



Overview

[Agrivoltaics](#) — pairing solar energy generation and agriculture on the same land — is emerging as a strategy for states to expand clean energy while supporting working lands and local economies. Agricultural land accounts for roughly [43% of the total land used in the lower 48 states](#). By combining renewable energy with agricultural operations, agrivoltaics can [diversify farm income](#), [improve land efficiency](#), [strengthen climate resilience](#), and [contribute to successful farmland conversion](#). As [electricity demand grows](#) and states pursue clean energy goals, states are adopting a range of approaches to support agrivoltaics.

Policy Options (*** indicates bipartisan support)

- ****Colorado SB 092 (Enacted 2023)**: Authorizes (1) the integration of solar energy generation facilities with agricultural activities and (2) grants for agrivoltaics research and development.
- **Maryland HB 1039 (Enacted 2022)**: Exempts agrivoltaics from personal property taxes.
- ****Nevada AB 479 (Enacted 2025)**: Updates property tax laws to recognize agrivoltaic purposes as a qualifying use under agricultural property tax assessment.
- ****Oklahoma HB 2157 (Passed 2025)**: Would establish (1) an advisory committee on agrivoltaic policies and (2) the Oklahoma Agrivoltaics Cash Revolving Fund to finance projects.
- ****Virginia HB 508/SB 340 (Enacted 2026)**: Establishes a statewide definition of agrivoltaics that defines agrivoltaics as solar development that (1) supports ongoing agricultural production, (2) keeps land in active use, and (3) allows existing farm businesses to continue selling agricultural products.

KEY POINTS

- Agrivoltaic systems can reduce water requirements for crops by 40% while increasing overall farm productivity by up to 30%. ([Environmental Defense Fund](#); [SolarTech](#))
- Converting less than 1% of U.S. agricultural land to agrivoltaics could meet 20% of the country's energy needs. ([U.S. Department of Agriculture](#))
- Sheep raised in an agrivoltaic project produce roughly 25% less greenhouse gas emissions than conventionally grazed sheep. ([Kleinman Center for Energy Policy](#))



Other Resources

- [Smart Solar](#) | American Farmland Trust
- [Solar Grazing Checklist for Shepherds and Solar Site Managers](#) | American Solar Grazing Association
- [How Solar Projects and Agriculture Can Share the Same Land](#) | Renewable Energy Farmers of America (REFA)
- [Farmer's Guide to Going Solar](#) | U.S. Department of Energy
- [How Solar and Wind Leases Compare to Traditional Farming Returns](#) | REFA

