

Can we make money from the wind turbines? -- No. Western does not own the turbines. He doesn't recommend bringing this up.

How much will this cost per year?

- Please see the table below within the email from Facilities Director, John Furman. The medium risk scenario is the most likely, but even that is quite conservative. The real cost will likely fall somewhere in between the medium and low cost, assuming that the SAF Committee agrees to use the \$50k that is spent now on RECs on the PSE wind turbine project.

- Where is the funding coming from?

- Each of the parties listed within the table will be responsible for coming up with the extra funds from within their budgets. The total amounts to about a 5% increase to everyone's utility bills. Utility bills are only a portion of the expenses that each area pays. What I am hearing is that this is a very low price to pay for what we get, and overall is not much money relative to each area's budget.

- Which other universities are doing this?

- Several universities have invested in building their own turbines. App State, Whitman, Luther College, U Minnesota, American University, George Washington University, and others. You can see more info via these CSPS projects attached.

- Who else is involved in this project?

- We know that Microsoft and the Evergreen State College are considering signing a Green Direct contract with PSE.

- SAF - what will we do with RECs?

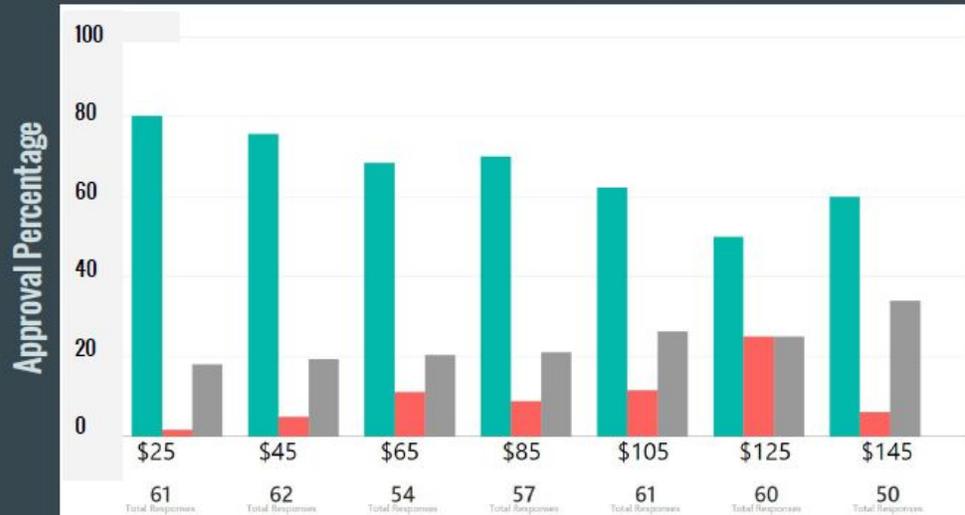
- We propose to take the \$50k currently spent on RECs and direct that money toward shaving \$50k off of the bill that utility payers would pay. This drops the amount that each of the utility payers would pay in the medium and low risk scenarios.

- Additional

- Check out the survey work done by students in the "Clean Energy B" proposal group. Their survey shows that students support paying for zero carbon energy.

## How much are students willing to pay?

Preliminary results show general support for a new fee



John's email to utility bill payers on campus:

All,

The University has an immediate opportunity to receive all power from PSE via an as yet undeveloped wind farm. The general concept is that we would sign on to a recently approved rate schedule – roughly 5% higher than the conventional rate – and that 5% premium is leveraged by PSE to acquire/construct a 75 megawatt wind farm. The power generated from that wind farm is directly attributed to the consumers who sign onto the green power purchase. **I am seeking your concurrence with moving forward on this purchase since all of you have the potential to see an impact to your operational expenses.**

The Sustainability Advisory Committee has endorsed this strategy as an improvement to our current process of purchasing RECs (Renewable Energy Credit). Seth Vidana is also working with the State with the expectation that this green power purchase will be accepted as a strategy to meet legislatively required progress on carbon footprint reduction (current RECs are not accepted). Concurrently, Seth is also discussing the possibility of shifting the current REC purchase to this Green Power Program (with Associated Students).

Program Details. The actual costs will not be imposed until 2019, when the wind farm construction is expected to be completed. We have submitted an application to be considered for the program, and expect to hear within the month whether PSE will have sufficient wind power production capacity to include Western in the program. At that time, Western will have to sign a Service Agreement committing us to participate. Since that invitation from PSE will come with a very short process time, I need to know BEFOREHAND that you will financially support the Green Power Purchase.

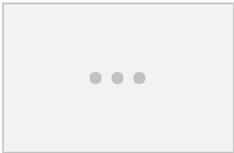
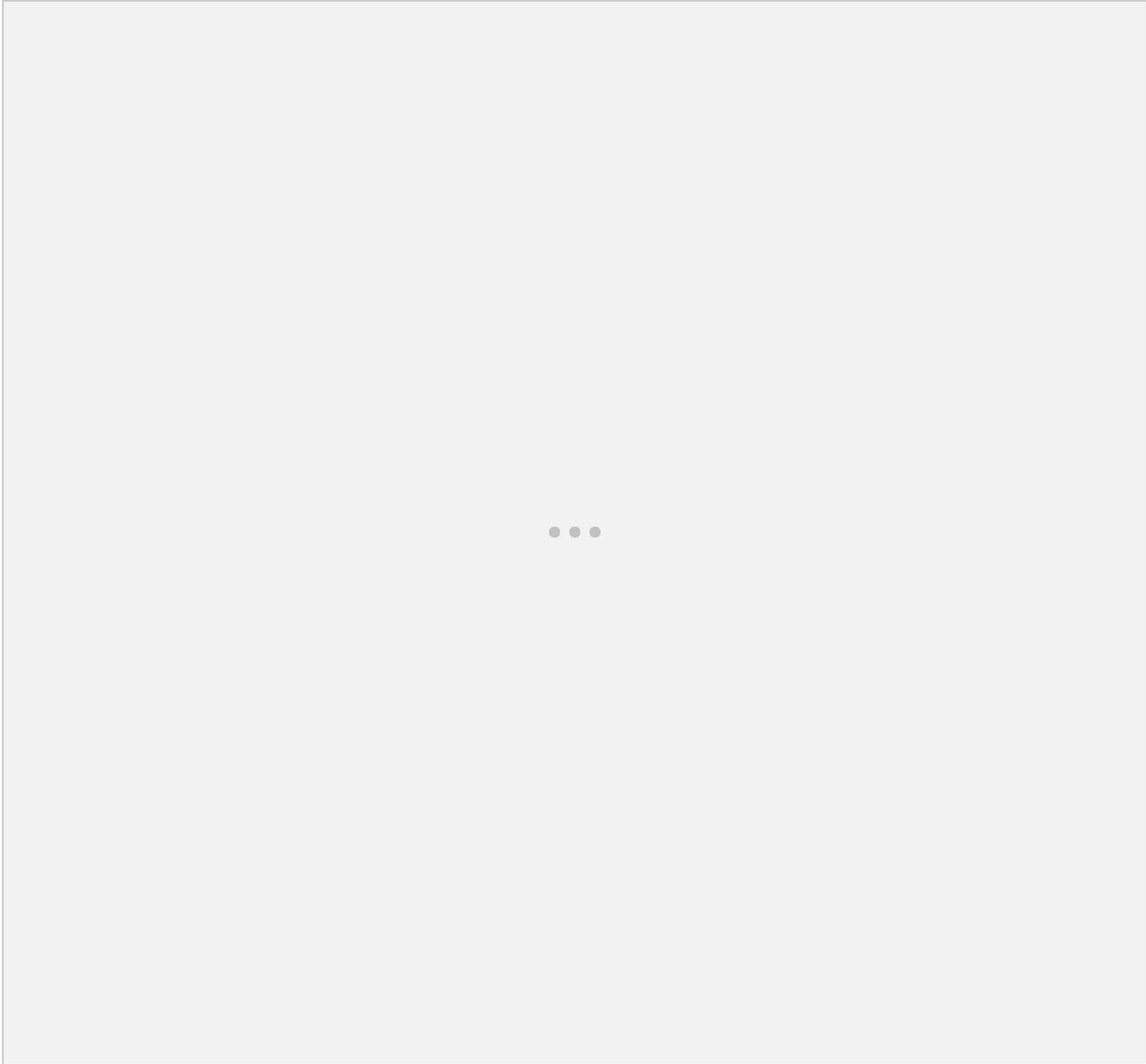
To help you understand the actual dollar impact, I have three scenarios below which show the additional annual cost to your budget over the first five years of the program. The worst case is where Associated Students does not shift the current REC purchase to this initiative. The medium case has the current REC purchase cost offsetting the total cost of the increase. Finally, the "Best" case is presented in light of the

current carbon tax initiative in front of voters and phasing out REC purchases. If I732 is approved, conventional power costs are predicted to rise, making our enrollment in this green power purchase program actually cost less than conventional power within 5 years.

There are many other variables and uncertainties that could be discussed, but I am confident that these dollar estimates are at the high end of what you could expect. If you have questions, please ask – If needed, we can meet as a group or individually to help you better understand the program.

Thanks,  
John

<b>WORST CASE</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>
<b>TOTAL COST</b>	<b>\$ 105,633</b>	<b>\$ 120,347</b>	<b>\$ 135,168</b>	<b>\$ 150,753</b>	<b>\$ 166,440</b>
Sustainable Action Fund REC	\$ -	\$ -	\$ -	\$ -	\$ -
Academic - 68.3%	\$ 72,147	\$ 82,197	\$ 92,320	\$ 102,965	\$ 113,678
University Residences - 19.2%	\$ 20,282	\$ 23,107	\$ 25,952	\$ 28,945	\$ 31,956
Viking Union - 6.1%	\$ 6,444	\$ 7,341	\$ 8,245	\$ 9,196	\$ 10,153
Student Rec - 6.1%	\$ 6,444	\$ 7,341	\$ 8,245	\$ 9,196	\$ 10,153
Bookstore - 0.3%	\$ 317	\$ 361	\$ 406	\$ 452	\$ 499
<b>MEDIUM RISK</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>
<b>TOTAL COST</b>	<b>\$ 105,633</b>	<b>\$ 120,347</b>	<b>\$ 135,168</b>	<b>\$ 150,753</b>	<b>\$ 166,440</b>
Sustainable Action Fund REC	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
Academic - 68.3%	\$ 37,997	\$ 48,047	\$ 58,170	\$ 68,815	\$ 79,528
University Residences - 19.2%	\$ 10,682	\$ 13,507	\$ 16,352	\$ 19,345	\$ 22,356
Viking Union - 6.1%	\$ 3,394	\$ 4,291	\$ 5,195	\$ 6,146	\$ 7,103
Student Rec - 6.1%	\$ 3,394	\$ 4,291	\$ 5,195	\$ 6,146	\$ 7,103
Bookstore - 0.3%	\$ 167	\$ 211	\$ 256	\$ 302	\$ 349
<b>I732 Approved</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>
<b>TOTAL COST</b>	<b>\$ 105,633</b>	<b>\$ 73,809</b>	<b>\$ 39,578</b>	<b>\$ 3,485</b>	<b>\$ (35,248)</b>
Sustainable Action Fund REC	\$ 50,000	\$ 25,000	\$ -	\$ -	\$ -
Academic - 68.3%	\$ 37,997	\$ 33,336	\$ 27,031	\$ 2,380	\$ (24,075)
University Residences - 19.2%	\$ 10,682	\$ 9,371	\$ 7,599	\$ 669	\$ (6,768)
Viking Union - 6.1%	\$ 3,394	\$ 2,977	\$ 2,414	\$ 213	\$ (2,150)
Student Rec - 6.1%	\$ 3,394	\$ 2,977	\$ 2,414	\$ 213	\$ (2,150)
Bookstore - 0.3%	\$ 167	\$ 146	\$ 119	\$ 10	\$ (106)



John Furman, PE, CEFM, CFM

Director Facilities Management

Voice [360-650-3496](tel:360-650-3496)

[John.Furman@wwu.edu](mailto:John.Furman@wwu.edu)