American Farmland Trust investigated the treatment of ground-mounted solar energy infrastructure in the context of the state’s farmland protection policies to help advance renewable energy development while protecting the state’s agricultural land. This policy brief describes the purpose of each policy or program and the entity responsible for administering it. It also highlights sections of statute that are most relevant to the treatment of solar installations on agricultural land. We use information provided by state officials to survey the current handling of solar policy within each program. Finally, we provide considerations for policymakers and other stakeholders.

The development of ground-mounted solar installations on farmland is an emerging issue. We found that within the context of the state’s farmland protection policies and programs, most have not yet developed guidance to address it. The Kentucky Department of Revenue has published guidance in 2021 about large, commercial-scale solar arrays on land formerly designated for agricultural use valuation. The agency has not issued advice and local administrators have not made determinations about smaller arrays for on-farm energy generation. Three other programs have made no determinations or developed policies or guidance related to solar installations. State officials reported that there have been no official requests or inquiries from program participants about installing solar panels on their agricultural land. Most administering entities intend only to make determinations in response to formal landowner requests unless otherwise directed by the legislature.

Lastly, we found existing links and similar statutory purposes among the state’s farmland protection programs and policies. Policymakers may want to maintain and reinforce this coordination by ensuring consistent treatment of solar installations on agricultural land across the suite of programs.

Purchase of Agricultural Conservation Easement Program

Authority and Administration

The Kentucky legislature authorized a state-level purchase and donation of agricultural conservation easement (PACE) program in 1994. The program is administered by the Purchase of Agricultural Conservation Easement Corporation, a political subdivision of the state, which is governed by a Board of Directors in association with the state Department of Agriculture. Staff implement procedures set forth in statute and administrative regulations to implement the program. The program purpose is to:

“(1)…retain agriculture and enhance the contribution that agriculture makes to its economy. A program to retain and enhance agriculture is in the economic best interests of the Commonwealth and, consequently, constitutes a public benefit that contributes to the health, safety, and general welfare of the residents of the Commonwealth and the nation.

(2)…[pay] in whole or part the cost of acquiring agricultural conservation easements as set forth in KRS 262.900 to 262.920, including any costs necessarily incident to the acquisition, sale, issuance, and delivery of the funds, and the monitoring and enforcement of agricultural conservation easements, or to the participation of any party for these purposes, [to] promote the public health, safety, and general welfare of the people of the Commonwealth.

(3)…a) Establish procedures for the acquisition of agricultural conservation easements in order to ensure that lands

currently in agricultural use will continue to remain available for agriculture and not be converted to other land uses, and that landowners who participate in this program will be fairly compensated for their agreement to accept deed restrictions limiting the use of their property; (b) Encourage landowners to make a long-term commitment to agriculture by offering them financial incentives and security that land use will remain stable; (c) Protect normal farming operations in agricultural areas from incompatible nonfarming uses that may render farming impracticable; (d) Protect normal farming operations from complaints of public nuisance against normal farming operations; and (e) Maximize the use of agricultural conservation easement purchase funds and protect the investment of taxpayers in agricultural conservation easements”.

The enabling statute outlines allowed uses of the restricted land during the term of easement. These requirements serve as the basis for the program’s template easement. The purpose of the easement is to, “conserve productive agricultural and forestry lands in order to facilitate active and economically viable farm use of the property now and in the future.” It describes what activities can occur on land protected by the easement. The protected land must be used only for the production of crops and livestock, with related uses allowed but subject to limitation.

**Treatment of Solar**

Currently, the PACE program has not developed guidance or policy related to solar installations for on-farm or commercial use. Staff reported that there are currently no solar panels on easement-protected land. According to staff, landowners have received a few inquiries from solar developers, but no projects were further pursued by the developers upon receiving requests for information from the PACE Board.

PACE program staff sent a letter to all landowners with easements acknowledging that solar developers may be contacting them about installing arrays on their land. The letter explains that any solar installation would be considered a “structure” under the easement and therefore would need to be approved by the PACE Board before it can be constructed. Further, the letter states that the PACE Board “has not determined if any solar project would qualify as an agriculture structure for agriculture use, as no requests containing the required information have been received.” As such, any proposed solar panels, regardless of the size of the array or the intended use of the energy, would need to be approved by the PACE Board. The PACE Board is not planning to make a determination about the compatibility of solar on protected agricultural land until a proposal for solar is brought to them.

**Considerations**

- The program’s aim to retain and enhance agriculture indicates an interest in farm viability.
- The definition of “agricultural use” in statute contemplates a single use of the property without the potential for dual-use.
- The PACE program includes enrollment in an agricultural district in its ranking criteria. Therefore, it may be important to consider consistent treatment of solar installations in these two programs.
- Building or adding new structures, potentially including solar infrastructure, requires prior approval by the PACE Board of Directors. The proposed structure cannot “diminish or impair the agricultural values of the property” and will “not be located on prime or unique farmland, unless there is no alternative”.

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3 Agricultural Conservation Easement Template ("easement template").
• Solar infrastructure, if allowed, would contribute to impervious surfaces (e.g., structures and roads), which cannot exceed 3% of the protected area.

• Granting new rights-of-way for utilities is prohibited unless necessary for agricultural uses.

Agricultural Use Valuation

Authority and Administration

Kentucky’s property tax relief program, known as agricultural use valuation or agricultural assessment, allows locally elected Property Valuation Administrators (PVAs) to assess farmland at its agricultural value rather than its fair cash value. The legislature authorized this approach in 1942 and ratified in the constitution in 1969. The Office of Property Valuation within the Department of Revenue publishes guidelines for PVAs recommending agricultural values per acre by farmland class for six agricultural statistical districts.

For the purposes of farmland assessment, agricultural land is defined in statute as:

“(a) Any tract of land, including all income-producing improvements, of at least ten (10) contiguous acres in area used for the production of livestock, livestock products, poultry, poultry products and/or the growing of tobacco and/or other crops including timber;
(b) Any tract of land, including all income-producing improvements, of at least five (5) contiguous acres in area commercially used for aquaculture; or
(c) Any tract of land devoted to and meeting the requirements and qualifications for payments pursuant to agriculture programs under an agreement with the state or federal government…”

PVAs classify each parcel of land to determine the applicable property tax assessment. Agricultural landowners can file an application for valuation at agricultural or horticultural value with their county PVA. For land to be classified as agriculture, it must be intended to be used to produce agricultural products in line with the above definition. The classification will change whenever the actual use of the land changes. There may be more than one classification on a single parcel of land. For instance, farm residences are excluded from assessment at agricultural value.

Treatment of Solar

The Kentucky Department of Revenue published a Technical Advice Memorandum, “Application of Kentucky Ad Valorem Tax and Sales and Use Taxes on Equipment Generating Solar Power”, related to the treatment of large, commercial-scale solar arrays for the assessment agricultural land. The agency advises treatment of any land under these arrays as a commercial use. These large arrays are classified as public service companies (PSCs), which are considered to have a business profit motivation, have the primary intent to sell the majority of electric power directly to other electric companies or to consumers, and not to use the electricity for their personal home use, farming use, or private business use. The Technical Advice Memorandum states the following:

“Once land formerly devoted to agriculture or horticulture farming is devoted to the construction and operation of a solar power facility, it is no longer eligible for the special valuation procedures used for assessing agriculture or horticulture land as provided in KRS 132.450 and authorized under Ky. Constitution Section 172A. The change in

5 2019-2022 Recommended Agriculture Value Guidelines.
7 Kentucky Department of Revenue: Solar Farm Assessment Recommended Guidelines
use invokes the requirement under Ky. Constitution Section 172 that the property be assessed at its fair cash value estimated at the price it would bring at a fair voluntary sale.\footnote{Kentucky Technical Advice Memorandum (KY-TAM-21-01): Application of Kentucky Ad Valorem Tax and Sales and Use Taxes on Equipment Generating Solar Power}

The agency has not issued advice about smaller arrays for on-farm energy generation. There have been no formal determinations by local PVAs that the state is aware of relating to small-scale solar installations, although PVAs are not expected to inform the agency about individual determinations. Local PVAs may deem small arrays intended solely for on-farm energy generation to be part of the parcel’s agricultural infrastructure. Alternatively, small arrays could be taxed as tangible personal property or at their fair cash value.

In Kentucky, net metering offers renewable energy consumer-generators a credit on future utility bills if they generate more electricity than they use.\footnote{Ky. Rev. Stat. § 278.466(4).} If an agricultural landowner participating in net metering produces excess energy, they may still be able to take advantage of future utility credits without triggering a change in land use. There is no set threshold for how much excess energy sales would trigger a change in use. Determinations about what would be considered a change in use would be made by a PVA. It is currently unclear whether installing agrivoltaics, or dual-use solar panels that integrate grazing or row crops below an array, would trigger a change in use requiring land re-classification.

For a parcel that has both commercial-scale solar and agricultural on different portions, only the land used for the commercial solar array will be re-classified. The remainder of the land that continues to be used for agriculture can continue to be assessed at agricultural value. If a developer leasing farmland to install solar offers to pay the property taxes for the leased land, a change in land classification to commercial use may not be a deterrent for landowners.

**Considerations**

- The definition of “agricultural use” in statute contemplates a single use of the property without the potential for dual-use and co-location.
- Currently, PVAs are not provided with guidance about small-scale solar arrays for on-farm use from the state, so determinations could be applied inconsistently in one place and may be inconsistent across the state.

**Agricultural Districts**

**Authority and Administration**

Kentucky’s agricultural districts program enables landowners to form special areas to support agriculture. It was authorized in 1982 and is enabled in statute.\footnote{Ky. Rev. Stat. § 262.850.} The Kentucky Division of Conservation administers the program for the Soil and Water Conservation Commission and local conservation districts. The Soil and Water Conservation Commission approves requests to form or amend districts while the local boards administer the program on the ground.

The statutory purpose of the program is as follows:

“It is the policy of the state to conserve, protect and to encourage development and improvement of its agricultural lands for the production of food and other agricultural products. It is also the policy of this state to conserve and
protect the agricultural land base as a valuable natural resource which is both fragile and finite. The pressure imposed by urban expansion, transportation systems, water impoundments, surface mining of mineral resources, utility rights-of-way and industrial development has continually reduced the land resource base necessary to sufficiently produce food and fiber for our future needs. It is the purpose of this section to provide a means by which agricultural land may be protected and enhanced as a viable segment of the state's economy and as an important resource.”\(^\text{11}\)

In order to be enrolled in a district, land must be in agricultural use. The definition of agricultural use for district eligibility is the same definition used in the agricultural value assessment program:

“(a) Any tract of land, including all income-producing improvements, of at least ten (10) contiguous acres in area used for the production of livestock, livestock products, poultry, poultry products and/or the growing of tobacco and/or other crops including timber;
(b) Any tract of land, including all income-producing improvements, of at least five (5) contiguous acres in area commercially used for aquaculture; or
(c) Any tract of land devoted to and meeting the requirements and qualifications for payments pursuant to agriculture programs under an agreement with the state or federal government…”\(^\text{12}\)

Landowners who voluntarily participate in an agricultural district receive a package of incentives and protections that includes limits on nonfarm development, limits on annexation, limits on eminent domain (providing an administrative review process for proposed eminent domain actions), limits special assessments, and soil and water practice cost-sharing.

### Treatment of Solar

To date, the state Soil and Water Conservation Commission has not developed any guidance or policy related to solar on land enrolled in an agricultural district. State officials reported that there have been no requests by landowners or developers to place solar arrays on agricultural land enrolled in a district. Therefore, no determinations have been made regarding its permissibility.

Local conservation district boards must inform PVAs if land is withdrawn from a district.\(^\text{13}\). Given the link between a parcel’s agricultural value assessment status and agricultural district enrollment, policy toward solar arrays on farmland may ultimately be treated similarly to policy under the agricultural value assessment program. If any type of solar array is determined to be incompatible with agricultural districts, participating landowners could withdraw their land without penalty and choose to forego district benefits. The district can remain in effect if one landowner withdraws.

### Considerations

- The program’s aim to retain and enhance agriculture indicates an interest in farm viability.
- Currently, local conservation districts are not provided with guidance from the state so determinations about changes in use could be applied inconsistently in one place and may be inconsistent across the state.
- The definition of agricultural use in this program is linked to agricultural value assessment. It could be important to have consistency between the two programs.

Right to Farm

Authority and Administration

Kentucky’s Right to Farm law, passed in 1980, gives existing farms a degree of protection from nuisance complaints.\(^\text{14}\) It provides a more stable investment climate for agricultural infrastructure and a sense of security that farmers will not be overwhelmed with lawsuits as new neighbors move into agricultural areas. No state entity is given authority to administer Right to Farm in Kentucky.

The statutory purpose for the program is:

“…to conserve, protect, and encourage the development and improvement of its agricultural land and silvicultural land for the production of food, timber, and other agricultural and silvicultural products. When nonagricultural land uses extend into agricultural and silvicultural areas, agricultural and silvicultural operations often become the subject of nuisance suits or legal actions restricting agricultural or silvicultural operations. As a result, agricultural and silvicultural operations are sometimes either curtailed or forced to cease operations. Investments in farm and timber improvements may be discouraged. It is the purpose of this section to reduce the loss to the state of its agricultural and silvicultural resources by clarifying the circumstances under which agricultural and silvicultural operations may be deemed to be a nuisance or interfered with by local ordinances or legal actions.”\(^\text{15}\)

The statute offers protection to agricultural operations, which it defines as:

“…any facility for the production of crops, livestock, equine, poultry, livestock products, poultry products, horticultural products, and any generally accepted, reasonable, and prudent method for the operation of a farm to obtain a monetary profit that complies with applicable laws and administrative regulations, and is performed in a reasonable and prudent manner customary among farm operators. Agricultural practices protected by this section shall include, but not be limited to, fertilizer application, the application of pesticides or herbicides that have been approved by public authority, planting, cultivating, mowing, harvesting, land clearing, and constructing farm buildings, roads, lakes, and ponds associated with a farming operation.”\(^\text{16}\)

Treatment of Solar

The Right to Farm statute does not address whether a solar installation could be considered part of an agricultural operation and there is no administrative body to create policy or guidance related to solar. Therefore, decisions made by the court to resolve nuisance lawsuits will set precedent for the treatment of solar on agricultural lands. The courts would likely be tasked with determining whether a solar array is part of the agricultural operation itself or if it changes the nature of the operation so that it no longer qualifies for protection.

Considerations

- There is no administrative body to develop guidance or regulations for Right to Farm. Further clarification would need to come from the legislature.
- The treatment of dual-use is not currently contemplated.

\(^{14}\) Ky. Rev. Stat. § 413.072.
\(^{15}\) Ky. Rev. Stat. § 413.072(1).
\(^{16}\) Ky. Rev. Stat. § 413.072(3)(a).