

Green Team Quarterly Meeting

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WAKE FOREST
UNIVERSITY

Introduce yourself...

Name

Department

What personal appliance can you not live without?



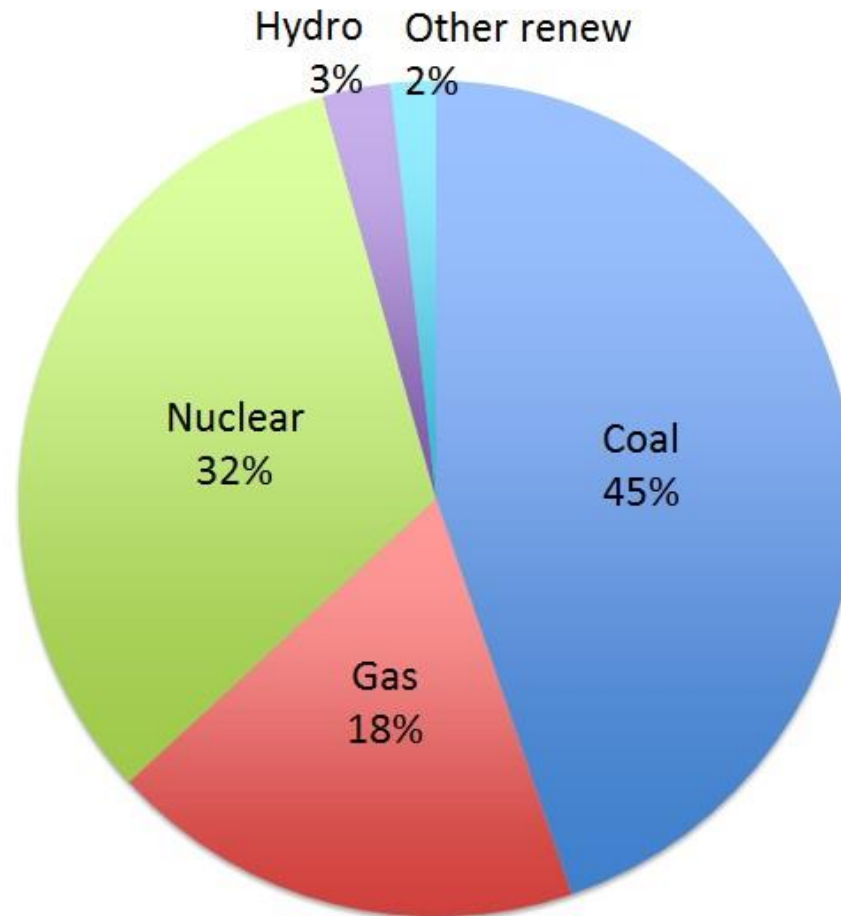
Energy

Who said it?

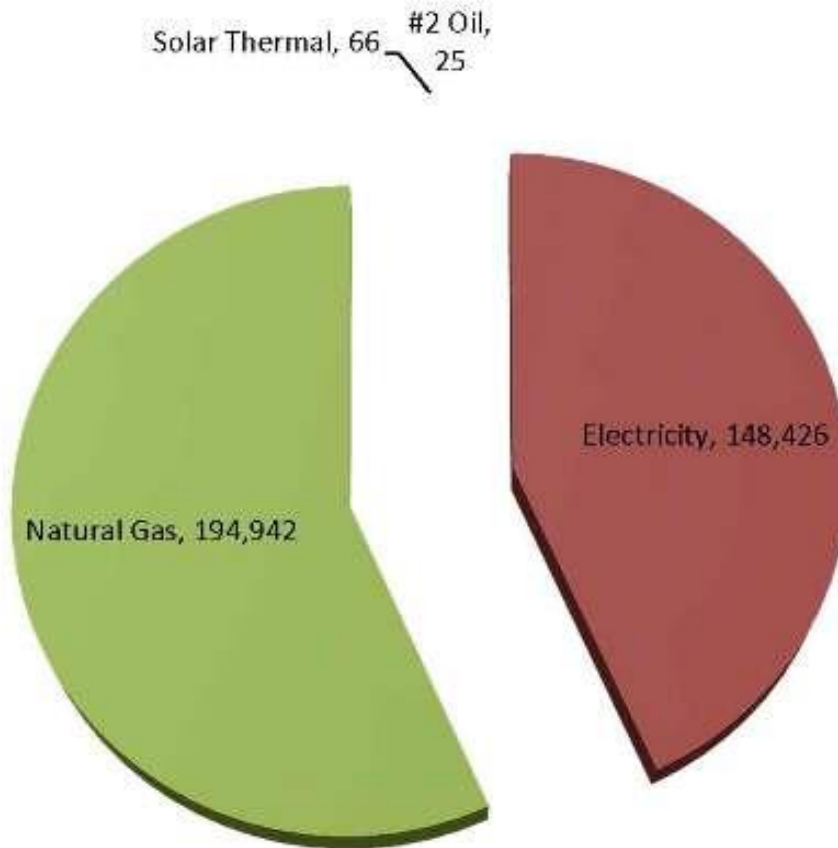
“I’d put my money on the sun and solar energy. What a source of power! I hope we don’t have to wait until oil and coal run out before we tackle that.”

--Thomas Edison, 1931

Where does our electricity come from?



WFU Yearly Energy Usage (Million BTU)



Alternative energy sources at Wake:

Solar panels on the Barn produce only 1,007 kWh/year = 287 hours/year at full capacity.

Solar hot water in South Residence Hall = 66 million BTU/year.

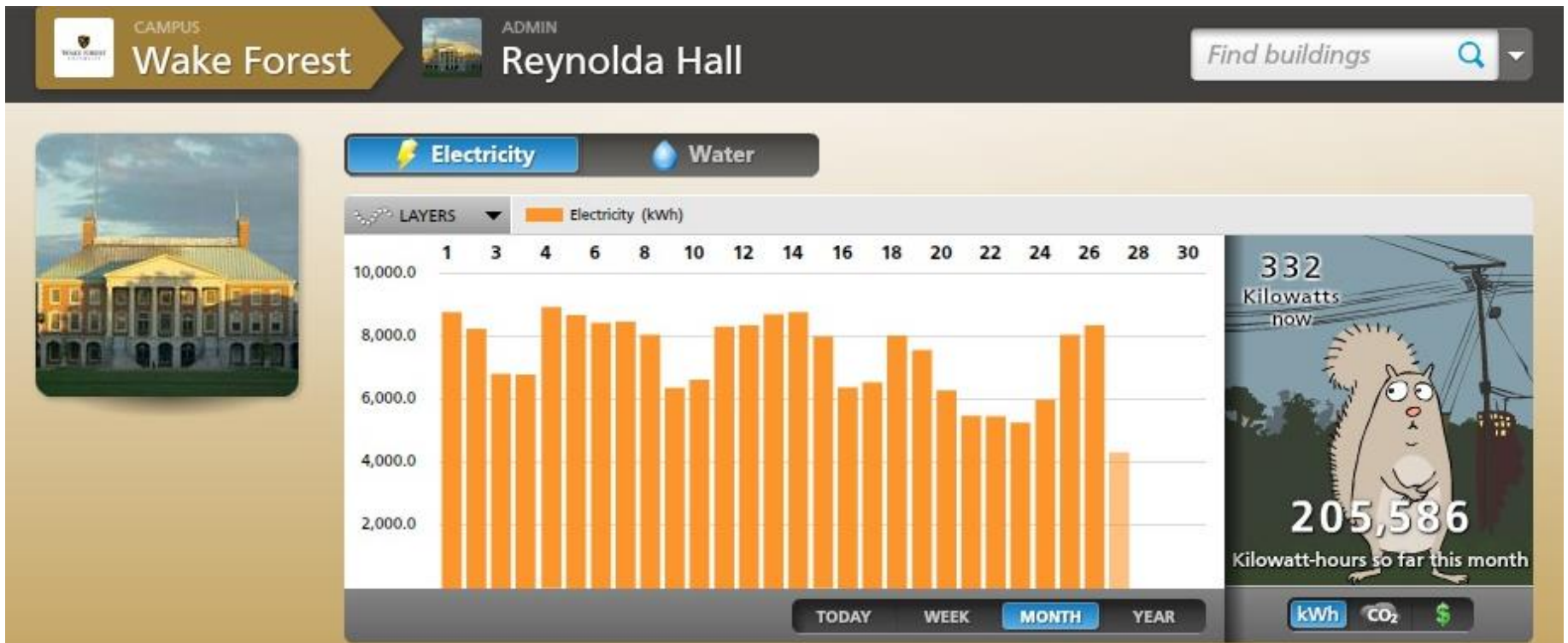
- Benson =
5,812 kWh/day
- South-facing panels (~7,500 sq ft) on a typical sunny day =
880-1000 kWh/day (17%)
- Cost difference =
+\$.09/kWh (over 20 years)



- **According to the Department of Energy:**
 - **Buildings = 41% of energy consumption in the U.S.**
 - 44% more than the entire transportation sector
 - 36% more than industry
 - **50% use in buildings**
 - space heating
 - space cooling
 - lighting
-

Wake Forest Building Dashboard

<http://buildingdashboard.net/wakeforest/>



Watt are you using?

$(\text{Wattage} \times \text{Hours Used Per Day}) \div 1000$
= Daily Kilowatt-hour (kWh) consumption

Annual consumption = kWh x number of days you use the appliance

Desk lamp: $(10 \text{ Watts} \times 8.5) \div 1000 = 0.085 \times 260 = 22.1 \text{ kWh/year}$

$22.1 \text{ kWh} \times .065 = \mathbf{\$1.44}$

$(6752 \text{ students} + 2551 \text{ employees}) \times 1.44 = \mathbf{\$13,396}$

And if it was a 'regular' 60w bulb, the total would be $\mathbf{\$80,378!!}$

- **Last to leave, lights out each time you leave a room, not just at night**
- **Power down computers and monitors each night using your power strip**
- **Use smart strips (and turn them off) to combat phantom power**
- **Adjust the thermostat, or call facilities if you are unable to adjust yourself**
- **Use shared printers vs. individual**



- **Unplug unnecessary items when not in use, esp. on weekends and holidays**
- **Reduce the use of your appliances**
- **Buy Energy Star-rated units when possible**
- **Use your blinds – they're not just for light**



- **Green Team department announcements**
- **Next Green Team Quarterly Meeting – February– Topic: TBD**

