Welcome to our program!

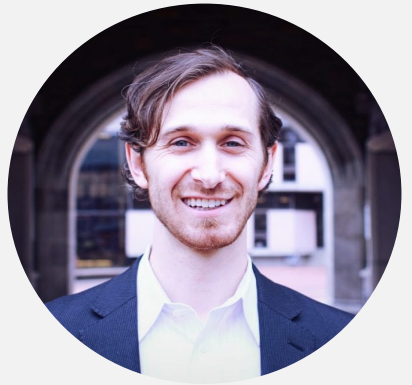
As you wait please feel free to do the following:

- Make sure that your microphone is muted.
- Locate the chat feature.
- If you have any questions, please put them in the chat box.
- We invite everyone to turn their video on so we can have some face time together!

Who we are

7 full-time sustainability staff
and many more student associates!




Claire Santoro:
Energy & Climate
Data Analyst

Who we are

Brianna Chandler (she/ they)

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Office of Sustainability
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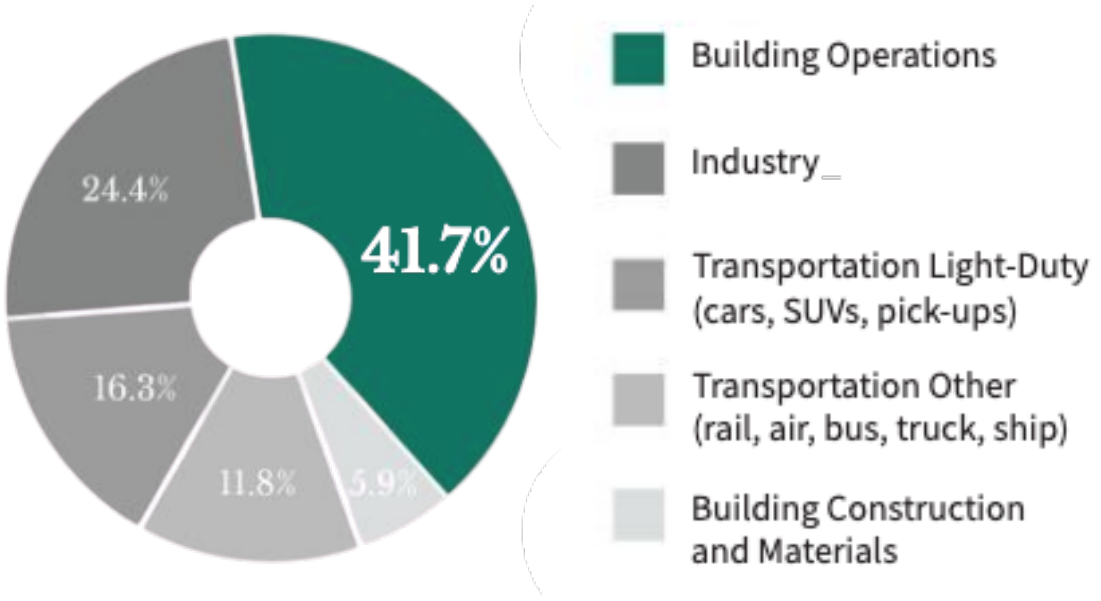
Who are you?

Please respond to the Zoom polls that show up on your screen so we can learn who is in the room!

Energy Savings Matter!

Building operations account for 41.7% of all energy use in the United States, which makes it the largest sector.



Project Drawdown

Solutions by Rank (first 10 out of 100)

Rank	Solution	Sector	TOTAL ATMOSPHERIC CO2-EQ REDUCTION (GT)	NET COST (BILLIONS US $)	SAVINGS (BILLIONS US $)
1	Refrigerant Management	Materials	89.74	N/A	$-902.77
2	Wind Turbines (Onshore)	Electricity Generation	84.60	$1,225.37	$7,425.00
3	Reduced Food Waste	Food	70.53	N/A	N/A
4	Plant-Rich Diet	Food	66.11	N/A	N/A
5	Tropical Forests	Land Use	61.23	N/A	N/A
6	Educating Girls	Women and Girls	51.48	N/A	N/A
7	Family Planning	Women and Girls	51.48	N/A	N/A
8	Solar Farms	Electricity Generation	36.90	$-80.60	$5,023.84
9	Silvopasture	Food	31.19	$41.59	$699.37
10	Rooftop Solar	Electricity Generation	24.60	$453.14	$3,457.63

Our Region

- In Missouri, 70% - 83% of energy comes from coal
- Our region has the third most carbon intensive grid in the nation
- St. Louis has a variety of challenges

WashU:
Energy and Efficiency on Campus

Sustainability
Washington University in St. Louis

Campus Energy Savings

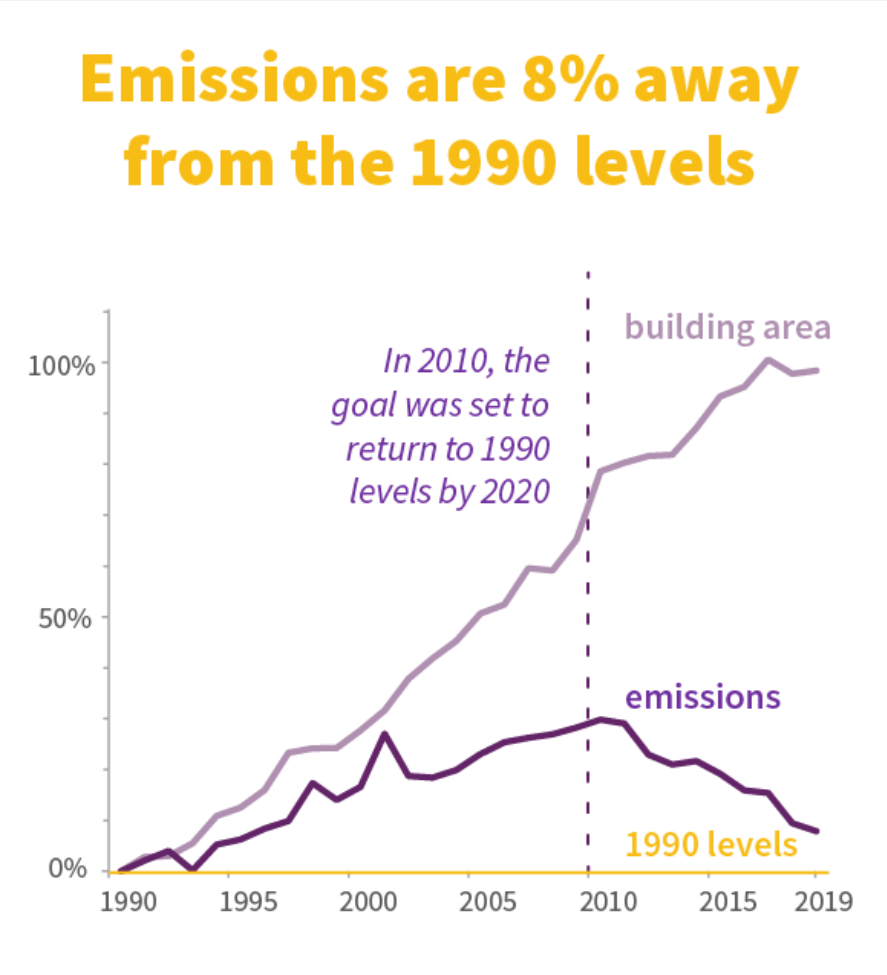
- Less carbon emissions

  despite increased square footage

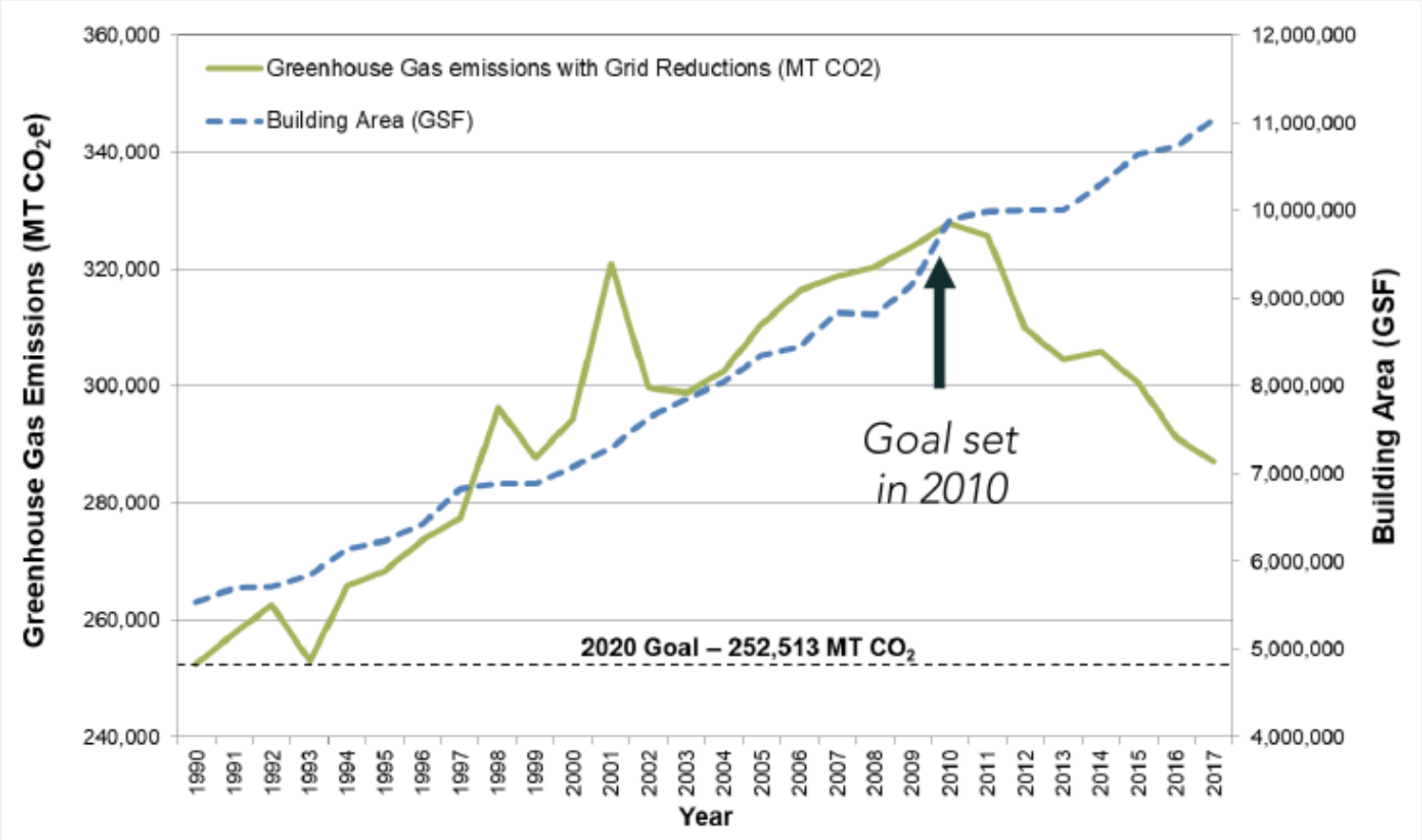
- Campus buildings are metered

  to track monthly Natural Gas

  & Electricity usage



Campus Energy Savings



Renewable Energy

- WashU has assets of about 3 MW of on-site solar
- Last year our solar arrays produced 621,281 kWh
- This number is equivalent to burning 484,016 pounds of coal

WashU is now one of the largest producers of on-site solar in Missouri

.5
Megawatts
in 2015

2.5
Megawatts
in 2019

Commitment to Energy Efficiency

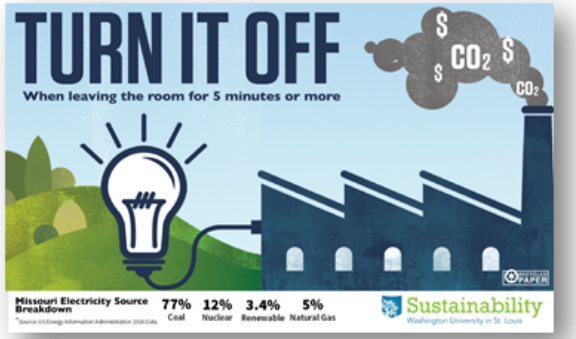
LEED Building Certifications

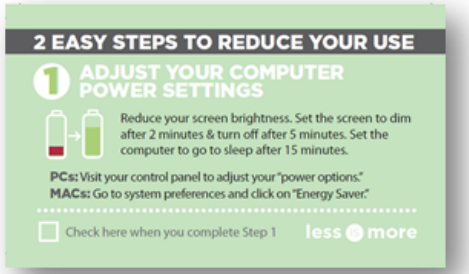
All new buildings must be 30% more energy efficient than standard buildings.

Green Cup

Less Is More

Email **sustainability@wustl.edu** to request a Less is More toolkit to further your commitment to reducing your impact





Energy and Efficiency at Home

Sustainability
Washington University in St. Louis

Contents

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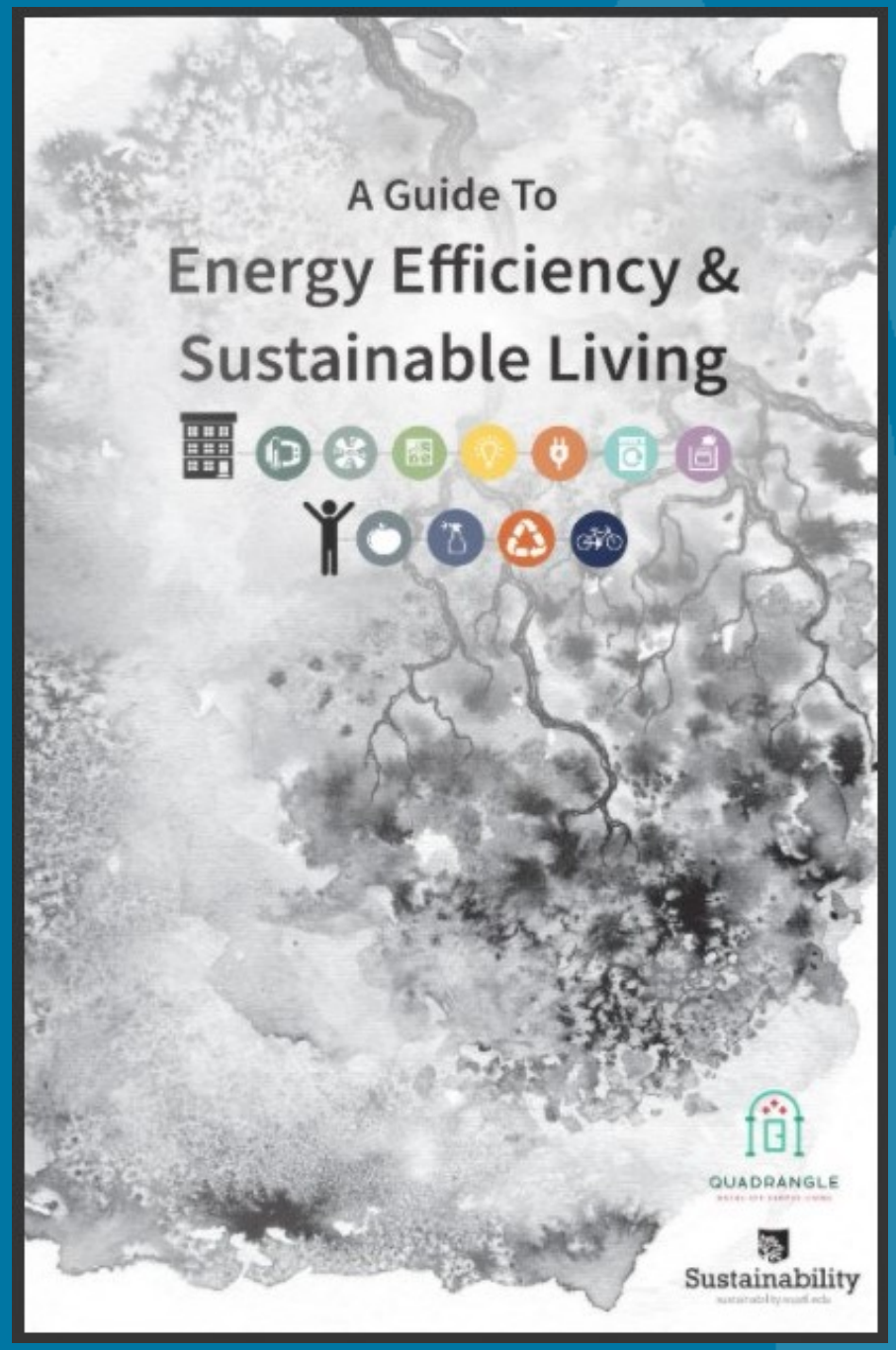
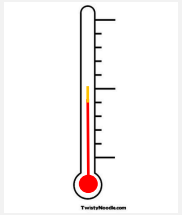
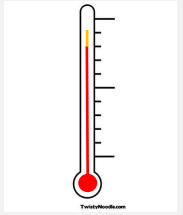
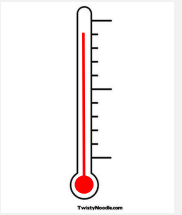
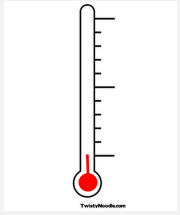
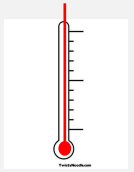
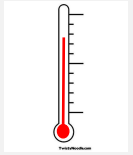
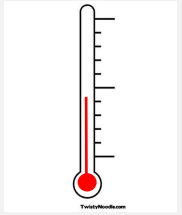


WashU: Energy Efficiency Guide

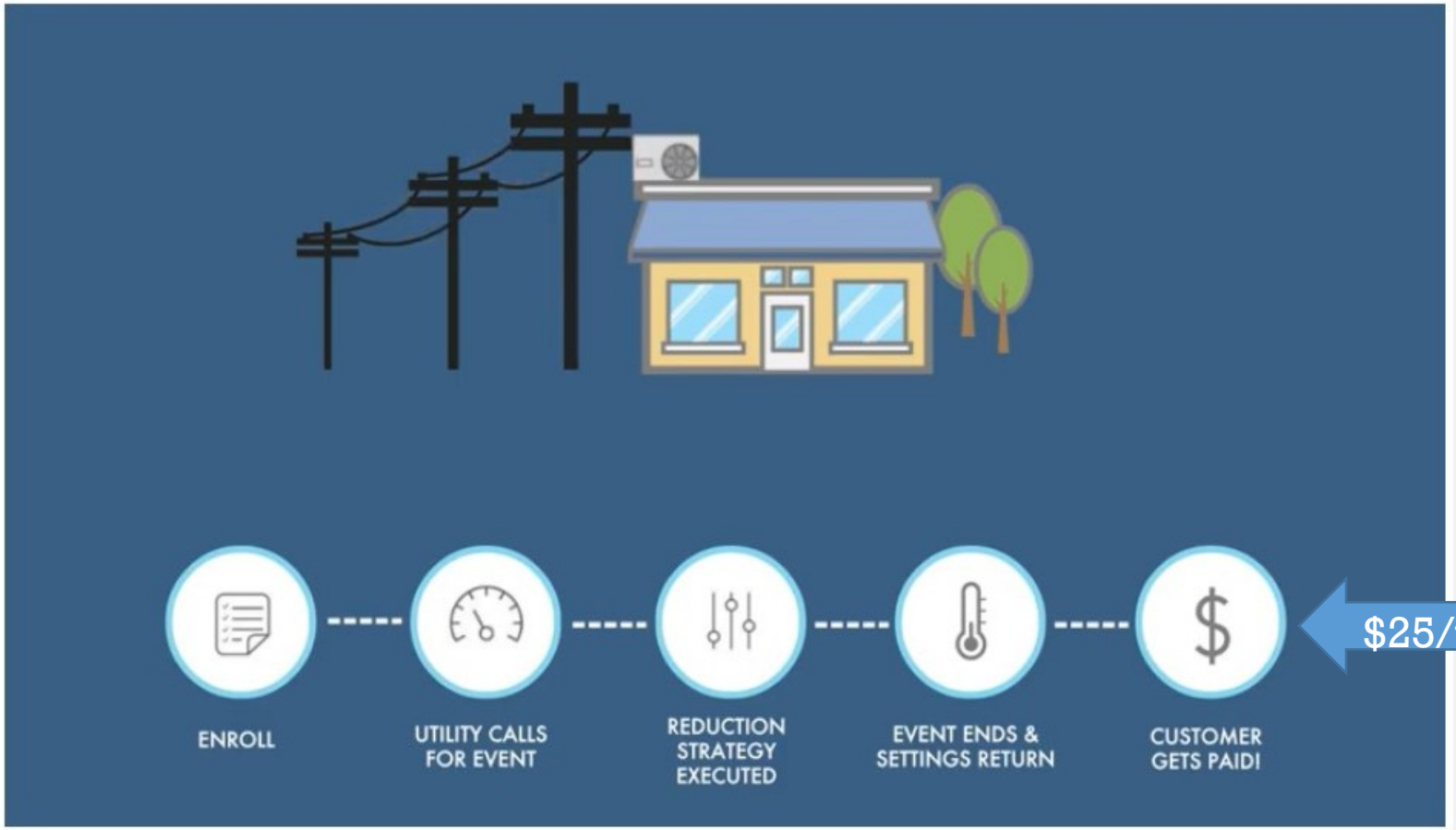
Download from sustainability.wustl.edu

Sustainability
Washington University in St. Louis

Thermostats

	WINTER	SUMMER	SPRING & FALL
At Home	68-70° 	76-78° 	78° 
Away or Sleeping	60° 	*Away:* 85°  *Sleeping:* 75° 	68° 

Demand Response



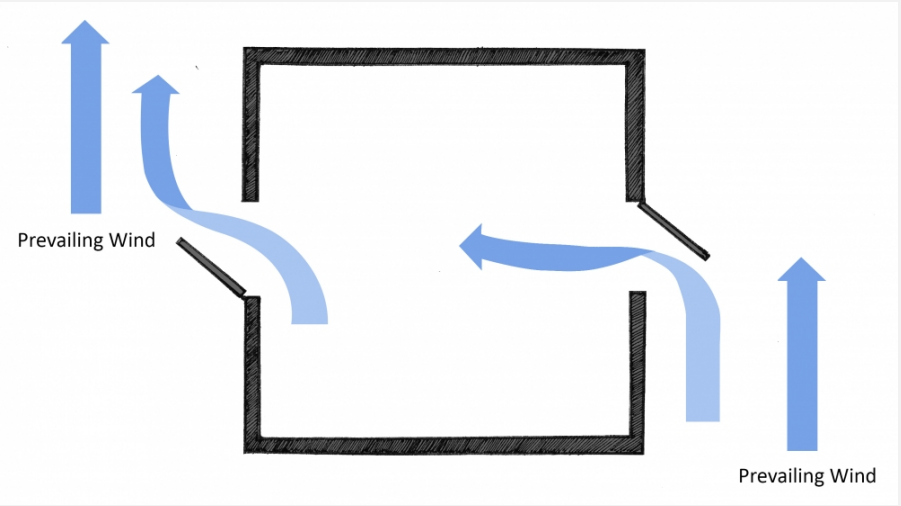
Allows energy companies to balance the needs of the energy grid at peak moments of use.

Install a smart themostat in your home!

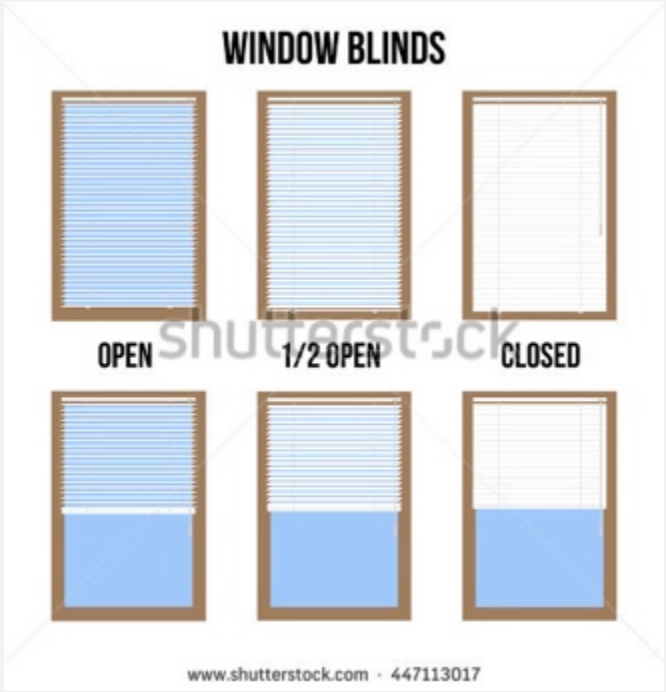
More info: https://sustainability.wustl.edu/local-demand-response-program-cuts-carbon-saves-money/

Windows

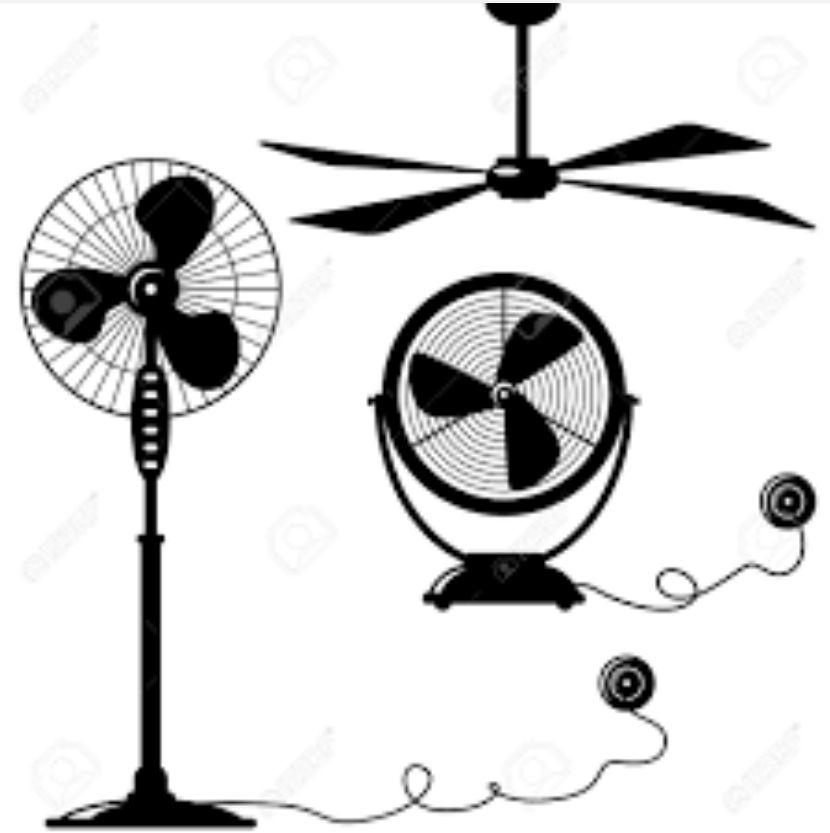
Cross Ventilation



Blinds

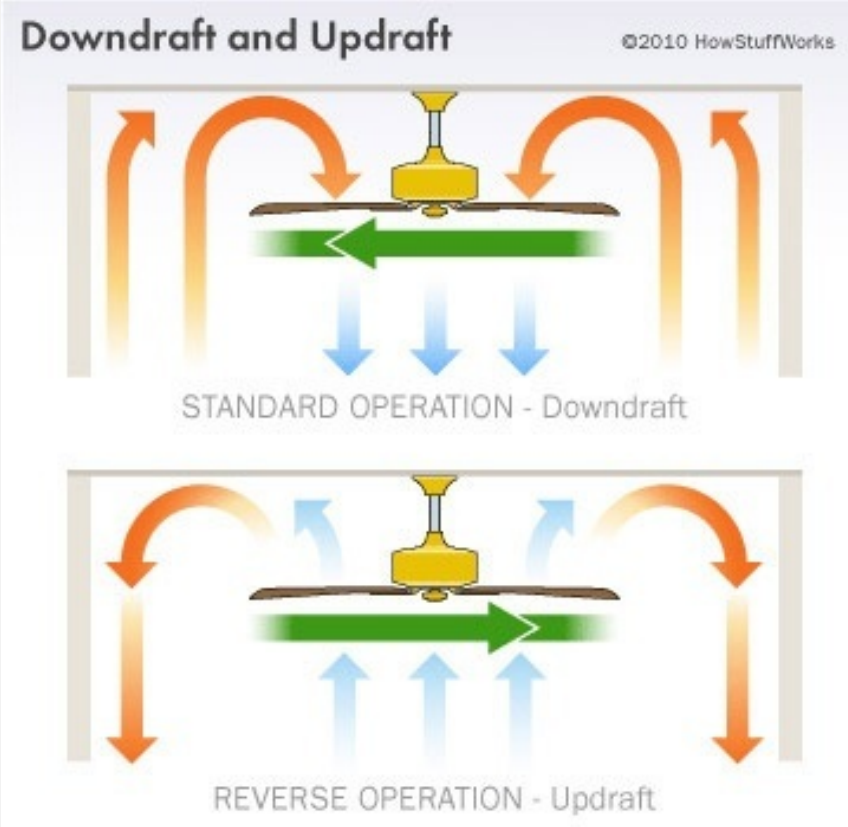


Fans



SUMMER

WINTER



Space Heaters

Each standard space heater contributes to 2,160-3,456 pounds of carbon emissions each year and costs $84-$134 per year in electricity bills.

Heat your body, not the air (think: sweater, lap blanket, foot warmer)

Use a timer to turn on/off for predictable places, like a cold bathroom in the morning

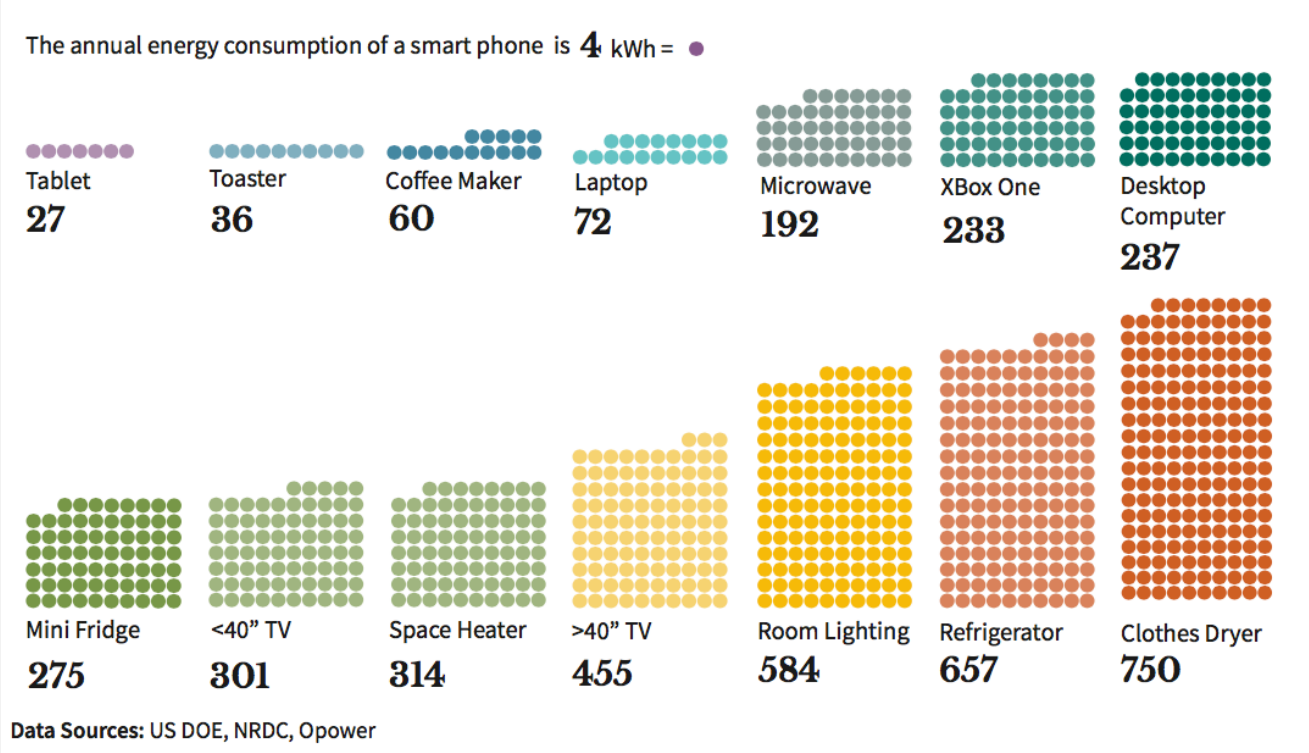
Turn off when you aren't in the room!

Lighting

LED	CFL	Incandescent
Avg Life: 25,000 Hrs	Avg Life: 8,000 Hrs	Avg Life: 1,200 Hrs
No Mercury	Mercury	No Mercury
6-8 Watts	13-15 Watts	60 Watts
Uses 84% less energy	Uses 75% less energy	90% energy lost to heat

More info: https://sustainability.wustl.edu/everything-your-need-to-know-about-led-lights/

Outlets and Phantom Loads



Laundry

Wash with cold water

Wash with cold water

Drying rack

Avoid over-drying clothes

Wash Full Loads

Bathroom

Short Showers: 3-5 minutes

Decrease Flow Rate

Turn off the tap

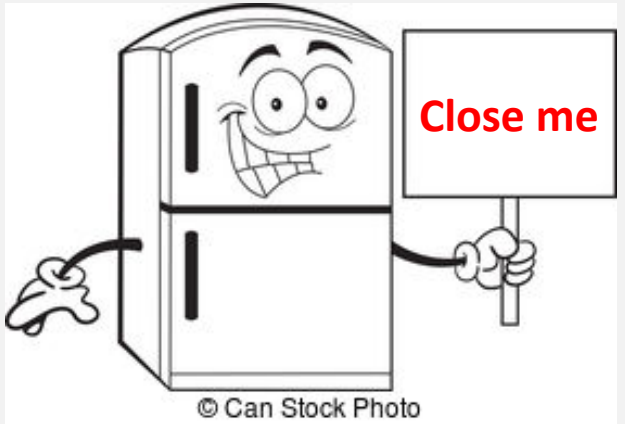
Kitchen

Full Dishwasher

Toaster Oven

Electric Kettle

Conserve Cold



Household Retrofits

Home Energy Audit: Through a set of tests, identify the highest impact opportunities for conserving energy, primarily through sealing and insulating your home and preventing the loss of conditioned air.

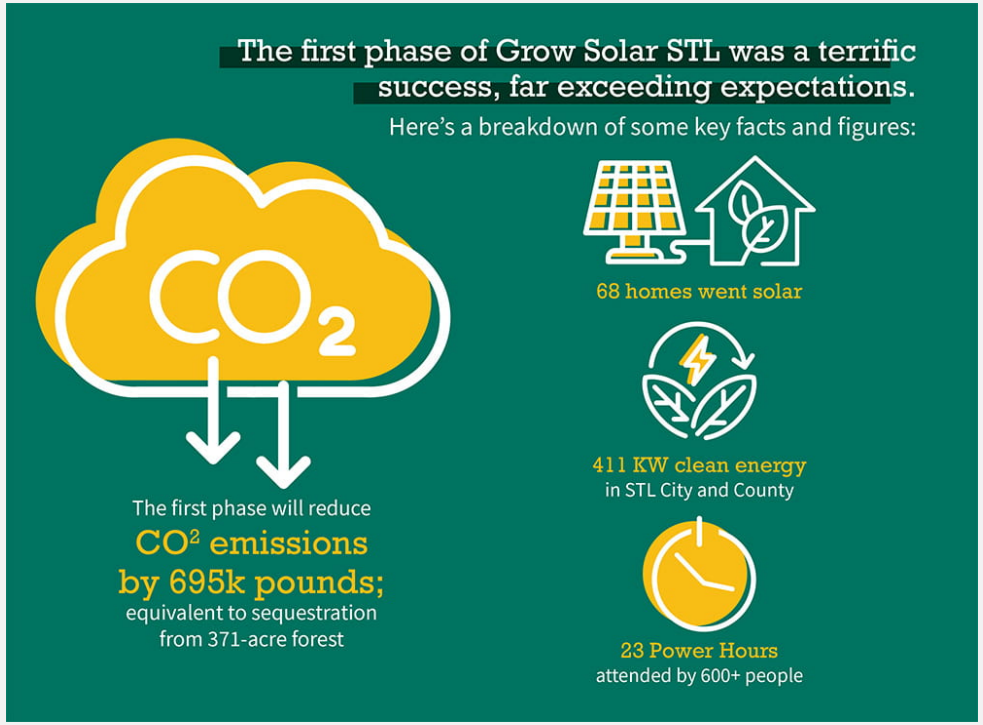
Insulate: Good insulation has many benefits, including increasing the thermal comfort of your house, reducing energy bills, reducing wear and tear on your HVAC system, and substantial energy conservation. Target: walls, ducts, chimney, plumbing, and water heater.

Seal Cracks and Gaps: Low cost, easy way to seal up your home and reduce the loss of conditioned air. Target windows and doors with caulk, weatherstripping, and draft blockers.

More Resources for Household Retrofits: https://www.energystar.gov/products/energy_star_home_tips

Grow Solar

- Reduces solar installation costs
- Educates homeowners
- Pre-selects a high quality solar company through a competitive bid process to save homeowners time.



GROW SOLAR
ST. LOUIS

More Info: https://sustainability.wustl.edu/70-homes-went-solar-with-grow-solar-stl-phase-1-now-to-phase-2/

SUSTAINABLE LIVING SERIES

Five virtual lectures discussing sustainability programs and resources here at WashU St. Louis

THURSDAYS
4:30–5:15pm
Central Time

SEP 17th	Waste
SEP 24th	Food
OCT 1st	Energy
OCT 8th	Campus Tour
OCT 15th	Transportation

SAVE THE DATE!

Sustainability
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