



**Cornell University**  
**Agricultural Experiment Station**

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Dear STARS review committee:

I am writing to affirm the innovativeness – both in process and in outcome – of our Cornell University Agricultural Experiment Station (CUAES) Lean Team Project. The aim of this project was to address the challenge of how to maximize the efficient allocation and use of 155,000 square feet of CUAES-managed greenhouse space to reduce significant facilities and energy costs. The team worked creatively to reimagine the greenhouse space allocation process, engaged college leadership, and developed an array of related communication materials.

Some of the immediate and pending outcomes of the project include:

1. Bringing staff together from all levels, with open dialogue and active participation, was a real-time immediate outcome. I'm proud of the group effort and the open-mindedness, engagement and culture of sustainability embodied by the CUAES lean team.
2. The financial benefits to the college (CAL S) are substantial. Improving the process of space allocation within CAL S greenhouses will allow for decommissioning of around 17% of our least-functional and least efficient spaces. These savings are expected to be fully realized in about a year. Specifically, estimated savings to CAL S if 17% of existing greenhouse space is removed (25,000 sq. ft.):
  - Deferred Maintenance/ Replacement in-kind savings (one-time): 260\$/sq.ft. to replace/renovate = \$6,500,000
  - Corrective/Preventative Maintenance costs: 100K to 120K annually
  - Heating savings: 160K to 212K annually
  - Electrical savings: 30-70K annually
  - Reduction in greenhouse gas emissions by ~2000 metric tons/year
3. Other potential benefits:
  - Reduction in building coordinator time commitments for greenhouse management (TBD)
  - Focus limited CAL S facilities dollars to improve remaining greenhouse spaces to better serve faculty needs for research, teaching and outreach
  - Clearly inform users of every greenhouse in the facility how much the space costs to heat and cool and the related greenhouse gas equivalents. Encourage social change.

Having a creative, empowered, lean team has led us to commendable, innovative, outcomes. I'm happy to provide any additional clarification as needed.

Kind regards,

Glenn

Glenn Evans  
Director of Agricultural Operations