



**Statement of Jerry Taylor  
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MFA Oil Company**

**Co-Founder  
MFA Oil Biomass LLC**

**Testimony Before  
Committee on Agriculture Subcommittee on Conservation,  
Energy and Forestry**

**Formulation of the 2012 Farm Bill: Energy and Forestry Programs  
May 18, 2012**

Chairman Thompson, Ranking Member Holden, and members of the Subcommittee, thank you for the invitation to testify today on farm bill energy title programs, in particular the Biomass Crop Assistance Program (BCAP).

I am Jerry Taylor, President and Chief Executive Officer of MFA Oil Company. I also serve on the boards of Mid America Biofuels, the National Cooperative Refining Association, and the National Council of Farmer Cooperatives.

Formed in 1929, MFA Oil Company is a farmer-owned energy cooperative in Missouri with 40,000 members. Before ethanol as we know it today, MFA Oil Company was producing fuel grown by our farmers. Prior to the oil embargo of the 1970s, MFA Oil was one of the early producers of gasohol, which started America on the long road towards energy security and energy independence. MFA Oil was able to make that bold move because of its lasting history in Missouri and strong relationship with the region's farmers.

From those days of gasohol, MFA Oil today supplies fuels, lubricants, and propane to customers in Missouri, Arkansas, Oklahoma, Kansas, Indiana, Kentucky, and Iowa. Through a subsidiary, MFA Oil operates Break Time convenience stores in Missouri and Arkansas, and Jiffy Lube and Big O Tire franchises in Missouri. MFA Oil also is an investor in a biodiesel production facility in Missouri, offers E-85 at over 50 locations, and has a 10 percent ethanol blend at more than 300 MFA Oil fueling stations.

In 2008, we began laying the groundwork to expand our energy services and take on America's most important and most difficult renewable energy sector – biomass.

Beyond our willingness to consider new fuel opportunities, our pursuit of this expansion was triggered when I was informed by one of our members in southwest Missouri that they were switching from propane to solid fuel pellets because of the significant operational cost savings and the elimination of big price swings in the oil markets. This change was driven by our innovative farmers and our cooperative has an obligation to find the best fuel prices for our farmers. Those conversations spurred our dive into using *Miscanthus Giganteus* as a new energy source for rural America. Also important were lots of policy changes like Missouri's Proposition C that mandated a renewable electricity standard of 15 percent by 2021. The latter has triggered significant activity among electricity providers, including among coal plants exploring co-firing coal with biomass products.

In addition to Missouri's renewable energy law, we saw an opportunity in the state's high rate of underutilized, marginal farm land, combined with a significant density of poultry farmers who are very vulnerable to a rise in heating costs necessary to heat poultry barns.

MFA Oil Company's biomass initiative took a major step in 2011 when we partnered with Aloterra Energy LLC to form MFA Oil Biomass LLC (MFAB), a separate small business with the mission of leading the cooperative into the renewable energy field. MFAB is utilizing our existing knowledge of farming and the energy markets to form a completely vertically integrated renewable energy supply chain. This vertically integrated system provides farmers an energy crop source, unique harvesting and planting equipment for the crop's rhizomes, specialty harvesting services for the mature crop, processing technology, and marketing services to get the best return for the farmer and the cooperative.

Our story is one of entrepreneurial spirit inherent in American agriculture—we saw a need, assessed our options, and applied know-how, skill and hard work to develop a solution. It is also a story of the role that cooperatives play in bringing individual farmers and ranchers together to seize new opportunities in the marketplace that they would never be able to take advantage of as individuals. As a co-op, we are able to work hand-in-hand with producers as valued, trusted business partners, allowing farmers to boost their earnings from the marketplace and diversify their income streams.

For more information about our feedstock and our vertically integrated system, please refer to Appendix A following this testimony.

### **Solving the Chicken and Egg Problem**

In October 2010 when the U.S. Department of Agriculture (USDA) issued the final rule for BCAP, they noted the following:

*BCAP will address a classic chicken-and-egg challenge: if commercial-scale biomass facilities are to have sufficient feedstocks, then an established, large-scale energy crop source must exist. Conversely, if profitable crop production is to occur, then a viable consumer base must exist to purchase the product.*

In our experiences, this could not ring truer. It is hard to articulate just how difficult it was, and still is, to educate farmers on a strange new plant called *Miscanthus Giganteus*. This was not an attempt to plant a known crop in a new industry, but an unknown crop in a non-existent industry. Add to that a

crop that was too expensive (at \$1,400 per acre) and was being planted by hand. And we were asking farmers to spend capital without a return on investment for three years.

Our strategy since the 2008 Farm Bill was enacted has been to leverage BCAP funding to take the best energy crop in the U.S., mechanize all logistics, and use cutting edge technology to quickly mature the industry. In FY2011, USDA approved \$14.6 million in BCAP funding for MFAB's three project areas – central Missouri, southwest Missouri and northeast Arkansas. USDA also approved \$5.7 million for one project area in Ohio and Pennsylvania sponsored by our partners, Aloterra Energy LLC.

This money is going to local farmers to establish *Miscanthus Giganteus* to be used as an energy feedstock. Leveraging BCAP funding, MFAB and Aloterra Energy LLC have signed up a combined 18,000 acres to grow *Miscanthus Giganteus* in these four project areas. To date, 225 family farmers have dedicated acres to the new energy crop and we anticipate this number will grow to over 2,000 as our projects scale up to maturity at 50,000 acres per region. These families will be the backbone that will help reduce our dependence on foreign oil by displacing the current fossil fuels that are used for agricultural heating and power plants. All of this is occurring on land that had been underutilized or was earning very little. Our target farmland is marginal and/or underproductive that is not used for row crop production.

The 2011 BCAP funding was a critical first step and allowed us to leverage our resources to develop a four-row planter, plant massive propagation acres, and get the costs down below \$750 per acre. To that end, the BCAP funding was essential to bridging the gap with our producers to take that leap of faith.

We believe in starting with the farmers and the feedstock – the rest will follow. We would not leverage our future or BCAP dollars on an unproven technology, but instead started with proven markets and the proven technology of solid fuel pellets. It was the only thing that made sense to us and our farmers. At maturity MFAB's three project areas will have 150,000 acres and produce 1.8 million tons of biomass per year. In liquid fuel language, this would create a twenty-year reserve of 93,000,000 barrels of liquid fuel, using the same language and conversion methods of the oil and gas industry. (150,000 acres x 12 tons per acre = 1,800,000 tons x 15.5 MMBTU/ton = 27,900,000 MMBTU / 5.8 MMBTU per barrel of crude oil = 4.66 million barrels of crude oil x 20 year life of crop = 93 million barrels of crude oil equivalent)

The results of our work through BCAP have been both exciting and stunning. Almost immediately following USDA's funding to start our BCAP project areas, we witnessed a flurry of activity from national and international entities to introduce dozens of cutting-edge technologies and manufacturing projects to convert our crops into green fuels, green chemicals, solid fuel pellets, and consumer products ranging from car parts to construction materials.

### **BCAP Uncertainty**

While USDA committed resources to fund our first year of a seven-year model to have 50,000 acres planted in each region by 2014, we had to adapt our model and pace of implementation due to the drastic funding cuts to BCAP in FY2012. As a result, we submitted BCAP applications to the Farm Service Administration (FSA) that had comprehensive and pragmatic adjustments to our past budgeting

projections with the goal of maintaining the significant momentum and success that has been created. Our goal is to ensure that the BCAP dollars already invested will result in a successful project.

However, funding uncertainties – BCAP funding cut from \$432 million in FY2011 to \$17 million in FY2012 – the timing of the farm bill reauthorization, and inconsistent federal energy policies make us seriously question continued investments at current levels in this renewable energy industry. Despite our significant successes and ability to sign up 18,000 acres in partnership with Aloterra Energy LLC in only three months, the absence of a clear direction in federal policy is forcing us to scale back each of our project areas.

We recognize that the energy security problems in the U.S. cannot be fixed overnight. We also recognize that we need to consider the entire portfolio of petroleum and renewable tools to solve our problems. However, those of us tackling the most difficult part of this industry and likely the most promising for rural America – biomass – are in a situation where it is impossible to plan six months out, let alone the three to five years necessary to properly run a company.

America needs farmer participation if we are to solve our energy problems. We will need millions of tons of biomass for biobased products and liquid fuels. I truly believe we need programs like BCAP to solve the chicken and egg problem. However, a BCAP program that exists one day and is gone another, that is funded one day and is cut another, will ultimately do more harm than good. It will set the biomass industry back ten years because farmers will lose faith in the industry.

Why is BCAP so important to solving our energy security problems while also creating rural manufacturing? Because most of the entities in the renewable energy industry are focused on one technology – liquid fuel – the biomass to feed that technology is an afterthought. In contrast, we and other similar companies are using BCAP to accomplish the following:

1. Educate farmers about this new cash crop and industry.
2. Develop all of the custom farming equipment necessary to make this possible.
3. Develop thousands of acres of energy crops and prepare our farmers for that breakthrough technology when it does occur.
4. Simultaneously develop multiple biomass markets in solid fuel pellets, biobased products, and biobased chemicals.
5. Make solid advancements in fiber based processes to replace a host of petroleum products ranging from Fiberglass to car parts.

No other federal program has this broad effect on America's renewable energy industry. BCAP is going to change the economies of rural America and therefore all of America. Not to be forgotten, while we are developing all of these other product lines, we are also primarily responsible for supplying the much needed test tonnage so liquid fuel companies can develop the breakthrough that will change how we fuel America. BCAP is a game changer, but only if administered properly and funded consistently.

All efforts are being made to reduce the per-acre planting costs of *Miscanthus Giganteus* and to move the industry quickly to a point that BCAP is no longer necessary. To support our words with actions, both MFA Oil Biomass and Aloterra Energy have offered to sign a contract that we will not request BCAP dollars in the future if we were to receive a guarantee of three years of adequate funding to

properly plan and invest our way away from government subsidies. Consistent funding is the story here. Consistent funding is critical because expanding our renewable energy industry cannot be done in a laboratory or in theory. Farming is advanced by doing. Our farmers are learning about Miscanthus Giganteus and the equipment by getting into the fields with us, observing, and then providing great ideas and pragmatic solutions to problems. You cannot ferret out all of the complexities of such a unique rhizome-based crop and independently scale up to 200,000 acres in the four project areas after only one year of funding. Because we own the planting supplies, the BCAP funding is not leaving the project area, but is instead being reinvested in the local economy while also reducing planting costs.

As is the case with many farm bill titles (research, rural development, energy, etc.), programs that are authorized but never funded are of no help. Likewise, programs that are deprived during the appropriations process never reach their full potential. We hope this will not be the case for BCAP going forward.

### **BCAP Reauthorization**

Our co-op and its farmer-owners support reducing our nation's deficit and tackling the rising debt. In fact, U.S. farmers have led the way, establishing a fiscal record that is unique among federal policies. We understand tight budgetary constraints will be a major issue in the 2012 Farm Bill and encourage careful review of all programs. In doing so, I believe you will find BCAP is worthy of continuing and should any funding be made available for the energy title, I strongly encourage you to direct it toward this game-changing program.

BCAP, if reauthorized in the 2012 Farm Bill, will be viewed in the future as a sleeper program that changed the trajectory of renewable energy forever. BCAP's most important long-term influence on the renewable energy market is to drive down the cost of the best perennial crops and to increase the efficiency with which they are planted. That is how we change our future, grow our own oil fields, and make "energy security" a meaningful phrase.

Beyond a simple reauthorization, we offer the following suggestions and reactions to existing legislative proposals related to the functionality of the program.

***Reimbursement Rates.*** As it is implemented today, BCAP acknowledges the need to incentivize farmers to take on the risk of energy crops and weather the two maturation years with little or no income on their crops. Important to obtaining farmer participation is maintaining the 75 percent reimbursement rate for establishing the crops.

BCAP is not a loan guarantee program for a specific technology, nor is it a program that bets on any technology to convert biomass into a biobased product or fuel. Rather, BCAP is intended to solve the front-end problems of this industry – getting feedstock planted **and** using BCAP to reduce the historically prohibitive perennial crop planting costs. BCAP has placed us on the path to accomplish exactly that. Two things are accomplished through 75 percent reimbursements:

1. The farmer can take a risk on an unknown industry despite many issues that could harm a project; and
2. The project sponsor can find ways to reduce costs.

MFA Oil Biomass is leveraging BCAP to amass assets in seed sources and equipment that will allow America's farmers to plant this ten to fifteen ton per acre crop at \$250 an acre in about three years. As previously noted, prior to BCAP this cost was at \$1,400 or above. This eliminates the need for BCAP entirely and allows us to make BCAP a stepping stone program and not a new long-term farming subsidy.

Reducing the establishment reimbursement rate forces a project sponsor to forego long-term planning and instead focus on a short-term strategy to do whatever it takes to convince a farmer to pay fifty percent of the costs and get acres planted. This eliminates progress, breakthroughs, and the ability to have a project sponsor work in a true partnership with their farmers. A concrete example could be a decision to continue the hand planting of the crop and to forego long-term investments in manufacturing mechanized planting systems.

Instead, the program could cap funds to plant new acres under BCAP to three years. For example, MFA Oil Biomass intends to scale up each project to 50,000 acres. We averaged about 4,000 acres per project area with 2011 funding. BCAP could limit our project to two more years of new acres. So, if the FSA funds 7,000 acres in 2013 and 10,000 in 2014 – that would be the final year. MFA Oil Biomass would be forced to work out a funding mechanism with its farmers to plant the final 29,000 acres. After three funding years, a project area should be able to reduce planting costs to no longer need BCAP or obtain traditional financing after proving the economics of the specific project. However, this can occur only with consistent congressional funding and a three-year plan. Our current experience with project funding uncertainty makes planning for the future impossible.

***Environmentally sensitive lands.*** As previously stated, our efforts are occurring on land that had been underutilized or earning very little. Our target farm is comprised of marginal and/or underproductive land that is not used for row crop production. The entire biomass industry is based on the premise that it will not take land from food acres. To push us to compete with row crop acres is to push us back towards the very problem we are trying to solve with cellulosic ethanol.

We do not have an issue with eliminating land that has never been farmed – as the existing rule dictates. We completed a thorough Environmental Assessment under the National Environmental Policy Act (NEPA) that assesses whether or not growing *Miscanthus Giganteus* would have a significant impact on the environment, which included assessing the effects on wildlife. Additionally, USDA's Natural Resources Conservation Service (NRCS) receives funding to complete mandatory conservation plans with each field planted taking into account the effects on endangered species and wildlife. For our project areas, NRCS mandated a 25-foot border around each field as well as mandatory monitoring and reporting expectations. This is a second layer of protection for the environment. In our experience, we have found existing federal law being used as intended and fully protecting environmentally sensitive lands. To place further limitations on eligible land may hurt future opportunities.

***Geographic and Feedstock Diversity.*** Years of economic analysis goes into a biomass project area before a private company decides to invest. Therefore, the markets are already vetting the appropriate geographic regions for a biomass crop or technology, which is determined on a host of inputs that include existing regional farming practices, local transportation infrastructure, access to markets, climate for specific crops, and more. MFAB would recommend that the FSA administer BCAP applications based on what comes to the program from the private market and not give preference to a region because

it has fewer or no existing projects or a new energy crop. There are economic reasons why more arid or dry regions will see less activity. Conversely, there are economic reasons as to why highly productive row cropping regions will not see large projects but regions with marginal acres will see more activity. Likewise, there are reasons why regions with access to transportation infrastructure will see more activity. Legislation should work in cooperation with the markets to produce more economical projects.

***Funding for Existing Projects.*** MFAB also encourages the Subcommittee to consider how the program treats existing projects that have received funding. It is important to allow continuation of funding of such project sponsors to ensure project maturity. We base this recommendation on our experience with BCAP for two straight years. We have been consistently told that current regulations dictate the assessment of other projects to ensure crop diversity. This has the ill-advised effect of pulling the plug on existing projects that may be performing very well but are not yet mature enough to stand alone. USDA needs to have the flexibility to continue funding programs to ensure projects are seen through to maturity and to ensure the FSA has the tools needed to be a good steward of public funds. I look forward to working the Subcommittee on legislation language that ensures existing projects are not put at disadvantage when funding decisions are made.

In closing, meeting the food and energy needs of a growing world population is a daunting task but one that will be accomplished by fostering American agriculture's pioneering spirit. MFA Oil Biomass has harnessed that spirit to advance opportunities for our farmer members and we are overcoming the proverbial chicken-and-egg problem by successfully leveraging BCAP the way it was intended.

Our farmer-owners see incredible opportunities as this endeavor takes off. They recognize the potential to offer America's rural communities permanent manufacturing jobs, a new cash crop for farmers, and a local source for green heating, renewable liquid fuel sources, biobased chemicals, green building materials, water treatment systems, soil reclamation systems, and consumer packaging.

Again, thank you for the opportunity to be with you today and I am happy to respond to any questions.

## Appendix A: MFA Oil Biomass LLC

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### Project Description

#### About Our Crop

MFAB recognized early on that having a versatile feedstock, something able to be used in multiple products, was critical to success. MFAB's extensive research confirmed the potential of Miscanthus x. Giganteus as not just a viable feedstock but one with incredible potential. Miscanthus Giganteus is rated to grow from hardy zones 4-9, and unlike other similar species, it can grow in temperatures as low as 43° F. A Miscanthus Giganteus stand is estimated to last 15 to 20 years or more after the initial planting.

Miscanthus Giganteus is a C4 warm season perennial grass that is a non-invasive, sterile hybrid that moves slowly by rhizome expansion. The plant also is drought and pest resistant, and needs less fertilizer than food crops, which translates into less run-off into the region's water systems. In fact, a Biomass Crop Options and Supply Chain Feasibility study performed by Missouri Biomass Farmer Supply Chain Consortium and funded by the Missouri Agricultural and Small Business Development Authority (MASBDA) found that Miscanthus can filter run-off, reduce the use of fertilizers, act as a disposal option for animal waste, improve water quality and soil health, and more.

The grass is also extremely efficient in sequestering carbon from the air which is an added benefit as carbon markets further develop. We are in the process of confirming third party studies showing that Miscanthus has a ratio of 53:1 in terms of carbon sequestered per acre versus the carbon emitted in farming/harvesting the crop itself. Furthermore, producers have found that by planting Miscanthus, their soil quality has improved due to decreased compaction and increased soil organic matter. This latter information has dramatic consequences for America's farmers.

Regarding efficiencies, third party studies (and we are confirming with our own teams) establish Miscanthus as having a 36:1 energy-in to energy-out ratio, making it very efficient and the consumers of this product will therefore not have to address assertions that energy or biobased products sourced from Miscanthus are not truly renewable. Lastly, at 10-15 tons per acre, Miscanthus doubles its nearest competitor in tonnage and increases the farmer's return. It is also projected to produce three times more gallons of ethanol per acre than corn.

Below is a rough comparison of the economics of Miscanthus, long considered cost prohibitive, against the funding of all other BCAP projects funded in 2011.



Name	Main Crop	Estimated	Estimated	Cost per Acre	Total Cost	MMBTU/T on	Life of Crop (Years)	Total MMBTU's Over Life of Crop	Cost per MMBTU
		Acres for 2011	Annual Yield of Per Acre						Over Life of Crop
BCAP Project Area 1	Switchgrass"	20,000	4.00	\$310	\$6,200,000	14.4	10	11,520,000	\$0.54
BCAP Project Area 2	Miscanthus	6,588	12.00	\$877	\$5,775,000	15.5	15	18,380,520	\$0.31
BCAP Project Area 3	Miscanthus	3,400	12.00	\$1,124	\$3,822,000	15.5	15	9,486,000	\$0.40
BCAP Project Area 4	Miscanthus	3,850	12.00	\$1,251	\$4,815,000	15.5	15	10,741,500	\$0.45
BCAP Project Area 5	Miscanthus	5,344	12.00	\$1,067	\$5,700,000	15.5	15	14,909,760	\$0.38
BCAP Project Area 6	Camelina*	1,000	0.48	\$370	\$370,000	20.5	1	9,840	\$37.60
BCAP Project Area 7	Switchgrass	20,000	4.00	\$310	\$6,200,000	14.4	10	11,520,000	\$0.54
BCAP Project Area 8	Camelina*	50,000	0.48	\$490	\$24,500,000	20.5	1	492,000	\$49.80
BCAP Project Area 9	Poplar#	7,002	5.00	\$2,446	\$17,127,000	16.0	15	8,402,400	\$2.04

\*Assumes 1.2 ton per acre yield of camelina seed with 40% oil composition

"Assumes same price as Project Area 7 due to lack of funding information

# Assumes 15 year cycle per Zeachem website with 5 harvests, 15 tons per harvest, or 5 tons per year

ONE ACRE COMPARISON~	Main Crop	BTU's per ton	Estimated	# of Harvests	Total MMBTU's Over Life of Crop	Cost per MMBTU
			Annual Yield of Per Acre			ONE ACRE Over Life of Crop
One Acre	Miscanthus	15.5	12.00	15	2,790	\$0.39
One Acre	Poplar	16.0	5.00	15	1,200	\$2.04
One Acre	Switchgrass	14.4	4.00	10	576	\$0.54
One Acre	Camelina	20.5	0.48	1	10	\$43.70

~ Used per acre cost average for each individual crop

Two significant points above – Miscanthus has no equal in MMBTUs over the life of the crop and we have the cheapest per BTU cost using BCAP funding. We believe these points create a strong argument that we are a very good investment of BCAP dollars. This data strongly supports our approach and our emphasis on a vertical integration model that allowed us to plant more efficiently than the above crops (switchgrass, camelina, and poplar) that have well over a decade head start, have existing planting systems, and are well known crops to potential farmers. We are singularly focused on getting crop costs down and into the hands of our farmers.

Finally, in order to garner approval under BCAP, we had to complete a thorough Environmental Assessment under the National Environmental Policy Act (NEPA). The Final EA (available on USDA's website) confirmed that the crop has a scientifically sound and clearly established record and will not have a significant environmental impact on the region.

## **About Our Model**

We use the phrase “vertical integration” frequently in our daily work. This model grew out of two years of research and frustration in trying to understand the best way to enter into the biomass industry. Growing, harvesting, and processing crops whose sole use is an energy source is something that is in its infancy. MFAB's owners realized that to develop farmer support we had to understand each aspect of our supply chain and be able to answer every question to ease farmer concerns and gain commitment. After extensive research, we came to the conclusion that the only way to control our destiny in this nascent industry was to rely on ourselves and become experts in each area of our own supply chain that we controlled. Also, the economics of biomass – high volume and low margins – dictates this model for survival.

From our vertically integrated model and emphasis on making *Miscanthus Giganteus* inexpensive to plant evolved our approach to our biomass acres as “oil fields” of liquid fuel biomass reserves. Focusing on a true “feedstock first” viewpoint, we are agnostic as to conversion technologies. We are only interested in what makes economic sense and what has the best risk-reward profile.

MFA Oil is already supplying fuel, including propane to thousands of farmer members and non-members in each state where we operate. Therefore, MFAB is well positioned to introduce a new fuel source to existing customers and to create new fuel markets. MFAB is developing biomass supply and heating systems for existing MFAB members that already purchase propane – specifically Farm to Fuel – a new start up that has designed and is producing a high efficiency biomass furnace. With approximately 100 of our pellet stoves in operation today, many customers are already transitioning their heating systems to be compatible with our pellets. Last, if necessary, locating our facilities near transportation infrastructure allows MFAB to access international pellet markets.

Most other entities in this industry are focused on one technology and biomass is an afterthought. In contrast, MFAB is not only developing the biomass but is also simultaneously developing multiple biomass markets in pellets, biobased products, biobased chemicals, and we are making solid advancements in fiber based processes to replace a host of petroleum products ranging from Fiberglass to car parts. While this is occurring, we are also supplying significant test tonnage to liquid fuel companies developing their different types of liquid fuel technologies.

Our future plans entail building biorefineries inside our biomass reserve areas that make multiple higher value products that each replace part of a barrel of oil. This allows a conservative and methodical approach, instead of betting our future on the success of a specific conversion technology. Dedicated energy crops require the cultivation of farmer relationships and a vertically integrated model that assures the farmer that all of the pieces are in place for success. Our emphasis is on working in partnership with our farmers from soil to market.

### **Our Potential**

The four-year goal of MFAB is to establish approximately 50,000 acres of *Miscanthus Giganteus* in each of its three project areas. The 50,000 acre goal will enable each area to process approximately 600,000 tons of biomass per year. Each ton contains about 15,500,000 BTUs, which means at full maturity each project area can produce enough energy to power 65,000 homes or produce 1,600,000 barrels of renewable liquid fuels each year.

For all three project areas combined, third party feasibility studies prepared by Environ International Corporation anticipate a \$150 million annual economic impact from growing this new energy crop, while creating 2,700 new jobs.

Additionally, we have seen our potential fuel pellet markets serving agricultural heating needs explode. To keep up with demand, MFAB has purchased a pellet stove company and is rapidly developing this market. Displacing only 35 percent of the propane market in southwest Missouri and northwest Arkansas would create an annual pellet market of 600,000 tons. MFAB has also completed extensive side by side comparisons to propane with Tyson growers with outstanding results for the *Miscanthus* pellets.

The existence of MFAB backed by our committed farmers has led to dozens of meetings with technology providers from around the U.S. as well as international companies, all seeking to leverage our existing acres and assess establishing liquid fuel plants in our project areas. This has triggered several interactions with our state economic development agencies and we are currently assessing the use of several funding sources to accelerate our manufacturing projects.

Beyond the quickly developing liquid fuel and biobased chemicals markets, MFAB is implementing a model to assist small towns across the U.S. in complying with EPA wastewater discharge requirements. Rather than requiring small towns to build multi-million dollar water treatment facilities, MFAB is working with state level environmental agencies to help municipalities comply with regulations by using *Miscanthus Giganteus* to filter the water in conjunction with drip line technologies. This has enormous implications for America's small towns to save money in a tough economic period and to properly clean water to the standards of the EPA without massive capital expenditures.

Another benefit is the reclamation of mine land. Mining companies across the Midwest are working with MFAB to plant *Miscanthus* to increase organic matter, sequester carbon, improve soil drainage and water retention, reduce soil erosion, reduce nutrient leaching, increase wildlife habitat, and reduce water runoff. Hundreds of thousands of acres of mine land are currently sitting idle, but are also continuing to contaminate nearby communities, which is why the planting of *Miscanthus* is critical to stabilizing soil and creating a new source of biomass for regional "green" projects.

Regarding power needs, the city of Columbia, Missouri, has instituted a self-mandated 15 percent renewable energy requirement and the University of Missouri is putting in place a biomass boiler, which will be online June 2012.

MFAB also is working with the Missouri based USDA – Agricultural Research Service, the University of Missouri, and Arkansas State University on several research projects related to *Miscanthus*. We have taken on the role of bringing industry to the table as advisors and to assess new projects and opportunities for the region's businesses and farmers. This includes potential joint projects with the corn growers associations using corn stover, retrofitting underutilized regional power plants to burn biomass, and assessing technologies of Missouri-based companies to commercialize liquid fuel projects. Additionally, we are exploring joint projects with Missouri equipment dealers to assess harvesting and storage techniques and to spur local equipment sales, as well as a 200 ton *Miscanthus* pellet test burn with the City of Columbia to test equipment.

## MFA Oil Company

### Jerry Taylor



Jerry Taylor is president and CEO of MFA Oil Company, which is headquartered in Columbia, Missouri. MFA Oil is a petroleum supply cooperative that serves more than 40,000 farmer-members, as well as retail and wholesale customers, in Missouri and surrounding states.

A native of Omaha, Nebraska, Jerry received a Bachelor of Science in Marketing from the University of Missouri in 1969. After serving with the U.S. Army he spent six years in the banking and brokerage business. He then returned to Missouri as owner-manager of a chain of convenience stores. Jerry joined MFA Oil in 1982 and served in several capacities before being named president in 2003.

He was recently named by the White House as a Champion of Change for Renewable Energy. The award, only given to ten individuals in the U.S., was given in response to the work accomplished by MFA Oil Biomass in 2011. Currently, Jerry serves on the boards of Mid America Biofuels and the National Cooperative Refining Association. Past board memberships include the Missouri LP Gas Association, Missouri Petroleum Marketers Association and Missouri Institute of Cooperatives.

Jerry and his wife Jeannie are the parents of two sons and a daughter and have eight grandchildren. They are bicycling enthusiasts who enjoy exploring and sightseeing on their tandem bike.

Committee on Agriculture  
U.S. House of Representatives  
Required Witness Disclosure Form

House Rules\* require nongovernmental witnesses to disclose the amount and source of Federal grants received since October 1, 2008.

Name: JEROME TAYLOR JR.

Organization you represent (if any): \_\_\_\_\_

MFA OIL BIOMASS, LLC

1. Please list any federal grants or contracts (including subgrants and subcontracts) you have received since October 1, 2008, as well as the source and the amount of each grant or contract. House Rules do NOT require disclosure of federal payments to individuals, such as Social Security or Medicare benefits, farm program payments, or assistance to agricultural producers:

Source: NONE Amount: \_\_\_\_\_


Source: \_\_\_\_\_ Amount: \_\_\_\_\_

2. If you are appearing on behalf of an organization, please list any federal grants or contracts (including subgrants and subcontracts) the organization has received since October 1, 2008, as well as the source and the amount of each grant or contract:

Source: MFA OIL BIOMASS, LLC HAS NOT RECEIVED ANY FEDERAL GRANT DOLLARS, OR FEDERAL CONTRACTS. Amount: \_\_\_\_\_

Source: MFA OIL BIOMASS, LLC WAS A PROJECT SPONSOR BCAP FY 2011. ALL DOLLARS WERE PAID TO FARMERS Amount: \_\_\_\_\_

Please check here if this form is NOT applicable to you: \_\_\_\_\_

Signature: 

\* Rule XI, clause 2(g)(4) of the U.S. House of Representatives provides: *Each committee shall, to the greatest extent practicable, require witnesses who appear before it to submit in advance written statements of proposed testimony and to limit their initial presentations to the committee to brief summaries thereof. In the case of a witness appearing in a nongovernmental capacity, a written statement of proposed testimony shall include a curriculum vitae and a disclosure of the amount and source (by agency and program) of each Federal grant (or subgrant thereof) or contract (or subcontract thereof) received during the current fiscal year or either of the two previous fiscal years by the witness or by any entity represented by the witness.*

PLEASE ATTACH DISCLOSURE FORM TO EACH COPY OF TESTIMONY.