys an option. If, at the time the option matures, the market price of gas is below the option price, it buys in the open market. If the price is above the option, it exercises the option. There is, of course, a cost to buy the option, regardless of whether it is exercised, but buying the option puts the plant operator in the position where it is cushioned from prices that might make operating the plant unprofitable, while not being forced to buy at an above-market price should the worst-case scenario not occur.

Collars work like options, but with both a floor and a ceiling to the commodity price. In reality, they are two option contracts, a put and a call. The reason a plant operator might buy a collar instead of an option is that they are often priced significantly lower. If price increases, they work exactly as the option described above. If prices drop below the collar price, though, the counterparty will exercise its put option and require the plant to buy the commodity at the lower collar price. This is why they are priced lower than options; the counterparty is also able to hedge its risk in the market, since it is assured a minimum price for the commodity.

There are other ways to enter into contracts that will have the effect of a hedge, particularly when there are strategic partners available, such as an offtake purchaser whose interest is more in the certainty of supply than the exact price paid.

And of course, just because there are alternatives to futures does not make describing how futures work inappropriate. Futures are simply contracts to buy or sell a commodity at a particular price at a particular time in the future. Most futures markets are regulated by the Commodities Futures Commission, which functions as to futures markets much the same as the Securities and Exchange Commission does with respect to stock markets. Futures markets include the Chicago Board of Trade, the Chicago Mercantile Exchange and the New York Mercantile Exchange or "NYMEX".

The difference between futures and options is that in futures the contract for the future purchase will be executed at the futures price regardless of what the market price is at the time the contract expires. Thus, if one were to agree to buy corn at \$2 a bushel in October 2006, one would actually have to buy that corn at that price

on that date, even if the market price of corn were \$1.20 on that date. Some contracts contemplate physical delivery, while others are settled financially.

Futures have both a cost and can immobilize working capital. In order to enter into futures contracts, a commodities broker will require that the plant have sufficient working capital to meet margin calls. These are requirements to post additional cash when the price of the commodity is moving against the holder of the future. Conversely, when prices move in the plant's favor, it will be the counterparty who will be making margin calls, which will be credited to the plant's margin account. Ordinarily, this will work out by the time the contract expires, with the amount of margin posted aiding one party in making the final cash settlement at the end of the contract.

Hedging Is Neither for the Faint of Heart Nor for the Amateur. People who understand commodities trading are well-compensated for a reason: it is not easy. As someone recently said at a seminar, when asked which way gasoline prices were going, "If I knew, I wouldn't be here, I'd be buying or selling oil stocks."

Hedging should only be done by professionals who understand the markets and are used to their surges and countersurges.

It is important to distinguish between contracts that are often offered by suppliers that agree to provide advice about hedging, and actually having a hedging program in place. An adviser can provide intelligence about the direction of markets, but that is only a tiny part of the information that goes into a hedging program. They will not be able to tell you how much to hedge and when, because that is not their business. Factors that go into the final calculation—which include the availability of capital, the degree of risk to which the plant is willing to be exposed and the needs of investors—are far beyond the scope of what an outside adviser can provide. Instead, the final decisions can be made only by the plant operator itself.

Conclusion: Be Careful Out There. Supply, offtake and hedging agreements are critically important to any ethanol or biodiesel plant. For plants financed by outside investors, they create a clash of three worlds that until now have not been known to communicate well with one another. However, there are tools available to soften this clash, and it is important to get proper professional advice in attempting to do so.