Dear Chair Putnam and members of the Committee,

We support <u>Senate File 2653</u> and its efforts to expand the innovative and environmentally responsible use of agrivoltaics in Minnesota and to finance the successful but underfunded Board of Soil & Water Resources Solar Pollinator Habitat Program. The bill establishes a statutory definition of "agrivoltaics," which is crucial for steering solar development in Minnesota toward this beneficial dual-use approach to solar site management. The bill is supported by a voluntary funding mechanism with no general fund impact by creating the first license plate in the country to include a solar panel, and to depict pollinator-friendly solar site management (as previously defined in 2016, at Sect. 216B.1642), a related best practice in which Minnesota leads the nation. The license plate artwork, executed beautifully by REPLACE design studio, was commissioned by Natural Resources Services.

Allowing ground-mounted solar projects to opt-in to agrivoltaic best practices offers numerous benefits such as:

- Economic Opportunities: Encouraging solar projects to keep the land under and between panels
 rows in use creates new and additional economic opportunities for farmers and others in rural
 communities.
- **Crop Production:** Allows for the continued use of land for agricultural production while generating clean energy.
- Rotational or Conservation Grazing: Integrating animal grazing can enhance soil health and support local agriculture.
- Pollinator Habitat: Establishing perennial vegetation for pollinator habitat supports biodiversity
 and provides vital soil, water, and agricultural ecological benefits, including natural crop
 pollination services.

Minnesota is already a leader in agrivoltaics, thanks to the 2016 pollinator-friendly definition statute (216B.1642) and BWSR's pioneering work to document and establish best practices thereunder. According to the National Renewable Energy Laboratory, Minnesota currently has more agrivoltaic projects than any other state in the country. This bill expands and supports this work, through the inclusion of livestock grazing and crop production as dual use options for these sites. This addition offers potential for agrivoltaics to evolve into an even bigger win-win through partnerships between ground-mounted solar projects, local farmers, and conservation specialists.

The proposed legislation is designed to be flexible and adaptable to site-specific conditions. It enables a voluntary opt-in approach, encouraging project owners to implement agrivoltaics practices while enabling oversight by the Board of Soil and Water Resources through project reporting requirements. Furthermore, the dedicated yet voluntary funding generated by the special license plates provides much-needed resources to support and expand BWSR's work in this important area.

We urge you to support Senate File 2653 to advance agrivoltaics in Minnesota. Thank you for your support and leadership.

Sincerely,

American Solar Grazing Association



Bare Honey



Clean Energy Economy Minnesota



Center for Rural Affairs



Great Plains Institute



Monarch Joint Venture



Minnesota Solar Energy Industries Association



Minnesota Conservative Energy Forum



Minnesota Native Landscapes



Natural Resource Services



The Food Group



US Solar



What is Agrivoltaics?

Agrivoltaics is the practice of siting a solar generation facility that is directly integrated with agricultural and/or soil conservation activities (such as crop production, livestock grazing, or managing pollinator habitat) underneath and around the panel rows.

Why adopt a definition of Agrivoltaics into Minnesota law?

- For the same reason that Minnesota adopted a pioneering definition of habitat/pollinator friendly solar back in 2016. This bill expands and supports that earlier work by allowing the inclusion of livestock grazing and crop production as additional dual use options for solar sites across the state.
- Minn Stat. 216B.1642 (2016) has proven successful in steering MN solar developers towards installing pollinator friendly habitat between, under and around panel rows.
- The proposed Agrivoltaics definition uses the same voluntary opt-in dynamic without specifically mandating the use of agrivoltaics or providing an incentive.
- Projects that opt-in would partner with local farmers, graziers, conservation specialists, and other subject matter experts to plan and conduct the work on site.

How many Agrivoltaics projects are there currently in Minnesota?

NREL tracks the number of Agrivoltaic projects nationally, broken down by primary agrivoltaic use. *See* NREL INSPIRE Agrivoltaics Map. According to NREL's data, Minnesota already has more Agrivoltaic projects than any other state, and over 43% of all Agrivoltaic project sites in the country.

Active AGV Sites (per NREL InSPIRE)	in Minnesota	entire U.S.
Habitat alone or with Grazing	247	408
Grazing alone ¹	9	143
Crop Production alone	0	26
Crop Production with Habitat (/Grazing)	2	13
	258	500

What are the benefits of Agrivoltaics?

Economic Opportunities	Encouraging solar projects to keep the land under and between panels rows in use creates new and additional economic opportunities for farmers and others in rural communities.
Self Funded	The <u>Pollinator-Friendly Solar license plate</u> provides a voluntary self-funding mechanism with no general fund impact - and would be the first license plate in the country to include a solar panel.
Crop Production	Allows for the continued use of land for agricultural production while generating clean energy.
Pollinator Habitat	Establishing perennial vegetation for pollinator habitat supports biodiversity and provides vital soil, water, and agricultural ecological benefits, including natural crop pollination services.
Rotational or Conservation Grazing	Integrating animal grazing can enhance soil health and support local agriculture.

¹ One of these is UofM Morris' famous dairy cow agrivoltaics project, led by Brad Heins (*see* Twin Cities PBS, <u>Can Solar Panels and Cows Coexist? Cutting-Edge Agrivoltaics Research in Minnesota</u>).

