

MEASURE: SB 620  
EXHIBIT: F  
Joint Committee on Tax Credits 76<sup>th</sup> Session  
DATE: 05-03-2011 PAGES: 19  
SUBMITTED BY: Lis Pinheiro

**From:** Longacre Julia  
**To:** Longacre Julia  
**Subject:** FW: ODOE Responses to Jt. Tax Credit Committee questions on Biomass Producer and Collector Tax Credit Program **submitted**  
**Date:** Wednesday, May 04, 2011 7:44:21 AM **After hearing**  
**Attachments:** Memo on 2010 BPC 3 7.pdf  
EWP\_UO-BiomassTaxCreditUpdate5-2-11.pdf  
BPC Tax Credit response Final HB 2936 A 5 3 Jt TaxCredit.pdf  
BPC Tax Credit response final SB 620 5 3 Jt TaxCredit.pdf

---

**From:** Pinheiro, Lisa [mailto:lisa.pinheiro@state.or.us]  
**Sent:** Tuesday, May 03, 2011 4:44 PM  
**To:** Allanach Christopher; Gavette Corinne  
**Cc:** REPINE Bob; HALE Matt; KRUMENAUER Matt  
**Subject:** ODOE Responses to Jt. Tax Credit Committee questions on Biomass Producer and Collector Tax Credit Program

Good afternoon,

Please find attached the electronic version of the responses to the Jt. Tax Credit Committee questions as they relate to the Biomass Producer and Collector Tax Credit Program.

You will actually find two separate packets: one for SB 620, as submitted this morning, and another on HB 2936 for which we did not provide testimony last week.

The two other documents, one named "EWP\_UO-Biomass Tax CreditUpdate.pdf" and the file named "Memo on 2010 BPC 3 7. Pdf" are generic to the Biomass Producer and Collector Tax Credit program and therefore should be submitted as exhibits to both bills.

Please let me know if you have any questions.

Lisa Pinheiro  
Government Relations Manager  
Oregon Department of Energy  
625 Marion Street NE  
Salem, OR 97301-3737  
P: 503 373 2293  
f: 503 373 7806  
c: 503 586 6430  
toll free: 1-800-221-8035  
www.oregon.gov/energy





To: Bob Repine, Director – Oregon Department of Energy

CC: Andrea Simmons, Lisa Pinheiro, Matt Hale

From: Matt Krumenauer

### **Biomass Producer or Collector Tax Credit Program**

The State of Oregon offers a tax credit to producers and collectors of biomass that is used in Oregon as biofuel or to produce biofuels. The first year that the Oregon Department of Energy (ODOE) has detailed information on the utilization of this program is 2010. This memorandum provides a summary of the Biomass Producer or Collector (BPC) tax credit for 2010.

The BPC tax credit was authorized in 2007 through House Bill 2210. This legislation provided administrative responsibility for the program to the Oregon Department of Revenue and did not require that the tax credits be certified prior to claiming or transferring the credits. In 2009, House Bill 2078 made slight changes to the program and authorized ODOE to establish a certification program, and set a minimum discount value for the transfer of these tax credits.

ODOE began certifying BPC tax credits in July of 2010.

### ***Certification Program***

ODOE developed administrative rules for the BPC tax credit certification through a series of advisory committee meetings, culminating in the development of permanent rules following a public hearing. Temporary rules were issued on July 1, 2010. Permanent rules were issued on November 2, 2010; they included improvements identified during the first implementation phase and incorporated suggestions from affected stakeholders.

The Oregon Department of Energy focused on number of policy goals when developing the certification program:

1. Certification will provide value to eligible taxpayers without being unnecessarily time-consuming or complicated.
2. The certification process will ensure that only eligible applicants, eligible material, and eligible activities can be issued tax credits.
3. Only one tax credit will be issued for each unit of biomass, eliminating the possibility for double-dipping.
4. Proper documentation is required to demonstrate eligibility.
5. Additional criteria would be developed to more effectively target the incentive and control the impact to the state's general fund.
6. Information will be collected to allow the State to evaluate the impact of the BPC tax credit.

The tax credit is determined by taking the amount of eligible biomass that is delivered and multiplying it by the appropriate tax credit rate. To apply for tax credits applicants must complete an application form available from ODOE's website, provide proof of origin and ownership of the biomass, provide information showing the shipments and amount of the biomass, and provide receipts from a biofuel producer certifying that the biomass was used as biofuel or to produce biofuel. The website for this program, including the administrative rules, authorizing statutes, and instructions on how to apply, is available at:

<http://oregon.gov/ENERGY/RENEW/Biomass/TaxCdt.shtml>

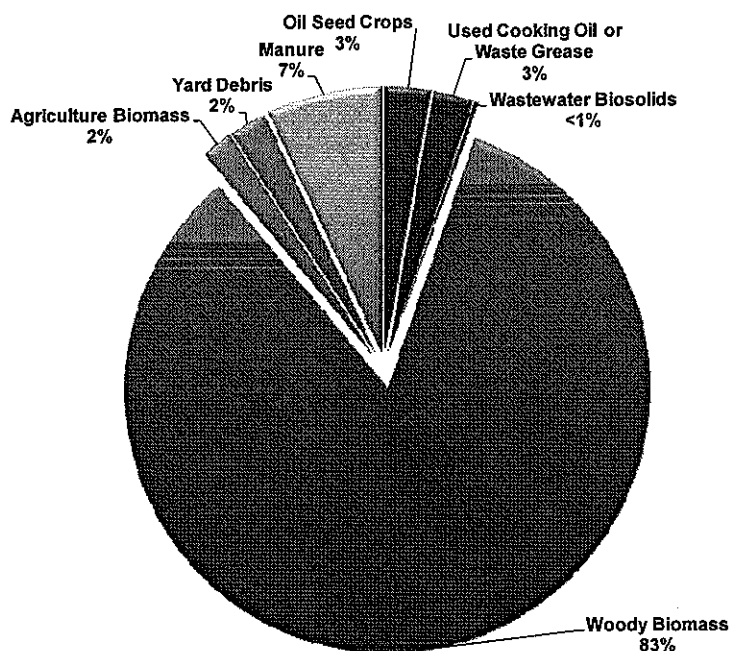
**2010 BPC Tax Credit Summary**

Current rules require that applications be received by ODOE no later than 45 days following the end of the tax year. For most taxpayers the tax year ends at the end of the calendar year; however, a minority of taxpayers follow alternative tax years. For this reason, the summary information provided here is considered preliminary.

**BPC Tax Credit - Summary of Tax Year 2010 as of March 3, 2011**

Total tax credits requested	\$6,600,422
Total tax credit amount pending review	\$1,334,065
Amount of tax credits reduced or denied	-\$356,154
Total amount certified	\$4,911,258

**BPC Tax Credits Requested by Biomass Type**



All applications received by ODOE have been reviewed. The amount of tax credit pending review results from follow-up requests for information issued to applicants by ODOE. The requests for information are a result of missing information from the application, such as proof of origin or ownership, lack of receipts from a biofuel producer, or for applications that included mixed loads of eligible biomass or eligible biomass that may be mixed with ineligible materials such as construction debris. ODOE has rejected applications received after February 15, 2011 for tax years that ended on December 31, 2010.

**Summary of BPC Tax Credit Applications**

Total number of applications	96
Number of individual taxpayers	52
Number of taxpayers applying for woody biomass	25
Number of Biofuel Producers	31
Number in OR	24
Number in WA	6
Number in CA	1
Average amount requested by taxpayer	\$126,931
Average amount requested by application	\$68,754

Applicants for this tax credit are primarily biomass collectors that gather forest-based biomass and deliver this material to wood products manufacturers in the region. This group comprised 83% of the total tax credit requested. These collectors gather the biomass from logging activities, collection yards, and from forest stewardship activities. The biomass collectors process the material by grinding it into hog fuel and then transporting it to a facility, or contracting for this transportation to be completed. The material is then combusted in an industrial boiler to produce heat and electric energy. Approximately 22 percent of the tax credits requested for woody biomass relate to material collected and processed in Oregon, and delivered to facilities in Washington or California.

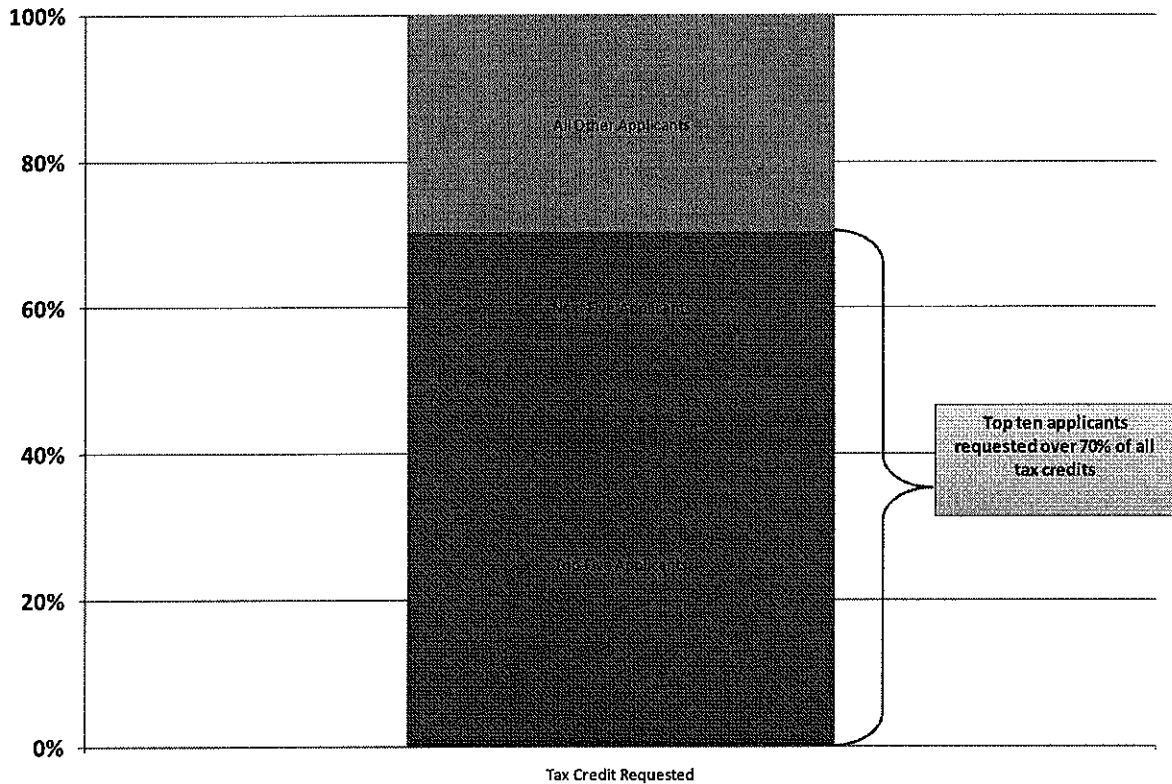
**BPC Tax Credit Rates and 2010 Utilization**

Type of biomass	Tax Credit Rate	Units	Volume	Tax Credit Amount
Woody Biomass	\$10.00	green ton	550,770	\$5,507,700
Manure	\$5.00	wet ton	92,048	\$460,240
Oil Seed Crops	\$0.05	pound	3,592,827	\$179,641
Used Cooking Oil or Waste Grease	\$0.10	gallon	1,614,462	\$161,446
Yard Debris	\$5.00	wet ton	29,888	\$149,441
Agriculture Biomass	\$10.00	green ton	12,606	\$126,057
Wastewater Biosolids	\$10.00	wet ton	1,590	\$15,897
Grain Crops	\$0.90	bushel	0	\$0
Virgin Oil or Alcohol	\$0.10	gallon	0	\$0
			<b>Total</b>	<b>\$6,600,422</b>

Tax credits that are requested for manure relate to anaerobic digesters that produce electricity at three locations located in Tillamook County, Polk County, and Lane County. Tax credits requested for agriculture biomass and wastewater biosolids encompass biomass that was delivered to an anaerobic digester located at Stahlbush Island Farms in Corvallis. Tax credits requested for oil seed crops and used cooking oil or waste grease encompass biomass that was used to produce biodiesel by Sequential Biofuels, in Salem.

The BPC tax credit is utilized by a range of taxpayers, but the amount of tax credits requested is concentrated in a small band. The taxpayer that requested the highest amount had applications totaling approximately \$1.18 million. The taxpayer requested the second highest amount had applications totaling slightly over \$648,000. Ten of the taxpayers requesting credits made up 70 percent of the total credits requested. The remaining 42 taxpayers requested 30 percent.

### One-Fifth of Applicants Request 70% of Tax Credits



## **Conclusions**

The certification program developed for the BPC tax credit is functioning effectively. Applications are processed in a timely manner. Taxpayers will receive additional value if they transfer the certified tax credits as a result of a minimum discount value set by ODOE. The program is designed to incorporate continuous improvement concepts. As a result, ODOE staff have identified a number of improvements that can be considered in future rulemaking. These improvements relate to refinement of the definitions of eligible biomass, communication of certification requirements, and improvements to the application forms.

As stated earlier, ODOE only has detailed information for tax year 2010. This limited amount of information does not allow for a complete evaluation of the broader policy objective of this tax credit. Nor does a clear definition of the overall objective exist for this tax credit; the authorizing statute for this tax credit does not explicitly state a purpose. Presumably, the purpose of the program is to stimulate production and collection of biomass necessary to produce biofuel. Due to the lack of a specific purpose, ODOE is limited in determining the success of this tax credit.

Given this limited amount of information, staff has initiated a study to answer two policy questions:

1. What is the economic impact to Oregon from the increased use of biomass?
2. Has the tax credit resulted in a difference in the amount of biomass deliveries?

The University of Oregon Ecosystem Workforce Program has been contracted to lead this study. Data collection for this study is currently underway as a collaborative effort between the university, ODOE, the Oregon Department of Forestry, and the Oregon Department of Agriculture.

Preliminary results of this study are expected in April, 2011.



# Oregon

John A. Kitzhaber, M.D., Governor



OREGON  
DEPARTMENT OF  
ENERGY

625 Marion St. NE  
Salem, OR 97301-3737  
Phone: (503) 378-4040  
Toll Free: 1-800-221-8035  
FAX: (503) 373-7806  
[www.Oregon.gov/ENERGY](http://www.Oregon.gov/ENERGY)

Date: May 3, 2011

To: Sen. Ginny Burdick, Co-Chair  
Rep. Jules Bailey, Co-Chair  
Rep. Vicki Berger, Co-Chair  
Joint Committee on Tax Credits

From: Bob Repine, Acting Director Oregon Department of Energy

RE: House Bill 2936-A: Proposing to extend the Biomass Producer or Collector Tax Credit

Thank you for the opportunity to provide your committee with background information on House Bill 2936. The Department of Energy (Department) is responsible for the administration of this tax credit program.

What HB 2936 proposes: In addition to extending the current biomass producer and collector tax credit to 2019, this bill introduces a new tax credit for the transportation of woody biomass and includes a new and broader definition of woody biomass. The bill also defines application requirements and the fee structure for the woody biomass transportation tax credit.

HB 2936 also creates a Task Force on Biomass Facility Siting to identify locations of biomass; amounts available regionally; types of facilities that may be developed using biomass as fuel; and potential sites for biomass facilities, including existing facilities.

The Joint Committee on Tax Credits recommended that policy committees address a series of questions when reviewing the tax credit sunset extension bills. Based on programmatic experience, the Department offers the following information for the committee's consideration.

**1. What is the public policy purpose of this credit? Is there an expected timeline for achieving this goal?**

ORS 315.141 authorizes the Biomass Producer or Collector (BPC) Tax Credit, however, the statute is silent on the intent or purpose. Based on the legislative history, it appears that this tax credit was intended to stimulate production and collection of biomass necessary to produce biofuel. The statute does not provide a limit on the amount of tax credits or targets for biofuel or bioenergy production.

The statute does not provide an expected timeline for achieving biofuel production or collection. The authorizing legislation, HB 2210, (2007) originally had a sunset date of January 1, 2013. HB 2936 expands the program and extends it to 2019.

The tax credit program may also have an indirect impact on Oregon's Low Carbon Fuel Standard. The Low Carbon Fuel Standard program, authorized by the Oregon legislature in 2009 as part of HB 2186, is a strategy to lower the carbon intensity of Oregon's fuel use. The biofuel production supported by this tax credit can help meet this standard.

**2. Is economic development and job creation a primary goal of this credit? If so, the following should be addressed based on historical evidence for the existing credits and projections based on new proposed credits:**

- **Number of jobs associated with credit on an annual basis.**
- **Break down between permanent and temporary jobs.**
- **Break down between traded sector and domestic sector jobs.**
- **Estimates of average wage per job.**
- **Estimate of tax revenue cost per job.**

The statute that allows the Biomass Producer or Collector (BPC) Tax Credit does not explicitly state a purpose. Based on the legislative history, it appears that this tax credit was intended to stimulate production and collection of biomass necessary to produce biofuel. The statute does not provide a limit on the amount of tax credits or targets for biofuel or bioenergy production.

The authorizing legislation for this tax credit did require the Oregon Department of Energy (ODOE) to periodically conduct an impact study of the biofuels program. This study was to include criteria related to jobs created and average wage rate for those jobs among other items. This study can be accessed at:

[http://www.oregon.gov/ENERGY/RENEW/Biomass/docs/Biofuels\\_Impact\\_Study\\_Final.pdf](http://www.oregon.gov/ENERGY/RENEW/Biomass/docs/Biofuels_Impact_Study_Final.pdf)

The first impact study was issued to the legislature in August of 2010. In this study, ODOE concluded that the data collected in the limited time since certification began in January 2010, was insufficient to provide adequate confidence in determining the number of jobs created in the bioenergy industry as a result of the tax credit program.

ODOE has since contracted with the Ecosystem Workforce Initiative at the University of Oregon to conduct an economic impact study of biomass production and collection in Oregon. This study will research and report on two primary areas: 1) How many jobs are created from forest-based biomass collection and delivery to energy facilities and 2) Has the tax credit impacted the volume of forest-based biomass collected and the prices paid for woody biomass. This study is currently underway with final results expected at the end of June.



**3. Who (groups of individuals, types of organizations for businesses) directly benefits from this credit? Does this credit target a specific group? If so, is it effectively reaching this group?**

Oregon taxpayers who produce or collect biomass benefit from this credit. The facilities to which they deliver biomass also benefit from the tax credit through the reduction in cost for certain types of biomass feedstock.

In accordance with ODOE rules, eligible applicants must hold title to the biomass at the time it is delivered to be used as biofuel or to produce biofuel. This ensures that only one taxpayer is able to earn this credit. The majority of the applicants are biomass collectors that collect, process and transport or contract to have the biomass transported to a wood products mill. In addition, a minority of the applicants have been ranch owners, dairy farmers, agricultural producers, food processors, and waste haulers.

The new woody biomass transportation tax credit is specific to a person that transports woody biomass from forest management operations to a biofuel producer. In many instances this will be the same entity as the biomass collector.

In 2010, 52 individual applicants applied for tax credits under this program. Attached is a summary of the Biomass Producer or Collector Tax Credit Program for 2010. This summary provides more details on the amount of tax credit requested and the applicants.

**4. What is expected to happen if this credit fully sunsets? Could adequate results be achieved with a scaled down version of the credit? What would be the effect of reducing the credit by 50%?**

The Department does not have sufficient data to accurately determine what may happen if the program is scaled down, reduced by 50% or fully sunsets. Presumably, there would be some biomass production or collection activities that would not be economically feasible without the ability to claim and subsequently monetize this tax credit. The amount of energy or biofuel produced in Oregon is not likely be affected by this credit.

**5. What background information on the effectiveness of this type of credit is available from other states?**

Many states have implemented incentives or tax credit programs to support the utilization of various types of biomass. A recent study classified 370 state policies that provide incentives for forest biomass utilization. This analysis found that Oregon is the only state that currently provides an incentive for the *transportation* of biomass in the form of the biomass producer or collector tax credit. The majority of these incentives are in the form of loans, grants, tax credits, or exemptions for the purchase of processing equipment or in the

form of an energy production tax credit. Oregon offers similar incentives through the Business Energy Tax Credit Program. While no state has a specific transportation incentive like Oregon, similar programs include:

- Missouri offers a corporate tax credit at the rate of \$5 per ton for businesses processing forest industry residue into fuels (e.g. pellets, charcoal).
- New Mexico offers a \$5 per wet ton tax credit for biomass from a dairy or feedlot that is used at a facility to generate electricity or make a liquid or gaseous fuel for commercial use. Program is capped at \$5 million per year.
- The Arizona Healthy Forest Enterprise Incentives Program includes provisions for reducing state diesel fuel surcharges from \$0.26 to \$0.13 per gallon.

**6. Is use of a tax credit an effective and efficient way to achieve this policy goal? What are the administrative and compliance costs associated with this credit? Would a direct appropriation achieve the goal of this credit more efficiently?**

The use of this tax credit can provide benefit to biomass production or collection that otherwise would not be economically feasible. The tax credit does not directly facilitate the investment in assets or facilities that increase the demand for biomass, or the production of bioenergy or fuels.

The certification program currently costs approximately \$50,000 annually to administer. This includes the cost to provide information and assistance to taxpayers as well as accept, review and certify tax credit applications. This expense is captured through application fees authorized by House Bill 2078 (2009).

Oregon law currently allows the transfer of a BPC tax credit in exchange for a cash payment. Applicants have indicated the majority of the tax credits earned are transferred.

**7. What other incentives (including state or local subsidies, federal tax expenditures or subsidies) are available that attempt to achieve a similar policy goal?**

There are a variety of state and federal incentives that are available to support the production or collection of biomass in Oregon. The Business Energy Tax Credit has provided financial incentives for the purchase of equipment to collect, process and transport biomass as well as tax credits for facilities that will increase the overall demand for biomass.

There are various federal programs that offer grants, loans, tax credits, accelerated depreciation, and other incentives for equipment and facilities that use biomass for energy production. A comparable program, the Biomass Crop Assistance Program (BCAP), was authorized in the 2008 Farm Bill to assist agriculture and forest landowners and operators

with the establishment and production of biomass for conversion to bioenergy. The availability of funding for BCAP and other federal programs is uncertain.

**8. Could this credit be modified to make it more effective and/or efficient? If so, how?**

The current program is broad and is attempting to support a wide range of biomass feedstocks and conversion technologies without a clearly stated goal or objective. Much of the current program utilization has been for existing facilities that are using additional materials directly from the forest in place of mill residues or other materials. Clearly defining the goal and objectives of this tax credit would help to determine how the program could be modified. Two examples for the committee to consider are provided below.

The credit is currently calculated based on the wet or green weight of the biomass. The credit could be calculated on a dry ton basis to align with the purchasing practices of existing wood products firms. This change would promote higher energy biomass and more efficient practices. If the credit is calculated on a green ton basis, there is an incentive to provide higher weight, higher moisture, and lower energy fuels.

The types of biomass that is allowed a tax credit could also be reviewed to determine if a tax credit is needed. For example, yard debris is provided a tax credit rate of \$5.00 per green ton. The collection of this material is regulated and has a different cost profile than woody biomass that is collected from remote forest locations. In contrast to forest residues, yard debris is often delivered directly to a collection facility and a tipping fee charged to the individual or firm delivering the material.

**9. How would the return on the state's investment best be measured for this credit? Which of the following can be quantified as a "return" or "benefit" resulting from the use of this credit:**

- **Jobs & overall economic Activity**
- **Environmental goals such as energy conservation, air/water quality**
- **Social goals**

Using biomass to produce fuels or energy has benefits in all three of these categories. Biofuels and bioenergy can contribute not only to reduced carbon emissions and reliance on fossil fuels; it can contribute positively to ecosystem health. These attributes can result in a positive impact to the state's economy and environment.

ORS 469.785 requires the ODOE to conduct an impact study of the biofuels program. This requirement could be adjusted and the responsibility expanded to allow ODOE to work with the Oregon Employment Department, Oregon Department of Forestry and the Oregon

Department of Agriculture to evaluate the BPC tax credit and the various state policies and goals that it relates to and report on metrics as appropriate. Metrics could include:

- Job creation
- Biofuel and bioenergy production
- Agricultural biomass production
- Forest biomass utilization

**10. Using the three broad categories above, how do these credits rank in terms of their expected return on investment?**

Question 10 can only be answered by the committee based on the review of multiple bills.



May 2, 2011

Matt Krummenauer  
Senior Policy Analyst  
Oregon Department of Energy

**Re: Biomass Producers or Collectors Tax Credit Impact Study**

Dear Matt:

We are writing to provide an update of our study of the biomass producers and collectors tax credit. This study aims to answer two questions:

1. How many jobs are created from forest-based biomass collection and delivery to energy facilities?
2. Has the tax credit impacted the volume of forest-based biomass collected and the prices paid for woody biomass?

Answering these questions should increase understanding of the economic development potential of forest-based biomass utilization and offer a preliminary understanding of how the tax credit has affected the market for woody biomass.

To understand the economic impacts of biomass utilization, we are surveying businesses that have received the tax credit about the costs of biomass collection and delivery. We will use this information to forecast the number of jobs, average wages of those jobs, and tax revenue impact per green ton of material delivered to biomass energy facilities.

To understand the impacts of the tax credit, we will compare the price paid and volume demanded by biomass energy facilities to state and national trends in energy and wood products markets to discover if any decoupling occurred following the introduction of the tax credit. A decoupling of these trends could be an indicator that the tax credit fostered biomass utilization.

We will produce a report and Power Point presentation that will describe our results. We anticipate completing our research by the end of June 2011. If you have any questions, please do not hesitate to get in touch. Thank you again for your support of this project.

Sincerely,

Cassandra Moseley  
Director  
cmoseley@uoregon.edu • 541-346-4545

Max Nielsen-Pincus  
Faculty Research Associate  
maxn@uoregon.edu • 541-346-0676



# Oregon

John A. Kitzhaber, M.D., Governor



OREGON  
DEPARTMENT OF  
ENERGY

625 Marion St. NE  
Salem, OR 97301-3737  
Phone: (503) 378-4040  
Toll Free: 1-800-221-8035  
FAX: (503) 373-7806  
[www.Oregon.gov/ENERGY](http://www.Oregon.gov/ENERGY)

Date: May 3, 2011

To: Sen. Ginny Burdick, Co-Chair  
Rep. Jules Bailey, Co-Chair  
Rep. Vicki Berger, Co-Chair  
Joint Committee on Tax Credits

From: Bob Repine, Acting Director Oregon Department of Energy

RE: Senate Bill 620: Proposing to extend the Biomass Producer or Collector Tax Credit

Thank you for the opportunity to provide your committee with background information on Senate Bill 620. The Department of Energy (Department) is responsible for the administration of this tax credit program.

What SB 620 proposes: In addition to extending the current biomass producer and collector tax credit to 2019, SB 620 changes the year for which a tax credit can be claimed. Under SB 620, the tax credit can be claimed in the tax year that the biomass is transferred to a biofuel producer or oilseed processor. Under current law, the credit can be claimed in the tax year it was certified by the Department of Energy. In cases in which the certification does not occur until the tax year following the year in which the biomass was transferred, the taxpayer is unable to claim the credit in the year in which the biomass was produced or collected. This timing issue primarily impacts agricultural producers who harvest an oil seed crop at the end of one year, and the oil is delivered to a biofuel producer the following year. Legislation in 2009 directed the Department to implement a certification program for these tax credits, becoming effective in 2010. SB 620 does not make changes to the certification requirements.

The Joint Committee on Tax Credits recommended that policy committees address a series of questions when reviewing the tax credit sunset extension bills. Based on programmatic experience, the Department offers the following information for the committee's consideration.

**1. What is the public policy purpose of this credit? Is there an expected timeline for achieving this goal?**

ORS 315.141 authorizes the Biomass Producer or Collector (BPC) Tax Credit, however, statute is silent on the its intent or purpose. Based on the legislative history, it appears that this tax credit was intended to stimulate production and collection of biomass

necessary to produce biofuel. The statute does not provide a limit on the amount of tax credits or targets for biofuel or bioenergy production.

The statute does not provide an expected timeline for achieving biofuel production or collection. The authorizing legislation (2007 House Bill 2210) originally had a sunset date of January 1, 2013. SB 620 extends it to 2019.

The tax credit program may also have an indirect impact on Oregon's Low Carbon Fuel Standard. The Low Carbon Fuel Standard program, authorized by the Oregon legislature in 2009 as part of HB 2186, is a strategy to lower the carbon intensity of Oregon's fuel use. The biofuel production supported by this tax credit can help meet this standard.

**2. Is economic development and job creation a primary goal of this credit? If so, the following should be addressed based on historical evidence for the existing credits and projections based on new proposed credits:**

- **Number of jobs associated with credit on an annual basis.**
- **Break down between permanent and temporary jobs.**
- **Break down between traded sector and domestic sector jobs.**
- **Estimates of average wage per job.**
- **Estimate of tax revenue cost per job.**

The statute that allows the Biomass Producer or Collector (BPC) Tax Credit does not explicitly state a purpose. Based on the legislative history, it appears that this tax credit was intended to stimulate production and collection of biomass necessary to produce biofuel. The statute does not provide a limit on the amount of tax credits or targets for biofuel or bioenergy production.

The authorizing legislation for this tax credit did require the Oregon Department of Energy (ODOE) to periodically conduct an impact study of the biofuels program. This study was to include criteria related to jobs created and average wage rate for those jobs among other items. This study can be accessed at:

[http://www.oregon.gov/ENERGY/RENEW/Biomass/docs/Biofuels\\_Impact\\_Study\\_Final.pdf](http://www.oregon.gov/ENERGY/RENEW/Biomass/docs/Biofuels_Impact_Study_Final.pdf)

The first impact study was issued to the legislature in August of 2010. In this study, ODOE concluded that the data collected in the limited time since certification began in January 2010, was insufficient to provide adequate confidence in determining the number of jobs created in the bioenergy industry as a result of the tax credit program.

ODOE has since contracted with the Ecosystem Workforce Initiative at the University of Oregon to conduct an economic impact study of biomass production and collection in Oregon. This study will research and report on two primary areas: 1) How many jobs are created from forest-based biomass collection and delivery to energy facilities and 2) Has the tax credit impacted the volume of forest-based biomass collected and the prices paid

for woody biomass. This study is currently underway with final results expected at the end of June.

**3. Who (groups of individuals, types of organizations for businesses) directly benefits from this credit? Does this credit target a specific group? If so, is it effectively reaching this group?**

Oregon taxpayers who produce or collect biomass benefit from this credit. The facilities to which they deliver biomass also benefit from the tax credit through the reduction in cost for certain types of biomass feedstock.

In accordance with ODOE rules, eligible applicants must hold title to the biomass at the time it is delivered to be used as biofuel or to produce biofuel. This ensures that only one taxpayer is able to earn this credit. The majority of the applicants are biomass collectors that collect, process and transport or contract to have the biomass transported to a wood products mill. In addition, a minority of the applicants have been ranch owners, dairy farmers, agricultural producers, food processors, and waste haulers.

In 2010, 52 individual applicants applied for tax credits under this program. Attached is a summary of the Biomass Producer or Collector Tax Credit Program for 2010. This summary provides more details on the amount of tax credit requested and the applicants.

**4. What is expected to happen if this credit fully sunsets? Could adequate results be achieved with a scaled down version of the credit? What would be the effect of reducing the credit by 50%?**

The Department does not have sufficient data to accurately determine what may happen if the program is scaled down, reduced by 50% or fully sunsets. Presumably, there would be some biomass production or collection activities that would not be economically feasible without the ability to claim and subsequently monetize this tax credit. The amount of energy or biofuel produced in Oregon is not likely be affected by this credit.

**5. What background information on the effectiveness of this type of credit is available from other states?**

Many states have implemented incentives or tax credit programs to support the utilization of various types of biomass. A recent study classified 370 state policies that provide incentives for forest biomass utilization. This analysis found that Oregon is the only state that provides an incentive for the *transportation* of biomass. The majority of these incentives are in the form of loans, grants, tax credits, or exemptions for the purchase of processing equipment or in the form of an energy production tax credit. Oregon offers similar incentives through the Business Energy Tax Credit Program. While no state has a specific transportation incentive like Oregon, similar programs include:



- Missouri offers a corporate tax credit at the rate of \$5 per ton for businesses processing forest industry residue into fuels (e.g. pellets, charcoal).
- New Mexico offers a \$5 per wet ton tax credit for biomass from a dairy or feedlot that is used at a facility to generate electricity or make a liquid or gaseous fuel for commercial use. Program is capped at \$5 million per year.
- The Arizona Healthy Forest Enterprise Incentives Program includes provisions for reducing state diesel fuel surcharges from \$0.26 to \$0.13 per gallon.

**6. Is use of a tax credit an effective and efficient way to achieve this policy goal? What are the administrative and compliance costs associated with this credit? Would a direct appropriation achieve the goal of this credit more efficiently?**

The use of this tax credit can provide benefit to biomass production or collection that otherwise would not be economically feasible. The tax credit does not directly facilitate the investment in assets or facilities that increase the demand for biomass, or the production of bioenergy or fuels.

The certification program currently costs approximately \$50,000 annually to administer. This includes the cost to provide information and assistance to taxpayers as well as accept, review and certify tax credit applications. This expense is captured through application fees authorized by House Bill 2078 (2009).

Oregon law currently allows the transfer of a BPC tax credit in exchange for a cash payment. Applicants have indicated the majority of the tax credits earned are transferred.

**7. What other incentives (including state or local subsidies, federal tax expenditures or subsidies) are available that attempt to achieve a similar policy goal?**

There are a variety of state and federal incentives that are available to support the production or collection of biomass in Oregon. The Business Energy Tax Credit has provided financial incentives for the purchase of equipment to collect, process and transport biomass as well as tax credits for facilities that will increase the overall demand for biomass.

There are various federal programs that offer grants, loans, tax credits, accelerated depreciation, and other incentives for equipment and facilities that use biomass for energy production. A comparable program, the Biomass Crop Assistance Program (BCAP), was authorized in the 2008 Farm Bill to assist agriculture and forest landowners and operators with the establishment and production of biomass for conversion to bioenergy. The availability of funding for BCAP and other federal programs is uncertain.

**8. Could this credit be modified to make it more effective and/or efficient? If so, how?**

The current program is broad and is attempting to support a wide range of biomass feedstocks and conversion technologies without a clearly stated goal or objective. Much of the current program utilization has been for existing facilities that are using additional materials directly from the forest in place of mill residues or other materials. Clearly defining the goal and objectives of this tax credit would help to determine how the program could be modified. Two examples for the committee to consider are provided below.

The credit is currently calculated based on the wet or green weight of the biomass. The credit could be calculated on a dry ton basis to align with the purchasing practices of existing wood products firms. This change would promote higher energy biomass and more efficient practices. If the credit is calculated on a green ton basis, there is an incentive to provide higher weight, higher moisture, and lower energy fuels.

The types of biomass that is allowed a tax credit could also be reviewed to determine if a tax credit is needed. For example, yard debris is provided a tax credit rate of \$5.00 per green ton. The collection of this material is regulated and has a different cost profile than woody biomass that is collected from remote forest locations. In contrast to forest residues, yard debris is often delivered directly to a collection facility and a tipping fee charged to the individual or firm delivering the material.

**9. How would the return on the state's investment best be measured for this credit? Which of the following can be quantified as a "return" or "benefit" resulting from the use of this credit:**

- **Jobs & overall economic Activity**
- **Environmental goals such as energy conservation, air/water quality**
- **Social goals**

Using biomass to produce fuels or energy has benefits in all three of these categories. Biofuels and bioenergy can contribute not only to reduced carbon emissions and reliance on fossil fuels; it can contribute positively to ecosystem health. These attributes can result in a positive impact to the state's economy and environment.

ORS 469.785 requires the ODOE to conduct an impact study of the biofuels program. This requirement could be adjusted and the responsibility expanded to allow ODOE to work with the Oregon Employment Department, Oregon Department of Forestry and the Oregon Department of Agriculture to evaluate the BPC tax credit and the various state policies and goals that it relates to and report on metrics as appropriate. Metrics could include:

- Job creation
- Biofuel and bioenergy production
- Agricultural biomass production

- Forest biomass utilization

**10. Using the three broad categories above, how do these credits rank in terms of their expected return on investment?**

Question 10 can only be answered by the committee based on the review of multiple bills.