



# Energy on Campus

5x5 Presentations

North Central Texas Energy Forum

October 26, 2016

# Energy on Campus

University of North Texas



# Motivations and Context

- Sustainability and Energy Efficiency key part of the Master Plans and Strategy since the 1990's
- 37,937 students, 174 buildings with 7 Million sq. ft. of building space, spread across 895 acres
- Innovative Tier 1 research University
- Energy efficiency ROI allows for institutional grade modernization of the campus
- The 2012 SMART project was a \$42 Million Performance Contract to pay back over 20 years



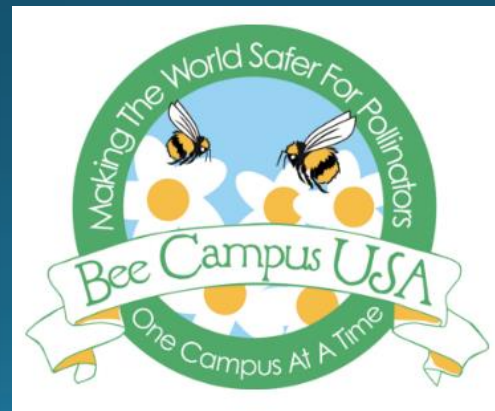
# Innovation and Energy Initiatives

- SMART Program – comprehensive energy efficiency project
- Three 100 kW wind turbines, 80 kW from two Solar PV arrays
- Academic research: Zero Energy Lab, Solar building envelopes, and a lot more
- Sustainability as a part of the Division of Student Affairs



# Impact and Benefits

- SMART Program Savings –since September 2013 \$9 Million expected, but has saved over \$10 Million! Phase 1 saved \$14 Million since 1999
- All new buildings built to LEED Silver or higher standards
  - Apogee Stadium - First ever LEED Platinum collegiate stadium
  - Life Sciences Complex – LEED Gold lab building
  - University Union – LEED Platinum/Gold application
- We Mean Green Fund –student, staff and faculty ideas being implemented
  - Community garden
  - Renewable Energy Credits
  - Bee Campus USA
  - 7 more from FY 2016



# Lessons Learned

- Energy professionals required to capitalize on every opportunity
- Tremendous financial and O&M benefits from utilizing energy savings as a vessel towards large capital expenditures
- Student recommendations that become projects are much more likely to be approved and then supported by the campus at large



# Next Steps

- Renewed efficiency focus for every project – New Energy Engineer
  - Design & Construction Guidelines - updates and oversight
  - Communication campaign for those unseen efficiency wins
  - Utilize meter, utility bill and controls data
- Carbon Neutrality – SGA funding request goes to a student vote
- Evaluate for new Performance Contract opportunities



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