

## University of Connecticut

Carbon Neutral Task Force Meeting #2

February 2023

## **UCONN**

### Agenda

- Task Force Charge
- Energy Conservation Program
  - Project and Data Tracking
- Ongoing Project Update
- Open Discussion



## **Task Force Charge**



"The Carbon Reduction Working Group will identify, evaluate and recommend specific cost-effective initiatives and actions, within the larger context of the university's available resources, that will increase the use of clean and sustainable energy on UConn's campuses and reduce environmentally harmful emissions with the goal of allowing UConn to achieve carbon neutrality on its campuses by 2030."

## **Carbon Reduction Vision**





Three (3) Solar Taurus 70 Turbines-Central Utility Plant (7.5 MW each) Free Thermal (steam) ~ 60,000 lbs/hr



Operation of the Central Utility Plant Creates Renewable Energy Credits which Funds Energy Conservation Projects

Existing Conditions



Solar – Parking Lots 7.5 MW



Fuel Cells – Science 1 and 6 Building Locations (7 MW)



Other potential projects include geothermal, solar, hydrogen vehicles, wind and continuing with energy conservation program

On-Going Efforts

#### **Large Scale Projects**



Turbines Hydrogen Fueled with Carbon Capture Supplemental Utility Plant (25 MW) Free Thermal (steam) ~60,000 lbs/hr

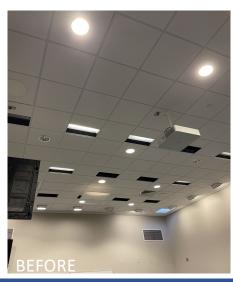


Wind, Solar, Geothermal, Storage Hydrogen Alternatives

Future









#### Storrs Campus LED Lighting Phase 1 Project Summary



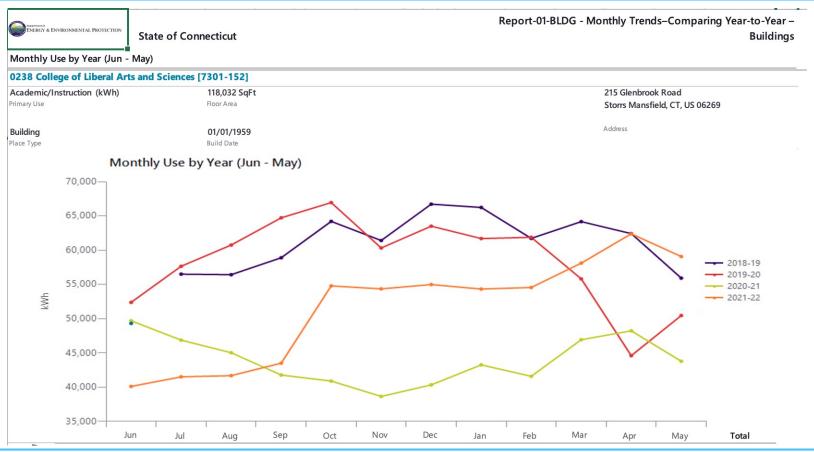
Total Project Cost (Before Incentives)
Project Annual Energy Savings
Annual Utility Cost Savings
Eversource Utility Incentives
Greenhouse Gas Reduction

\$5,748,138 1,887,847 kWh \$188,784 \$787,698 **1,116 MTeCO2**√

1,116 metric tons GHG Reduction

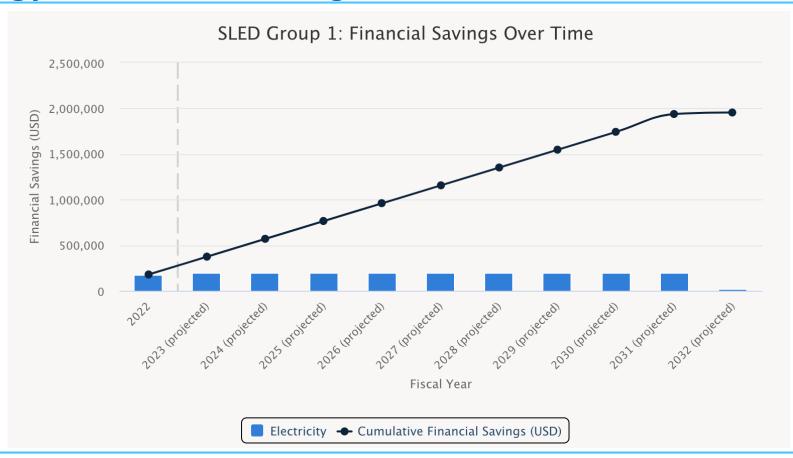






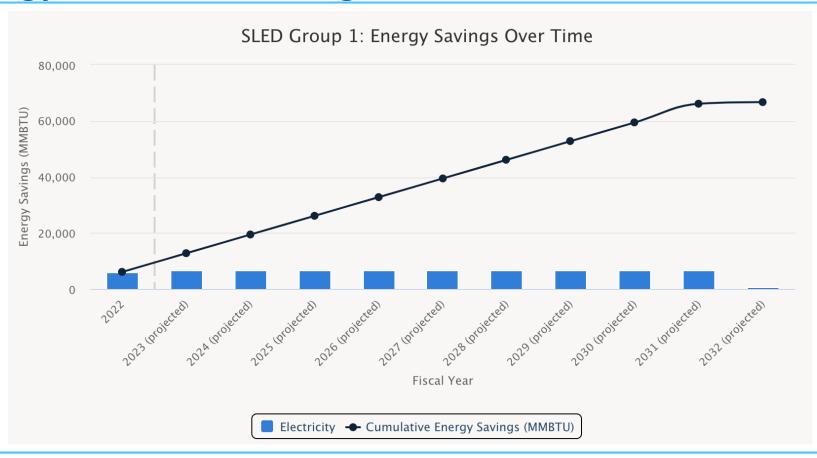


## **Energy Conservation Program – GRITS Data**





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## **UCONN**

# Open Discussion

