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Inventory of State Wind Property Tax Treatments

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This study inventories the current property tax treatments for utility-scale wind developments across all 50 states. This inventory was created entirely with publicly available information from a variety of web-based sources and is accurate as of June 2021. There is also an interactive map displaying the data¹ and a parallel inventory of solar energy property tax treatment.² Further information on wind taxation policies can be found in Leiser and Esenstad's 2019 memo.³

This inventory is intended to serve as a resource to simplify and promote future research on the impact of state policy on wind energy developments. To facilitate this use, each state's tax policy has been placed into one of three defined tax categories, which are defined below:

- **Exemption and Replacement:** Legislation exempts wind projects from ad valorem property taxes and replaces those taxes with another form of regularized payment, such as payment in lieu of taxes (PILOT), nameplate capacity excise tax, or wind production tax. Although the mechanism and ultimate outcome of this form of taxation vary between states, this treatment replaces an irregular set of payments based on depreciating assessed property values with a more regular set of payments.
- **Abatement or Exemption:** Some or all of the assessed costs of a utility-scale wind development are either reduced or exempt from property tax. The total effective property tax reduction varies between states, and some states may have eligibility requirements or time limits on these tax benefits.
- **No Special Treatment:** There is no legislation to address utility-scale wind energy development. Thus, wind installations are subject to valuation by local property assessors and unidentified taxation methods.

Additionally, this inventory highlighted states in which municipalities retained local control, defined as:

- **Local Control:** the decision on whether to grant a special property tax treatment is decided at the county or township level. This control can act as a potential veto point for localities that may not have siting authority over utility-scale wind projects. This category is not discrete from the prior types of tax treatment and is evident in some, but not all, of the legislation affecting utility-scale wind development.

¹ Hintz, O., Uebelhor, E., and Gold, E. "Tax Treatments for Wind Energy Development in the United States" [map]. 1:36,978,595. "State Wind Property Tax Treatments." June 23, 2021.

<http://www.arcgis.com/apps/dashboards/29f7d253fc9f48b2b427699552d7fadd>

² Uebelhor, E., Hintz, O., and Gold, E. (2021). Inventory of State Solar Property Tax Treatments. Available at: <http://closup.umich.edu/research/working-papers/inventory-state-solar-property-tax-treatments>

³ Leiser, S. & Esenstad, A. (2019). The Taxation of Wind Energy. Available at: <http://closup.umich.edu/research/taxation-wind-energy>

Summary of Wind Property Tax Treatment

State	Type of Property Tax Treatment	State	Type of Property Tax Treatment
Alabama	Abatement or Exemption	Montana	Abatement or Exemption*
Alaska	None*	Nebraska	Exemption and Replacement
Arizona	Abatement or Exemption	Nevada	Abatement or Exemption
Arkansas	None	New Hampshire	Exemption and Replacement*
California	None	New Jersey	Abatement or Exemption
Colorado	None*	New Mexico	None
Connecticut	Abatement or Exemption	New York	Exemption and Replacement*
Delaware	None	North Carolina	None
Florida	Abatement or Exemption	North Dakota	Exemption and Replacement
Georgia	None	Ohio	Exemption and Replacement*
Hawaii	None*	Oklahoma	None
Idaho	Exemption and Replacement	Oregon	Abatement or Exemption*
Illinois	Abatement or Exemption	Pennsylvania	Exemption and Replacement
Indiana	None*	Rhode Island	Abatement or Exemption*
Iowa	Exemption and Replacement	South Carolina	None
Kansas	Abatement or Exemption	South Dakota	Exemption and Replacement
Kentucky	None	Tennessee	Abatement or Exemption
Louisiana	None	Texas	Abatement or Exemption*
Maine	None	Utah	None
Maryland	Exemption and Replacement*	Vermont	None*
Massachusetts	Exemption and Replacement*	Virginia	None
Michigan	None	Washington	None
Minnesota	Exemption and Replacement*	West Virginia	Abatement or Exemption
Mississippi	None*	Wisconsin	Exemption and Replacement
Missouri	None	Wyoming	None

* = involves local government control

State Details

Alabama

Alabama allows utilities that develop “alternative energy sources” with capital costs of over \$100 million to apply for full property tax abatements on new projects. Abatements apply only to non-educational taxes. Abatements are subject to the approval of their relevant taxing authorities and can only be approved for ten years at a time with a maximum of twenty years of abatement.

Relevant Legislation and/or Code: [Code of Ala. § 40-8-1](#), [revenue.alabama.gov \(Summary\)](http://revenue.alabama.gov)

Alaska

While Alaska allows localities to vote to exempt residential renewable energy systems from property taxation, there is no special property tax treatment for utility-scale wind energy facilities.

Relevant Legislation and/or Code: [Alaska Stat. § 29.45.050](#)

Arizona

Arizona exempts 80 percent of the original value of renewable energy equipment that produces electricity for off-site use from taxation.

Relevant Legislation and/or Code: [A.R.S. § 42-14155](#), [A.R.S. §§ 42-11051 through 42-11053](#)

Arkansas

Arkansas has no special property tax treatment for utility-scale wind energy facilities.

California

California has no special property tax treatment for utility-scale wind energy facilities.

Colorado

In Colorado, wind energy facilities that produce under 2 MW of energy are assessed locally while facilities producing over 2 MW are assessed at the state level as public utility property. For state valuations, if equipment costs at a wind energy facility exceed costs at a non-renewable energy facility of equal capacity, the valuation of the wind facility is capped at the non-renewable facility rate. The state of Colorado also authorizes its localities to create additional property tax incentives to attract wind energy projects, if desired.

Relevant Legislation and/or Code: [§§ 39-4-102\(1\)\(e\) and § 39-5-104.7, C.R.S.](#), [§§ 30-11-107.3 and 31-20-101.3, C.R.S.](#), [Summary](#)

Connecticut

Connecticut allows its municipalities to exempt up to 100 percent of the property taxes of renewable energy facilities created through power purchase agreements for as long as the power purchase agreements last.

Relevant Legislation and/or Code: [Conn. Gen. Stat. § 12-81 \(57\) et seq.](#)

Delaware

Delaware has no special property tax treatment for utility-scale wind energy facilities.

Relevant Legislation and/or Code: [Del. Title 9 § 8101](#), [Barnes, Laurent, et al. \(2013\). 59-60](#)

Florida

Florida provides a 100% property tax exemption for residential renewable energy property and an 80% property tax exemption for non-residential renewable energy property.

Relevant Legislation and/or Code: [Florida Statutes § 193.624](#), [DSIRE](#)

Georgia

Georgia currently has no special property tax treatment for utility-scale wind energy facilities.

Hawaii

Hawaiian property tax treatments are established at the county level. In the County of Honolulu, wind energy equipment is exempt from property taxation during a facility's first 25 years of operation. In the rest of the state, there are no special property tax treatments for wind energy projects.

Relevant Legislation and/or Code: [Honolulu Code 8-10.15](#)

Idaho

Utility-scale wind energy facilities in Idaho that are not regulated by the Idaho Public Utilities Commission are 100% exempt from taxes on real estate, fixtures or property related to their renewable energy systems. In lieu of these property taxes, wind energy producers must pay a tax of 3% of gross energy earnings, which is defined as the gross receipts from the distribution, delivery, and sale to a customer for the direct use or resale of electrical energy generated, manufactured, or produced utilizing wind energy.

Relevant Legislation and/or Code: [Idaho Statutes § 63-3502B](#)

Illinois

Illinois uses a fair cash value assessment for its taxation of utility-scale wind energy projects. In 2007, Illinois established that any wind energy device that produced more than 500 kW of energy for off-site sale was worth \$360,000 per MW of capacity. After annual adjustments to this value to account for inflation, the state considers the impact of physical equipment degradation on an individual facility's value by multiplying the original value by the number of years the equipment has been in operation divided by 25. Illinois then values the equipment at $\frac{1}{3}$ of the calculated fair cash value for property taxation.

Relevant Legislation and/or Code: [§ 35 ILCS 200/10-600 et seq.](#)

Indiana

Indiana currently has no special property tax treatment for utility-scale wind energy production. However, wind systems designed for onsite use are exempt from property taxes. Furthermore, Indiana counties have the authority to sign tax abatement agreements for new business personal property. This can include large-scale wind projects. Abatement agreements are limited to ten years, but can be extended for another ten years for a maximum of twenty years of abatement.

Relevant Legislation and/or Code: Ind. [Code § 6-1.1-12-26](#), [SEA1](#)

Iowa

Iowa allows municipalities to enact a special valuation process for wind energy facilities. The facility owner owes nothing in the first year of operation. Payments then increase by 5 percent of

the net acquisition cost each subsequent year until the seventh year, when they are capped at 30 percent of net acquisition. These payments are based on the net acquisition costs to construct a wind energy facility. If a wind energy facility is not located in a municipality with this special process, utility-scale wind installations are subject to a full tax exemption with an equivalent “replacement tax” levied as an excise tax. This allows Iowa to tax both in-state energy production and energy sold into the state. This tax regime is not specific to wind, but rather applies to almost all utilities in Iowa, and it does not create a clear net benefit for the building of utility-scale wind in Iowa.

Relevant Legislation and/or Code: [Iowa Code 2020, Section 441.21 \(61, 4, 8\)](#), [Iowa Code 2020, §427B.26, Replacement Tax Summary](#)

Kansas

Kansas statute exempts renewable energy equipment from property taxes if an application for an exemption is filed for the property on or before December 31, 2016. For applications for exemptions filed after December 31, 2016, a property tax exemption is limited to the 10 taxable years immediately following the taxable year in which construction or installation of such property is completed.

Relevant Legislation and/or Code: [K.S.A. § 79-201](#)

Kentucky

Kentucky does not have a special property tax treatment for utility-scale wind facilities.

Louisiana

Louisiana does not have a special property tax treatment for utility-scale wind facilities.

Maine

Maine does not have a special property tax treatment for utility-scale wind facilities.

Maryland

Maryland grants its counties permission to enter into payment in lieu of tax (PILOT) agreements with an electricity generation facility within their jurisdiction. If a county chooses not to establish a PILOT agreement with a facility, all of the machinery and equipment used to generate electricity is assessed as personal property and receives a 50% exemption on its assessed value for taxation.

Relevant Legislation and/or Code: [MD Code, Tax-Property, § 7-514](#), [MD Code, Tax-Property, § 7-237](#)

Massachusetts

Massachusetts has a 100% property tax exemption on wind energy systems for 20 years whose purpose is supplying the energy needs of taxable property. While this exemption does not apply to utility-scale wind projects, Massachusetts allows its localities to enter into payment in lieu of tax (PILOT) agreements with electricity generation facilities that ease tax burdens in projects' early years. Additionally, if a project is located in a designated "Economic Opportunity" area, a facility can use a tax increment finance (TIF) agreement and gain exemptions from some property taxes in exchange for job creation and investment.

Relevant Legislation and/or Code: [M.G.L. ch. 59 § 5 \(45, 45A\)](#), [M.G.L. ch. 59, §38H\(b\)](#), [M.G.L. ch. 23A, § 3E](#); [ch. 40, § 59](#); [ch. 59, § 5](#)

Michigan

Michigan's utility-scale wind facilities are classified as personal property. The Michigan State Tax Commission first established a tax table for wind energy systems in 2007, which was subsequently amended in 2011 and 2014. Under the 2011 and 2014 taxation schedules, Michigan's localities receive less revenue from wind energy facilities than originally required under the 2007 policy. As a result, many localities have filed tax appeal cases with the state's Tax Tribunal, and litigation for these cases is ongoing. As for small-scale wind energy usage, in 2019, Michigan passed legislation that exempts alternative energy systems valued at less than \$80,000. Similar legislation had previously expired in 2012.

Relevant Legislation and/or Code: [MCL § 460.1131 et seq.](#), [Tax Schedule Litigation](#), [H.B. 4465](#)

Minnesota

Minnesota exempts all real and personal property at utility-scale wind energy facilities from taxation, with an exception for the land the facility is built on, which is taxed. In lieu of property taxes, Minnesota has placed a production tax on utility-scale wind that varies based upon a system's total capacity. Systems that produce less than 250 kW of energy are exempt; systems that produce between 250 kW and 2 MW pay a \$0.00012 per kWh tax; systems that produce between 2 MW and 12 MW pay a \$0.00036 per kWh tax; and finally, systems that produce more than 12 MW of energy pay a tax of \$0.0012 per kWh of electricity generated. Minnesota also

grants its municipalities the authority to negotiate alternative taxation plans with wind energy system owners in order to attract wind energy developments.

Relevant Legislation and/or Code: [H.B. 3167](#), [Minn. Stat. § 272.028](#)

Mississippi

According to Mississippi property tax law, local governing authorities can request certain industries be exempt from ad valorem taxation. This allowance could be applied to a utility-scale wind energy system, but Mississippi does not have a special taxation program that specifically addresses utility-scale wind.

Relevant Legislation and/or Code: [Miss. Code Ann. Sections 27-31-101 to 27-31-117](#)

Missouri

Missouri does not have a special taxation program for utility-scale wind energy facilities.

Montana

Montana exempts up to \$100,000 of capital investment from property taxes at multi-family and non-residential wind energy facilities for up to ten years after the facility is installed.

Additionally, the utility-scale wind industry is classified as a desirable new industry under Montana tax code. Under this classification wind facilities that produce more than one megawatt of energy are taxed at 50% of their full taxable value in their first year, which increases year after year for ten years until they reach their full taxable value. However, Montana cities and counties hold the ultimate authority to reject an adjusted tax rate for a wind facility if they feel it would negatively impact their schools and communities.

Relevant Legislation and/or Code: [MCA § 15-32-102](#), [MCA § 15-6-224](#), [MCA § 15-24-1402](#)

Nebraska

In Nebraska, equipment used to produce renewable energy at a facility with a capacity greater than or equal to 100 kW is classified as depreciable tangible personal property that is exempt from property taxes. Instead, such property is taxed through a nameplate capacity excise tax that collects \$3,518 per megawatt. Accessory buildings, roads and land that support a wind energy facility are classified as real property and taxed fully.

Relevant Legislation and/or Code: [Nebraska 77-6203](#), [LB 1048](#), [Summary](#)

Nevada

In Nevada, wind facilities that serve commercial or industrial buildings on-site are fully exempt from property taxes. Nevada's utility-scale wind facilities are eligible to apply for a 55% tax abatement for 20 years. This partial abatement is conditional on the facility's fulfillment of several employment obligations and commitment to remain in the state for at least 10 years.

Relevant Legislation and/or Code: [NRS § 701A.200](#), [NRS 701A.360-390](#)

New Hampshire

In New Hampshire, localities are authorized to exempt most wind energy systems from property taxation and enter into payment in lieu of taxes (PILOT) agreements with renewable energy producers. These exemptions vary across jurisdictions.

Relevant Legislation and/or Code: [RSA 72:61-62](#), [RSA 72:74](#)

New Jersey

Certified wind energy systems that provide on-site electricity are exempt from New Jersey property taxation. Additionally, research suggests that local assessing officers typically consider commercial energy production equipment to be business personal property, which is typically exempt from taxation in New Jersey (Barnes, et al, 2013). As a result, New Jersey's utility-scale wind energy equipment may be excused from taxation, but there is no official state law explicitly regulating this exemption. New Jersey law also requires that any wind energy system located on land assessed under the New Jersey Farmland Assessment Act meet certain requirements in order for the landowners to retain their farmland property tax benefits. The energy system must be created primarily for onsite use, produce no more than 2 MW of energy and occupy less than 10 acres of land, among other requirements.

Relevant Legislation and/or Code: [NJ Rev Stat § 54:4-3.114 \(2013\)](#), [New Jersey S.B. 1538](#), [Barnes, Laurent, et al. \(2013\). 81.](#)

New Mexico

New Mexico has no special property tax treatment for utility-scale wind developments.

New York

New York authorizes its counties, municipalities and school districts to offer 15-year real property tax exemptions to renewable energy facilities, including utility-scale wind energy projects, within their jurisdictions. If a locality chooses to opt in to this exemption, they are also

authorized to enter into a payment in lieu of taxes (PILOT) agreement with the renewable energy facility, for any amount up to the value of the exempted property taxes. Furthermore, according to renewableenergypost.com, “in an order issued on February 11, 2021, the New York State Public Service Commission... established a “host community benefit program” through which owners of large-scale renewable wind energy facilities (25 MW+) would pay \$1,000/MW each year for the first 10 years of project operation to be distributed equally among all residential utility customers residing in the municipality where the facility would be located.”

Relevant Legislation and/or Code: [N.Y. Real Property Tax Law §487](#), [Renewable Energy Post](#)

North Carolina

North Carolina has no special property tax treatment for utility-scale wind developments.

North Dakota

All machinery and equipment involved in wind energy generation on locally-assessed property are fully exempt from property taxes for the first five years of an installation’s life. As larger wind energy projects are assessed by the state, this exemption only applies to small-scale wind energy projects that are built mostly for on-site use. North Dakota wind projects that have a capacity of 100 kW or greater are eligible for a statewide payment in lieu of taxes (PILOT) program. In the program, wind generator owners owe \$2.50 per kW of nameplate capacity and \$.0005 per kWh actually produced over the taxable period in place of traditional property taxes. This exemption applies only to the energy producing equipment, not to the real property or any associated facilities built on site.

Relevant Legislation and/or Code: [N.D.C.C. §57-02-08](#), [N.D.C.C. §57-33.2](#)

Ohio

In Ohio, wind energy facilities with a nameplate capacity of 250 kW or less are permanently exempt from both real and personal property taxes within the state. Wind energy facilities with nameplate capacities greater than 250 kW are eligible for payment in lieu of taxes (PILOT) agreement. Depending on the sizes of their facilities, wind developers with PILOT agreements are required to meet several job creation and economic advancement obligations. Additionally, wind energy facilities with nameplate capacities that exceed 20 MW must seek approval from their host county commissioners. The payments required range based upon the amount of Ohio-based workers who were involved in a facility's construction, and localities can negotiate up to an additional \$2,000/ MW beyond the state's baseline, with a cap on yearly payments of \$9,000/MW.

Relevant Legislation and/or Code: [ORC 5709.53](#), [ORC§5727.75](#)

Oklahoma

Oklahoma previously offered a 5-year ad valorem property tax exemption to certain wind energy projects in the state, but this program was eliminated in 2015. There is currently no special property tax treatment for utility-scale wind developments in Oklahoma.

Relevant Legislation and/or Code: [SB 498](#), [68 O.S. § 2902\(C\)\(8\)](#)

Oregon

All wind energy facilities primarily designed to offset on-site energy usage are exempt from Oregon property taxes. Additionally, if a commercial wind energy facility is within a Rural Renewable Energy Development Zone, facility owners can apply for a 3 to 5 year local property tax exemption, provided that they meet certain employment and economic investment criteria.

Relevant Legislation and/or Code: [ORS 307.175](#), [ORS 285C.353](#), [ORS 285C.359](#),

Pennsylvania

All equipment utilized for wind energy production in Pennsylvania is exempt from taxation. Additionally, Pennsylvania's county assessors are directed to assess the real property value of a wind energy development using an income capitalization approach, meaning that the assessor would use lease agreements for the property to determine the taxable value of the land.

Relevant Legislation and/or Code: [Pa.C.S.A § 8811\(b\)\(5\)](#), [53 Pa.C.S.A. § 8842\(b\)\(2\)](#)

Rhode Island

Rhode Island has a full property tax exemption for all residential and industrial renewable energy resources, including wind energy systems. Any commercial renewable energy resource that a town or city deems beneficial or desirable to their community may be granted a property tax exemption or "property tax stabilization," which is a partial exemption, for up to 20 years.

Relevant Legislation and/or Code: [R.I.G.L. 44-3-3](#), [H.8354](#), [R.I.G.L. 44-3-9](#)

South Carolina

South Carolina does not have a special tax treatment for utility-scale wind developments.

South Dakota

South Dakota fully exempts wind facilities with over 5MW of nameplate capacity from property taxes. However, these facilities are required to pay \$3000 per MW of nameplate capacity and a \$0.00045 to \$0.00065/kWh production tax, depending on their installation year. For wind projects under 5MW, the first \$50,000 of the assessed value of the renewable energy property or 70 percent of the assessed value of the renewable energy property, whichever is greater, is exempt from the real property tax.

Relevant Legislation and/or Code: [S.D.L.C. 10-35-18](#), [10-35-16](#), [10-35-19.1](#), [10-4-44](#)

Tennessee

In Tennessee, county assessors set property taxes for certified wind energy facilities based upon their immediate value in a special ad valorem tax assessment. Assessors are instructed to set taxes no higher than one third of the initial installation costs of a wind energy development.

Relevant Legislation and/or Code: [Tenn. Code § 67-5-601](#)

Texas

Texas gives its municipalities and school districts the right to designate an area in their community as a “reinvestment zone” and offer a tax abatement agreement to any developer that comes into the area. There are additional abatement programs for school district taxes for developments that bring jobs to an area. Texas’s commercial wind developers can take advantage of these policies to sign abatement agreements with local tax authorities and reduce their

property tax costs. Additionally, Texas tax code specifies that any increases in a property's value due to the creation of a wind facility that generates electricity for on-site use are exempt from property taxation.

Relevant Legislation and/or Code: [Texas Economic Development Act \(Chapter 313\)](#), [Property Redevelopment and Tax Abatement Act \(Chapter 312\)](#), [Texas Tax Code 11.27](#)

Utah

Utah has no special property tax treatment for wind energy. However, Utah does provide other tax incentives for wind energy projects through the Alternative Energy Development Incentive.

Relevant Legislation and/or Code: [Utah Code § 63M-4-502](#), [Utah Code § 59-7-614.7](#)

Vermont

There exists no special property tax treatment for utility-scale wind energy developments in Vermont. However, Vermont municipalities are authorized to exempt on-site wind energy facilities from municipal real and personal property taxation. Owners of these facilities would still be obligated to pay state taxes on their wind energy development.

Relevant Legislation and/or Code: [32 V.S.A. § 3845](#)

Virginia

Virginia has no special property tax treatment for wind energy facilities.

Washington

Washington has no special property tax treatment for wind energy facilities.

West Virginia

In West Virginia, up to 79 percent of the equipment involved directly in production of utility wind energy is assessed at its salvage value, or the value it would hold after it was completely depreciated. This leads to a significant reduction in the overall property taxes for wind development owners, especially in the years immediately following the construction of a facility.

Relevant Legislation and/or Code: [W. Va. Code § 11-6A-5a](#)

Wisconsin

The state of Wisconsin fully exempts any materials or equipment used to run any wind facility from general property taxes. Alternative energy systems are required to pay a total of \$4,000 per/MW nameplate capacity for projects over 1 MW. These payments are divided up between counties and local communities. If a system is located in a city or village \$2,333/MW is paid to that community, with the remaining \$1,667 to be paid to the county. If a system is located in a town, the town receives \$1,667/MW, and the county receives the remaining \$2,333.

Relevant Legislation and/or Code: [Wisconsin Tax Code § 70.111\(18\)](#), [Wis. Stat. § 76.28](#), [Schuman & Olin \(2017\). 5](#)

Wyoming

Wyoming has no special property tax treatment for utility-scale wind energy facilities.