

ENERGY & COMFORT @ WSU

JULY 6th, 2023

WSU Tenant Engagement Program Newsletter for French Administration, Lighty Student Services, Smith Center for Undergraduate Education, Johnson Tower, Todd Hall, and Todd Addition building occupants.

“HAVE YOU SPOKEN TO GREG?”

Coordinating with ITS, prior to SPS implementation, mitigates challenges during installs.

As we enter our **3rd year of SPS installations**, we have shifted our approach to engaging departmental Information Technology Services (ITS) and facilities liaisons in addition to individual staff and faculty. By initiating the conversation with these representatives, **we can address any security or procedural concerns prior to installation** and develop case-specific protocols for addressing obstacles before they come up. With their approval and coordination, we can assure you all—staff and faculty—that getting approval from WSU Facilities Liaisons, such as Greg Neunherz, ensures **our program is safe, secure, and effective** for reducing plug loads on campus.

We understand that folks aren't always able to approve the SPS installation right-off-the-bat and require additional approval. For this reason, **we explain and test our installation procedure with ITS support** to confirm that our team still uses best practices for our SPS program. This allows us to move forward with the trust and support necessary to run the program smoothly. If there are any challenges that arise, such as with Uninterrupted Power Supply (UPS) configurations, **we develop and approve solutions** to move forward with the installation. **As with any experiment, sometimes things don't always go as planned; if you experienced challenges with an install and have suggestions for how to improve our program, please let us know below!**

SMART POWER STRIPS Check-In:

Please fill out our questionnaire using the QR code so we can get you the resources you need or can stop by and grab any discontinued strips from your workstation. Your honest responses will enable us to identify areas of strength and opportunities for improvement within our study. Additionally, this will allow us to provide you with any necessary resources or assistance you may need to enhance your experience moving forward. To learn more about our study and to participate in making campus more efficient, **reach out to Zach at zach.colligan@wsu.edu**.



OUR END-OF-SEMESTER UPDATE!

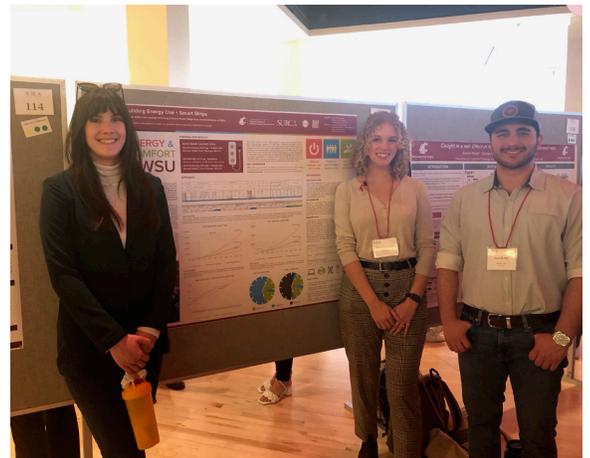
Doin' Great at the GPSA Expo!

Two of our graduate students presented the "Energy and Comfort at WSU" campaign at the GPSA Research Exposition on March 30th, 2023. **Zach** and **Anna** won the Crimson Award, first place, in the Engineering and Environmental Sciences category. The team's work has been geared towards expanding WSU's Energy and Comfort campaign, which involves the **reduction of energy consumption**, the development of a **network of advocates**, and **prioritizing the comfort and well-being of building occupants**.



Success at SURCA!

Jacob and **Sierra** two of our research assistants, presented our 'Energy and Comfort at WSU' program at the Showcase for Undergraduate Research and Creative Activities alongside 150 students. We are proud to announce that Jacob was awarded a Gray Award for his presentation, and Sierra was featured in the Daily Evergreen for hers! The two projects featured our data collection and analysis procedures which create the SPS study.



Semester of 'Growing' Engagement!

The ID+CL continued to engage staff and faculty throughout our targeted buildings. **Did you see us walking around with wildflower seeds or tomato starts?** If you missed us the first time around, feel free to **email Zach at Zach.Colligan@wsu.edu** for a packet or two of **free wildflower seeds!**



BIG THANKS TO:

Director of Technology and Facilities for CCB, **Greg Neunherz**, for your continued support of our engagement with Todd and Todd+!

BIG THANKS TO:

Hildegarde Velasco-Faga'atau, for being our contact and starting point for our most recent string of installs. Your help got us to **276 total installs!**

BIG THANKS TO:

Everyone who has given us feedback and guidance with our study so far. **Positive feedback is good, but negative feedback is necessary for the study's success!**

STEP OUTDOORS & DISCOVER THE MAGIC OF SUMMER!

Warm weather is finally here and we ask that you properly prepare for your departure.

As the sun shines brightly and the temperatures rise, it's time to put on your adventure hat and step outside to embrace the beauty of summer! Our latest newsletter is here to inspire you to explore the great outdoors, soak up the sun, and create unforgettable memories under the clear blue skies. Before you head out for that long weekend or highly anticipated annual leave, be sure to review our **Annual Leave Checklist** to ensure a safe and sustainable departure from your WSU workstation:

ANNUAL LEAVE CHECKLIST

- Be sure to remove or secure any items on your desktop that might blow off your surfaces.

These items could cause a fire if they land on heaters with exposed radiant elements.

- Completely and safely power off and unplug all electronics. This includes*:

**Note: if you remote into your computer, you should unplug all monitors and other connected equipment, but leave the computer on.*

- Surge protectors (override SPS programming with 'Manual function'; see our website for more information)
- Computer monitors
- Desktop speakers
- Personal fans
- Space heaters
- All printers/scanners
- Electric kettles
- Lamps and warmers
- Adjustable desks
- Coffee machines
- Microwaves
- Other appliances within the shared kitchenette

- Turn off all overhead lights and shut the blinds.
- At your desk, empty trash and remove any food items: things that smell, or could go bad in the time you will be away.



IMPORTANT REMINDER: If you are using a space heater during the summer months due to your space being overcooled, please call FS @ (509)-335-9000!



Communicate

Directly engaged with over 560 staff and faculty



Relate

Organized 8 in-person engagement activities



Educate

Published 13 16 newsletters



Intervene

Installed 188 271 Smart Power Strips



Disseminate

Engaged with 45 departments across 6 buildings



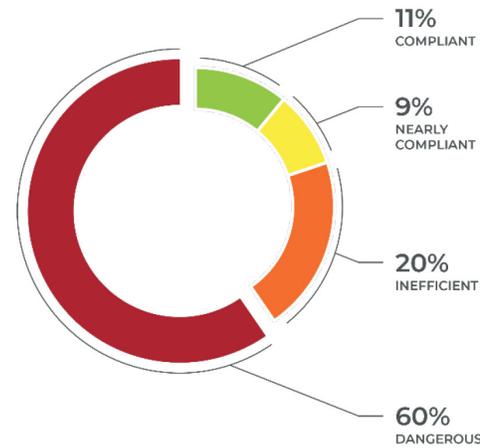
Advocate

Recruited 35 48 Energy Champions

These compiled figures represent our progress from this past fiscal year, thanks to our team of total research assistants and volunteers who help create and share our work!

Our team identified and assessed 146 space heaters across campus. The provided information is based on 260 business days of use at 4 hours or 8 hours throughout the workday. ▼

	\$\$/4hr use	\$\$/8hr use
DANGEROUS >1,200 W (avg. 1,413 W)	\$0.44 \$114/yr	\$0.88 \$228/yr
INEFFICIENT 600 to <1,200 W (avg. 961 W)	\$0.30 \$78/yr	\$0.60 \$156/yr
NEARLY COMPLIANT 200 to <600 W (avg. 348 W)	\$0.11 \$29/yr	\$0.22 \$228/yr
COMPLIANT <200 W (avg. 165 W)	\$0.05 \$13/yr	\$0.10 \$26/yr



146 space heaters were identified across our six target buildings

This data indicates the compounded energy and cost savings from the total number of SPS installed to-date. It also illustrates the projected compounded savings with each fiscal year!

	New Strips Installed	Total Strips Installed	Pre-SPS (compounded annually)						Post-SPS (AG+T) (compounded annually)						COMPOUNDED SAVINGS		
			DAILY		MONTHLY		YEARLY		DAILY		MONTHLY		YEARLY		KWH	\$	%
			kWh	\$	kWh	\$	kWh	\$	kWh	\$	kWh	\$	kWh	\$			
FY22	91	91	681.79	\$49.23	20,453.81	\$1,476.77	248,854.68	\$17,967.31	382.39	\$27.61	8,190.87	\$591.38	139,573.63	\$10,077.22	109,281.05	\$7,890.09	43.91%
FY23	180	271	1,874.43	\$202.20	76,686.81	\$7,735.18	933,022.87	\$94,111.30	1,080.89	\$84.61	31,343.52	\$3,149.33	415,200.45	\$43,961.72	517,822.42	\$50,149.58	46.71%
FY24	200	471	4,683.10	\$601.81	217,179.81	\$26,267.13	2,642,354.39	\$319,583.40	2,725.85	\$317.21	89,731.18	\$10,806.09	1,110,291.58	\$138,702.91	1,532,062.81	\$180,880.50	43.40%
FY25	200	671	8,684.41	\$1,333.90	477,712.01	\$66,538.25	5,812,162.73	\$809,548.72	5,069.30	\$744.55	198,315.62	\$27,524.09	2,402,963.49	\$341,272.73	3,409,192.47	\$468,276.00	42.16%
10 YR TOTALS		2271	83,629.89	\$35,647.68	11,176,883.59	\$3,889,463.77	135,985,417.03	\$47,321,809.26	48,962.79	\$20,828.49	4,669,489.55	\$1,623,815.15	55,631,224.56	\$19,376,285.17	80,354,192.47	\$27,945,524.09	40.95%
KWH saved:		80,354,192.47															
\$ saved:		\$27,945,524.09															
% saved:		40.95%															

