

# FISCAL NOTE

**Bill #:** SB 506

**Title:** Encourage alternative energy and electrical generation.

**Primary**

**Sponsor:** John Cobb

**Status:** Final Bill

|                   |      |                                 |      |
|-------------------|------|---------------------------------|------|
| Sponsor signature | Date | Chuck Swysgood, Budget Director | Date |
|-------------------|------|---------------------------------|------|

## Fiscal Summary

|  | <b><u>FY2002</u></b><br><b><u>Difference</u></b> | <b><u>FY2003</u></b><br><b><u>Difference</u></b> |
|--|--|--|
| <b>Expenditures:</b>                       |  |  |
| State Special Revenue                      | \$148,819  | \$148,819  |
| <b>Revenue:</b>                            |  |  |
| General Fund                               |  | (\$894,983)                                      |
| State Special Revenue                      | \$148,819  | \$179,769  |
| <b>Net Impact on General Fund Balance:</b> | <b>(\$0)</b>                                     | <b>(\$894,983)</b>                               |

| <b><u>Yes</u></b> | <b><u>No</u></b> |                                  | <b><u>Yes</u></b> | <b><u>No</u></b> |                               |
|-------------------|------------------|----------------------------------|-------------------|------------------|-------------------------------|
| X                 |                  | Significant Local Gov. Impact    | X                 |                  | Technical Concerns            |
|                   | X                | Included in the Executive Budget | X                 |                  | Significant Long-Term Impacts |
|                   | X                | Dedicated Revenue Form Attached  | X                 |                  | Family Impact Form Attached   |

## Fiscal Analysis

### ASSUMPTIONS:

#### **General**

1. The proposal amends the laws relating to alternative energy systems. In particular, this bill creates a special revenue account that will be used to provide loans to individuals and small businesses for building alternative energy systems. This loan program will fall under the jurisdiction of the Department of Environmental Quality and will be funded by Air Quality Non-compliance fees.
2. The proposal includes exemptions for machinery and equipment used in qualifying generation facilities from property taxation, extends and increases tax credits for alternative energy systems, and increases the tax credit for capital expenditures for energy conserving investments. Further, the bill allows cities and

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towns to create special improvement districts for the purchase, installation, maintenance, and management of alternative energy production facilities.

### **Alternative Energy Loan Account**

3. The Department of Environmental Quality assumes 5-year loans with terms at 5% interest, 100% of available funds will be loaned, and 100% of repayments will be recovered. The alternative energy loan account will lend \$133,999 each year (Air Quality non compliance fees of \$148,819 – administrative assessment of 10%). Repayment of FY02 loans will begin to be realized in FY03, for a repayment total of \$30,950. The alternative energy revolving loan program will require the entire 10% administration costs allowed in the bill (Department of Environmental Quality).

### **Revenue impacts**

#### **PROPERTY TAX**

4. The Department of Environmental Quality projects installation of 150 generation systems under 1MW in FY02, which includes anything being used for net metering. Each generation system under 1MW is estimated to generate an average of 400kW, with an estimated installation costs of \$1200/kW. Total property value of equipment exempted from taxation for systems under 1MW for FY03 is estimated at \$72,000,000 (Department of Environmental Quality).
5. The Department of Environmental Quality estimates systems that generate in excess of 1 megawatt will total 50MW installed in FY02, having total installation costs of \$1,000/KW. The estimated value of equipment exempt from taxation for systems generating over 1MW is estimated to be \$50,000,000 for FY03 (Department of Environmental Quality).
6. Commercial generation property is classified as class 13 property and has a tax rate of 6%.
7. Noncommercial generation property is classified as class 8 property and has a tax rate of 3%.
8. For purposes of this analysis, it is assumed that generation systems in excess of 1MW are commercial generation systems, classified as class 13 with a tax rate of 6%. Also, assume generation facilities that generate less than 1MW are noncommercial facilities, classified as class 8 with a tax rate of 3%.
9. Using the aforementioned assumptions, general fund property tax revenues under the proposal are estimated to decrease in FY 03 by **\$218,160** (\$72,000,000 x 3% x 101 mills) for (noncommercial) systems generating under 1MW, and by **\$303,000** (\$50,000,000 x 6% x 101 mills) for (commercial) systems generating in excess of 1MW. Under the proposal, total loss in property tax revenue attributed to generation systems that generate both in excess of 1MW and less than 1MW is estimated to be **\$521,160** (\$218,160 + \$303,000) in FY 03. Of the total estimated impact of \$521,160, the impact to the university system is estimated to be \$30,960. **Since it appears the base revenue estimate (HJR2) for property taxes did not anticipate the growth in alternative energy investments these amounts are not included in the fiscal note.**

#### **INCOME CREDITS**

10. The proposal includes language that specifically includes generation facilities as a type of facility that qualifies as new and expanding industry. Under current law, generation facilities are already eligible for the tax benefits under this section for new and expanding, as well as new industry under 15-6-135, MCA. Considering that the proposal only adds clarifying language to 15-24-1401 and 15-31-124, MCA, there are not any estimated fiscal impacts associated with this section.

#### **ENERGY-CONSERVATION CREDIT**

11. In FY 01 there were 1,777 individuals taking the energy-conservation credit, totaling \$132,907 in tax savings.
12. The proposal increases the allowable energy-conservation credit on *residential buildings* from 5% of expenditures up to a maximum credit of \$150, to 25% of expenditures up to a maximum credit of \$500; and increases the allowable credit on *commercial buildings* from 5% of expenditures up to a maximum credit of \$300 to 25% of expenditures up to a maximum credit of \$500.

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13. Over the period 1994-1999 an average of 1,800 taxpayers took an average energy conservation credit of \$71, for an annual total credit amount claimed of \$131,000. Under this bill, an average of 3,000 taxpayers will claim an average credit of \$200 each year, for a total amount of \$600,000. This represents an increase of **\$469,000** each year in total credit claimed.

GEOHERMAL SYSTEM CREDIT

14. Under current law, taxpayers are allowed a credit for costs of installing a geothermal energy system of up to \$250 per year for up to four years. In fiscal 2001 there were 217 geothermal system credits claimed, with credits totaling \$41,230, for an average credit of \$190.
15. This bill increases the allowable credit on geothermal systems from \$250 per year for up to four years to \$1,500, which can be carried forward for up to 7 years. The Department of Environmental Quality estimates the number of geothermal system claims to increase to 267 per year. The average credit claimed by these taxpayers will be \$900, for total annual credits of \$240,300. This represents an increase of **\$199,070** each year over current law.

NONFOSSIL GENERATION CREDIT

16. The proposal reenacts and increases the tax credit for new nonfossil energy generation from \$250 to \$500, and provides for a carryforward period for these credits of up to 7 years. Based on assumptions provided by the Department of Environmental Quality for the annual number of new installations, and assuming each installation will qualify for and be able to use the entire \$500 credit, the following table shows the impact of reinstating the nonfossil energy credit at the levels provided for in the bill:

| <u>Type of System</u>                  | <u>Number Installed</u> | <u>Credit Amount</u> |
|--|-------------------------|----------------------|
| Wind Energy Systems                    | 50                      | \$25,000             |
| Low-Emission Wood<br>Or Biomass Stoves | 50                      | \$25,000             |
| Photovoltaic Systems                   | 50                      | \$25,000             |
| Hydroelectric Systems                  | 1                       | \$500                |
| Total Additional Credit                |                         | <b>\$75,500</b>      |

COMMERCIAL OR NET METERING SYSTEM ALTERNATIVE ENERGY INVESTMENT CREDIT:

17. The proposal changes the section of current law referring to the wind generation investment credit, now allowing the credit to be taken for investments in alternative energy systems. The proposal allows taxpayers who invest in excess of \$5,000 in a commercial or net metering alternative energy investment credit equal to 35% of the amount invested. The commercial or net metering system alternative energy investment credit is extended to generation systems that convert energy sources using fuel cells, geothermal systems, low emission wood or biomass, wind, photovoltaic, geothermal, small hydropower plants under 1 MW, and other recognized nonfossil forms of energy generation.
18. In fiscal year 2000, there was \$5,187 in wind powered generation investment credits taken by individuals, and none taken by corporations.
19. For purposes of this fiscal note, it is assumed that the combination of allowing alternative energy systems to qualify for the credit and the rising costs of energy will increase the amount of generation credits taken under this section of the proposal by 50%.
20. Holding all else constant, using the assumption of an increase of 50% in credits taken in association with the alternative energy credit generation; the amount in credit taken for commercial or net metering systems alternative energy credit is estimated to increase the amount currently taken under this section for wind generation credits by **\$2,594** (\$5,187 x 50%) in FY 03.
21. Under the proposal, total commercial or net metering systems alternative energy investment credits are estimated to be \$7,781 (\$5,187 + \$2,594) in FY 03.

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WHOLESALE ENERGY TAX

22. The proposal also includes language in 15-72-104, MCA that exempts wind turbines erected on state land from the wholesale energy tax. Exempting wind turbines erected on state lands is estimated not to have any impacts in the biennium because there are no current plans to develop wind generation systems on state land, and it takes years of monitoring wind patterns to determine the feasibility of building such wind systems.

Total Revenue Impact

23. The new alternative energy revolving loan account will receive an estimated \$148,819 each year from air quality noncompliance fees, which currently are deposited into the state general fund (Department of Environmental Quality). Therefore, there is a loss to the state general fund of \$148,819 in FY 03.

24. Total revenue to the general fund will decrease by (\$894,983 (energy conservation credit \$469,000 + geothermal system credit \$199,070 + nonfossil generation credit \$75,500 + alternative energy investment credit \$2,594 + the loss of air quality noncompliance fees \$148,819) in FY 03.

Expenditures

25. To comply with the proposal, the Department of Revenue will require 340 hours of contracted programming time to insert and recalculate credits and deductions in its database system. The one time expenditure for programming hours is estimated to be \$20,241 in FY 02. **Since HB2 has been finished without adjustment for this item it is anticipated the costs will be absorbed and therefore are not included in the fiscal note.**

FISCAL IMPACT:

|  | <u>FY2002<br/>Difference</u> | <u>FY2003<br/>Difference</u> |
|--|------------------------------|------------------------------|
| <u>Expenditures:</u>   |                              |                              |
| Operating Expenses – DEQ                                       | \$14,820                     | \$14,820                     |
| Loans – DEQ  | \$133,999                    | \$133,999                    |
| TOTAL  | \$148,819                    | \$148,819                    |
| <u>Funding:</u>  |                              |                              |
| State Special – Alt. Energy Loan                               | \$148,819                    | \$148,819                    |
| TOTAL  | \$148,819                    | \$148,819                    |
| <u>Revenues:</u>   |                              |                              |
| General Fund (01)  | 0                            | (\$894,983)                  |
| State Special – Alt. Energy Loan                               | \$148,819                    | \$179,769                    |
| <u>Net Impact to Fund Balance (Revenue minus Expenditure):</u> |                              |                              |
| General Fund (01)  | \$0                          | (\$894,983)                  |
| State Special – Alt. Energy Loan                               | \$0                          | \$30,950                     |

EFFECT ON COUNTY OR OTHER LOCAL REVENUES OR EXPENDITURES:

1. The Department of Environmental Quality projects installation of 150 generation systems under 1MW in FY02, which includes anything being used for net metering. Each generation system under 1MW is estimated to generate an average of 400kW, with an estimated installation costs of \$1200/kW. Total property value of equipment exempted from taxation for systems under 1MW for FY03 is estimated at \$72,000,000 (Department of Environmental Quality).

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2. The Department of Environmental Quality estimates systems that generate in excess of 1 megawatt will total 50MW installed in FY02, having total installation costs of \$1,000/KW. The estimated value of equipment exempt from taxation for systems generating over 1MW is estimated to be \$50,000,000 for FY03 (Department of Environmental Quality).
3. Commercial generation property is classified as class 13 property and has a tax rate of 6%. Noncommercial generation property is classified as class 8 property and has a tax rate of 3%. For purposes of this analysis, it is assumed that generation systems in excess of 1MW are commercial generation systems, classified as class 13 with a tax rate of 6%. Also, assume generation facilities that generate less than 1MW are noncommercial facilities, classified as class 8 with a tax rate of 3%.
4. The FY 01 class 8 statewide average mill levy for local governments taxing purposes, which includes county, city, school, and miscellaneous mills is 323.64. The FY 01 class 13 statewide average mill levy for local governments taxing purposes, which includes county, city, school, and miscellaneous mills is 218.43.
5. Using the aforementioned assumptions, local government property tax revenues under the proposal are estimated to decrease in FY 03 by \$699,062 ( $\$72,000,000 \times 3\% \times 323.64$  mills) for (noncommercial) systems generating under 1MW, and by \$655,290 ( $\$50,000,000 \times 6\% \times 218.43$  mills) for (commercial) systems generating in excess of 1MW. Under the proposal, total loss in property tax revenue attributed to generation systems that generate both in excess of 1MW and less than 1MW is estimated to be \$1,354,352 ( $\$699,062 + \$655,290$ ) in FY 03.

**LONG-RANGE IMPACTS:**

1. If use of the property tax exemption and income tax credits changed by the proposal remain at FY 03 levels, then future revenues for the state general fund and local governments will have the similar fiscal impacts in succeeding years. However, the Department of Environmental Quality projects the installation of wind generation systems in FY 03 to double (50 in FY 02 and 100 in FY 03), and estimates increases in fiscal impacts attributable to the proposal as additional technologies such as fuel cells become cost-effective and gain greater use in the future.
2. The carry forward provisions for income tax credits in the proposal could have a multiplier effect on future revenues, much of which is determined by the amount of tax liabilities the individuals taking the credit have in the year the credit is taken and the carry forward years. For example, assume 5 individuals install a generation system that qualifies for the alternative energy credit maximum \$2,000 in FY 02. Also assume that the 5 individuals have an income tax liability of \$1,000 each year. Since the maximum credit individuals can take in a year is equal to the individuals tax liability, so assume the 5 individuals have a combined credit amount taken in FY 03 of \$5,000, and \$5,000 in credit to carry forward. Now, assume 7 more individuals with the same \$1,000 tax liability install qualifying systems (the next year) in FY 03. Looking at FY 04, the total impact will equal \$7,000 from 7 individuals installing systems in FY 03, and \$5,000 from the 5 individuals carrying forward the credit from the previous year; totaling \$12,000 in FY 04.

**Department of Environmental Quality**

3. Fiscal impact will increase as additional technologies such as fuel cells become cost-effective and gain greater use.
4. Loan repayments will continue to increase each year. Assuming 100% of loans are issued and 100% repaid, loan program can become self-sustaining in 5 years, reducing net impact on fund balance by up to \$3.4 million per year. If either of above assumption is less than 100%, reduction to net impact is scalable according to percentage reductions.
5. Loss of future revenue anticipated from large windfarms assumed to be moderately significant from increase of income tax credit from 35% to 40%. Expansion of this credit to other alternative energy

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systems that are not currently allowed the credit could result in more substantial loss of future revenue long-term.

6. Assume 25MW windfarm x installed cost of \$1,000/KW = \$25 million installed cost. Assume income at 3,000 hrs/yr. x 25MW x \$50/MW-hr (highly volatile number to predict) = \$3,750,000/yr. The net income should be substantially less than this amount, and would be subject to the 5% incremental credit authorized in this bill. Assuming net income at \$500,000 to \$1,500,000 would yield a fiscal impact range of \$25,000 to \$75,000 per facility.

**TECHNICAL NOTES:**

**Department of Revenue**

1. The proposal includes language specifically including generation facilities as a type of facility qualifying as new and expanding industry in 15-24-1402. In the past, generation facilities have been included in new and expanding, as well as new industry under 15-6-135. Hence, the generation facilities under current law are already eligible for the tax benefits described in 15-32-103 and 15-32-109.
2. Section 6 exempts machinery and equipment used in qualifying generating facilities from taxation. The confusion is that it does not define what is a "qualifying generation facility". Subsection (2)(b) states that in order to qualify for the exemption the generation facility **may** (emphasis added) include those powered by water, solar energy, fossil fuels biomass, geothermal, fuel cells, or wind. As written, any generating facility except nuclear powered generators qualifies for the exemptions. If the intent is to exempt equipment from all new generation facilities except nuclear power then it is written correctly. If this is not the case then language that is more specific is needed to exempt only equipment used in the facilities intended for the exemption. In addition, it is not clear whether this exemption is granted to commercial generators or non-commercial generators or both.