WSDA 2010 Energy Freedom Program Update

A report documenting the status of the Energy Freedom loans administered by the Department of Agriculture

Prepared by

Washington State Department of Agriculture

Daniel Newhouse, Director

December 2010
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Overview

The Energy Freedom program is one element of the state’s *Bioenergy Initiative*. The goal of the *Bioenergy Initiative* is to:

- Establish a market for alternative fuels;
- Reduce dependence on imports of foreign oil;
- Improve the health and quality of life for Washingtonians; and
- Create a new industry in Washington that benefits our farmers and rural communities.

The Energy Freedom program was established in June 2006, in part, to stimulate the construction of facilities in Washington that generate energy from farm sources or convert organic matter into fuels. The Washington State Department of Agriculture (WSDA) administers the responsibilities of the Energy Freedom program for four projects that were awarded loans prior to June 30, 2007. These low-interest loans to public entities, totaling $10.4 million, leverage additional private financing with matching funds required to cover at least one-half of each project’s total cost.

The Energy Freedom program was expanded in 2007 and is currently administered by the Department of Commerce. The Director of Commerce is required to report to the Legislature and the Governor on the status of the Energy Freedom program by December 1 of each even-numbered year. This report is prepared by WSDA to document the December 1, 2010 status of the Energy Freedom loans it administers.

**Energy Freedom Loans Provided to Four Public Entities**

WSDA currently supports and administers the state’s responsibilities for loans provided for four bioenergy facilities, three operating and one planned. All four are in eastern Washington and include:

- An anaerobic digester at a large Outlook dairy farm
- An oilseed crushing facility on a Sunnyside-area farm
- An oilseed processing and biodiesel production facility in Odessa
- A planned oilseed processing/biodiesel production facility in Warden

Between July 1, 2006 and June 30, 2007, WSDA signed agreements with four local agencies to provide $10.4 million in low-interest loans for these bioenergy facilities. The agencies included two ports, a public development authority, and a conservation district. Each of these local agencies received loan money designated in the state capital budget for a specific bioenergy project, with two of the agencies awarded additional monies through a competitive process.
WSDA Energy Freedom Loan Program Update, December 2010

WSDA assumed the public partner duties of the Port of Sunnyside after the initial loan administration phase was completed in 2008. Table 1 summarizes the loans administered by WSDA.

Table 1. Summary of WSDA-Administered Energy Freedom Loans, 2010

<table>
<thead>
<tr>
<th>Public Entity</th>
<th>Total Loan Amount</th>
<th>Project Type</th>
<th>Location</th>
<th>Private Partner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odessa Public Development Authority</td>
<td>$4,348,102</td>
<td>Oilseed Processing &amp; Biodiesel Production</td>
<td>Odessa</td>
<td>Inland Empire Oilseeds, LLC</td>
</tr>
<tr>
<td>Port of Warden</td>
<td>$3,296,177</td>
<td>Oilseed Processing &amp; Biodiesel Production</td>
<td>Warden</td>
<td>Pacific Coast Canola, LLC</td>
</tr>
<tr>
<td>South Yakima Conservation District</td>
<td>$1,973,000</td>
<td>Anaerobic Digester</td>
<td>Outlook</td>
<td>George DeRuyter &amp; Sons Farms</td>
</tr>
<tr>
<td>Washington State Dept. of Agriculture</td>
<td>$750,000</td>
<td>Oilseed Processing</td>
<td>Sunnyside</td>
<td>Natural Selection Farms</td>
</tr>
<tr>
<td></td>
<td><strong>$10,367,279</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Overview of Loan Agreements**

WSDA contracts with the public sector partner which then contracts with its private sector partner. Loan documents are project-specific and typically consist of a loan agreement, promissory notes, a trust indenture, a lease or use agreement between the local jurisdiction and its private partner, and assignments for security purposes. Loan procedures and documentation follow standard banking procedures and require verification of how loans will be repaid and how they will be collateralized in the event of a default.

WSDA uses a qualified depository bank as a trustee who acts on behalf of the state to disburse loan funds, collect repayments, and report all financial activity and transactions to WSDA and its partners.

The original agreements provided ten-year loans with an interest rate of one percent. The program allows for up to three percent of the total loan amount for administrative costs. WSDA elected to pass this allowance on to its public sector partners for administrative expenses directly related to the project.

**Loan Repayment**

State law provides that the Director of Agriculture fix the terms and rates of the loans to minimize the costs to the public entity and to encourage the establishment of a viable bioenergy industry. The law allows the director to defer repayment of the low-interest loans for up to 24 months or until a project starts to generate revenue, whichever is sooner.
Repayments of the loans for the four projects are on an annual or semi-annual schedule that ends in 2016 or 2017. The repayment schedules for two projects were restructured during 2010.

- Loan agreements with the Port of Warden were amended twice during the year to accommodate delays in its project. Currently, the 2009 and 2010 annual payments have been deferred until February 1, 2011.
- The Odessa Public Development Authority loan agreement was amended in the fall of 2010 to accommodate the unexpected mid-summer interruption in the operations of its project. The OPDA loan payments due on December 1, 2010 and May 1, 2011 are now due at the end of the loan term on December 1, 2017.

All payments due through December 1, 2010 have been received and are summarized in Table 2.

Table 2. Repayment Status of Energy Freedom Loans, as of Dec. 1, 2010

<table>
<thead>
<tr>
<th>Public Entity</th>
<th>Total Loan Funds</th>
<th>Principal to be Repaid*</th>
<th>Repayment Start</th>
<th>Repayment Received**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odessa Public Development Authority</td>
<td>$4,348,102</td>
<td>$4,217,659</td>
<td>Dec. 2008</td>
<td>$399,380</td>
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<tr>
<td>Port of Warden</td>
<td>$3,296,177</td>
<td>$3,197,292</td>
<td>Oct. 2008</td>
<td>$25,000</td>
</tr>
<tr>
<td>South Yakima Conservation District</td>
<td>$1,973,000</td>
<td>$1,913,810</td>
<td>Dec. 2007</td>
<td>$800,414</td>
</tr>
<tr>
<td>Washington State Department of Agriculture</td>
<td>$750,000</td>
<td>$727,500</td>
<td>June 2008</td>
<td>$221,420</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$10,367,279</strong></td>
<td><strong>$10,056,261</strong></td>
<td></td>
<td><strong>$1,019,653</strong></td>
</tr>
</tbody>
</table>

* Less 3% allowed administrative costs. ** Includes interest.

**Status of Projects**

All contracts require the public partner to report its project status to WSDA on a quarterly basis. Information includes, but is not limited to, the status of:

- Project activities;
- Use of Washington-grown oilseed;
- Long-term economic benefits to the state, region and community;
- Creation of new jobs, job retention and higher income;
- Quality and suitability of any product produced by the project for its intended use; and
- Safe and environmentally sound manner of product storage and distribution.

The following narratives are drawn from the quarterly reports and summarize the status of the four bioenergy projects with Energy Freedom loans administered by WSDA, as of December 1, 2010.
Odessa Public Development Authority

The Odessa Public Development Authority (OPDA) is partnered with Inland Empire Oilseeds, LLC (IEO) on an oilseed crushing and biodiesel refining facility. IEO’s ownership group has included two farmer cooperatives, Odessa Union Warehouse and Reardan Grain Growers, as well as Reardan Seed Company, Green Star Products Inc., and Avista Development.

IEO’s crushing and refining facility is in Odessa next to a grain elevator and a 26-car rail siding that adjoins the Burlington Northern Santa Fe mainline. IEO refined its first biodiesel in November 2008 and crushed its first Washington-grown canola in July 2009, becoming the state’s first fully integrated biodiesel company.

The nine months prior to July 2010 were a period of improved operations and production for IEO. The crush line and refinery were fine-tuned, resulting in more consistent and better quality products. IEO ramped up production as bottlenecks were addressed and the plant was operated at higher throughput. The company achieved a major milestone in early 2010 by selling its first railcar directly to a major oil company. It continued to supply in-state distributors, including those providing biodiesel to state and local governments through the state fuel contract, as well as some retailers and local farmers.

On July 1, the U.S. Environmental Protection Agency (EPA) implemented new federal rules for the Renewable Fuel Standard (RFS2). These rules did not include canola as an approved biomass feedstock, which put U.S. canola biodiesel producers at a considerable disadvantage. As a result, on July 9, IEO suspended most production activity and laid off 27 employees, keeping a skeleton management staff to operate and maintain the facility.

The financial impact of the RFS2 rule, together with federal inaction to extend the $1 per gallon biodiesel blender’s tax credit which expired at the end of 2009, caused the company’s major shareholders to withdraw financial backing. In evaluating its options, IEO determined that the company would be more viable if it added edible oil refining capability to its biodiesel operation. IEO completed the business plan for this expansion and is in the process of seeking new investors. In early October, EPA approved canola as a biomass feedstock. As soon as IEO raises new operating capital, it can restart operations.

IEO crushed more than 9,000 tons of canola in the 12-month period ending September 30, 2010. It shipped or produced more than 960,000 gallons of biodiesel and shipped more than 5,500 tons of canola meal and 70,000 gallons of glycerin. Prior to suspending operations, demand for IEO’s biodiesel and meal exceeded the available supply, and all product was immediately sold into the market.

Since crushing operations began, IEO has only crushed oilseeds grown in Washington and neighboring states, purchasing the canola seed through its associated farmer cooperatives. Canola meal has been marketed primarily through regional feed brokers. The demand for meal
has been good, coming primarily from the dairy industry, and elastic enough to move product when available.

IEO has been accredited by the National Biodiesel Accreditation Commission as a BQ-9000 producer since November 20, 2009. Its biodiesel has consistently met or exceeded ASTM quality standards. In the third quarter of 2010, IEO was reapproved as a registered biodiesel producer under the RFS2 rule.

Employment at IEO expanded as production and sales increased. At the end of the second quarter of 2010, IEO employed more than 20 full-time positions and more than 10 part-time/temporary positions. More than half of the full-time jobs paid wages above the county average rate of $26,765. Once new investment capital is found, IEO will restart operations and begin rehiring employees. Along with providing work for contractors, distributors and consultants, the company contributes to the local economy through its use of electricity and town utilities and purchases of services, tools, supplies, machinery, equipment, and raw materials.

ODPA approved disbursement of the last of the Energy Freedom loan funds to IEO in July 2010 and submitted a project completion certificate in November 2010.

**Port of Warden**

The Port of Warden is working with Home Grown Oil d/b/a Pacific Coast Canola, LLC, (PCC) to construct a large canola oilseed crushing facility. PCC plans to make oil available for biodiesel production as soon as the crushing facility commences operation and intends to add a biodiesel production facility at the site when feasible.

Progress on the project continued to be delayed in 2010 as PCC pursued completion of project financing. As of late November, PCC reported it was pursuing multiple options for completing its equity financing, including a restructured initial public offering process and/or various other public and private equity opportunities with interested parties. PCC remains hopeful it can complete its funding by early 2011. Construction would likely begin within a matter of weeks following the close of financing, and the plant would be up and running within 18 months of the start of construction.

The Warden crush facility is designed with a capacity of processing 1,200 tons of canola seeds per day, yielding approximately 35 to 40 million gallons of high-grade refined, bleached and deodorized (RBD) canola oil and 250,000 tons of canola meal per year.

PCC has leased a 52-acre site from the Port of Warden. In 2010, PCC continued to complete necessary pre-construction activities. As examples, it received septic system and building permits and a utility easement; updated its SEPA; continued to make on-site silo purchase option payments; completed various site environmental analyses; and is now in the process of amending its air permit to add the RBD equipment to the plant.
PCC is partnered with the farmer cooperative CHS to supply canola seed and to sell the canola meal. PCC and CHS have developed a program to use canola grown in Washington and the Pacific Northwest to supply a significant portion of the facility needs.

The Port of Warden disbursed a small amount of Energy Freedom loan funds for site infrastructure in the first year of the project, but does not expect to distribute additional funds until PCC completes its financing.

To date, the project has created five part-time jobs. When fully operational, this project is expected to generate several dozen full-time, family-wage jobs in Grant County.

**South Yakima Conservation District**

South Yakima Conservation District partnered with George DeRuyter & Sons Farms on an anaerobic digester that converts methane from dairy waste into electricity. The dairy is a 365-day, confined free-stall operation with a flush manure handling system. The digester uses manure from the DeRuyters’ 5,300-cow dairy farm as the feedstock for energy production.

The DeRuyter digester has been operating since November 2006. It has an energy production capacity of 1.2 megawatts per hour, enough to power about 700 homes. The digester operated continuously during the 12-month period ending September 30, 2010 and has been relatively trouble-free since the second year. The DeRuyters’ initial three-year contract with Pacific Power, the local utility, ran until November 2009. The digester operated under an interim renewal agreement while issues related to the lower price proposed by the utility were addressed. Ultimately, a new contract was signed that provides for purchase of all power produced by the digester at 6.3 cents per kilowatts hour, the same price as the initial contract. Under this contract, DeRuyters receive an average of $40,000 per month in income from power sales.

The digester produces a fiber co-product that is 100% bacteria-free. In the past year, about half of the fiber has been used as bedding on the farm, reducing costs. The remainder is being composted on-site and sold by a third-party vendor. The liquid effluent is stored in ponds on the farm and used as a nutrient for crop production.

No viable commercial uses have been found for the waste heat, however, during cold weather the heat is used to keep the digester operating properly. DeRuyters also use the heat off the engines to provide hot water when possible. The digester system significantly reduces odors associated with manure storage and distribution. It also reduces pathogens in the manure by as much as 99%, improving air and water quality.

The project has created one new job at the dairy. Loan repayment began in December 2007, with the fourth $200,000 payment made on December 1, 2010.
Washington State Department of Agriculture

The Port of Sunnyside partnered with Natural Selection Farms (NSF) on the state’s first oilseed crushing facility, which began operation in September 2006. The Washington State Department of Agriculture (WSDA) assumed the public partner duties on the project from the Port of Sunnyside in 2008, after the initial loan administration phase was completed. The facility crushes oilseeds to produce oil for use in biodiesel production. Meal from the crushed seeds is sold as high protein animal feed.

Production at the Natural Selection Farms facility continues to be variable, depending on marketplace economics. NSF used down time in late 2009 and early 2010 to make improvements to the crushing facility and to add a seed cleaning operation. These improvements were designed to increase oil recovery, reduce seed handling costs, and enhance operating efficiencies.

Most of the oilseed processing in the last year occurred in April and May. NSF received more than 900,000 pounds of oilseeds in the 12-month period ending September 30, 2010. The oilseeds were primarily Washington-grown canola and soybeans. Small amounts of camelina, sunflower, and mustard were also handled. Canola and camelina oils were shipped to Washington markets, while the soy oil was shipped out of state. All the meal was shipped to Washington markets.

NSF operations were adversely affected by the three-month delay in EPA approval of canola as a biomass feedstock under the federal Renewable Fuel Standard rules and the expiration of the $1 per gallon biodiesel blender’s tax credit.

When operating, the crushing facility provides employment for seven positions. Otherwise, these employees are utilized in other parts of the operation. During the spring quarter, hours worked attributed to the crushing facility totaled 1,454.

NSF continues to work to encourage oilseed production and crushing for biofuels in Washington.
## Energy Freedom Program Summary
### December 2010

<table>
<thead>
<tr>
<th>Public Partner/Contact</th>
<th>Private Partner/Contact</th>
<th>Activity</th>
<th>Energy Freedom Loan Amount</th>
<th>Project Cost</th>
<th>Location</th>
<th>Output</th>
<th>Jobs Created</th>
<th>Facility Operations Start</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odessa Public Development Authority</td>
<td>Inland Empire Oilseeds, LLC</td>
<td>Oilseed Crushing, Biodiesel Manufacturing</td>
<td>$4,348,102</td>
<td>$11 Million</td>
<td>Odessa</td>
<td>Up to 8 million gallons biodiesel /year</td>
<td>31 new jobs</td>
<td>Refinery - Nov. 2008</td>
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<tr>
<td>Steven Powell</td>
<td>Steve Starr</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(prior to cutback)</td>
<td></td>
</tr>
<tr>
<td>(509) 988-3046</td>
<td>(509) 982-2970</td>
<td></td>
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<tr>
<td>Port of Warden</td>
<td>Pacific Coast Canola, LLC</td>
<td>Oilseed Crushing, Biodiesel Manufacturing</td>
<td>$3,296,177</td>
<td>$113 Million</td>
<td>Warden</td>
<td>Est. 35-40 million gallons canola oil /year</td>
<td>5 part-time jobs</td>
<td>Crusher - July 2009</td>
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<tr>
<td>Pat Millard</td>
<td>Kevin Raymond</td>
<td></td>
<td></td>
<td></td>
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<td>(to date)</td>
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<tr>
<td>(509) 349-2480</td>
<td>(206) 547-1078</td>
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<td>South Yakima Conservation District</td>
<td>George DeRuyter &amp; Sons Farms</td>
<td>Anaerobic Digester</td>
<td>$1,973,000</td>
<td>$5.1 Million</td>
<td>Outlook</td>
<td>1.2 megawatts per hour (power for ~700 homes)</td>
<td>1 new job</td>
<td>Late 2012</td>
</tr>
<tr>
<td>Laurie Crowe</td>
<td>Dan DeRuyter</td>
<td></td>
<td></td>
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<tr>
<td>(509) 837-7911</td>
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<tr>
<td>Washington State Department of Agriculture</td>
<td>Natural Selection Farms</td>
<td>Oilseed Crushing</td>
<td>$750,000</td>
<td>$1.75 Million</td>
<td>Sunnyside</td>
<td>Up to 0.5 million gallons oil /year</td>
<td>7 new jobs</td>
<td>Nov. 2006</td>
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<td>Mary Beth Lang</td>
<td>Ted Durfey</td>
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