



Agrivoltaic Architecture

Energy Pods, Green Weave, & Light Meander

Designing for Light and the Environment at the Nexus of Energy, Food, Water and Shelter

Agrivoltaic Architecture intertwines contemporary building-integrated agrivoltaics, advanced material-conscious computational design and digital fabrication, and playful community-building architectures to create a series of environmentally sensitive dynamic waypoint prototypes within the otherworldly landscape of Fly Ranch: Village Pavilions (Energy Pods), Agrivoltaic Surface Farming (Green Weave), and Canopy Light Networks (Light Meander). Agrivoltaic Architecture embraces holistically the sustainable initiatives proposed by LAGI & Burning Man at Fly Ranch and Black Rock-High Rock NCA.

Agrivoltaic Architecture innovates the design and engineering of Building Integrated Photovoltaics (BIPV) through computational design and 3D printing for highly customized non-standard filters and panels that result in site-specific non-mechanical tracking solar collection systems. By leveraging the beauty and performance of nature's toolkit, Agrivoltaic Architecture demonstrates an adaptable system through 3 linked prototypes (Energy Pods, Green Weave, & Light Meander) with low greenhouse gas emissions, showcasing the potential of sustainable design for a resilient land use model to provide an integrated approach to food, water, energy, and shelter.



View of the Green Weaves