Generally, renewable energy is taxable in three ways: production, property, and sales taxation. Utility-scale solar and community solar garden taxation is based on its nameplate capacity in alternating current and potential property tax re-classification due to the nameplate capacity of the solar development. Wind farms are primarily taxed on the amount of their production and rarely involve property tax re-classification because the underlying agricultural land use does not change.

1. **Production Taxes**

**Solar**: Solar energy production taxes are determined by the total size of the “solar energy generating system” and apply when the system exceeds 1 megawatt alternating current (1 MW AC). The total size of a solar energy generating system is determined by the following criteria:

- constructed within the same 12-month period,
- interconnected with the same distribution system,
- nameplate capacity exceeds 1 MW AC
- exhibits characteristics of a single development (i.e. umbrella sales arrangement, same ownership structure, common financing)

If there is a dispute about the size of a solar development, the Department of Commerce determines the total size of the system and draws all reasonable inferences in favor of combining the systems.

**Wind**: Wind energy production taxes apply when a wind energy turbine is larger than .25 MW (250 kW) in nameplate capacity. Beyond .25 MW, wind energy projects are classified as large (over 12 MW), medium (2MW to 12 MW), and small (up to 2 MW).

The total size of a wind energy project is determined according to the following criteria unless the systems are interconnected with different distribution systems:

- The nameplate capacity of one wind energy system must be combined with the nameplate capacity of any other wind system that is
  - located within five miles of the wind system;
  - constructed within the same calendar year, and;
  - under common ownership.

Like solar farms, if there is a dispute about the size of a wind energy project, the Minnesota Department of Commerce determines the total size of the system and draws all reasonable inferences in favor of combining the turbines into one project.

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2. Id. at 272.0295, subd. 3 (2020).
3. In making the size determination, Commerce may find that two solar PV systems or two wind systems are under common ownership when the underlying ownership structure contains similar persons or entities, even if the ownership shares differ between the systems. Two systems are not under common ownerships solely because the same person or entity provided equity financing for systems (financier exception for large banks).
5. Id.
1.1. **Production Tax Rate**

**Solar:** For a solar PV system with a capacity greater than 1 MW AC, the tax is $1.20 per megawatt-hour (MWh). Systems that are 1 MW AC or less are exempt from the production tax rate.

**Wind:** For a wind system with a capacity greater than .25 MW, the production tax rate depends on the size of the system. For large scale wind energy projects (over 12 MW), $1.20 per MWh produced. For medium-scale systems (over 2 MW to 12 MW), $0.36 per MWh produced. For small systems (over .25 MW to 2 MW), $0.12 per MWh produced.

1.2. **Reporting Production, Notification of Tax & Collection**

The owner of a solar energy project has to file a report with the Minnesota Department of Commerce before January 15 of each year detailing how many MWh their facility produced. The owner of a wind energy project has to file by February 1st of each year.

By February 28 of the year for solar and wind projects, the Minnesota Department of Commerce must notify the tax due, and to which county(ies) the tax is owed. The Minnesota Department of Commerce must also certify to the county auditor of each county in which the project is located the tax due from the project owner for that year. In turn, at least 50% of the production tax amount must be paid to the appropriate county treasurer by May 15 and the remaining 50% by October 15.

1.3. **Distribution of Production Tax Revenues**

The county auditor splits the revenue on an 80% county – 20% cities/townships basis for the local taxing jurisdictions in which the system lies.

2. **Property Taxation**

**Personal Property:** The actual frame, modules, inverters, substations, towers, blades, gear box and so forth consisting of solar energy systems or wind energy systems, which are typically used for on-site farm, residential or small business use, are exempt from property taxation.

**Real Property – Solar:** If the real property upon which a solar energy generating system is located is primarily for solar energy production subject to the production tax as described above, meaning if it is determined to exceed 1 MW AC or larger, then the real property is classified as class 3a “Commercial, Industrial and Utility Property”. If the real property on which the PV system is located is not used primarily for solar energy production, then the property is classified without regard to the system (i.e. business as usual taxation).

**Real Property – Wind:** For wind energy, the value of the land on which the wind energy system is located must be valued in the same way as similar land that has not been improved with a wind system. The land must be classified based on the most probable use of the property if it were not improved with a wind energy system.

**Classification:** Class 3a property is Commercial, Industrial and Utility Property. For classification, parcels are considered to be contiguous 3a property, even if separated by a road, waterway, street or other intervening property. The class rate of 3a property is generally 1.5% for the first $150,000 in

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6 Minn. Stat. Secs. 272.029, subd 3 and 272.0295, subd. 3 (2020).
7 Minn. Stat. Sec. 277.01, subd. 3 (2020).
8 Minn. Stat. Sec. 272.028, subd 6 and 272.0295, subd. 7 (2020).
10 Minn. Stat. Sec. 272.02, subd 22 (2020).
market value, and 2.00% thereafter with a handful of exceptions (i.e. the Metropolitan Airport Commission).\textsuperscript{11}

Agricultural land hosting over 1 MW AC of solar would then convert from Class 2a Agricultural Land (taxed at a 1% rate as agricultural non-homestead land, not subject to local referendum levies or state general tax) or Class 2b Rural Vacant Land (also taxed at a 1% rate and also not subject to referendum levies or state general tax) to Class 3a Utility Property (taxed at a 2% rate subject to both referendum levies and state general tax). Note: Solar does not fall under the “electrical generation machinery” exception to the state general levy property tax rate. Agricultural land hosting wind energy systems must be classified based on the most probable use of the property, meaning it would not convert to Class 3a Utility Property.

In other words, solar energy farms are deemed a land use change absent a factual showing the underlying land maintains an agricultural use (e.g. livestock grazing, horticulture, honey production). In contrast, wind farms are deemed to maintain agricultural land use in light of continuing crop production.

3. Sales Tax
Solar energy products (i.e. the panels, inverters, racking systems, etc.) are exempt from Minnesota sales taxation.\textsuperscript{12}

\textsuperscript{11} Minn. Stat. Sec 273.13 (2020).
\textsuperscript{12} Minn. Stat. Secs. 297A.68, subd. 12 (wind) and 297A.67, sub. 29 (solar) (2020).