

# Understanding Sales Tax Incentives for Solar Energy Systems

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*A Factsheet for Customers, Industry, and Local Governments*

*3/17/2015*



# Acknowledgements

## *Authors*

The authors of this report are Kate Daniel, Benjamin Inskeep, and Autumn Proudlove from the NC Clean Energy Technology Center.

## *About the NC Clean Energy Technology Center*

The N.C. Clean Energy Technology Center is a UNC System-chartered Public Service Center administered by the College of Engineering at North Carolina State University.

Its mission is to advance a sustainable energy economy by educating, demonstrating and providing support for clean energy technologies, practices, and policies. The Center provides service to the businesses and citizens of North Carolina and beyond relating to the development and adoption of clean energy technologies. Through its programs and activities, including the SunShot Solar Outreach Partnership, the Center envisions and seeks to promote the development and use clean energy in ways that stimulate a sustainable economy while reducing dependence on foreign sources of energy, and mitigating the environmental impacts of fossil fuel use.

## *Disclaimer*

This material is based upon work supported by the U.S. Department of Energy under Award Number DE-EE0003525. The guide was produced by the NC Clean Energy Technology Center (formerly the NC Solar Center) with the support of the following team of organizations: ICLEI – Local Governments for Sustainability; International City/County Management Association (ICMA); Interstate Renewable Energy Council, Inc. (IREC); Meister Consultants Group, Inc. (MCG); Solar Electric Power Association (SEPA); The Solar Foundation (TSF); American Planning Association (APA); and National Association of Regional Councils (NARC).

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# Understanding Sales Tax Incentives for Solar Energy Systems

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*NOTE: This factsheet provides an overview and does not constitute professional tax advice or other professional financial guidance, and it should not be used as the only source of information when making purchasing decisions, investment decisions, or tax decisions, or when executing other binding agreements.*

In the U.S., state sales taxes can contribute a significant sum to total solar energy system project costs. All but five states collect sales taxes, and combined state and local sales taxes can be as high as 9-10 percent in some parts of the country.<sup>1</sup> A 10 percent tax rate on a \$15,000 dollar solar energy system results in additional costs of \$1,500, a substantial additional cost for the typical homeowner.

Sales taxes vary greatly across states, so corresponding incentives also vary widely. This factsheet provides an overview of how sales tax incentives may be structured and factors local governments can consider in sales tax design. It also provides Appendices with a summary map and detailed table of statewide incentives. It covers incentives for both residential and non-residential projects.

## Categories of Relevant Taxes

This factsheet covers incentives for the types of taxes defined below. While most states utilize a standard “sales tax”, some have slight variations on the way they tax retail transactions. The term sales tax in this factsheet generally applies to these types of taxes as well.

**Sales tax** is a tax imposed on retail transactions of tangible personal property. In some states, it is also levied on services. While the state may directly impose the tax on either the retailer or purchaser, sales tax is almost always borne by the consumer.

**Use tax** is levied on tangible personal property used, consumed, or stored within the state. Use taxes typically apply to goods purchased out of state, where the state’s sales tax is not collected, and usually fall on the consumer.

**Gross Receipts Tax** is an alternative to sales taxes. The tax is levied on the gross receipts, or total revenue, from all business transactions, including retail sales. For example, New Mexico has a gross receipts tax, which taxes revenue on transactions beyond retail sales, such as services and the right to a franchise. Indiana has a gross retail tax, which limits the revenue taxed to retail transactions. Other states levy a gross receipts tax only on certain industries or business activities.

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<sup>1</sup> Drenkard, Scott. (2014, March 18). State and Local Sales Tax Rates in 2014. The Tax Foundation. Available: <http://taxfoundation.org/article/state-and-local-sales-tax-rates-2014>. Accessed February 27, 2015.

**Value-Added Tax (VAT)** is not found in the United States, but is similar to a sales tax. It is levied at every stage of a good's production, but only on the value added at each level.

## Typical Sales Tax Base

While each state's sales tax is different, sales taxes usually apply to retail sales of tangible personal property. Most states exempt groceries, prescription medications, and other necessities, and do not tax wholesale transactions and sales of components for the manufacture of retail goods.<sup>2</sup> Sales and use taxes usually also include the cost of a lease or rental of personal property (including solar energy systems).<sup>3</sup> The inclusion of services and labor costs varies more widely across states.

## States with No Statewide Sales Tax

Five states do not have any state-mandated sales or use tax. *Delaware*, *New Hampshire*, and *Oregon* have no state or local sales tax. *Montana* allows for limited "resort taxes" in areas with low permanent populations and a high number of visitors, but has no other local taxes.<sup>4</sup> *Alaska* has no statewide sales tax and does permit cities, towns, or counties to levy their own local taxes. However, not all cities have done so, including Anchorage, by far the largest population area in the state.<sup>5</sup>

## Statewide Sales Tax Incentives

The *Database of State Incentives for Renewables and Efficiency* (DSIRE – [www.dsireusa.org](http://www.dsireusa.org)) tracks many types of policies that encourage solar energy deployment, including sales tax incentives. The following information on state sales tax incentives draws directly from the content in DSIRE.

Among the 45 states that levy a state sales tax, 24 have a full or partial exemption for photovoltaics (PV) and other solar energy systems, as shown in Figure 1. The structure of these tax incentives differs, due to the varying nature of state sales tax laws as well as for the ways in which the exemption is designed to incentivize particular activities. State sales tax incentives vary on characteristics such as what types of systems qualify, how local sales taxes are treated, how labor and intangible costs are treated, how the incentive is structured, and the incentive amount.

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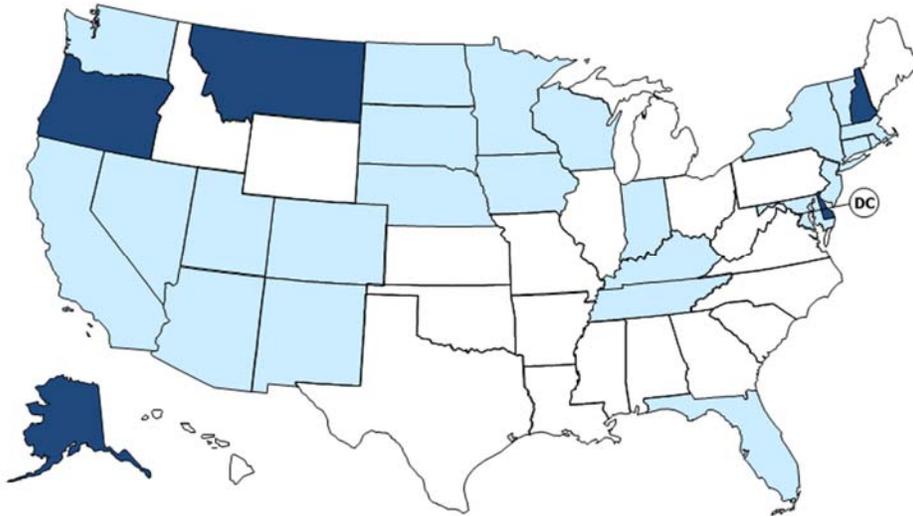
<sup>2</sup> Tax Foundation. Sales & Use Taxes. Available: <http://taxfoundation.org/tax-topics/sales-use-taxes>. Accessed February 27, 2015.

<sup>3</sup> Specie Capital. Is sales tax charged on leased equipment? Available: <http://www.speciecapital.com/faqs.html>. Accessed February 27, 2015.

<sup>4</sup> Tabish, Dillon. (2015, Jan 2). Montana Cities Seek Ability to Add Sales Tax. The Flathead Beacon. Available: <http://flatheadbeacon.com/2015/01/02/montana-cities-seek-ability-explore-sales-tax/>. Accessed March 6, 2015.

<sup>5</sup> Anchorage.net. No sales tax in Anchorage. Available: <http://www.anchorage.net/meetings/sales-tax>. Accessed March 6, 2015.

**Figure 1: States with Sales Tax Incentives for Solar Energy Technology**



Source: [www.dsireusa.org](http://www.dsireusa.org), February 2015

Note: Darker shade represents states that do not charge any statewide sales tax. Lighter shades are states that provide a full or partial sales tax exemption for eligible solar PV systems.

**System Eligibility**

Some sales tax exemptions cover all types of solar energy systems and technologies (e.g., solar space heat, passive systems, pool heating, etc.), and some are restricted to cover only PV panels and possibly solar water heating. All sales tax incentives covered in this factsheet cover PV systems. The majority of statewide sales tax exemptions do not set qualifications based on system size, but six states offer exemptions only to commercial or utility-scale projects, and two states impose upper limits on eligible system size. Table 1 lays out which states include sales tax incentives for additional solar energy systems other than PV.

**Table 1: Solar Technologies in Addition to PV Included in State Sales Tax Incentives**

Non-PV Technology Type	States With Sales Tax Exemptions	No. of States
Solar Water Heat	AZ, CO, CT, FL, IA, MA, MD, MN, NJ, NM, NY, RI, VT, WA, WI	15
Solar Space Heat	AZ, CO, CT, FL, IA, MA, MD, MN, NJ, NM, NY, RI, WI	13
Solar Thermal Electric	AZ, CO, IA, KY, MD, ND, NE, NJ, NM, NV, RI, SD, UT, VT	14
Solar Thermal Process Heat	CO, IA, MN, NJ, NV, WI	6
Passive Solar	AZ, NJ, NY, NM	4
Solar Pool Heating	AZ, CO, FL, IA, MN, NJ, NY (commercial only), RI, WI	9
Daylighting	AZ	1

Occasionally, state laws may stipulate the specific components of a system that are covered under the exemption. Some sales tax incentives cover equipment for storage or transmission of energy generated from the system, while others include only the components necessary to collect and convert solar energy.

### **Inclusion of Local Option Taxes**

In some states, there is only one statewide sales tax rate. Other states allow cities, towns, and counties to set an additional rate above the state sales tax rate. While most state sales tax exemptions cover these local surplus rates as well, some explicitly do not. In these states, the locality often has the authority to set its own exemptions.

### **Inclusion of Labor and/or Installation Costs**

In some states, installation services, including labor, are subject to sales tax. Exemptions in those states typically include the taxes on labor and installation costs, but not all statutes specify their eligibility for exemption. Check with your state's department of revenue or taxation for more information.

### **Incentive Structure**

Most sales tax exemptions are up-front exemptions, in which the buyer does not pay any tax out of pocket. Some, however, are structured as a refund or tax credit payable at the end of the tax year, and some are granted on a case-by-case basis. In many cases, exemptions require the buyer or seller to complete a form at the time of purchase in order for the seller to waive collection of the tax.

### **Full or Partial Exemptions**

Almost all of the 24 state sales tax incentives in DSIRE cover the full state sales tax amount. Nevada, however, provides a partial abatement that reduces the sales tax rate by about one-third.<sup>6</sup> Washington State provides a full exemption for systems with a capacity of 10 kW or less, but a 75% abatement of the sales tax rate for other systems.<sup>7</sup>

## **Other Types of Sales Tax Incentives**

Some states offer sales tax “holidays” for certain goods. The holidays specify a limited period of time during the year, usually just a few days, where the specified goods are exempt from sales tax. While

### ***Examples of Local Sales Tax Exemptions***

*New York City is one of several jurisdictions in New York State to exempt solar energy systems from its local sales tax. The normal combined state and local sales tax rate in New York City would be 8.5%.*

*Boulder, CO allows residents to claim a rebate for local sales and use taxes paid on solar energy equipment. The rebate is up to approximately 15% of the sales taxes paid, and averages \$140 for a 4.5 kW system. Much of the remainder of the sales tax paid on the system goes to Boulder's Solar Grant Fund, which funds solar for nonprofits and affordable housing developments.*

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<sup>6</sup> Database of State Incentives for Renewables and Efficiency. (2014). Nevada Renewable Energy Sales and Use Tax Abatement. Available: <http://programs.dsireusa.org/system/program/detail/3233>. Accessed March 6, 2015.

<sup>7</sup> Database of State Incentives for Renewables and Efficiency. (2014). Washington Renewable Energy Sales and Use Tax Abatement. Available: <http://programs.dsireusa.org/system/program/detail/576>. Accessed March 6, 2015.

*Maryland* is currently the only state to include any type of solar energy system in a sales tax holiday, some states offer such holidays for ENERGY STAR certified appliances and other energy-efficient products.<sup>8</sup>

## Local Options for Sales Tax Incentives

As described above, some states allow cities, counties, and municipalities to set their own tax rates, and some also give them authority to set sales tax exemptions for their local rates. In these states, sales tax exemptions are a tool local governments can use to attract solar development.

*New York, Colorado, and Arizona* are examples of states where local sales tax exemptions are independent from statewide taxes and exemptions. In these states, the state law does not automatically apply the exemption to local sales and use taxes; rather, municipalities with local sales tax authority may set their own exemption for solar equipment. The State of New York publishes a list of cities and counties that have opted to do so for [residential](#) and [commercial](#) systems, providing information on where tax incentives are strongest within the state.<sup>9</sup>

Local governments in states that do not levy a sales tax at all, in states where statewide exemptions cover local sales taxes, or where there is no local sales tax, can consider making this information known and available to developers who may be interested in expanding in areas with a lower tax burden.

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<sup>8</sup> Maryland includes solar hot water heating in its energy-efficiency sales tax holiday. Database of State Incentives for Renewables and Efficiency. (2014). Maryland Sales Tax Holiday for Energy-Efficient Appliances. Available: <http://programs.dsireusa.org/system/program/detail/4426>. Accessed March 16, 2015.

<sup>9</sup> New York State Department of Taxation and Finance. (2015, March 1). Publications 718-S and 718-CS. Available: [http://www.tax.ny.gov/pubs\\_and\\_bulls/publications/sales/st\\_pubs\\_and\\_bulls\\_by\\_number.htm](http://www.tax.ny.gov/pubs_and_bulls/publications/sales/st_pubs_and_bulls_by_number.htm). Accessed March 17, 2015.

## Appendix: Detailed Summaries of State Sales Tax Incentives for Solar Energy Equipment

State	Eligible system size	Specific components covered and equipment requirements	Eligible Sector (per DSIRE)	Exemption Rate	State Sales Tax Rate	Additional local sales taxes not covered by incentive?	Other notes
<b>AZ</b>	Not specified	Includes the sale of Solar Renewable Energy Credits (SRECs). Batteries and storage components are specifically not covered.	Commercial, Residential	100%	6%	Yes - up to an additional 5.1%. Cities may exempt solar equipment under their own tax code.	AZ's sales tax is actually a "transaction privilege tax" levied on vendors. The exemption therefore technically allows businesses to exempt from their sales base the amount of revenue generated by sales of solar energy devices.
<b>CA</b>	Not specified	At least half of the system's output must be used to provide electricity to farm equipment.	Agricultural	100%	6.50%	Yes - incentive explicitly does not exempt local sales and use taxes. There is a mandatory minimum of 1% for local sales tax.	
<b>CO</b>	Not specified	Includes system components and balance of system components such as wiring, control systems, switchgears, and generator step-up transformers. Does not include components beyond step-up transformers.	Commercial, Industrial, Local Government, Nonprofit, Residential, State Government, Retail Supplier, Agricultural, Institutional	100%	2.90%	Yes - localities have authority to exempt renewable energy equipment from local sales and use taxes.	

<b>CT</b>	Not specified	None specified	Commercial, Residential	100%	6.35%	No local sales taxes.	
<b>FL</b>	Not specified	Includes storage, hardware, and accessories. A complete list is available from FL DOR.	Commercial, Residential, Agricultural	100%	6%	No - exemption covers local sales taxes as well, which may be up to an additional 1%.	Purchasers should bring form to sellers; sellers must document exempt sales.
<b>IA</b>	Not specified	Includes equipment used to convert solar radiation to energy, or equipment used to transform that energy to a storage point or point of use.	Commercial, Residential, Agricultural	100%	6%	No - exemption covers local sales taxes as well, which are an additional 1%.	
<b>IN</b>	Not specified	None specified.	Commercial, Industrial, Residential	100%	7%	No local sales taxes.	State has not ruled on specific components of renewable energy systems other than wind turbines. Exemption is from state gross retail tax.
<b>KY</b>	50 kW or greater	None specified.	Commercial	up to 100%	6%	No local sales taxes.	The sales tax exemption may be combined with an income tax credit. The combined incentives may not exceed 50% of the project's total capital investment.
<b>MA</b>	Not specified	Equipment must supply primary or auxiliary power to an individual's principle residence.	Residential	100%	6.25%	No local sales taxes.	
<b>MD</b>	Not specified	Applies to "solar energy equipment", but language indicates solar pool heating and passive heat are not eligible.	Commercial, Industrial, Residential, Agricultural	100%	6%	No local sales taxes.	Maryland also has separate legislation exempting the sale of electricity generated by solar and wind from sales and use taxes. Grid electricity sales were already exempt; this incentive expands the exemption

							to residential third-party power purchase agreement solar electricity sales.
<b>MN</b>	Not specified	Includes all components of the system, including pumps, wiring, racks, etc.	Commercial, Industrial, Residential	100%	6.88%	No – exemption covers local sales tax as well, which can be up to an additional 1%.	
<b>ND</b>	100 kW or greater	Includes any tangible personal property for constructing the facility.	Commercial, Industrial	100%	5%	No – exemption covers local sales tax as well, which can be up to an additional 2%.	For all electricity generators, not just renewable energy. Must be 100 kW or larger - so commercial and industrial only.
<b>NE</b>	\$20 million investment	None specified.	Industrial, Utility	100%	5.50%	Yes - up to 2%. Refund does not include first 1.5% of local sales tax.	There is also an exemption for community-based energy development projects. Under that provision, contract payments for services to construct the project are tax-exempt.
<b>NJ</b>	Not specified	Equipment must be directly used in the gathering, storing, or conversion of solar energy.	Commercial, Industrial, Residential	100%	7%	No local sales taxes.	The incentive is available to all taxpayers.
<b>NM</b>	Not specified	Does not include components for the use of energy, such as pipes or electrical wires.	Commercial, Construction, Residential, Installers/Contractors, Retail Supplier	100%	5.13%	No – exemption covers local taxes as well, which can be as high as 3.7%.	New Mexico has a gross receipts tax rather than a traditional sales tax - businesses are taxed on the gross revenue of sales. This incentive allows businesses to deduct revenues from the sale of solar equipment. There is also an exemption for the revenues gathered from the sale of electricity from "qualified facilities," which are at least 1 MW and include PV or solar hot water. There is also an

							explicit provision for sales of wind and solar energy systems to federal, state, or local governments.
<b>NV</b>	10 MW or greater	The reduced sales tax rate is for electricity generating equipment using renewable sources, including solar thermal. Qualifying equipment is taxed at a reduced rate of 2.25%.	Commercial, Industrial, Utility, Agricultural	33%	6.85%	Yes. Abatements are granted on a case-by-case basis, and allow for the abatement of local option sales taxes but only above the first 0.6% through July 2015 and the first 0.25% after.	Nameplate capacity of generating equipment must be 10 MW. Tax rate abatement, not full exemption. Does not apply to residential or government-owned property.
<b>NY</b>	Not specified	Does not include components of non-solar energy systems (pipes, controls, etc.), or residential pool heating.	Commercial, Industrial, Residential	100%	4%	Yes - there is a local option to allow local governments to grant exemption.	NY Department of Finance and Taxation produces list of localities that have opted for exemption.
<b>RI</b>	Not specified	Includes inverters, mounting racks, ballast pans. Does not include pumps, fans, plumbing or electrical features, or storage hot water tanks.	Commercial, Residential	100%	7%	No	
<b>SD</b>	\$20 million in project costs	Includes electric interconnection systems.	Commercial, Industrial, Installers/Contractors, Agricultural	up to 100%	4%	Yes. Cities may impose a local option sales tax, which would not be covered by this incentive. They do have authority to set their own exemption, and most eligible projects are outside city lines	Project costs must total \$20 million, with \$2 million for equipment. Incentive is structured as a "reinvestment payment", or a refund equal to the amount paid in sales tax. Governor's Office of Economic Development has authority to define eligible facilities. Facilities are approved on a case-by-case basis.

						and do not have a local tax.	
<b>TN</b>	Not specified	The system must be a Certified Green Energy Production Facility, and must produce electricity for use off the premises of the facility.		100%	7%	No – exemption covers local taxes as well, which can be an additional 2.75%.	The incentive may be utilized as an exemption if applied for in advance, or a refund or credit if after the equipment is purchased.
<b>UT</b>	2 MW or greater	Includes control and monitoring systems, power lines, substation equipment, lighting, fencing, pipes, and other equipment for locating power lines and poles. Does not include tools and other equipment used in construction of a new facility, contracted services required for construction, and routine maintenance.	Commercial, Industrial, Utility	100%	4.70%	No – exemption covers local sales taxes as well, which can be an additional 1%.	Facilities must have a minimum capacity of 2 MW.
<b>VT</b>	500 kW or smaller	None specified.	Commercial, Residential, Agricultural	100%	6%	No - exemption covers local sales taxes as well, which may be up to an additional 1%.	
<b>WA</b>	10 kW or less for PV for full exemption, over 1 kW	Includes components necessary to the generation of electricity or production and use of thermal heat. Solar hot water heaters must	Commercial, Residential	75-100%	6.50%	No - exemption includes local taxes as well, which can be up to an additional 3.4%.	There are two provisions for sales tax incentives: 1) Equipment for systems that electricity from renewable energy sources and are at least 1 kW are exempt from 75% of the sales tax. 2) Solar energy systems 10 kW or

	for partial exemption	meet certification standards, or be determined by WSU Extension to be an equivalent system.					less may receive a full exemption from sales and use tax.
<b>WI</b>	Must be capable of producing 200 W AC or 600 BTU a day	Does not include storage or items used to "convey, transfer, or alter" the electricity or heat.	Commercial, Industrial, Residential	100%	5%	No- exemption includes local taxes as well, which can be up to an additional 0.6%.	

For more information on any of these incentives, visit [www.dsireusa.org](http://www.dsireusa.org).