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## FISCAL IMPACT REPORT

SPONSOR	Stewart	ORIGINAL DATE	1/29/19	LAST UPDATED	HB
SHORT TITLE	Solar Market Development Tax Credit	SB	39		
		ANALYST	Graeser		

### REVENUE (dollars in thousands)

Estimated Revenue					Recurring or Nonrecurring	Fund Affected
FY19	FY20	FY21	FY22	FY23		
	(3,500.0) to (10,000.0)	(3,400.0) to (10,000.0)	(3,100.0) to (10,000.0)	(2,900.0) to (10,000.0)	R	General Fund (PIT)

Parenthesis () indicate revenue decreases

## SOURCES OF INFORMATION

LFC Files

### Responses Received From

Energy, Minerals and Natural Resources Department (EMNRD)  
Taxation and Revenue Department (TRD)

## SUMMARY

### Synopsis of Bill

Senate Bill 39 provides a personal income tax credit of 10 percent of the cost of equipment and installation of residential, business (commercial or industrial) or agricultural solar thermal system or a solar photovoltaic system. Systems installed after January 1, 2019 are eligible for the credit. Each installation is limited to \$6,000 in credit (based on \$60,000 cost of equipment plus installation). Total annual credits paid are limited to \$10,000,000, with priority for payment in any year established by the order the claims are received by the Taxation and Revenue Department. This credit is entitled the "solar market development income tax credit". Claims are to be filed with the Energy, Minerals and Natural Resources Department, which is also responsible for establishing technical standards for acceptable systems. Once a claim has been allowed but the refund exceeds the individual's personal income tax liability, the approved refund may be carried forward for a maximum of five years.

The effective date of the bill is not stated; assume 90 days after the close of the legislative session or June 14, 2019. The credit is applicable for tax years beginning January 1, 2019. There is no delayed repeal (sunset) of the provisions of this bill. LFC recommends adding a delayed

repeal date, perhaps of December 31, 2021 to be consistent with the delayed repeal of the federal renewable energy and solar tax credits.

## **FISCAL IMPLICATIONS**

Based on EMNRD data for the period 2010-2014, the average cost of a creditable solar system was \$28,000; the average credit was \$2,764 and there were about .55 systems installed per year per 1,000 population.

Based on the LFC Personal Income Tax Model based on comprehensive information for the 2015 Tax Year, about 20 percent of all returns report at least \$2,800 annually in total PIT liability.

It is expected that the average number of installations will be similar to the historical data. While average equipment costs have fallen, the Trump Administration imposed up to a 30% tariff as of January 2018. The tariff continues for four years with some carveouts. Since 80% of the cost of an installed system is attributed to equipment cost, the average price during the 2018 -2021 period may rise above baseline by up to 20 percent. The federal 22 percent to 30 percent renewable energy credit has been renewed through the end of 2021. There has been a systemic increase in soft costs, including installation labor, profit, permitting fees, etc over the course of time while module costs have plummeted.

Installations installed from January 1, 2019 will be eligible for credit. However, EMNRD will not approve any credit applications until after the June 14, 2019 effective date of the bill. Some of these approved claims will be rendered on amended 2017 or 2018 income tax returns, but the majority will be claimed on 2019 tax returns filed in the spring of 2020. Because only 20 percent of filed returns have liability in excess of the average credit amount, some portion of claims will be rolled over to 2020 or 2021.

LFC has had some difficulty determining the historical volume of installations in the state over the last three years but is continuing to pursue this information.

It should also be noted that pursuant to the provisions of 7-36.21.2 NMSA 1978, residential solar installations are not valued for property tax purposes. This is largely a local incentive, not a state-level one and does not affect the state general fund. Solar and wind equipment sold to governments are exempt from gross receipts taxes (7-9-54.3 NMSA 1978), but most private installations generate both gross receipts tax and property tax.

Based on the average level of installations when the \$3,000,000 cap was in place, enhanced by the estimated number of installations that were not creditable because of the cap, LFC staff expect the total general fund cost and number of additional installations pursuant to the provisions of this bill to be approximately as follows:

	FY 19	FY20	FY21	FY22	FY23
After tax price (\$ thousands)	-\$203	-\$1,9607	-\$1,895	-\$1,771	-\$1,680
Additional Installations (assume .3 price elasticity)	7	62	60	57	54
State Credit Amount	\$343	\$3,543	\$3,416	\$3,122	\$2,911
** FY 19 State Credit -- assumes that installations in the first half of CY 19 would be creditable and claimed on an amended 2017 tax return, but that approvals by EMNRD would be sufficiently slow that only a small fraction of claims would be paid within FY 19.					

Jobs impact would be proportionally modest.

Because the bill establishes a \$10 million annual cap, the revenue table exhibits a range of impact from a realistic expectation of impact to the cap amount.

TRD on the other hand, in consultation with EMNRD expects the full amount of the credit to be claimed from the beginning.

TRD conferred with EMNRD and researched market costs for a photovoltaic systems.

The range of cost for a 4 kW system – the most common size system for New Mexico – is \$14,000 - \$20,000. EMNRD anticipates as many as 4000 applications during the first year of the new tax credit. Thus, TRD anticipates that the credit will reach the aggregate cap each of the first five years of the new program. ‘

This bill narrows the personal income tax (PIT) base. See *Significant Issues* for more information.

This bill creates a new tax expenditure with a cost that is difficult to determine but likely significant. LFC has serious concerns about the significant risk to state revenues from tax expenditures and the increase in revenue volatility from erosion of the revenue base. The committee recommends the bill adhere to the LFC tax expenditure policy principles for vetting, targeting, and reporting or be held for future consideration.

This bill may be counter to the LFC tax policy principle of adequacy, efficiency, and equity. Due to the increasing cost of tax expenditures, revenues may be insufficient to cover growing recurring appropriations. This is particularly true for this bill that establishes an annual cap of \$10 million, whereas the precursor solar credit was capped for both personal income tax and corporate income tax together at \$3 million. This creates a great deal of general fund risk.

Estimating the cost of tax expenditures is difficult. In this case, the precursor credit was capped at \$3 million and, in the last year or two of the credit, an unknown number of otherwise creditable systems did not receive credit approval because of the cap. LFC staff are basically guessing at the number of systems which would be installed that would be creditable when the cap is increased. The fiscal estimate could easily be exceeded.

## SIGNIFICANT ISSUES

In previous personal income tax credits, including the former solar market development credit, the legislature has chosen to implement a collateral corporate income tax credit. This bill would not allow a solar credit to be claimed on regular corporate income tax returns. However, the

advent of virtually universal acceptance and use of pass-through entities (PTEs), including Sub-S corporations, Limited Liability Companies (LLCs), partnerships, limited liability partnerships, and others is critical. This proposed credit can be claimed on personal income tax returns reporting income and liability from PTEs. means that the credit can be claimed.

The precursor credit allowed up to a \$9,000 credit per installation. This bill has reduced that to \$6,000. The average or typical installation is 5 KW, with an average cost of about \$28,000. Thus, the reduction to \$6,000 maximum will have very little impact on overall general fund costs.

## **PERFORMANCE IMPLICATIONS**

The LFC tax policy of accountability is met with the bill's requirement to report annually to an interim legislative committee regarding the data compiled from the reports from taxpayers taking the deduction and other information to determine whether the deduction is meeting its purpose.

## **ADMINISTRATIVE IMPLICATIONS**

TRD recommends all tax incentive legislation include specific standardizations to facilitate operational efficiency.

- tax credits programs should be limited to five year periods. This term facilitates a market-facing analysis, whereby market changes can be acted upon by legislators.
- Credits should not be refundable, but they should incorporate a standardized carry-forward period of three years. This limits the evaluation period of any tax credit incentive to a total of eight years, and limits the fiscal obligation to a period of three years after expiration.
- Legislation should require tax filers to apply for any credit within 12 months of the calendar year the filer qualified for the credit. This incentivizes the filer to use the credit program timely, or risk losing eligibility due solely to their nonfeasance.

## **TECHNICAL ISSUES**

TRD notes the following technical issue: "...although this legislation repeals the expired tax credit, the prior statute specified a 10-year carry forward for unused credit amounts. There remains approximately \$2.4 million in credits under the expired statute. Therefore, to differentiate between the competing statutes and facilitate accurate reporting, TRD recommends that the new legislation receive a unique name."

This bill does not contain a delayed repeal date. LFC usually recommends adding a delayed repeal date. The federal credit is scheduled to expire for systems installed after December 31, 2021. The effect on the solar industry of losing a 30% credit will be substantial. Losing the federal 22% credit and the state 10% may be unwise, even though the 15% safeguard tariff will end on December 31, 2021. With these multiple changes in provisions, it might be wise to allow a few years of transition before the state credit also expires.

The following assertion should be validated by TRD's attorneys. Approximately 20% of the total New Mexico tax liability paid for TY 2015 was paid on Schedule B returns filed either by first-year New Mexico residents or residents of other states reporting business income from New Mexico. The solar market development credit proposed in this bill may violate the venerable

U.S. Constitutional Interstate Commerce provisions because only solar installations in New Mexico are eligible for the credit.

### **OTHER SUBSTANTIVE ISSUES**

The federal credit limits lifetime claims for solar and other energy conservation household and business installations. This proposed state credit can be utilized annually without limit.

On January 22, 2018, the Trump Administration announced import tariffs on a portion of the total quantity of imported solar panels and modules.

<b>Safeguard Tariffs on Imported Solar Cells and Modules</b>			
<b>Year 1 (2018)</b>	<b>Year 2 (2019)</b>	<b>Year 3 (2020)</b>	<b>Year 4 (2021)</b>
30%	25%	20%	15%

\* First 2.5 gigawatt of imported cells are excluded from the additional tariff.

Federal Renewable Energy Tax Credits:

#### **Solar-electric property**

- 30% for systems placed in service by 12/31/2019
- 26% for systems placed in service after 12/31/2019 and before 01/01/2021
- 22% for systems placed in service after 12/31/2020 and before 01/01/2022
- There is no maximum credit for systems placed in service after 2008.
- Systems must be placed in service on or after January 1, 2006, and on or before December 31, 2021.
- The home served by the system does not have to be the taxpayer's principal residence.

#### **Solar water-heating property**

- 30% for systems placed in service by 12/31/2019
- 26% for systems placed in service after 12/31/2019 and before 01/01/2021
- 22% for systems placed in service after 12/31/2020 and before 01/01/2022
- There is no maximum credit for systems placed in service after 2008.
- Systems must be placed in service on or after January 1, 2006, and on or before December 31, 2021.
- Equipment must be certified for performance by the Solar Rating Certification Corporation (SRCC) or a comparable entity endorsed by the government of the state in which the property is installed.
- At least half the energy used to heat the dwelling's water must be from solar in order for the solar water-heating property expenditures to be eligible.
- The tax credit does not apply to solar water-heating property for swimming pools or hot tubs.
- The home served by the system does not have to be the taxpayer's principal residence.

#### **Fuel cell property**

- 30% for systems placed in service by 12/31/2019
- 26% for systems placed in service after 12/31/2019 and before 01/01/2021
- 22% for systems placed in service after 12/31/2020 and before 01/01/2022
- The maximum credit is \$500 per half kilowatt (kW).

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- Systems must be placed in service on or after January 1, 2006, on or before December 31, 2021.
- The fuel cell must have a nameplate capacity of at least 0.5 kW of electricity using an electrochemical process and an electricity-only generation efficiency greater than 30%.
- In case of joint occupancy, the maximum qualifying costs that can be taken into account by all occupants for figuring the credit is \$1,667 per 0.5 kW. This does not apply to married individuals filing a joint return. The credit that may be claimed by each individual is proportional to the costs he or she paid.
- The home served by the system must be the taxpayer's principal residence.

### Small wind-energy property

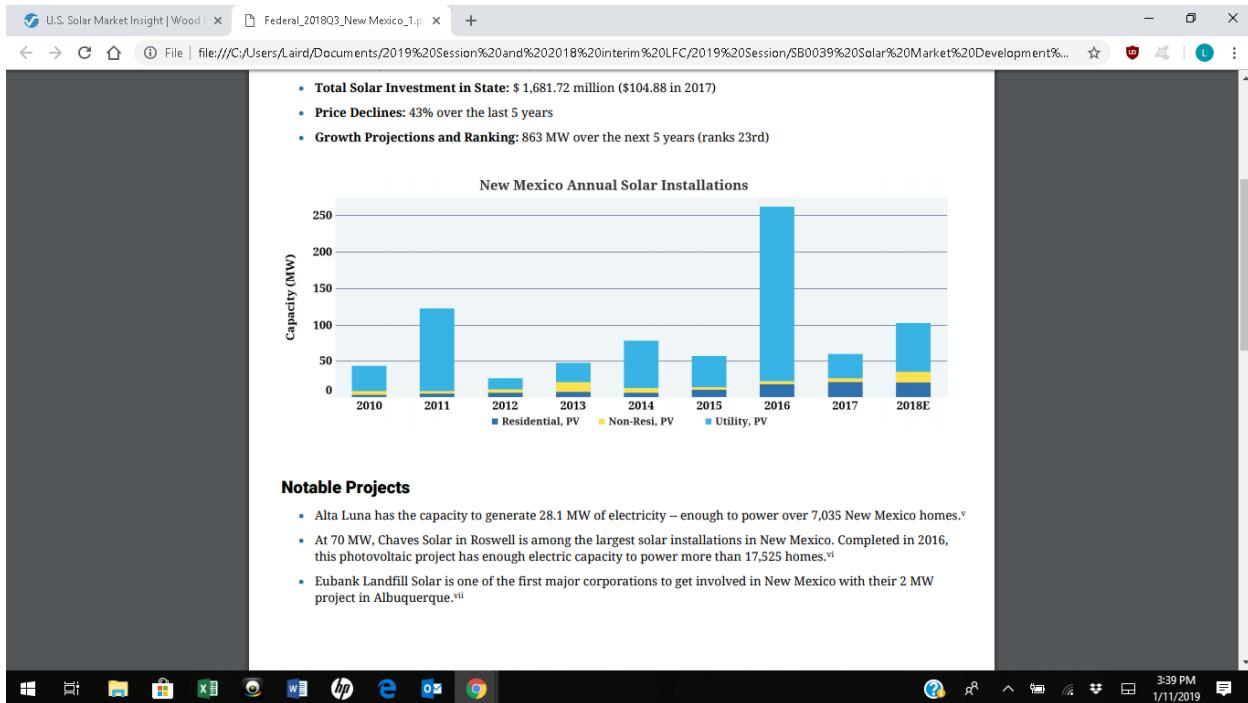
- 30% for systems placed in service by 12/31/2019
- 26% for systems placed in service after 12/31/2019 and before 01/01/2021
- 22% for systems placed in service after 12/31/2020 and before 01/01/2022
- There is no maximum credit for systems placed in service after 2008.
- Systems must be placed in service on or after January 1, 2008, on or before December 31, 2021.
- The home served by the system does not have to be the taxpayer's principal residence.

### Geothermal heat pumps

- 30% for systems placed in service by 12/31/2019
  - 26% for systems placed in service after 12/31/2019 and before 01/01/2021
  - 22% for systems placed in service after 12/31/2020 and before 01/01/2022
  - There is no maximum credit for systems placed in service after 2008.
  - Systems must be placed in service on or after January 1, 2008, and on or before December 31, 2021.
  - The geothermal heat pump must meet federal Energy Star criteria.
  - The home served by the system does not have to be the taxpayer's principal residence.
- Significantly, The American Recovery and Reinvestment Act of 2009 repealed a previous limitation on the use of the credit for eligible projects also supported by "subsidized energy financing." For projects placed in service after December 31, 2008, this limitation no longer applies.

<https://www.nrel.gov/docs/fy17osti/68925.pdf>

<https://www.seia.org/solar-industry-research-data>



## ALTERNATIVES

The National Conference of State Legislatures (NCSL) estimates that 60 percent of a typical residential or commercial installation represents “soft costs.” These include installation labor, profit for the installer, permit fees, and other costs. One way of reducing end costs to residents and businesses might be to reduce the soft costs by simplifying the permitting process.

According to various sources, several New Mexico utilities still offer some level of renewable energy certificates. These certificates reduce the monthly bill to customers with solar generation by a contracted amount. These RECs have varied over time in New Mexico from a maximum of \$.13 per KwH (approximately \$120 per month for a 6 Kw array) to zero for arrays installed currently. Allowing PRC to adjust these RECs might be another option.

## WHAT WILL BE THE CONSEQUENCES OF NOT ENACTING THIS BILL?

The industry may shrink as a result of the combined effect of saturation or the combined effect of the loss of federal 22 percent to 30 percent credit and the advent of import duties of up to 30% of import price. While these bigger issues may dominate, failure to pass this bill may encourage additional companies to abandon the industry. This effect was noted in the solar credit for active solar systems – primarily for water and space heating – that provided a 10% state credit from roughly 1983 to the oil price collapse in mid 1986. First, the credit payments were delayed by a

year and then cancelled. The fledgling industry was decimated. The following table exhibits this:

Solar Credits		
72nd FY	(1983-84)	\$7,253,386
73rd FY	(1984-85)	\$10,932,695
74th FY	(1985-86)	\$9,920,269
75TH FY	(1986-87)	\$2,658,322
76TH FY	(1987-88)	\$226,934
77th FY	(1988-89)	\$179,961
78TH FY	(1989-90)	\$135,230
79TH FY	(1990-91)	\$180,210
80TH FY	(1991-92)	\$7,984
81ST FY	(1992-93)	\$2,955
82nd FY	(1993-94)	\$1,065

Unlike the current credit, the previous credit was apparently misused. Unethical operators “sought the rents”, and largely consumed the 10% credit and a portion of the federal 30% credit. This effect was not well documented. The current credit was quite properly administered, largely because of the EMNRD certification for solar electric systems.

**Does the bill meet the Legislative Finance Committee tax policy principles?**

1. **Adequacy:** Revenue should be adequate to fund needed government services.
2. **Efficiency:** Tax base should be as broad as possible and avoid excess reliance on one tax.
3. **Equity:** Different taxpayers should be treated fairly.
4. **Simplicity:** Collection should be simple and easily understood.
5. **Accountability:** Preferences should be easy to monitor and evaluate

1. Any tax expenditure reduces revenue. In this case, a personal income tax credit only reduces general fund revenue, whereas gross receipts tax expenditures tend to reduce both state level taxes and local taxes.
2. Economic efficiency is also suspect, since this tax expenditure serves to subsidize a particular form of economic activity.
3. Overall, the purchase of a 5 or 6 Kilowatt solar array for around \$28,000 puts this option out of the price range of about 80 percent of New Mexicans. It is, perhaps, still a luxury good. So the equity involved is suspect.
4. Because of the desirable feature of this tax expenditure that minimizes abuse but requires at least three state agencies to be involved (Construction Industries Division of RLD, TRD and EMNRD) and an Investor-Owned Utility (in case of grid-tied systems and the potential of Res), soft costs and approval delays add between \$3,200 and \$4,700 to the costs of a typical 5 Kw system. This complexity is necessary, but is also an opportunity.
5. Accountability is preserved with this credit because of the required TRD reporting to the legislature.

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**Does the bill meet the Legislative Finance Committee tax expenditure policy principles?**

- 1. Vetted:** The proposed new or expanded tax expenditure was vetted through interim legislative committees, such as LFC and the Revenue Stabilization and Tax Policy Committee, to review fiscal, legal, and general policy parameters.
- 2. Targeted:** The tax expenditure has a clearly stated purpose, long-term goals, and measurable annual targets designed to mark progress toward the goals.
- 3. Transparent:** The tax expenditure requires at least annual reporting by the recipients, the Taxation and Revenue Department, and other relevant agencies.
- 4. Accountable:** The required reporting allows for analysis by members of the public to determine progress toward annual targets and determination of effectiveness and efficiency. The tax expenditure is set to expire unless legislative action is taken to review the tax expenditure and extend the expiration date.
- 5. Effective:** The tax expenditure fulfills the stated purpose. If the tax expenditure is designed to alter behavior – for example, economic development incentives intended to increase economic growth – there are indicators the recipients would not have performed the desired actions “but for” the existence of the tax expenditure.
- 6. Efficient:** The tax expenditure is the most cost-effective way to achieve the desired results.

LFC Tax Expenditure Policy Principle	Met?	Comments
<b>Vetted</b>	✓	
<b>Targeted</b>		
Clearly stated purpose	✓	The solar industry in New Mexico can hardly be considered new. Zomeworks began business in New Mexico in 1969 and is still in business.
Long-term goals	✗	None stated.
Measurable targets	✗	None stated
<b>Transparent</b>	✓	
<b>Accountable</b>		
Public analysis	✗	
Expiration date	✗	
<b>Effective</b>		
Fulfills stated purpose	✗	No purpose stated
Passes “but for” test	✗	The industry has been continuously growing, but may be in a saturation phase.
<b>Efficient</b>	✗	Credit serves to subsidize a particular but socially beneficial industry. This may be a way of internalizing positive externalities because of the non-polluting nature of solar-generated electricity.
Key:    ✓ Met    ✗ Not Met    ? Unclear		

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