

# What is Dual-Use Solar?



**Dual-use solar siting, also known as agrivoltaics, is the practice of installing solar photovoltaic panels on farmland in such a manner that primary agricultural activities (such as animal grazing and crop/vegetable production) are maintained simultaneously on that farmland.**

## Benefits of siting solar energy as dual-use:

- ◆ Supports solar development and renewable energy production goals
- ◆ Protects farmland from permanent solar or other development
- ◆ Protects farmland access for farmers leasing land as well as for new farmers
- ◆ Provides strong incentive for exiting farmers to transition land to another farmer to maintain on-site agricultural activity
- ◆ Provides income diversification and improved income stability
- ◆ Panels can improve moisture retention in soil and plants in times of high heat and low precipitation,\* leading to:
  - Reports of increased yields for some vegetables under dual-use arrays (including potatoes, celery, kale, and others)\*\*
  - Increases in pasture grass biomass under arrays during summer months as compared to areas in full-sun\*
- ◆ Panels can reduce heat-stress in livestock by providing added shade in summer
- ◆ Protects the land's potential for increased carbon sequestration

American Farmland Trust's (AFT) mission is to save the land that sustains us by protecting farmland, promoting sound farming practices, and keeping farmers on the land. AFT supports accelerated solar development and believes that, with proper planning and siting, our agricultural lands can also play a meaningful role in hosting solar energy while maintaining active, productive agriculture. **However, AFT does not support solar siting that converts farmland or displaces agriculture from the landscape.**

\* Remarkable agrivoltaic influence on soil moisture, micrometeorology and water-use efficiency. Adeh, Selker, & Higgins. PLOS One <https://dx.plos.org/10.1371/journal.pone.0203256>

\*\* Agrophotovoltaics: High Harvesting Yield in Hot Summer of 2018. Fraunhofer ISE. [https://www.ise.fraunhofer.de/content/dam/ise/en/documents/press-releases/2019/1019\\_ISE\\_e\\_PR\\_Agrophotovoltaics.pdf](https://www.ise.fraunhofer.de/content/dam/ise/en/documents/press-releases/2019/1019_ISE_e_PR_Agrophotovoltaics.pdf)