



Department of Local Government Finance

Assessing Renewable Energy

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Assessing Renewable Energy

- I. State Distributable Property
- II. Solar Projects
- III. Wind Power & Wind Towers
- IV. Hydrogen Production
- V. Questions



State Distributable Property



State Distributable Property

IC 6-1.1-8-2 Definitions

Sec. 2. As used in this chapter:

- (8) The term "public utility company" means a company which is subject to taxation under this chapter regardless of whether the company is operated by an individual, a partnership, an association, a corporation, a limited liability company, a fiduciary, or any other entity.



State Distributable Property

- Because public utilities often cross township and county lines, the Department is charged with assessing the value of public utilities in Indiana.
- The Department values a company's entire enterprise statewide and then distributes the assessed value to each county in which the company operates. The distribution is allocated based on a percentage of the company's total operation in the county by township/taxing district.
- There is a provision that allows companies in one taxing district to file a local Business Personal Property Return.
- IN Code 6-1.1-3-7.2: The \$40,000 (\$80,000 effective January 1, 2022) exemption is applicable to state distributable properties not regulated by the Indiana Utility Regulatory Commission.



State Distributable Property

IC 6-1.1-8-3 Companies subject to taxation; exemptions

- **Sec. 3. (a)** Except as provided in subsection (c), the following companies are subject to taxation under this chapter:
 - (1) Each company which is engaged in the business of transporting persons or property.
 - (2) Each company which is engaged in the business of selling or distributing electricity, gas, steam, or water.
 - (3) Each company which is engaged in the business of transmitting messages for the general public by wire or airwaves.
 - (4) Each company which is engaged in the business of operating a sewage system or a sewage treatment plant.



State Distributable Property

- (b) The companies which are subject to taxation under this chapter include, but are not limited to:
- (1) bridge companies;
 - (2) bus companies;
 - (3) express companies;
 - (4) light, heat, or power companies;
 - (5) pipeline companies;
 - (6) railroad companies;
 - (7) railroad car companies;
 - (8) sleeping car companies;
 - (9) street railway companies;
 - (10) telephone, telegraph, or cable companies;
 - (11) tunnel companies; and
 - (12) water distribution companies.



State Distributable Property

(c) The following persons are not subject to taxation under this chapter:

- (1) Aviation companies.
- (2) Broadcasting companies.
- (3) Television companies.
- (4) Water transportation companies.
- (5) Companies which are operated by a municipality or a municipal corporation, except those utility companies owned or held in trust by a first class city.



State Distributable Property

- (6) A taxpayer that:
 - (A) is described in subsection (b);
 - (B) owns definite situs property that is located in only one (1) taxing district;
and
 - (C) files a personal property tax return for the definite situs property with the county assessor or (if applicable) the township assessor.
- A taxpayer that meets the requirements of clauses (A) and (B) may elect to file a personal property tax return for the definite situs property with the county assessor or (if applicable) the township assessor, instead of filing a return for the definite situs property under this chapter.



State Distributable Property

- (7) A taxpayer that:
- (A) is participating in a net metering program under 170 IAC 4-4.2 or in a feed-in-tariff program offered by a company described in subsection (b)(4); and
 - (B) files a personal property tax return for the property with the county assessor or (if applicable) the township assessor.
- Note: These companies may be in more than one taxing district



State Distributable Property

- If the item is land, a building that houses employees rather than only equipment, or a building improvement, it is locally assessed real property, with the exception of Railroad companies' operating improvements (and portable equipment sheds).
- The remaining property is considered to be distributable property.
- Some items or units of property may have dual uses. A portion may be used to produce or provide utility service, while the remainder is specifically attributable to a building or structure.

Real Property Assessment Guidelines – Chapter 9, Page 4



State Distributable Property

- To determine whether a central system is locally assessed real property or distributable property, the following standards apply:
 - The portion of the central system that is specifically attributable to the building or structure is locally assessed real property.
 - The portion of the central system that was installed to specifically accommodate the utility process or activity conducted in the facility is distributable property.
 - What used to be locally assessed personal property (if any) now has become a part of the distributable property (2010).

Real Property Assessment Guidelines – Chapter 9, Page 4



State Distributable Property

- If the central system has a dual purpose, an allocation is made based on the specific facts and circumstances surrounding the use of the system.
- For example, the allocation of a central system would be a plumbing system that was installed both to serve the occupants of a building and also to supply water to cool an item of distributable property. In this case, an allocation is made to account for the portion of the central system that is locally assessed real property, and the portion of the central system that is attributable to the distributable property. The Department would need to confer with the taxpayer in this type situation to determine what the split would be based on the percentage.



State Distributable Property

- Companies report historical or original cost of their property including intangibles.
 - The intangibles and any locally assessed property are removed from the assessment.
 - The property is then subject to federal tax depreciation.
- Gross additions deduction:
 - 60 percent of the taxable value of the property.
 - The first year distributable equipment is placed in service.
- Construction work in process is added to the assessment at 10 percent of the depreciated value.
- It is not Market Value, but it makes the administration easier based on the Indiana Code and the Indiana Administrative Code provisions.



Solar Projects



Solar Projects

- <https://www.in.gov/dlgf/files/memos/210526-Bennett-Memo-Assessment-Matters-Legislative-Update-Memo.pdf>
- On April 29, 2021, Governor Holcomb signed into law House Enrolled Act 1348-2021 (“HEA 1348”). Section 1 of HEA 1348, effective January 1, 2022, amends Ind. Code § 6-1.1-8-2 by updating and adding definitions used in Ind. Code § 6-1.1-8, which provides how property owned or used by a public utility company shall be taxed.



Solar Projects

- Section 1 of HEA 1348 states that the term “light, heat or power company” now includes a utility grade solar energy installation facility. The term “solar land base rate” means the solar land based rates determined under Ind. Code § 6-1.1-8-24. The term “utility grade solar energy installation facility” means a renewable utility grade solar electricity facility that is used for purposes of generating solar electricity for resale to consumers. Section 1 of HEA 1348 also provides definitions for the terms “north region,” “central region,” and “south region” – dividing the 92 counties into one of these three (3) regions as shown on the next slide:



Solar Projects



¹ North District

Adams, Allen, Benton, Blackford, Carroll, Cass, DeKalb, Elkhart, Fulton, Grant, Howard, Huntington, Jasper, Jay, Kosciusko, LaGrange, Lake, LaPorte, Marshall, Miami, Newton, Noble, Porter, Pulaski, St. Joseph, Starke, Steuben, Wabash, Wells, White, Whitley

² Central District

Boone, Clay, Clinton, Delaware, Fayette, Fountain, Franklin, Hamilton, Hancock, Hendricks, Henry, Johnson, Madison, Marion, Montgomery, Morgan, Owen, Parke, Putnam, Randolph, Rush, Shelby, Tippecanoe, Tipton, Union, Vermillion, Vigo, Warren, Wayne

³ South District

Bartholomew, Brown, Clark, Crawford, Daviess, Dearborn, Decatur, Dubois, Floyd, Gibson, Greene, Harrison, Jackson, Jefferson, Jennings, Knox, Lawrence, Martin, Monroe, Ohio, Orange, Perry, Pike, Posey, Ripley, Scott, Spencer, Sullivan, Switzerland, Vanderburgh, Warrick, Washington



Solar Projects

North – Utility (800 Property Class Codes)⁵

	2018	2019	2020
Average	\$199,715.31	\$201,093.58	\$198,824.75
Median	\$11,296.06	\$11,321.43	\$11,825.25

Central – Utility (800 Property Class Codes)

	2018	2019	2020
Average	\$34,054.58	\$33,586.77	\$33,481.81
Median	\$13,066.38	\$13,069.23	\$13,069.23

South – Utility (800 Property Class Codes)

	2018	2019	2020
Average	\$20,680.75	\$20,431.68	\$20,492.94
Median	\$5,000.00	\$5,222.00	\$5,122.30

⁵ 800 Property Class Codes

800	Locally Assessed Vacant Utility Land – Commercial	850	Locally Assessed Property Owned by a Sewage Co. – Commercial
805	Locally Assessed Vacant Utility Land – Industrial	851	State Assessed Property Owned by a Sewage Co. – Part of Any Right-of-Way of Collection System
810	Locally Assessed Property Owned by Bus Co. – Commercial	855	Locally Assessed Property Owned by a Sewage Co. – Industrial
811	State Assessed Property Owned by a Bus Co.	860	Locally Assessed Property Owned by Telephone, Telegraph, or Cable Co. – Commercial
815	Locally Assessed Property Owned by a Bus Co. – Industrial	861	State Assessed Property Owned by Telephone, Telegraph, or Cable Co. – Part of Any Right-of-Way of the Distribution System
820	Locally Assessed Property Owned by Light, Heat, or Power Co. – Commercial	865	Locally Assessed Property Owned by Telephone, Telegraph, or Cable Co. – Industrial
821	State Assessed Property Owned by Light, Heat, or Power Co. – Part of Any Right-of-Way	870	Locally Assessed Property Owned by Water Distribution Co. – Commercial
825	Locally Assessed Property Owned by a Light, Heat, or Power Co. – Industrial	871	State Assessed Property Owned by Water Distribution Co. – Part of Any Right-of-Way
830	Locally Assessed Property Owned by a Pipeline Co. – Commercial	875	Locally Assessed Property Owned by Water Distribution Co. – Industrial
831	State Assessed Property Owned by a Pipeline Co. – Part of Any Right-of-Way of the Distribution System		
835	Locally Assessed Property Owned by Pipeline Co. – Industrial		
840	Locally Assessed Property Owned by Railroad Co. – Commercial		
841	State Assessed Operating Property Owned by Railroad Co.		
845	Locally Assessed Property Owned by Railroad Co. – Industrial		



Solar Projects

- Section 2 of HEA 1348, effective upon passage, amends Ind. Code § 6-1.1-8-24 by providing new guidelines for the assessment of the land underneath the fixed property of a utility grade solar energy installation facility. The provisions state that the township or county assessors will determine the assessed value of the land underneath the fixed property of a utility grade solar energy installation facility at an amount that does not exceed the solar land base rate for the region in which the property is located. Beginning December 1, 2021, the solar land base rates¹ for each region will be calculated by the Department and it will serve as the assessment cap, unless the facility was in existence and assessed on the January 1, 2021 assessment date. Assessing officials are still instructed to follow the normal guidelines and procedures as are applicable under Ind. Code § 6-1.1-20.6.

¹ The land base rate will apply to the land underneath a solar panel, as well as the land in between and immediately surrounding the solar panels.



Solar Projects

- Section 2 of HEA 1348 specifies that the amendment to Ind. Code § 6-1.1-8-24 applies to a utility grade solar energy installation facility: (1) that had the land portion of its fixed property assessed and valued on January 1, 2021, property taxes first due and payable in 2022; and (2) for assessment dates after December 31, 2021, but only until the next planned reassessment of the property during the county's four (4) year reassessment cycle.



Solar Projects

- Section 2 of HEA 1348 carves out a limited exception for a utility grade solar energy installation facility that had the land underneath the fixed property assessed and valued on the January 1, 2021, assessment date. For these facilities with assessments that have been set for the January 1, 2021, assessment date, the assessed value cannot be changed until the next cyclical reassessment if the assessed value of the facility is less than the solar base rate.



Solar Projects

- Beginning July 1, 2021, the amended portion of Ind. Code § 6-1.1-8-24 is as follows:
- IC 6-1.1-8-24 Township assessor or county assessor determination of assessed values . . .
 - (c) This subsection applies to assessment dates after December 31, 2021. The land portion of the fixed property of a utility grade solar energy installation facility shall be assessed at an amount that does not exceed the solar land base rate for the region in which the property is located.
 - (d) Assessing officials shall follow the normal guidelines and procedures as are applicable under IC 6-1.1-20.6.



Solar Projects

- (e) This subsection applies to a utility grade solar energy installation facility:
- (1) that had the land portion of its fixed property assessed and valued on January 1, 2021, for property taxes first due and payable in 2022; and
 - (2) for assessment dates after December 31, 2021, but only until the next planned reassessment of the property during the county's four (4) year reassessment cycle under IC 6-1.1-4-4.2.
- If, for an assessment date described in subdivision (2), the assessed value of the land portion of the fixed property of a utility grade solar energy installation facility described in this subsection for the January 1, 2021, assessment date is less than the solar land base rate for the region in which the property is located on a particular assessment date, the land portion of the fixed property of a utility grade solar energy installation facility shall be assessed at an amount equal to the assessed value determined for the January 1, 2021, assessment date.



Solar Projects

- Section 3 of HEA 1348, effective upon passage, adds Ind. Code § 6-1.1-8-24.5 and provides that the Department will determine and release the solar land base rates for the north, central, and south regions of the State. In calculating the base rate, the Department will determine the median true tax value (TTV) per acre of land in the region classified under the utility property class codes of the Department for the immediately preceding year. The Department will release its annual determination of the solar land base rates on or before December 1 of each year.



Solar Projects

- The new statutory language under Ind. Code § 6-1.1-8-24.5 is as follows:
- IC 6-1.1-8-24.5 Sec. 24.5. The department of local government finance shall annually determine and release a solar land base rate for the north region, the central region, and the south region of the state as follows:



Solar Projects

- (1) For each region, the department shall determine the median true tax value per acre of all land in the region classified under the utility property class codes of the department of local government finance for the immediately preceding assessment date.
- (2) The department shall release the department's annual determination of the solar land base rates on or before December 1 of each year.



Solar Projects

- The solar land base rates annually determined by the Department will apply to the ensuing assessment date. For example, if the Department releases its annual determination on the solar land base rates on December 1, 2021, those rates will apply to the January 1, 2022 assessment date.



Solar Projects





Solar Projects





Solar Projects

 Agrivoltaics

FOOD · WATER · ENERGY

- Solar panels installed over bare ground are
 - hotter during the day &
 - trap heat overnight
- Hot solar panels produce less energy
- Sonoran Desert residents do not want a hotter environment!


Solar panels over soil = HOT

- But, plants under solar panels release heat from the system as water evaporates from leaves during photosynthesis
- And, shaded plants need less water!
- If the plants are food crops...

win-win-win system

1. yielding more energy &
2. using less water
3. while feeding people


AGRIVOLTAICS SYSTEM

Water evaporating from leaves cools them, increasing solar panels. Shade from panels reduces wind-drying of food crops. Cooler reduces frost damage to crops.

How might an agrivoltaics system benefit farm workers?


10 UA Biosphere 2



Wind Power & Wind Towers



Wind Power & Wind Towers

- IC 6-1.1-8-9 – Light, heat, or power companies
- The fixed property of a light, heat, or power company consists of:
 1. automotive and other mobile equipment;
 2. office furniture and fixtures;
 3. other tangible personal property which is not used as part of the company's production plant, transmission system, or distribution system; and
 4. real property which is not part of the company's right-of-ways, transmission system, or distribution system.



Wind Power & Wind Towers

- A light, heat, or power company's property which is not described as fixed property (see previous slide) is definite-situs distributable property. This property includes, but is not limited to, turbo-generators, boilers, transformers, transmission lines, distribution lines, and pipe lines.

Ind. Code § 6-1.1-8-9(b)



Wind Power & Wind Towers

- A wind power device is defined as a device, such as a windmill or a wind turbine, that is designed to utilize the kinetic energy of moving air to provide mechanical energy or to produce electricity.
 - However, the General Assembly has now specifically excluded from that definition a device that is owned or operated by a public utility (as defined by IC 8-1-2-1(a)) or another entity that provides electricity at wholesale or retail for consideration, other than a person who participates in a net metering program offered by an electric utility.

Ind. Code § 6-1.1-12-29



Wind Power & Wind Towers

- The Wind Tower, but not the land upon which it rests, is to be assessed as state distributable property.
- The company is required to file an Annual Report (UD-45) with the Department on March 1 (IC 6-1.1-8-19).
- The Department will review the assessment and allocate the value to the appropriate taxing district(s) as reported on the UD-45 by the taxpayer.



Wind Power & Wind Towers

- The assessment will be based on federal cost less federal depreciation, at tax basis per 50 IAC 5.1-6-3.
- Specific information can be found at:
<http://www.in.gov/dlgef/2486.htm>



Wind Power & Wind Towers

- Land Assessments
 - The portion of the land used for the Wind Tower is classified as Industrial land.
 - The Industrial land rate is county specific. It would be assessed comparable to a cell phone tower.
 - Typically, the land area that is utilized for the individual Wind Tower ranges from 0.25 acres to 0.50 acres. This would NOT include any roads used to construct and service the tower.



Wind Power & Wind Towers

- Land Assessments
 - Depending on the parcel and its use, it could be assessed as “Secondary Industrial” land.
 - Defined as land used for purposes that are secondary to the primary use of the land.
 - See <http://www.in.gov/dlgf/files/bk1ch2.pdf> for guidelines for valuing Commercial and Industrial Acreage.



Wind Power & Wind Towers

- Wind powered companies would most likely be considered state distributable property (see <https://www.in.gov/dlgf/2486.htm> for more information), but if they are in one taxing district or in a net metering/feed-in-tariff program with another company (regardless of the number of taxing districts they are in) they can file locally.



Wind Power & Wind Towers

- State distributable assessments are done on a federal cost less depreciation basis.
 - Hence, a \$100,000,000 investment could have a wide range for the assessed value based on depreciation. At a minimum, the 30% floor would apply (i.e. $\$100,000,000 \times 30\% = \$30,000,000$)



Hydrogen Production



Hydrogen Production

- On June 23, 2021, Phoenix-based Nikola Corp. announced it is investing \$50 million into a clean hydrogen project in Vigo County. The project, being developed by Wabash Valley Resources LLC, aims to convert solid waste byproducts into clean hydrogen for transportation fuel and electricity generation.
- The overall cost of the project is not being disclosed. WVR says in exchange for the investment, Nikola will receive a 20% equity interest in the project.



Hydrogen Production

- Nikola manufactures zero-emission battery-electric and hydrogen-electric vehicles, as well as hydrogen station infrastructure.



Hydrogen Production

The project plans to use solid waste byproducts such as petroleum coke combined with biomass to produce clean, sustainable hydrogen for transportation fuel and base-load electricity generation while capturing CO₂ emissions for permanent underground sequestration. Once completed, the project is expected to be one of the largest carbon capture and clean hydrogen production projects in the United States. The focus is to produce zero-carbon intensity hydrogen with the potential to develop negative carbon intensity hydrogen in the future.



Hydrogen Production

- This investment is anticipated to give Nikola a significant hydrogen hub with the ability to offtake approximately 50 tons a day to supply its future dispensing stations within an approximate 300-mile radius, covering a significant portion of the Midwest. Exercising its offtake right will likely require significant additional investment by Nikola to build liquefaction, storage, and transportation services.
- As part of this investment in the hydrogen economy in the Midwest, Nikola intends to build stations across Indiana and the broader Midwest to serve the region.



Hydrogen Production

- “We intend this project to produce clean, low cost hydrogen in a critical geography for commercial transportation,” Pablo Koziner, president of energy and commercial for Nikola, said in a news release. “The Wabash solution can generate electricity as well as hydrogen transportation fuel, which should provide the flexibility to support future truck sales and hydrogen station rollout in the region. The expected efficiency of WVR’s clean hydrogen production should allow Nikola’s bundled truck lease, including fuel, service, and maintenance, to compete favorably with diesel.”



Hydrogen Production

- “WVR is developing a multi-product facility, where the hydrogen can be combusted in a turbine to produce clean baseload power,” said Simon Greenshields, chairman of the board for WVR. “The recent spate of power outages serves as a reminder that the market has a pressing need for a non-intermittent source of clean energy. We also look forward to working with Nikola to bring zero-emission transportation solutions to the Midwest.”



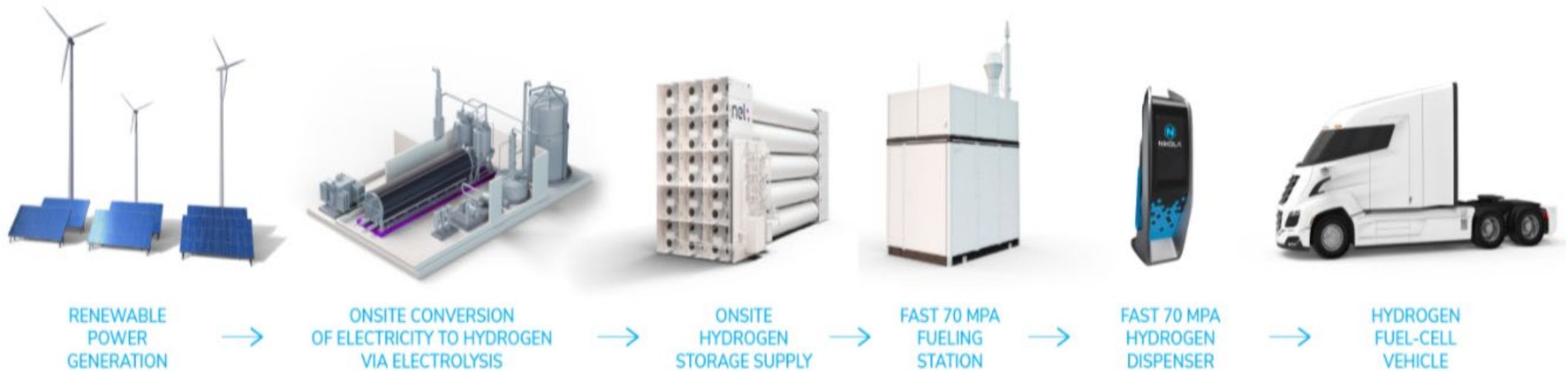
Hydrogen Production

- The completed facility should have the capability to produce up to 336 tons per day of hydrogen, enough to generate approximately 285 megawatts of clean electricity. The project is expected to require 125 full-time employees and may support 750 construction jobs. Groundbreaking is expected in early 2022 and will take approximately two years to complete.
- The [U.S. Department of Energy](#) concludes that by 2050, the U.S. hydrogen economy could lead to an estimated \$750 billion per year in revenue and a cumulative 3.4 million jobs.
- The first [Nikola Tre hydrogen fuel-cell](#) prototype builds have begun in Arizona and Ulm, Germany, with testing and validation of the vehicles planned into 2022, and serial production expected to commence in 2023.



Hydrogen Production

From energy creation to energy consumption across the hydrogen value chain





Hydrogen Production

- <https://www.insideindianabusiness.com/story/44163889/>
- https://nikolamotor.com/press_releases/nikola-invests-50-million-in-wabash-valley-resources-to-produce-clean-hydrogen-in-the-midwest-for-zero-emission-nikola-trucks-122
- <https://nikolamotor.com/energy>



Questions



Questions

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