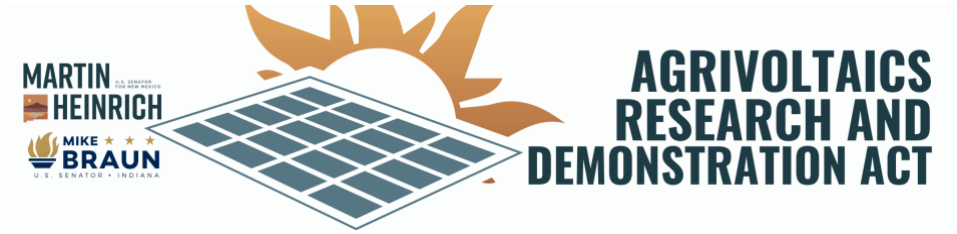

Agrivoltaics Research and Demonstration Act of 2023

Introduced by Senators Martin Heinrich and Mike Braun

Agrivoltaics, or the colocation of solar panels on land remaining in agricultural production, is a small but growing market for solar energy deployment and agricultural producers looking to diversify their incomes. Agrivoltaic systems are an important tool in our toolbox to meet clean energy deployment goals while helping to maintain strong agriculture-based rural economies.

Agrivoltaic systems offer multiple benefits for farmers and solar installations. For example, some crops grown beneath solar panels can benefit from partial shading during the hottest part of the day—thereby requiring less water and offering improved yields. Solar panels placed above crops may have improved performance due to the local cooling effects of crops and reduced maintenance costs due to the limited need for mowing.

Interest in agrivoltaics is growing at all levels. Farmers and solar developers are installing agrivoltaic systems in different environments and with different crops and livestock. Universities, states, and the federal government are all investing in agrivoltaics research. States are also experimenting with incentives for agrivoltaic systems.

However, more research and analysis is needed to establish best practices for agrivoltaic system design and deployment in different parts of the country. To help fill these gaps and support farmers, ranchers, rural communities, and solar developers in expanding deployment of agrivoltaic systems, Senator Heinrich and Senator Braun have introduced the *Agrivoltaics Research and Demonstration Act of 2023*.

The *Agrivoltaics Research and Demonstration Act of 2023* directs the USDA to:

- Conduct a study that reviews current research and identifies research gaps related to agrivoltaic systems, including on the regional compatibility of different livestock and crops with agrivoltaic system designs; economic scalability across different agricultural land types and production systems; scaling agrivoltaics in ways consistent with keeping land in production, increasing economic opportunity for rural communities, and enhancing biodiversity; and ways to better incorporate agrivoltaics into existing federal programs.
- Develop a regulatory definition of "agrivoltaic system" that can be used to incorporate agrivoltaics into relevant existing federal programs.
- Establish a research and demonstration network through the USDA Agricultural Research Service (ARS) in multiple regions across the country to investigate how agrivoltaics can increase agricultural productivity and profitability, enhance agricultural resilience, protect biodiversity, and increase economic opportunities for rural communities.
    - ARS will collaborate with USDA Climate Hubs and extension programs to translate research findings into educational and actionable technical assistance materials for farmers and ranchers.
    - Funding for this network is authorized at $15 million per year for fiscal years 2024 – 2028.

Endorsements: American Farmland Trust, National Sustainable Agriculture Coalition, National Center for Appropriate Technology, Lightstar Renewables, New Mexico State University, Purdue University