

# Joe Czajkowski Farm (JCF) & Lakeside Organics Agrivoltaics

Agrivoltaics is the co-development of the same plot of land for both solar photovoltaic power and agriculture.

## Array Design:

- Designed with Joe throughout the entire process; farm function was the top priority during system design.
- Orientation of the module rows allows for continued north-south crop planting.
- Row spacing is greater than needed—max shade for this system is 44% with an average shade of 37%, from Department of Energy Resources (DOER) Dual-Use Shading Analysis Tool.
- Greater row spacing accommodates JCFs existing equipment and allows for a variety of crops to be planted over the life of the array.
- Design is replicable. It's suitable for similar and larger-scale projects.

## Agrivoltaic Co-Benefits:

- **Improves farm economic viability.** The array provides JCF with revenue diversification that's consistent and reliable.
- Improves the farms environmental integrity. JCF is a subscriber to the project, which helps to decarbonize the Farm.

Hyperion was born from the idea of **"Food first, then energy."**



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## Hadley, Massachusetts

### Agrivoltaics Site Details

**Equipment:** SolarFlex Rack S-Series — Single Axis Tracker. 32 tracker motors total.

**JA Solar:** 535W bifacial modules. 832 modules total.

**SMA Inverters:** Sunny Highpower Peak3 150kW Inverters. 3 inverters total.



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### Array Specs:

**Size:** 2.2 acres

**Power generation:** The array is a community-shared solar project. 445kW DC 375 kW AC.

**Farmable land:** All but the area where the posts are. Perennial crops like rhubarb are being considered for planting directly below the modules. No perimeter fencing is needed. The design allows for continued use of standard farming equipment to grow crops or graze animals.

### Project's Value Add for the Farm:

- Strong annual lease payment. Includes a 2.5% annual escalator.
- Reduced electric bill for the farm. JCF will receive a 17.5% reduction in their monthly utility bill for the life of the array.
- Two wells were provided by Hyperion for future farming.
- Three-prong outlets included at the equipment pad, providing power to the farmer at this remote field.
- Improved farm access road.