
WSDA

Energy Freedom Program

2012 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 2012



Washington
State Department of
Agriculture

For more information or additional copies of this report, please contact:

Washington State Department of Agriculture
Mary Beth Lang, Bioenergy Coordinator
PO Box 42560
Olympia, WA 98504-2560
(360) 902-1812
mblang@agr.wa.gov

This report is available on the WSDA Web site at: <http://agr.wa.gov/>

AGR PUB 303-372 (N/12/12)

*Do you need this publication in a different format?
Contact the WSDA Receptionist at (360) 902-1976 or TTY (800) 833-6388.*

Energy Freedom Program Update

Overview

The Energy Freedom program was established in June 2006, in part, to stimulate the construction of facilities in Washington that generate energy from agricultural crops or waste. The Washington State Department of Agriculture (WSDA) administers the responsibilities of the Energy Freedom program for four projects that were awarded loans during the initial year of the program. These low-interest loans to public entities, totaling \$10.4 million, leveraged 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. This report is prepared by WSDA to document the December 2012 status of the four 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:

- 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
- An oilseed processing and biodiesel production facility in Warden

WSDA signed agreements with local agencies to provide low-interest loans for these facilities. Each local agency 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 assumed the public partner duties of one local agency 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, 2012

Public Entity	Loan Amount	Project Type	Private Partner
Odessa Public Development Authority	\$4,348,102	Oilseed Processing & Biodiesel Production	Inland Empire Oilseeds, LLC
Port of Warden	\$3,296,177	Oilseed Processing & Biodiesel Production	Pacific Coast Canola, LLC
South Yakima Conservation District	\$1,973,000	Anaerobic Digester	George DeRuyter & Sons Farms
Washington State Dept. of Agriculture	\$750,000	Oilseed Processing	Natural Selection Farms
	\$10,367,279		

Overview of Loan Agreements

WSDA has contracts with the public sector partners which then have contracts with the private sector partners. WSDA uses a qualified depository bank as a trustee who acts on behalf of the state to disburse loan funds, collect repayments, and report financial activity to WSDA and its partners. 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 projects.

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 original agreements provided ten-year loans with an interest rate of one percent. The term of two agreements have since been extended for an additional year.

Amendments to Agreements in 2012

In 2012, agreements with three of the projects were amended.

Port of Warden: In May, the project's two loan agreements, the trustee agreement and the appendix to the trust agreement were amended. Other than the repayment schedules, these documents had not been revised since they were first signed in 2006 and 2007. The amendments updated the project's scope of work, clarified and harmonized the reporting requirements of the two loan agreements, and recalculated the repayment schedule to account for a prepayment of principal. Other revisions included technical changes to correct, update and clarify provisions in the documents.

Natural Selection Farms: In May, WSDA responded to a request from Natural Selection Farms and determined that it would defer the annual lease payments due in 2012 and 2013 until June 1, 2018. In August, the lease agreement was amended to account for the removal of U.S. Bank as trustee and to make technical changes to correct, update or clarify certain sections of the lease agreement. WSDA and Natural Selection Farms exercised the right to remove the trustee, effective July 28, 2012, as there is no longer any financial activity related to the project other than receiving payments and transferring the money to the state.

Odessa Public Development Authority: In July, sections of the loan agreements were amended to clarify and harmonize the reporting requirements. The amendments were technical in nature and did not change the agreements in a significant way.

Loan Repayment

Repayments of the loans began in late 2007 and 2008 and are on annual or semi-annual schedules that end in June 2018. Three of the four projects had adjustments made to their payment schedules in 2012. The 2012 and 2013 annual lease payments from Natural Selection Farms were deferred until 2018. The Odessa PDA was given an extension on its December 2012 scheduled payment. The Port of Warden schedule was revised after it made a prepayment of principal in May. The Port made prepayments of principal totaling \$167,835 in 2012.

All payments due as of December 1, 2012 have been received and are summarized in Table 2. A total of \$1,048,012 was received during the 12-month period.

Table 2. Repayment Status of Energy Freedom Loans, as of December 2012

Public Entity	Principal to be Repaid*	Repayment Received in 2012	Total Repayment Received to date**
Odessa Public Development Authority	\$4,217,659	\$265,486	\$926,763
Port of Warden	\$3,197,292	\$582,422	\$1,862,238
South Yakima Conservation District	\$1,913,810	\$200,104	\$1,200,622
Washington State Dept. of Agriculture	\$727,500	\$0	\$298,498
Total	\$10,056,261.00	\$1,048,012	\$4,288,121

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

Status of Projects

All contracts require quarterly reporting to WSDA on project status as well as an annual report in the fall. Information reported includes, but is not limited to, the status of:

- Project activities, including production volumes;
- Use of Washington-grown oilseed or waste to produce bioenergy and co-products;
- Movement of products to in-state markets;
- Long-term economic benefits, including creation or retention of jobs, and higher income;
- Quality and suitability of any product produced for its intended use; and
- Safe and environmentally sound manner of product storage and distribution.

The following narratives are drawn from the quarterly and annual reports and summarize the current status of the bioenergy projects with Energy Freedom loans administered by WSDA.

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 facility is in Odessa next to a grain elevator and a 26-car rail siding that adjoins the Burlington Northern Santa Fe main line.

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. Operations were suspended in July 2010, due to the delay in canola qualifying as an approved feedstock under the revised federal Renewable Fuel Standard (RFS2). Operations resumed in early summer of 2011 with new private investment and management changes. Agreements were finalized in July 2012, giving 1138 LLC of Kirkland 75% ownership in the company with IEO's original ownership group, primarily the Odessa Union Warehouse and Reardan Grain Growers, taking a minority position.

IEO crushed more than 25,000 tons of canola in the 12-month period ending September 30, 2012. It shipped more than 3.3 million gallons of biodiesel and sold more than 17,000 tons of canola meal and 130,000 gallons of glycerin. The crushline and degum systems performed exceptionally well throughout the year. On a tonnage basis, throughput of seed averaged 83% of nameplate capacity, while oil output exceeded 100% of nameplate capacity (based on days operating).

IEO began refining glycerin in January, giving IEO another revenue stream and decreasing the overall cost of biodiesel production by recovering the methanol in the glycerin. In August, IEO created a glycerin/phospholipid product that was used successfully as road amendment/dust control.

Due to modifications in 2011, the biodiesel line capacity is greater than crush capacity. IEO took advantage of the extra refining capacity with contracted crushing activities at Touchet Seed and Energy, purchases of canola oil, and toll processing rapeseed oil for a customer. A new seed cleaner was installed in September and is big enough to handle an expansion in crush capacity. With low biodiesel prices and all-time high canola seed prices in 2012, the focus was on producing as efficiently as possible.

Early in the year, most of the canola seed crushed was purchased from in-state suppliers. As local inventory was depleted, IEO sourced its seed primarily from Washington, Oregon, Idaho and the Dakotas, with less than 10 percent overall from Canada. The price of seed averaged about 10 cents per pound higher than the previous year, with cash bids at Odessa hitting 31 cents per pound in September.

In its outreach to growers, IEO and its seed supply partner, AgVentures NW, co-sponsored and participated in WSU oilseed grower workshops in Odessa and Colfax in January, discussed canola production and marketing at grower meetings, offered daily canola pricing through the web and market recordings, and cooperated with on-farm variety trials.

Canola meal was marketed primarily through regional feed brokers for use in dairy rations. Most biodiesel was sold by rail to a major oil company and a regional fuel terminal that supplies distributors providing fuel to state government. Biodiesel sales to local growers and businesses directly from IEO and through the neighboring Grange Supply increased each quarter as local demand strengthened.

OPDA undertook outreach efforts to encourage local sales of biodiesel. Over the last year, OPDA contacted about 20 growers as well as community leaders and larger, fleet-owning businesses in the area to promote local biodiesel availability and the community impact of IEO.

All products produced during the period met or exceeded industry standards for their intended use.

Employment at IEO was as high as 29 full-time positions during the period. At the end of September, IEO employed 24 full-time staff. Most employees received wages above the county average rate of \$26,765. The company also contributed to the local economy through its use of electricity and town utilities and purchases of supplies and equipment.

Port of Warden

The Port of Warden is partnered with Pacific Coast Canola, LLC, (PCC) to construct a large canola processing facility. PCC is initially developing the oilseed crushing facility and will make oil available for biodiesel production as soon as the crushing facility commences operation. PCC intends to add biodiesel production facilities at the site when practical.

The Warden crush facility is designed with a capacity of processing 1,200 tons of canola seeds per day, yielding approximately 35-40 million gallons of high-grade refined, bleached and deodorized (RBD) canola oil and approximately 250,000 tons of canola meal per year. The facility is on a 52-acre site leased from the Port of Warden.

PCC gave its construction contractor, ICG, notice to proceed on July 14, 2011. On-site construction activities commenced in September 2011 and progressed as planned in 2012.

At the end of November 2012, PCC reported that its employees had moved into the facility's office area, and its contractor continued progress towards meeting the target date for beginning production in early 2013. The meal load-out building was nearly complete, and crews were putting in the final piping in the tank farm and the two load-out buildings. The contractor was also completing work in the process building.

PCC is actively working to use canola grown in Washington and the Pacific Northwest to supply a significant portion of the facility needs within a few years of commencing operations. PCC has an agreement with CHS Inc. for the procurement of canola seed as well as for the sale of canola meal and canola oil products. The agreement includes partnering to increase canola production in Washington and elsewhere in the Pacific Northwest and Montana. This effort encompasses

outreach to grain elevators and their growers, support for university research-based agronomic support, new approaches to production contracts, and promotional activities through the media. PCC reports it is already seeing increased grower interest in canola production.

Plant construction has generated job activity at the site over the last year and a half through the project's contractor and subcontractors. In an effort to pre-train as many employees as possible prior to plant commissioning, PCC began hiring operators and other plant staff in the fall. Total employment as of the end of November was 43 full-time jobs and one part-time job in Warden that all pay above average Grant County wages. In addition, there are a total of 8 full-time and 1 part-time PCC employees working in Seattle and Winnipeg. When fully operational, the project is expected to generate 46 to 48 full-time jobs in Grant County, a significantly higher number than previously estimated.

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 digester uses manure from more than 5,000 mature dairy cows on the DeRuyter farm and a neighboring farm. It also occasionally adds other allowed organic waste materials, such as yeast, as feedstock to the digester.

The DeRuyter digester has been operating since November 2006 and is, by far, the largest of the state's eight operating dairy digesters. It has an energy production capacity of 1.2 megawatts per hour, enough to power about 700 homes. The digester ran smoothly and continuously during the 12-month period ending September 30, 2012.

Under the current power purchase agreement, Pacific Power, the local utility, purchases the electricity produced by the digester at 6.3 cents per kilowatt hour, generating an average of \$40,000 per month in income for DeRuyter this year. Under new rates approved by the Utilities and Transportation Commission, the price received by the DeRuyter digester for power sales will go down to 3.4 cents per kilowatt hour in 2013. In light of the pending lower revenues from electricity sales, the DeRuyter digester participated in a feasibility study this spring that assessed: (1) the economics of the current digester operation; (2) the potential for converting from electricity production to renewable natural gas production; and (3) the potential for adding nutrient recovery technology to the digester operation. The DeRuyters are using the findings of the study to consider future business decisions related to the digester.

Since November 2010, the digested solids from the digester have been sold to Organix, a Walla Walla company that uses them to produce a peat moss substitute called RePeet™. Income from fiber sales this year totaled \$456,000. The liquid effluent is stored in ponds on the farm and used to provide nutrients 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 percent. Potential changes to the digester are expected to make it feasible to recover and export marketable bio-fertilizers, which will reduce nutrient loading.

The project created one new job at the dairy.

Washington State Department of Agriculture

Natural Selection Farms (NSF) began operation of the state's first oilseed crushing facility 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. The facility has a crushing capacity of 24 tons per day.

Activity at the Natural Selection Farms facility continued to be intermittent, due to the limited ability to secure seed for processing. NSF crushed 65 tons of Washington-grown canola during the 12-month period ending September 30, 2012. Other activity included shipping canola oil and meal as well as shipping soybean and camelina oil and meal from oilseeds crushed in the previous year. Oil and meal were shipped to both in-state and out-of state markets.

When fully operating, the crushing facility provides employment for seven positions. Otherwise, these employees are used in other parts of the operation. During the period, hours worked attributed to the crushing facility totaled 1,195.

In March, NSF requested a restructuring of the lease payment schedule for the oilseed crusher. With continued high commodity prices, NSF said it had not found it viable to purchase seed, crush, and sell the oil and meal in the current market place. It is exploring several opportunities to return the facility to profitability. WSDA responded in May with a determination that it would defer the annual lease payments due in 2012 and 2013 until June 1, 2018.

NSF helped sponsor and made presentations at the WSU oilseed grower workshops in January and continued to work with growers, biodiesel producers, and university researchers in Washington and Oregon throughout the year to encourage oilseed production and development of the biofuels industry.

Washington State Department of Agriculture
Energy Freedom Program Summary
December 2012

Public Partner/ Contact	Odessa Public Development Authority <i>Stacey Rasmussen (509) 982-7850</i>	Port of Warden <i>Pat Millard (509) 349-2480</i>	South Yakima Conservation District <i>Laurie Crowe (509) 829-9025</i>	Washington State Department of Agriculture <i>Mary Beth Lang (360) 902-1812</i>
Private Partner/ Contact	Inland Empire Oilseeds, LLC <i>Joel Edmonds (509) 982-2970</i>	Pacific Coast Canola, LLC <i>Matt Upmeyer (206) 547-1078</i>	George DeRuyter & Sons Farms <i>Dan DeRuyter (509) 837-7783</i>	Natural Selection Farms <i>Ted Durfey (509) 837-3501</i>
Activity	Oilseed Crushing, Biodiesel Manufacturing	Oilseed Crushing, Biodiesel Manufacturing	Anaerobic Digester	Oilseed Crushing
Energy Freedom Loan Amount	\$4,348,102	\$3,296,177	\$1,973,000	\$750,000
Project Cost	\$9.4 Million*	\$120 Million	\$4.5 Million*	\$1.75 Million*
Location	Odessa	Warden	Outlook	Sunnyside
Output	Up to 8 million gallons biodiesel /year	Est. 35-40 million gallons canola oil /year	Up to 1.2 megawatts per hour (power for ~700 homes)	Up to 0.5 million gallons oil /year
Jobs Created	20 new jobs	43 new jobs (to date)	1 new job	7 new jobs
Facility Operations Start	Refinery - Nov. 2008 Crusher - July 2009	Crusher - Jan. 2013	Nov. 2006	Sept. 2006

* per completion certificate

For more information, contact:

Mary Beth Lang, WSDA Bioenergy Coordinator, (360) 902-1812 / mblang@agr.wa.gov