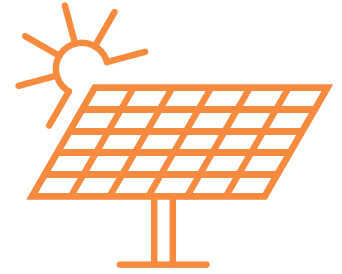


Fact sheet:

Best Practices for Adopting Dual-Use Solar Ordinances

As the demand for renewable energy grows, solar deployment will continue to rise. Many state and local governments are discussing the future impact of solar development on agricultural land. Dual-use solar, often referred to as agrisolar or agrivoltaics, involves the practice of allowing for solar generation and agriculture in the same space and can help address concerns about solar on agricultural land.¹



Local decision makers should consider the following topics when engaging in the ordinance development or amendment process.

Land-use planning

Many counties use comprehensive land-use plans to help guide solar development. These plans reflect the values and vision of the community.

Decision makers need to consider how the language in these land-use plans can promote or inhibit agrisolar development. For example:

- Land-use regulations often include language aimed at preserving agricultural heritage and farmland.²
- Language around agricultural resource protection and dual-use are often interpreted in a variety of ways by counties and local decision makers.³

Adopting dual-use practices offers an alternative to the either/or mentality regarding agricultural and clean energy development.

Solar sites can preserve agricultural land by being combined with:

- Livestock grazing
- Crop production
- Pollinator habitat
- Beekeeping

Additionally, dual-use solar allows landowners and counties to take advantage of the economic and environmental benefits of clean energy development.⁴

Clean energy can benefit counties through:

- Increased tax revenues
- Lease payments to local landowners
- New job creation
- Environmental benefits
- New revenue streams for local farmers

The inclusion of renewable energy development in a county's comprehensive plan ensures the economic benefits of agrisolar development are considered when ordinances are created or amended.⁵

Sources

1 Marieb, Dugan. "Dual-use Solar in the Pacific Northwest: A Way Forward." Renewable Northwest, 2019, renewablenw.org/sites/default/files/Reports-Fact%20Sheets/Dual-Use%20Solar%20Report_FINAL.pdf. Accessed July 2024.

2 Ibid.

3 Ibid.

4 Macknick, Jordan, et al. "The 5 Cs of Agrivoltaic Success Factors in the United States: Lessons From the InSPIRE Research Study." National Renewable Energy Laboratory, August 2022, nrel.gov/docs/fy22osti/83566.pdf. Accessed July 2024.

5 Kolbeck-Urlacher, Heidi. "Policy Approaches for Dual-Use and Agrisolar Practices." Center for Rural Affairs, AgriSolar Clearinghouse, April 2023, cfra.org/publications/policy-approaches-dual-use-and-agrisolar-practices. Accessed July 2024.



Zoning and siting regulations

Local decision makers can ensure that development meets a community's needs by adopting an ordinance before a clean energy project is proposed. By engaging in a proactive process, decision makers can make sure there is time to receive community input and feedback on the proposed language.

Counties should consider setting additional land-use expectations for dual use, and they should use zoning schemes that allow for mixed land use. This could include:

- Establishing overlay districts, which would allow a special permit for solar in certain zones
- Allowing development when certain land-use standards are met, such as placing a specific percentage of land into pollinator habitat
- Crafting siting regulations to ensure dual-use practices are not limited or prohibited, which includes avoiding setting restrictions on panel height or developing overly prescriptive vegetation management requirements⁶



Definitions

Local officials can ensure ordinances do not prevent dual-use solar by creating refined definitions for solar generation, farmland, and farm use within the county's zoning and siting regulations.⁷ The definitions establish which applications and practices will be considered dual-use.

- For example, in Oregon, a rule was adopted allowing for dual-use practices on high-value soils. The rule only specifies agrivoltaics and grazing, meaning pollinator habitats or other conservation uses do not qualify.⁸

Interaction of dual-use goals

When creating policies, local officials should consider the interaction of dual-use goals, as some requirements may unintentionally restrict beneficial practices. For instance, requirements for native vegetation or pollinator-friendly habitats may inadvertently restrict grazing opportunities if the site's plants are unsuitable as forage.⁹

Additionally, to ensure it benefits pollinators, vegetation must be allowed to bloom, which means grazing schedules may need to be adjusted or withheld until the vegetation is fully established.¹⁰

Sources, continued

6 Pascaris, Alexis S. "Examining Existing Policy to Inform a Comprehensive Legal Framework for Agrivoltaics in the U.S." Energy Policy, December 2021, sciencedirect.com/science/article/abs/pii/S0301421521004869. Accessed September 2024.

7 Marieb, Dugan. "Dual-use Solar in the Pacific Northwest: A Way Forward." Renewable Northwest, 2019, renewablenw.org/sites/default/files/Reports-Fact%20Sheets/Dual-Use%20Solar%20Report_FINAL.pdf. Accessed July 2024.

8 Ibid.

9 "Fact Sheet: Making the Case for Solar Grazing." Center for Rural Affairs, Dec. 20, 2021, cfra.org/publications/fact-sheet-making-case-solar-grazing. Accessed July 2024.

10 Ibid.





Site construction, decommissioning, and restoration

Local governments can use ordinances to minimize land impact during the construction and decommissioning of solar energy systems.

Regulations can minimize impact and ensure the land can be used for farming at the end of the project's life cycle by:

- Setting clear guidelines for land management during construction and decommissioning
- Establishing requirements for construction, vegetation management, and decommissioning that spell out the expectations and obligations

The requirements could include:

- Completing construction in a minimally disruptive manner by using low-impact selective cutting plans and burying lines¹¹
- Installing solar arrays with consideration for dual use; for example, installing a temporary fence for grazing flocks, or extending solar height and width to accommodate farm equipment¹²
- Financial guarantees to ensure funds are available for decommissioning to make sure local governments are not responsible for costs¹³



Additional Agrisolar Resources

- **Policy Approaches for Dual-Use and Agrisolar Practices**
cfra.org/publications/policy-approaches-dual-use-and-agrisolar-practices
- **Making the Case for Solar Grazing**
cfra.org/publications/fact-sheet-making-case-solar-grazing
- **Making the Case for Crops + Solar**
cfra.org/publications/making-case-crops-solar
- **Making the Case for Solar Beekeeping**
cfra.org/publications/fact-sheet-making-case-solar-beekeeping
- **Resource Guide: Native Seed Supply and Seed Mixes for Pollinator-Friendly Solar**
cfra.org/publications/resource-guide-native-seed-supply-and-seed-mixes-pollinator-friendly-solar

Sources, continued

11 "New York Solar Guidebook For Local Governments - Solar Installations on Agricultural Lands." New York State, 2023, nyscrda.ny.gov/-/media/Project/Nyserda/Files/Programs/NY-Sun/2023-Solar-Installations-in-Agricultural-Lands.pdf. Accessed July 2024.

12 Ibid.

13 Kolbeck-Urlacher, Heidi. "Decommissioning Solar Energy Systems Resource Guide." Center for Rural Affairs, June 20, 2022, cfra.org/publications/decommissioning-solar-energy-systems. Accessed July 2024.

