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# WSDA

# Energy Freedom Program

# 2011 Update

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*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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# Energy Freedom Program Update

## 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 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 prior to June 30, 2007. 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 1, 2011 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. The agencies included two ports, a public development authority, and a conservation district. 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 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, 2011**

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
	<b>\$10,367,279</b>		

**Overview of Loan Agreements**

WSDA contracts with the public sector partner which then contracts with its private sector partner. 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.

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 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.

**Loan Repayment**

Repayments of the loans began in late 2007 and 2008 and are on an annual or semi-annual schedule that ends in 2016 or 2017. In 2011, loan agreements with the Port of Warden were amended twice, in January and April, to accommodate project delays, with the 2009 and 2010 annual payments ultimately deferred until August 1, 2011. The Odessa PDA repayments resumed in December 2011 as per the loan agreements amended in 2010.

All payments due as of December 1, 2011 have been received and are summarized in Table 2. A total of \$1,793,895 was received during the 12-month period.

**Table 2. Repayment Status of Energy Freedom Loans, as of December 2011**

Public Entity	Principal to be Repaid*	Repayment Received in 2011	Total Repayment Received to date**
Odessa Public Development Authority	\$4,217,659	\$261,898	<b>\$661,278</b>
Port of Warden	\$3,197,292	\$1,254,815	<b>\$1,279,815</b>
South Yakima Conservation District	\$1,913,810	\$200,104	<b>\$1,000,518</b>
Washington State Dept. of Agriculture	\$727,500	\$77,078	<b>\$298,498</b>
<b>Total</b>	<b>\$10,056,261</b>	<b>\$1,793,895</b>	<b>\$2,813,548</b>

\* Less 3% administrative costs allowance. \*\* 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, including production volumes;
- Use of Washington-grown oilseed or waste to produce bioenergy and co-products;
- Movement of products into 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 reports and summarize the status of the bioenergy projects with Energy Freedom loans administered by WSDA, as of December 2011.

### **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 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, shortly after the U.S. market for canola biodiesel disappeared due to the implementation of the revised federal Renewable Fuel Standard (RFS2), which did not include canola as an approved feedstock.

The past twelve months for this project were marked by management changes, new private investment, and a restart of operations in early summer after being idle for almost a year.

Two federal actions -- the approval of canola as a biomass feedstock under the federal RFS2 rules in early October 2010 and the reinstatement of the \$1 per gallon biodiesel blender's tax credit in late December 2010 -- created a more favorable position at the start of 2011 for IEO to obtain needed new capital to restart operations.

At the end of April 2011, IEO signed an agreement with 1138 LLC of Kirkland to manage and finance the operations, while negotiations continued for the company to become the majority owner. Additional investments were made to improve production efficiencies and product quality, increase throughput, and address air quality permit issues. The majority of the changes and updates were completed by mid-June and the crush line was restarted. The biodiesel line was restarted in mid-July.

IEO crushed more than 6,000 tons of canola in the 12-month period ending September 30, 2011, almost all in the last four months of the period. It shipped more than 580,000 gallons of biodiesel and more than 3,100 tons of canola meal and produced 48,000 gallons of glycerin.

All oilseeds crushed this period were grown in Washington and neighboring states, with purchases made through IEO's associated farmer cooperatives. Meal demand and prices were very strong with all canola meal purchased and shipped within two days of production. Demand and prices for biodiesel were also very strong with fuel shipped to market within hours of final testing. Canola meal was marketed primarily through regional feed brokers for use in dairy rations. Most biodiesel was sold by railcar to a major oil company. IEO also supplied fuel to a distributor providing biodiesel to state government through the state fuel contract, an in state retailer, and to local growers and businesses through the neighboring Grange Supply.

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

Employment at IEO expanded as work began to restart operations and as production increased. At the end of September, IEO employed 21 full-time and one part-time staff. Of the full-time jobs, 16 pay wages above the county average rate of \$26,765. Total projected employment is 28 full-time positions. Along with providing work for contractors, distributors, consultants and accountants, the company contributes to the local economy through its use of electricity and town utilities and purchases of tools, supplies, machinery, equipment, and raw materials.

OPDA loan repayments resumed in December 2011 as per the loan agreements amended in late 2010.

### **Port of Warden**

The Port of Warden is partnered with Pacific Coast Canola, LLC, (PCC) to construct a large canola processing facility. PCC will initially develop the oilseed crushing facility and 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.

Progress on the project continued to be delayed early in the year as PCC pursued completion of project financing. The delays prompted a series of amendments to lease and loan documents to adjust payment schedules. In June, it was announced that PCC had joined with two Canadian agricultural companies, forming Legumex Walker, Inc.

Legumex Walker, Inc., (LWI) which owns 85% of Pacific Coast Canola, announced an initial public offering (IPO) on June 30, 2011 with a price of \$9.00 CDN per share. The company completed its IPO on July 14, 2011. LWI contributed \$42.1 million to PCC which allowed PCC to commence construction of its oilseed crushing facility.

The formal Notice To Proceed for construction under an 18-month guaranteed maximum price contract was issued on July 14, 2011. PCC hosted a groundbreaking ceremony on September 21, 2011 with local officials and project partners.

At the end of November, PCC reported that project engineering was being completed and survey work, site preparation and grading had begun. PCC expects to complete foundation work and commence above-ground construction in February. The crusher is expected to be operational by January 2013.

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. During 2011, PCC updated its agreement with the national farmer cooperative CHS to supply canola seed and to sell the canola meal. PCC and CHS are developing a program to use canola grown in Washington and the Pacific Northwest to supply a significant portion of the facility needs within a few years of commencement of operations.

The facility is on a 52-acre site leased from the Port of Warden. With the project now proceeding, the Port moved ahead on project-related investments. To date, the Port has disbursed \$2.4 million of its Energy Freedom loans for the project. This includes expenses related to acquisition of the project site, including purchasing railroad right of way and the five grain silos and related grain handling equipment on the site, and contracting with the Grant County PUD to support installation of an enhanced electrical substation in Warden.

The start of construction has generated job activity at the site through the project's contractor and various subcontractors. At the same time, PCC has been filling out its senior management team, adding six new full-time jobs during the fall that all pay above the average county wage. Total employment at the end of November was 10 full-time or part-time jobs. When fully operational, this project is expected to generate 35 to 45 full-time, family-wage jobs in Grant County.

The Port of Warden started loan repayment in October 2008. As agreed, the Port made its 2009 and 2010 payments, totaling \$840,000, in August 2011. It made its 2011 payment of \$415,000 in October.

### **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, including yeast and waste grease, as feedstock to the digester.

The DeRuyter digester has been operating since November 2006 and is, by far, the largest of the state's six 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, 2011 except for a shutdown for a month to repair a pipe in the digester. Pacific Power, the local utility, purchases all power produced by the digester at 6.3 cents per kilowatt hour. Under this contract, DeRuyters receive an average of \$40,000 per

month in income from power sales. According to Pacific Power, the pay rate will go down to 4 cents per kilowatt hour in January 2013. At this lower rate, the DeRuyters say it will be unprofitable to produce electricity and so they are looking for alternative uses for the gas.

Since November 2010, the digested solids have been sold to Organix, a Walla Walla company that uses them to produce a peat moss substitute called RePeet™. DeRuyters report their digester is the first dairy digester in the country to successfully market this product on a regular basis. 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 percent.

The project has created one new job at the dairy. Loan repayment began in December 2007, with the fifth \$200,000 payment made in December 2011.

### **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.

Production at the Natural Selection Farms facility continues to be intermittent, due to the limited availability of seed for processing. NSF worked with some area growers that planted canola in 2011 and participated in grower meetings encouraging camelina production for energy purposes.

NSF received more than 1.1 million pounds of oilseeds in the 12-month period ending September 30, 2011. Canola made up about 85 percent of the oilseeds received. Early in the year, NSF primarily did custom canola crushing for an out-of-state company. All of the seed received in the third quarter was Washington-grown and included canola, soybeans and camelina. Oil and meal were shipped to both in-state and out-of-state markets.

When operating, the crushing facility provides employment for seven positions. Otherwise, these employees are utilized in other parts of the operation. During the period, hours worked attributed to the crushing facility totaled 2,631.

Loan repayment began in June 2008, with the fourth annual payment made in June 2011. NSF continues to work to encourage oilseed production and crushing for biofuels in Washington.



Washington State Department of Agriculture  
**Energy Freedom Program Summary**  
 December 2011

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<b>Private Partner/ Contact</b>	<b>Inland Empire Oilseeds, LLC</b> <i>Joel Edmonds</i> (509) 982-2970	<b>Pacific Coast Canola, LLC</b> <i>Kevin Raymond</i> (206) 547-1078	<b>George DeRuyter &amp; Sons Farms</b> <i>Dan DeRuyter</i> (509) 837-7783	<b>Natural Selection Farms</b> <i>Ted Durfey</i> (509) 837-3501
<b>Activity</b>	Oilseed Crushing, Biodiesel Manufacturing	Oilseed Crushing, Biodiesel Manufacturing	Anaerobic Digester	Oilseed Crushing
<b>Energy Freedom Loan Amount</b>	\$4,348,102	\$3,296,177	\$1,973,000	\$750,000
<b>Project Cost</b>	\$9.4 Million*	\$110 Million	\$4.5 Million*	\$1.75 Million*
<b>Location</b>	Odessa	Warden	Outlook	Sunnyside
<b>Output</b>	Up to 8 million gallons biodiesel /year	Est. 35-40 million gallons canola oil /year	1.2 megawatts per hour (power for ~700 homes)	Up to 0.5 million gallons oil /year
<b>Jobs Created</b>	22 new jobs	10 new jobs (to date)	1 new job	7 new jobs
<b>Facility Operations Start</b>	Refinery - Nov. 2008 Crusher - July 2009	Crusher - Jan. 2013	Nov. 2006	Sept. 2006

\* per completion certificate

For more information, contact:

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