MINNESOTA · REVENUE

SALES AND USE TAX
Solar Energy Systems

April 1, 2005

	Yes	No
Separate Official Fiscal Note Requested		X
Fiscal Impact		
DOR Administrative Costs/Savings		X

Department of Revenue
Analysis of S.F. 1601 (Moua) / H.F. 1713 (Krinkie)

	Fund Impact			
	F.Y. 2006	F.Y. 2007	F.Y. 2008	F.Y. 2009
		(000's)		
General Fund	($40)	($50)	($40)	($25)

Effective for sales and purchases made on or after August 1, 2005.

EXPLANATION OF THE BILL

Current Law: Sales of tangible personal property, unless otherwise exempted, are generally subject to the sales and use tax. A variety of energy efficient products are currently exempt through August 1, 2005, including residential lighting fixtures, compact fluorescent bulbs, water heaters, furnaces, and photovoltaic devices.

Proposed Law: The bill would exempt solar energy systems from the sales and use tax. Solar energy systems are defined as a set of devices whose primary purpose is to collect solar energy and convert and store it for purposes including heating buildings, cooling buildings, and producing generated power. The exemption for solar energy systems would include photovoltaic devices along with other system components such as piping and inverters.

The bill eliminates the language for the exemption of energy efficient products which expires August 1, 2005.

REVENUE ANALYSIS DETAIL

- Three types of solar energy systems are currently available: 1) solar electrical systems, both grid and off-grid systems, 2) solar thermal systems - hot water, and 3) solar wall systems.
- It is assumed that the fiscal impact of solar wall technology and off-grid solar electrical systems will be relatively minimal during the forecast periods.
- The revenue impact for FY 2006 is adjusted for 10 months of collections.

REVENUE ANALYSIS DETAIL (continued)

Solar Electrical Systems

- Estimates for the electrical systems are based on information from the state solar electrical rebate program administered by the Minnesota Department of Commerce, Energy Division.
- The average solar electrical system size is approximately 2 kilowatts.
- The solar electrical system rebate program is operated with Xcel Energy and provides for 500 kilowatts of solar electricity through the end of calendar year 2005. About 180 kilowatts have been used, leaving 320 available.
- The state solar electrical energy rebate program expires at the end of calendar year 2005. It is assumed that the rebate program will be extended for two years. The cost of the proposed exemption for solar energy systems would be somewhat less in fiscal years 2006, 2007, and 2008 if the rebate program is not extended.
- It is estimated that there will be 80 kilowatts of solar electric energy systems receiving rebates during the current fiscal year. The estimates of the number of kilowatts of solar electric energy systems per fiscal year (2006-2009) are based on historical information and observed growth in the rebate program.
- The average solar energy electrical system cost is estimated to be $8,000 to $10,000 per kilowatt. The taxable portion (excluding labor costs) is estimated to be $6,000 to $8,000.

Solar Thermal Systems

- Estimates for the solar thermal systems are based on information from retail solar energy system businesses.
- It is estimated that there will be 20 kilowatts of solar thermal systems sold during the current fiscal year. It is expected that the number of kilowatts of solar thermal systems will increase by 10% per year.
- The equipment cost for a solar thermal system was reported to be $3,500 to $5,500.

NUMBER OF TAXPAYERS AFFECTED: Approximately 50 solar energy systems (or 100 kilowatts) in fiscal year 2006 would be eligible for the exemption.

Source: Minnesota Department of Revenue
Tax Research Division
http://www.taxes.state.mn.us/taxes/legal_policy