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.