
WSDA

Energy Freedom Program

2014 Update

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

Prepared by

Washington State Department of Agriculture

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Washington State Department of Agriculture
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 (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 2014 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. Table 1 summarizes the loans administered by WSDA.

Table 1. Summary of WSDA-Administered Energy Freedom Loans, 2014

Public Entity	Loan Amount	Project Type	Private Partner
Odessa Public Development Authority	\$4,348,102	Oilseed Processing & Biodiesel Production	TransMessis Columbia Plateau, 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 & Son Dairy
Washington State Dept. of Agriculture	\$750,000	Oilseed Processing	Natural Selection Farms
	\$10,367,279		

Overview of Loan Agreements

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

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 10-year loans with an interest rate of one percent. The final payments from the Port of Warden and the South Yakima Conservation District are due in the fall of 2016. The terms of the other two agreements have been extended.

Loan Repayment

Payments on loans were made by three of the projects during 2014. The Odessa PDA made two of the three payments scheduled for 2014; WSDA granted the Odessa PDA’s request to defer its November 2014 payment while it worked to locate a new tenant to operate its facility. Natural Selections Farms did not make its scheduled payment in 2014. All payments received as of December 9, 2014 are summarized in Table 2. A total of \$754,501 was received during the 12-month period.

Table 2. Repayment Status of Energy Freedom Loans, as of December 2014

Public Entity	Principal to be Repaid*	Repayment Received in 2014	Total Repayment Received to date**
Odessa Public Development Authority	\$4,217,659	\$182,846	\$1,109,609
Port of Warden	\$3,197,292	\$371,551	\$2,605,339
South Yakima Conservation District	\$1,913,810	\$200,104	\$1,600,829
Washington State Dept. of Agriculture	\$727,500	\$0	\$298,498
Total	\$10,056,261	\$754,501	\$5,614,274

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

Status of Projects

All contracts require quarterly reporting to WSDA, 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 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) has an oilseed crushing and biodiesel refining facility in Odessa. The facility is in a former grain storage flat house that is next to a grain elevator and a 26-car rail siding that adjoins the Burlington Northern Santa Fe main line.

The OPDA originally partnered with Inland Empire Oilseeds, LLC (IEO) to operate the facility. IEO refined its first biodiesel in November 2008 and crushed its first Washington-grown canola in July 2009. Before filing for bankruptcy in December 2012, IEO produced more than 5 million gallons of biodiesel, including 3.3 million gallons in 2012.

The OPDA entered into a new partnership with TransMessis Columbia Plateau (TCP) on November 12, 2013 and TCP immediately began work to prepare the facility for restarting oilseed crushing and biodiesel production. TCP produced its first batch of biodiesel in December 2013 and began mass production soon thereafter. By the second quarter of 2014, the crush line processed an average of 100 tons of seed each day. TCP crushed more than 10,000 tons of canola seed and produced 967,000 gallons of biodiesel during the first six months of 2014, the majority of which was delivered to large distributors in Washington. It also produced more than 6,000 tons of canola meal and 56,000 gallons of glycerin.

On July 9, TCP issued layoff notices to all employees and put them on standby status, saying market conditions forced it to suspend operations while it completed its plan to expand plant capacity. In mid-August, TCP informed the OPDA that it had not raised sufficient funds to proceed with the expansion and would not be making future lease payments. As of the end of September, the OPDA was taking actions to terminate the lease with TCP and seek a new partner to operate the facility.

TCP had up to 28 employees when in operation and paid wages that were above the county average for most employees.

In February 2014, the OPDA and WSDA amended the loan agreements to reflect a new loan repayment schedule and creation of a security deposit account. The OPDA made two loan payments during the period totaling \$182,496. At the request of the OPDA, WSDA deferred the loan payment due on November 1, 2014. The OPDA and WSDA plan to review the loan repayment plan in spring of 2015 in light of its work to lease the facility to a new operator.

Port of Warden

The Port of Warden is partnered with Pacific Coast Canola, LLC, (PCC) on a large canola processing facility. The crush facility has 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. PCC intends to add a biodiesel production facility at the site when practical. The facility is on a 52-acre site leased from the Port of Warden.

The PCC crush facility marked its first year of operations in 2013 and, by the third quarter of 2014, it had improved quarterly capacity utilization to 76 percent. PCC reports that the crush facility generally operates on a fixed crushing schedule and produces product for sale on a daily basis.

PCC is selling canola meal into the regional livestock feed market and selling oil into both the food and biodiesel markets. In 2014, PCC sold more than 9 million gallons of canola oil into the biodiesel market, with over 90 percent sold to Imperium Renewables, an in-state biodiesel producer. No biodiesel was returned to the Grant County market.

PCC continues to actively work with elevators, agronomy input providers, and growers to increase canola acreage in Washington. In the spring, it completed a major update to its web site, www.pacificcoastcanola.com, which now includes extensive agronomic information on growing canola in the PNW. The site includes agronomic tips for growing canola in three different Washington climates, links to several WSU publications, and contact information for local resources. PCC reports an enthusiastic response to the new site.

In October, PCC announced a new partnership with The Scoular Company to work together on commercial activities, particularly the origination of canola. Scoular will procure all canola seed for processing at the PCC plant and will market all of the canola meal and canola oil produced by PCC. Concurrently, PCC and CHS, Inc., mutually ended their supply agreement. Scoular and PCC will be cooperating to expand acreage in the PNW and this partnership will leverage PCC's efforts to make canola an attractive crop in the region.

In Washington, acreage planted to canola for 2014 harvest was 51,000 acres, an increase of more than 40 percent over the previous year. PCC hopes to use canola grown in Washington and the Pacific Northwest to supply the majority of its needs within the next three to five years.

PCC reports it has adopted technology and production processes that will enable it to produce products that will meet or exceed the most stringent specifications in effect today.

Total employment as of the end of November 2014 was 44 full-time jobs in Warden that all pay above average Grant County wages. Most plant employees live within 20 miles of the facility; all live within 60 miles. In addition, there are a total of nine full-time PCC employees working in Seattle and Winnipeg.

The Port of Warden reports it is continuing to work with the Columbia Basin Railroad to add more storage tracks that would benefit PCC and a new fertilizer plant that is to start construction in 2015. The Port is also actively involved in a coalition to work towards a new Connell rail interchange. The Port reports that the local trucking industry was busy all year hauling canola seed, oil and meal and that the project has contributed to the local economy through its use of local businesses to purchase supplies and equipment.

The completion certificates for the project were signed on January 14, 2014, noting the actual dollars spent in completing the project was \$98,408,022.

South Yakima Conservation District

South Yakima Conservation District partnered with George DeRuyter & Son Dairy on an anaerobic digester that converts methane from dairy waste into electricity. The digester uses manure from 5,300 mature dairy cows on the DeRuyter dairy and a neighboring dairy.

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. After years of smooth operation, one of the motors broke down at the end of May, causing the digester to run at half-capacity for the last four months of the 12-month period ending September 30, 2014. As a result, income received from electricity sales dropped to \$200,000 for the period. The DeRuyter digester receives 3.5 cents per kilowatt hour under its power purchase agreement with Pacific Power, the local utility.

Digested fiber was used as bedding during the winter months this period. DeRuyter then resumed selling the digested solids to a Walla Walla company that composts them on site. The finished product is sold as a soil amendment or peat moss substitute to the horticulture and landscape supply industries. Income from fiber sales this year totaled \$120,000. The liquid effluent is stored in ponds on the farm and used to provide nutrients for crop production.

In 2014, DeRuyter tested a new system to use in conjunction with the digester to efficiently remove nitrogen and phosphorus from the digested manure. The ability to recover and market these nutrients as bio-fertilizers would potentially generate additional income and reduce nutrient loading, a concern in the area. DeRuyter is continuing to work with Promus Energy to convert from electricity production to renewable natural gas production, in an effort to improve the financial feasibility of the digester.

No viable commercial use has been found for the waste heat, however, during cold weather all the heat is used to keep the digester operating properly. DeRuyter also uses 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.

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 is designed to crush 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 market economics. NSF received about 375,000 pounds of oilseeds during the 12-month period ending September 30, 2014, including Washington-grown camelina and canola as well as soybeans and mustard from out of state. All of the soybean, canola and camelina meal and oil was shipped to in-state markets. Mustard meal and oil were returned to the out-of-state company that contracted for the crushing.

The facility was idle for major repairs and updates during several months of the period. Employee hours worked attributed to the crushing facility during the period totaled 2,355.

In June 2014, NSF did not make its scheduled lease payment and informed WSDA of its decision to no longer pursue the crushing operation due to the facility's inability to remain economically viable for NSF. WSDA is in the process of evaluating the state's options. During this process, NSF continues to operate the facility and comply with the Use and Lease Agreement.

NSF continues to work to encourage oilseed production and crushing for biofuels in Washington.

Washington State Department of Agriculture
Energy Freedom Program Summary
 December 2014

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	<i>OPDA is seeking a new tenant for the facility</i>	Pacific Coast Canola, LLC <i>Matt Upmeyer (206) 547-1078</i>	George DeRuyter & Son Dairy <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	\$98.4 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	Up to 29 new jobs	44 new jobs	1 new job	Up to 7 new jobs (when operating)
Facility Operations Initial Start	Refinery - Nov. 2008 Crusher - July 2009	Crusher - Dec. 2012	Nov. 2006	Sept. 2006

* per completion certificate

For more information, contact:

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