



WSDA

Energy Freedom Program

2015 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 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 has been prepared annually by WSDA since 2006 to document the status of the portion of the Energy Freedom program it administers.

Energy Freedom Loans Provided to Four Public Entities

In 2015, WSDA supported and administered the state's responsibilities for loans provided for four bioenergy facilities:

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

WSDA signed agreements with local agencies in 2006 and 2007 to provide low-interest loans to support the construction of these facilities. Each local agency received loans in an amount designated in the state capital budget; two of the agencies received additional loan 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

Public Entity	Private Partner	Project Type	Loan Amount
Odessa Public Development Authority	<i>Seeking new private partner</i>	Oilseed Processing & Biodiesel Production	\$4,348,102
Port of Warden	Pacific Coast Canola, LLC	Oilseed Processing	\$3,296,177
South Yakima Conservation District	George DeRuyter & Son Dairy	Anaerobic Digester	\$1,973,000
Washington State Dept. of Agriculture	Natural Selection Farms	Oilseed Processing	\$750,000

Overview of Loan Agreements

WSDA has loan agreements with three public sector partners which, in turn, 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.

Loan Repayment

Three projects made loan payments during 2015, with two projects making their final payments: The Port of Warden completed an early pay off of its loan, while a negotiated final payment was made related to the Sunnyside oilseed crusher project. The South Yakima Conservation District made the ninth of its ten scheduled payments. WSDA granted the Odessa Public Development Authority’s request to defer loan payments due in 2015 while it worked to locate a new private partner to operate its facility. All payments received as of December 31, 2015 are summarized in Table 2. A total of \$1,058,844 was received during the year.

Table 2. Repayment Status of Energy Freedom Loans, as of December 2015

Public Entity	Principal to be Repaid*	Received in 2015	Total Received to date**	Repayment Status
Odessa Public Development Authority	\$4,217,659	\$0	\$1,109,609	Payments deferred
Port of Warden	\$3,197,292	\$738,740	\$3,344,079	Completed
South Yakima Conservation District	\$1,913,810	\$200,104	\$1,800,933	Final payment due in 2016
Washington State Dept. of Agriculture	\$727,500	\$120,000	\$418,498	Completed
Total	\$10,056,261	\$1,058,844	\$6,673,119	

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

Status of Projects

All agreements require regular reporting to WSDA. These reports include information on the status of the project, including, but is not limited to, the status of:

- Project activities, including production volumes;
- Use of Washington-sourced oilseed or waste to produce bioenergy and co-products;
- Movement of products to in-state markets; and
- Long-term economic benefits, including creation or retention of jobs, and higher income.

The following narratives are drawn from the reports received in the last year.

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 partnership with TransMessis Columbia Plateau (TCP) in November 2013. TCP began production in December 2013 and, during the first six months of 2014, crushed more than 10,000 tons of canola seed and produced almost 1 million gallons of biodiesel, the majority of which was delivered to major distributors in Washington. TCP halted production in July 2014 and notified OPDA in early fall that it would not be resuming operations. OPDA then began work to seek a new tenant for the facility. It formally terminated the lease with TCP in December 2014.

OPDA issued a request for proposal in December 2014 to find a new qualified tenant. Three responses were received by the January 30th due date, however, none were complete proposals. The responding parties were given until April 15, 2015 to submit complete, detailed proposals. Only Global Clean Energy Holdings (GCE) responded. Rather than a proposal to lease the facility, GCE submitted a proposal to purchase the facility for \$1,022,000. At a special meeting of the board on April 27, the OPDA voted to make a request to WSDA to (1) accept the proceeds of the sale of the facility to GCE and other currently held project funds as payment on OPDA's Energy Freedom loans and (2) forgive the remaining balance due on the loans. WSDA determined it would approve the request contingent upon OPDA meeting certain conditions, including making all best efforts to close the transaction by August 1, 2015.

Since April, the OPDA has worked with GCE to complete due diligence processes and negotiate the purchase and sale agreement. The August closing date was delayed due to several factors. GCE determined it needed to conduct a Phase 1 environmental site assessment, which was not in its original timeline. GCE also determined it wanted to conclude transactions related to equipment and acquiring land adjacent to the facility in sync with the transaction with OPDA.

Other noteworthy activities during this period:

- On December 31, 2014, OPDA was awarded \$60,000 from the bankruptcy case of Inland Empire Oilseeds for reimbursement of expenses incurred by IEO's default.
- In March 2015, a site inspection by the Washington State Department of Ecology (DOE) resulted in a referral to the Environmental Protection Agency (EPA) Region 10 regarding possible hazardous materials at the OPDA facility. EPA subsequently carried out an emergency clean-up in late March to stabilize and mitigate the hazards of materials that were left at the site when TCP halted production.
- At the request of the OPDA, WSDA deferred the loan payments due during this period.

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. The facility is on a 52-acre site leased from the Port of Warden.

2015 marked the third year of operation for the plant. In the first nine months of 2015, PCC crushed 196,600 metric tons (equivalent to 216,700 tons) of canola seed. This was an increase of 16 percent compared to the same period in 2014 due to improved supply from distribution networks. The plant crushed at a typical rate of capacity as compared with the North American industry average for all canola crushers during the period.

PCC is selling canola meal into the regional livestock feed market and selling oil into both the food and biodiesel markets. PCC and its partner Scoular consolidated their efforts in seed procurement and meal sales during the period and Scoular's strong position in the PNW feed industry helped increase PCC's market share of the local canola meal market. PCC reports it has adopted technology and production processes that enable its products to meet or exceed the most stringent specifications in effect today.

In the first eight months of 2015, PCC reported it sold approximately 2.5 million gallons of canola oil to two biofuels companies, one of which produces BQ-9000 certified biodiesel. This compares to 9 million gallons sold to biofuels companies in 2014. No biodiesel was returned to the Grant County market.

PCC actively promoted canola production during the year participating in grower meetings, conferences and workshops around the Pacific Northwest. The agronomic benefits of canola are becoming more widely recognized as progressive growers in more production areas plant the crop. Acreage for the 2015 crop, however, is down from last year due to severe winter kill, dry soil in the low rainfall regions, and low prices relative to wheat.

Total employment as of September 2015 was 45 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 were seven full-time PCC employees working in Redmond or Winnipeg.

In March, PCC's parent company, Legumex Walker, Inc., announced it was examining strategic financial/partnering options, including possible sale of PCC. Around the same time, PCC and the Port began discussing options for use of monies in the project's Reserve Account. An agreement was reached which resulted in these monies being used to pay off the Port's Energy Freedom loans as of August 28.

On January 5, 2016, LWP Capital Inc., formerly Legumex Walker, Inc., announced it had completed the divestiture of its ownership interest in PCC to Glencore Grain Investment LLC, which already owned 16 percent of the company, and McKinstry Holdings, Inc., which was the

lead mechanical and electrical contractor for the plant's construction. The plant is being operated by Viterra, the grain handling arm of Glencore.

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 the new Cenex fertilizer plant that was completed in 2015. The Port also continues to be actively involved in a coalition working to upgrade and improve the Connell rail interchange. Currently, any unit train that comes to PCC on the BNSF through Spokane must first go to Pasco to be switched and then come back to Connell before going to Warden. With the proposed new interchange, the switch can be made at Connell. The Port supported the City of Connell's successful application for a Community Economic Revitalization Board (CERB) grant to study the project's feasibility, preliminary design and cost estimates.

The Port reports the local trucking industry was busy all year hauling canola seed, oil and meal.

South Yakima Conservation District

The South Yakima Conservation District is 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 was constructed with an energy production capacity of 1.2 megawatts per hour, enough to power about 700 homes. After years of smooth operation, one of the two motors broke down in May 2014. Due to cost, it has not been repaired and the digester ran at half-capacity for the 12-month period ending September 30, 2015.

Beginning January 1, 2015, the price the DeRuyter digester receives under its power purchase agreement with Pacific Power, the local utility, dropped from \$0.03407/kWh with a capacity rate of \$2.84/kW/month to \$0.03192/kWh with a capacity rate of \$2.49/kW/month. As a result of the lower production and lower electricity rates, income received from electricity sales during the 12-month period dropped to \$100,157, compared to \$200,000 for the previous 12-month period.

Most of the digested fiber was used as bedding during the period. When not needed as bedding, the fiber was contracted to a Walla Walla company that composts the fiber 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 \$36,000 at a price of \$6 per cubic yard.

The liquid effluent is stored in ponds on the farm and used to provide nutrients for crop production. In early 2015, DeRuyter added a Dissolved Air Flotation (DAF) sludge dewatering system to further reduce nitrogen and phosphorus in the liquid effluent. 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. Under the agreement, Promus Energy would also be in charge of the nutrient sales.

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 for 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.

Since 2011, Natural Selection Farms has operated the crush facility intermittently, with extruder use during the five-year period ending September 31, 2015 averaging less than 400 hours annually. In June 2014, NSF informed WSDA of its decision to no longer pursue the crushing operation due to the facility's inability to be an economically viable segment of its business. After evaluating several options, WSDA determined it would accept a payment of \$120,000, based on the value of the equipment associated with oilseed crushing facility, in full satisfaction of the amount due under the Use and Lease Agreement.

During WSDA's evaluation process, NSF continued to operate the facility intermittently and to comply with the Use and Lease Agreement. NSF received about 217 tons pounds of oilseeds during the 9-month period ending September 30, 2015, including Washington-grown camelina and mustard from out of state. The camelina meal and oil was shipped to in-state markets for chicken and cattle feed. Mustard meal and oil were returned to the Montana company that contracted for the crushing. Employee hours worked attributed to the crushing facility totaled 1,543 during the nine-month period.

NSF made its final payment and delivered its required reports on November 2, 2015. As part of the final agreement, NSF assumes full ownership and all responsibility for the condition and any disposition of the equipment associated with the facility. NSF reported that it is continuing to look for ways to improve the efficiency of the equipment and plans to investigate food-grade crushing opportunities.

Washington State Department of Agriculture
Energy Freedom Program Summary
 December 2015

Public Partner/ Contact	Odessa Public Development Authority <i>Stacey Rasmussen</i> (509) 982-7850	Port of Warden <i>Pat Millard</i> (509) 349-2480	South Yakima Conservation District <i>Laurie Crowe</i> (509) 829-9025	Washington State Department of Agriculture <i>Mary Beth Lang</i> (360) 902-1812
Private Partner/ Contact	<i>OPDA is seeking a new private partner</i>	Pacific Coast Canola, LLC <i>Ken Scheuer</i> (509) 349-8960	George DeRuyter & Son Dairy <i>Dan DeRuyter</i> (509) 837-7783	Natural Selection Farms <i>Ted Durfey</i> (509) 837-3501
Activity	Oilseed Crushing, Biodiesel Manufacturing	Oilseed Crushing	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 as constructed	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	45 new jobs	1 new job	Up to 7 new jobs
Facility Operations Initial Start	Refinery - Nov. 2008 Crusher - July 2009	Dec. 2012	Nov. 2006	Sept. 2006

* per completion certificate

For more information, contact:

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