



# UniGroup's Venture into Becoming Energy Star Certified

September 2, 2014

# Agenda

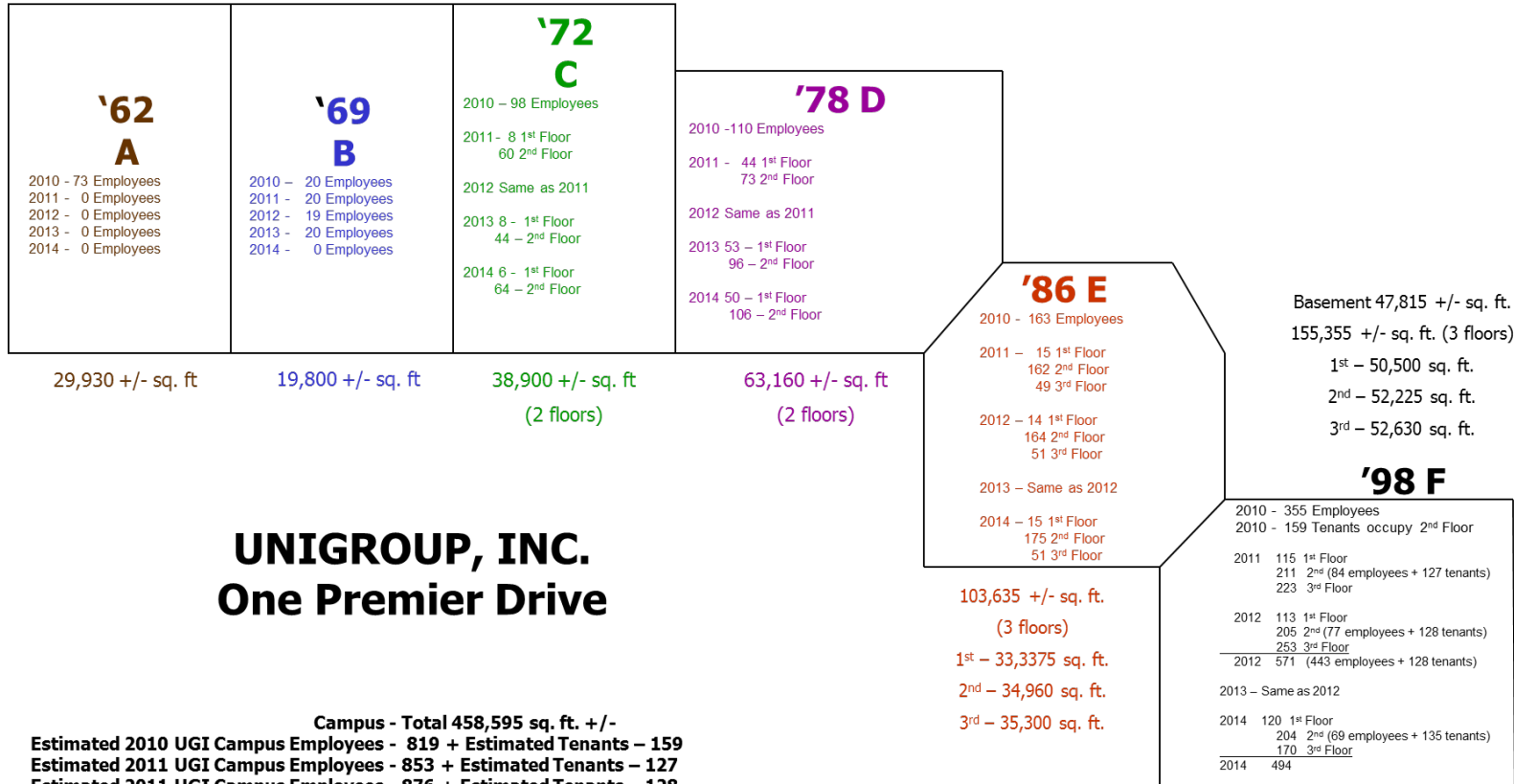
- History/information about the UniGroup Campus
- First Efforts with Inputting Data in Energy Star
- Lessons Learned from Inputting Data
- Projects that Improved our Performance
- Decision to Participate in the 25x20 Challenge
- Current Status

UniGroup Campus

# UniGroup Campus



# UniGroup Buildings and Employee Counts



# Interesting Facts from an Energy Perspective

- As UniGroup's campus grew and buildings were added, new electric meters and service were added.
- Four main Ameren accounts, and each Ameren account has a 25 kW solar panel attached to it
- There is minimum staffing in the 62/69 buildings




# First Efforts Inputting Data in Energy Star

# Inputting Energy Star Data

- Initial input was April 2013, could not “get it to work”
- Went back in August 2013 and the program website had changed in between April and August; previous profile was deleted
- Had to create a new profile
- After the first data input we were at 71 (have to be 75 or better for Energy Star)
- Areas we identified where we had issues
  - Office area
  - Headcount
- Never able to determine how to account for IT area and higher energy requirements (data center running 24/7)






# Lessons Learned with Energy Star

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- Wasn't easy to start, but once you figured out what you were doing, it was fairly easy
- Need to have a process for inputting data on a regular basis to keep it up
- Once data is in, you have to do a "data integrity check" before it will calculate your rating
- Energy Star uploads weather data once a week, so can take up to a week to get a new rating back
- Our multiple buildings all connected are considered 1 building
- Headcount number can really move your Energy Star Rating



# Projects to Help with Energy Performance

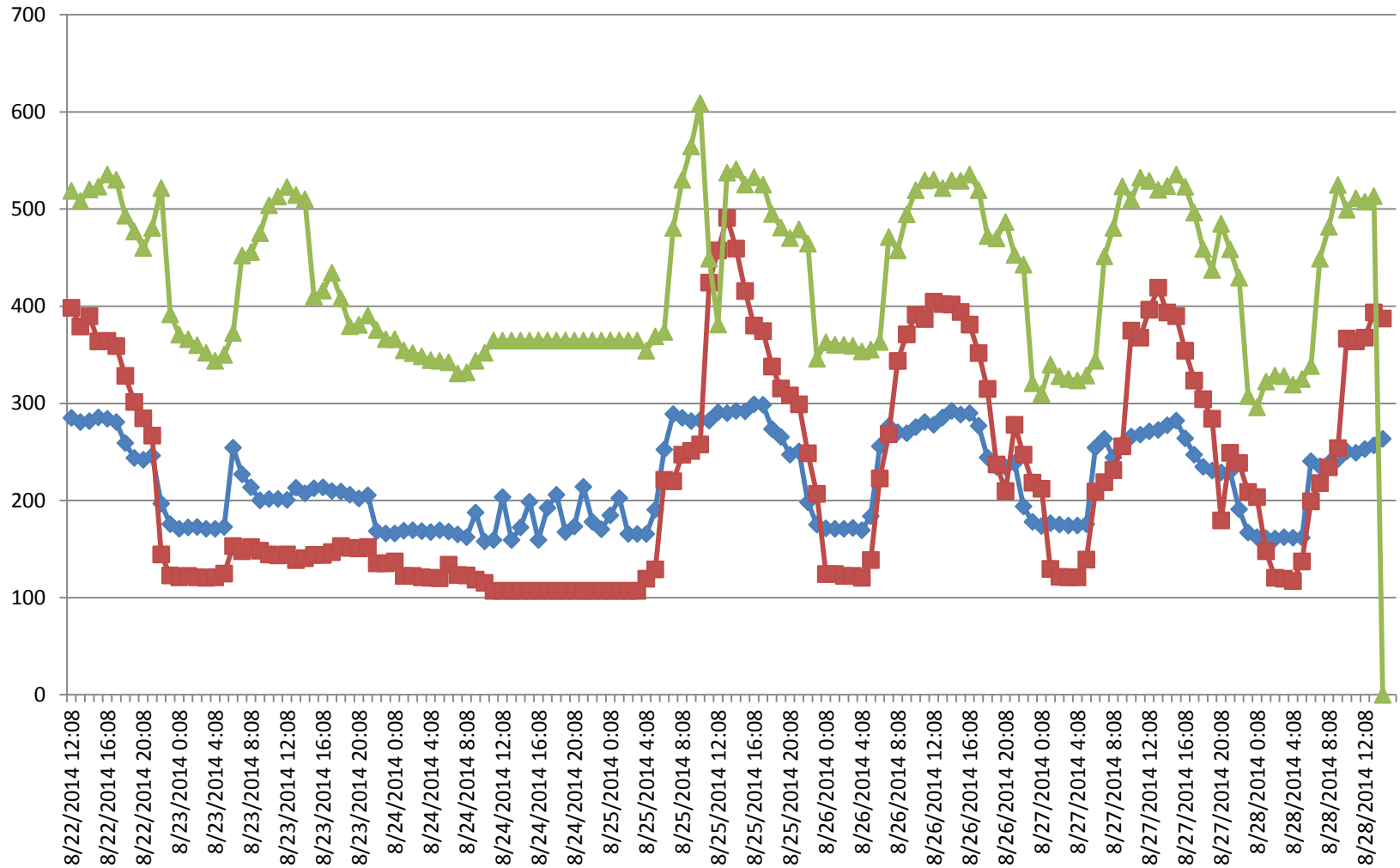
# Projects That Support Energy Reduction

- Solar Panels – Energy Production

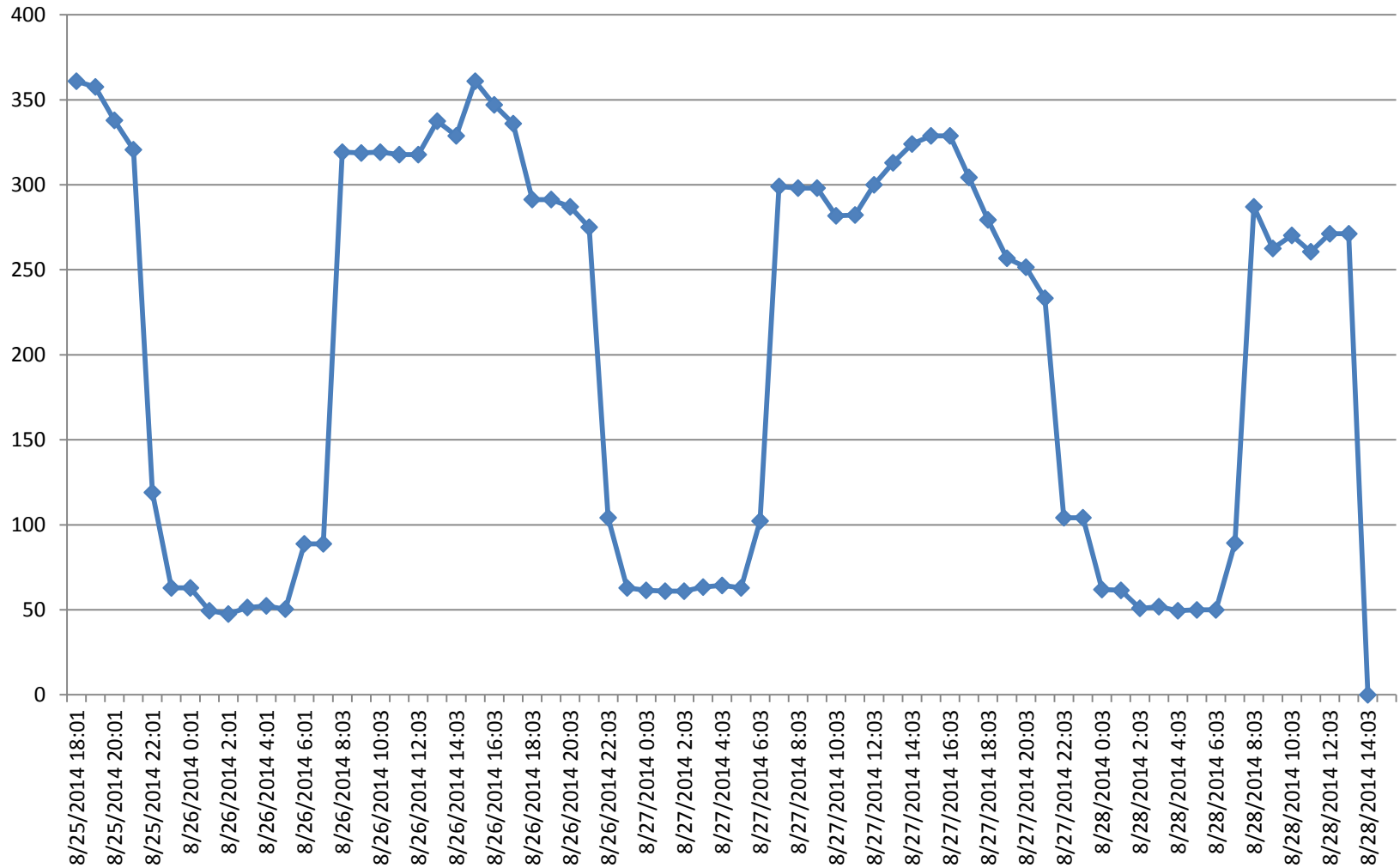


- Identify energy usage issues
  - Solar panels required a new meter
  - Installed pulse meters to see hour by hour energy usage
  - Just starting to get the data in a usable format

# Snapshot of Electricity Usage



# Snapshot of Electricity Usage



# Projects That Support Energy Reduction

- Lighting controls to turn off building lights outside of business hours
  - Focus on current antiquated system
  - Proposing 3 year capital project to upgrade the system
- Motion detectors for lighting basement storage area - Complete
- Motion detectors in building stairwells and larger conference rooms – awaiting bids
- Controls of HVAC system
  - Upgrade to the front end energy management system (improved interface with better graphics and optics capabilities)
  - Proposing 3 year project to upgrade system

# Projects That Support Energy Reduction- Induction Lighting For UniGroup Parking Lot

- Benefits of Induction Lighting
  - 60% less energy than HID (high-intensity discharge)
  - No parts to burn out
  - Our cost 30%-40% less than LED
  - Dimming capability
- Replacing 127 Parking Lot Lights
- Ameren Incentives used in Project Justification

Before



After





# 25x20 Challenge

The background features a light gray triangle on the left side and a red triangle on the right side, both pointing towards the center. The text "25x20 Challenge" is positioned in the center-left area.

# UniGroup's Acceptance of the 25X20 Challenge

- Take the Pledge
  - Reduce energy usage 25% in 6 years
  - You will never improve if you don't set a goal
  - Nice compliment for UniGroup's Sustainability efforts
- See how you are doing vs other like facilities by inputting your data in Energy Star Portfolio Manager. We were surprised with where we ranked. Improving our ranking seemed doable.
- Between our ranking and the additional information we were seeing with our energy usage, we could feel a sense of accomplishment with our improving performance
- Remember, it's just a challenge. We may not make 25%, but whatever we do, it will be more than we would have accomplished without a goal.





Current Status

# Path to Energy Star

- Our June score moved us into Energy Star classification
  - 77, vs. a minimum score of 75
- July score was even better at 79 (other campuses of our size average 71)
- In order to be certified must have an external verification of your data and ensure building comfort (to include hot and cold work areas)
- Took a while to find firms who perform the audit (only 2 vendors identified, Sitton and Heideman Associates)
- Cost was more than we expected, in the \$3-4k range even with all data input
- Have selected a vendor and are moving forward with certification

Questions?