2023 RES-346

SUPPORTING USE OF AGRIVOLTAICS FOR DANE COUNTY LAND-BASED SOLAR INSTALLATIONS

Agriculture is critically important to Dane County. Family-owned farms, food processors, and agriculture-related businesses generate thousands of jobs and millions of dollars of economic activity for Dane County annually, while contributing to local incomes and tax revenues.

Dane County is among Wisconsin's most agriculturally productive counties and proudly represents the strong role agriculture plays in the state's economy. The county's main agricultural commodities are dairy cows, corn for grain and silage, soybeans, alfalfa hay, and winter wheat, all of which require use of a limited supply of land in a region with the state's fastest-growing population. In addition, a strong local foods movement in the county has helped smaller-scale local agriculture to flourish through community gardens, agri-tourism, and direct marketing of fresh, locally grown produce.

Complementing its on-the-ground agricultural operations, the county also hosts premier agriculture events such as the World Dairy Expo, the Wisconsin Agribusiness Classic, and the Organic Vegetable Production Conference, and is home to the largest producer-only farmer's market in the nation.

In addition to being a leader in agriculture, Dane County is also a Wisconsin leader in the production and use of renewable energy. The county owns more solar production than any other county government in the state, currently generating renewable power at 16 county-owned facilities, including the 90-acre Yahara Solar Project on county-owned land in the Town of Cottage Grove, the Dane County Regional Airport, and numerous smaller facilities, such as park shelters and other buildings, located throughout the county. Through these county-owned projects, in 2023 Dane County became only the fourth county in the United States to achieve its goal of using 100% renewable electricity at all of its facilities.

Dane County's Climate Action Plan outlines an even broader goal to reduce greenhouse gas emissions by 50% countywide by 2030, become carbon neutral by 2050, and increase Dane County's resilience and ability to withstand weather extremes and other threats posed to all residents by climate change. In order to achieve these goals, the county must continue to seek innovative ways to use local and national expertise and adopt emerging practices and technologies.

One of these practices is the use of agrivoltaics, the dual use of the same land for both agriculture and solar photovoltaic energy production. Currently implemented successfully around the world, the most common methods of agrivoltaics involve growing crops or grazing animals underneath or between solar panels. While some large solar projects have caused land-use conflicts in rural and agricultural communities, agrivoltaics provide another option for simultaneously meeting our growing food and energy demands while reducing land conflicts.

Researchers in Wisconsin and elsewhere are investigating a number of suspected co-benefits of agrivoltaics, which may include more efficient use of water by plants, sheltering of plants from increasing heat, increased recharge of groundwater, creation of pollinator habitat, increased food yields, enhanced carbon sequestration in soils, and additional economic opportunities for rural communities.

NOW, THEREFORE, BE IT RESOLVED that Dane County reasserts its commitment to support our strong and healthy agricultural heritage and economy, as well as to increase the innovative implementation of renewable energy countywide to strengthen and sustain a resilient community for generations to come.

BE IT FURTHER RESOLVED that Dane County encourages efficient use of land by making solar photovoltaic installations compatible with current and future farming practices in the county.

BE IT FINALLY RESOLVED that Dane County shall attempt to employ agrivoltaic practices on our own land-based solar installations wherever feasible.