

## APPENDIX A: ENERGY BEHAVIORS

Individual responses are listed below from focus groups and interviews conducted at Fresno State between October 18 – 22, 2021. Responses listed are compiled from students, faculty, and staff, and are responses to the question, **“Please list all your energy consuming behaviors (electricity, water, gas, etc.) in a typical day.”**

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A lot of electricity on game day	Charge my phone	Computer
AC	Charge my phone & laptop	Computer
AC	Charge phone	Computer
AC	Charge phone	Computer
AC	Charge phones	Computer
AC	Charge radio all day	Computer
AC	Charger	Computer
AC	Chargers stay plugged in	Computer
AC	Charging cordless batteries	Computer
AC	Charging devices	Computer
AC	Charging devices	Computer
AC	Charging devices	Computer
AC	Charging electronics	Computer
AC	Charging equipment	Computer
AC	Charging golf cart	Computer
AC	Charging golf carts	Computer
AC	Charging golf carts	Computer
AC	Charging laptop	Computer
AC	Charging my electronics	Computer
AC	Charging phone & laptop	Computer
AC	Charging phone and laptop	Computer
AC	Charging phones	Computer
Air compressor	Charging phones, tablets	Computer
Air conditioner	Charging phones, tablets, laptops	Computer
Air purifier	Charging station	Computer
Air purifier	Coffee maker	Computer
All the lights	Coffee maker	Computer
All the lights	Coffee maker	Computer
Always computer	Coffee maker	Computer
Aquatic complex heater	Coffee maker	Computer & monitors
Automatic sliding glass door	Coffee maker	Computer & monitors
Bathroom	Coffee maker	Computer and monitors
Building lighting	Coffee maker	Computer in the lab
Calculator	Coffee maker	Computer lab
Car idling	Coffee makers	Computer usage
Charge devices	Cold units	Computers
Charge golf cart	Computer	Computers
Charge golf carts	Computer	Computers
Charge laptop	Computer	Computers

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Computers	Drives multiple hours on campus	Gas
Computers	Eat out on campus	Gas (drive to work, lunch)
Computers	Electric bookshelf (in library)	Gas (for labs)
Copier	Electric doors	Gas for car
Copier	Electric equipment at Rec center	Gas for car
Copier & printer	Electric kettle	Gas for heating
Copier & printer	Electric guitar amp	Gas for heating
Copier & printer	Electricity	Gas for small equipment
Copier & printer	Electricity	Gas in lab
Copier and printer	Electricity	Gas in work vehicles
Copier and printer	Electricity	Gas to operate equipment
Copier/printer	Electricity	Gas to power equipment and car
Desk fan	Electricity	Gas (car)
Desk fan	Electricity for tools	Get into mini fridge
Desk phone	Elevator	Golf cart
Desktop	Elevator	Golf cart
Devices	Elevator	Golf cart
Dishwasher	Elevator	Golf carts
Do laundry	Equipment	Golf carts
Do laundry	Equipment	Golf carts
Do laundry	EV parking/ charging	Golf carts
Drink bottled water	Excess water when wash items	Hand dryer
Drink water	Fan	Handicap door opener
Drink water	Fans	Heater
Drink water	Fans	Heater
Drink water	Fans	Heater/cooler turned on as needed
Drink water	Fans	Heaters, coolers
Drink water	Flush toilets	Heating cabinets
Drink water	Flushing toilet	Hot water
Drink water	Flushing toilet	Hot water
Drink water	Flushing toilets	HVAC
Drink water	Food cooler	17 mile RT commute
Drink water	Fridge	Ice machine
Drink water	Fridge	Industrial fridge all day
Drink water	Fridge	Irrigation system
Drink water	Fridge	Kettle
Drive	Fridge & freezer	Laptop
Drive golf carts	Fridge & freezer	Laptop
Drive on campus	Fridge in the breakroom	Laptop
Drive to campus	Fridge, freezer	Laptop hooked up with 2 monitors
Drive to campus to work	Fryers	Laptops
Drive to work	Gas	Laptops
Drive to work	Gas	Laptops
Drive truck all day	Gas	Laptops
Drive truck around for work	Gas	LED lights
Drive truck on site	Gas	LED lights

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Light	Lights	Personal heater
Light	Lights	Personal heater/cooler
Light	Lights	Personal office lights
Light	Lights	Phone
Light	Lights all day	Phone charger
Light	Lights in break room	Phones
Lighting	Lights in office	Phones and laptops
Lighting in office	Lights in rooms	Phones and laptops
Lighting in office	Lights in shop	Plug in phones
Lights	Lights in the buildings	Power drill
Lights	Lights in the equipment room	Power tools
Lights	Lights in the office	Practice rooms
Lights	Lights in the study rooms	Pressure washer
Lights	Lights with LED light bulbs	Printer
Lights	Lights with LED light bulbs	Printer
Lights	Lights with LED light bulbs	Printer
Lights	Main office lightings	Printer
Lights	Microscope	Printer
Lights	Microwave	Printer
Lights	Microwave	Printers
Lights	Microwave	Printers
Lights	Microwave	Processors
Lights	Microwave	Projector
Lights	Microwave	Projector
Lights	Microwave	Projector
Lights	Microwave	Pumping water
Lights	Microwave	Radio
Lights	Microwave	Radio
Lights	Microwave	Refill water bottle
Lights	Microwave	Refrigerator
Lights	Microwave and fridge	Restroom
Lights	Microwave and projector	Running sound machine
Lights	Mini fan	Saws
Lights	Mini fridge	Scanner
Lights	Mini fridge	Security camera
Lights	Mini fridge	Showering
Lights	Mini fridge	Showering
Lights	Multiple monitors	Showering
Lights	New masks	Showering
Lights	Office lighting, especially	Sink
Lights	theatre lighting	Sink
Lights	Office lights	Sink
Lights	Office lights	Sink & toilet
Lights	Office lights	Sink & toilet
Lights	Oven	Sink & toilet
Lights	Oven	Sink & toilet
Lights	Personal heater	Sink & toilet

Sink & toilet	Water cooler
Sink & toilet	Water cooler
Sink & toilet	Water for landscape
Sink(water)	Water for restroom
Sink(water)	Water in bathroom
Small fan	Water in bathroom
Small fan sometimes	Water in bathroom
Small space heater	Water in bathroom
Space heater	Water in bathroom
Space heater	Water in lab and bathroom
Steamer	Water in restroom
Swamp cooler	Water in restroom
Swamp cooler and heater	Water in restroom
Toaster	Water in restroom
Toilet	Water plants
Toilet	Water pots
Truck to work	Water pump
Turn lights on	Water receptacle
Turn on fluorescent lights are in my office	Water to clean
Turn on lights in cubicle	Water to do dishes
Turn on shop lights	Water to irrigate
Turn the lights on	Water to wash condenser coils
Turning on the faucet	Water to wash dishes
TV	Water to wash dishes
Using bathroom	Water to wash hands
Using restroom	Water to wash hands
Using water in the farm	Water usage in the bathroom
Vacuum cleaner and charges it overnight	Water washing hands
Warm up vehicle	Wi-Fi
Wash dishes	
Wash dishes	
Washer/dryer	
Washing hands	
Washing hands with hot water	
Watch TV	
Watch TV in office	
Water	
Water	
Water	
Water	
Water	
Water	
Water	
Water	
Water	

## APPENDIX B: ROOM OR OFFICE COOLING

Individual responses are listed below from focus groups and interviews conducted at Fresno State between October 18 – 22, 2021. Responses listed are compiled from students, faculty, and staff. Each row represents an individual response.

Internal Control	
Barriers to Reducing Usage	Possible Solution
I wish I knew the recommended temps, then I'd set my own HVAC	Look up online to find out recommended temps
The temperature control meter not working	Repair meters
N/A in my office. I use ac only when I need it, turn off the lights, too	
We can't really control the cooling	Talking with school/company to find way to reducing water
	Open class windows
Having a certain time	Only use when necessary
As far as I know, some rooms don't provide access to thermostat	
Always hot	Dress cooler, more cotton, open door
Windows left open	
For settings to turn it off	Temp-sensed cooling
Optimal room temp is colder than Fresno in the summer	Crack window at night
Personal comfort	
Ac in the office	Use when only in office
Thermostat doesn't work properly	Install proper system
	Close doors and only when occupied
Office in always way too cold for everyone not able to control temp	Adding control in office

I need my blinds open to utilize sunlight instead of my office light	Closing my blinds in my office earlier to prevent using the AC for too long
Have people control. People use fan in their space	
Sensor control in office	Discuss with colleagues what temp is most comfortable
Need to cool the office	
Open window	Close them
Work with a pump in office. I start the cooling as soon as I enter the room	Keep the room/hall cool all the time
Computers in the office need to stay cool	Run code/experiments in the evening
No option to control temp	Study outside. Bring a sweater?
Stuff in front of window	Move stuff to open window
Adjusting temp. To turn down when leaving at the end of the day	Having a note to remind me to turn off when leaving
No local control of the room temp	
	Don't use personal fan
Can't control own temperature	Allow for control
No real control of AC	Give control, more locally. Ability to set desired temp
It runs all the time and gets very cold	Set a thermostat to shut off at ambient temp
Need comfort	Use fan
Unable to adjust the thermostat	Individual climate control
Not able to adjust temp to weather	Give us control over thermostat
Decentralized controls will limit access	Individual control for each room
No ability to adjust temp in the office	Allow to adjust assuming system can do
Don't have access to thermostat	Have access to thermostat
Fixed controls	Individual controls
Blocked room HVAC	Fix equipment
Everyone has access to the thermostat	

Comfort defeat money	Upgrade ac
Return ducts	
Inconsistent cooling rooms	Desk fans, open window
Nothing stopping you	
	Thermostat on roof in units
We have no control	Give us some control
Manual locked thermostat	
	We have access to thermostat
Open space need temp control	Lighter clothing
Only one control for multiple offices/also no window in office so you run AC all the time	Open window
	Use slides
I can't control my office or building temp	Calling a work order
No control to thermostat	
No in room thermostat	Close doors
Set timers	Plant ops
Letting unit run while room is not being used	Set the temp high so is not wasting as much
By keeping doors closed and windows closed	Make sure all windows and door are shut
Systems that aren't user friendly	Replacing the system with something easier to use
The AC is very cold, need to run space heater	Bring extra layers to wear inside
Smaller heater under desk	
Fans don't cool as much as AC	Use fans instead of AC. Open window on moderate days
No control over AC	
	Supply fans
Too many computers in the break room	Invest in tablets to save energy
Many people in offices do not agree on temperature	
Door kept open	Tell people to close doors

Use when needed	Ask for new unit
	Communication training sensors
Running AC	Minimize set point in thermostat
Reducing AC and heating	Set temp
Too cold	Use sweater
Running thermostats constantly and probably setting it too high or low	Turn off at the end of the day. Only let it go to a certain temp
	Set thermostat
Air set at 74	Auto set temps
Turn off weekends and holidays	Turn off
I do not set thermostat	
Using AC selectively	Only turn on when absolutely needed
Others set thermostat too high or too low using too much energy	Talk about conservation
Too cool	Wear layers

External Control	
Barriers to Reducing Usage	Possible Solutions
We don't have control of AC/thermostat	Ability to set temperature to be warmer
HVAC are set by time of the year not by the temperature of the day	
Weather	Room control
The floor is sometimes too cold/hot even during weekdays when hardly anybody around	Setting automatic control differently for working hours
Some rooms don't have access to AC control	Allow all rooms to be able to access to AC
Getting in touch with company	Maybe getting the attention of the people to fix the problem
Have more tree shade	Plant more trees

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There are unit on 24/7, even on cold days (in class)	Give permission to turn off ac units
	Probably leave the thermostat within reach/accessible
Don't know how to change temp in classrooms	Call facilities
	Replace with energy efficient windows
Having and separate AC unit and heater	Heat pumps
Global warming	More sustainable solutions to fossil fuels
My roommate likes it really cold	Turn it on less; switch off periodically
I could wear less clothing to stay cooler, but worried about looking	Better blinds/privacy
Local climate, preset temps	
Contractor set with 2-degree margin	Set at appropriate temperature
Ongoing problems with the AC in buildings, so we use fan	
Not able to change temp when too cold	Adding control in office
	Individual control in the office
May be controlled centrally by campus	
Thermostats are set	
No thermostat in office	Zoned cooling to office
Centralized control of building cooling	Adopt environmental architecture principles
	Reduce the timer for the pump
Quality of insulation/unable to open office windows	Create offices with openable windows
No option to control temp	
No off switch. Window doesn't open	Fresno state installs windows that open
System in building subpar	Update building systems
Poor facilities and poor turnaround take on request	
Offices are colder than outside temp	Don't blast AC when it is not needed
Can't control own temperature	

No real control of AC	Give control, more locally. Ability to set desired temp
It runs all the time and gets very cold	Set a thermostat to shut off at ambient temp
No thermostat	In-room thermostat
No dedicated individual control	Office control
Super old building	Double windows & insulation
Gas operated systems instead of electric	Update system to current century
Placement of a thermostat and who controls it	Have the ability to cool/heat individual room
No individual office control of temp (in most offices and buildings)	Individual office HVAC controls, some will prefer cold, some prefer warmer.
Old buildings	Remodel insulation
I don't have control	Put a thermostat in the office
	Change culture
	Jump ducts for closed doors
Inconsistent cooling in buildings	Better/thermostats in office
Reduced temp controls	Make temp controls where only one person could use
Sensor detects movement even for one person and start cool heating the room	Switch the sensor
Automated AC number programmed	Being able to adjust individual room
Auto	
	Need functional AC in buildings
We can't control temp, doesn't distribute evenly	Fix ac unit and control
The work order doesn't always fix the problem	Calling someone else
No thermostat	Install thermostat
Reminder team to turn off when not using	Teamwork
Those who leave cooling unit running when not in office	Turn it off myself

I find that some if the classrooms are too cold, I can't adjust the temperature because there's no control	Individual room AC system
Most times can't adjust	
The building needs to be cooled due to equipment	
	Automatic off/on sensor
I can't control this, our maintenance team does	
No control to AC unit	No solution. We cannot please everyone
Old buildings	Remodel the building, make it energy efficient
Use newer more efficient unit	Proper service every year
AC control	Timer to reduce temp
Too hot during the summer	None
Thermostat location	
Not everyone is comfortable with set temps	Set temp range
Bad vents in the building	
Leaky building. Poor insulation. Old equipment	
Personnel	Set at 76 for cooler, open door windows
Open doors/ windows in office throughout campus when no one is in rooms	Turn off AC
Auto set AC	Only we have keys
Last person in the office forgets to turn off	Set up a system to remind
	Smart thermostat
Old building. Poor insulation	New buildings
Others keeping the AC low	Ask others to reduce use when not needed
Standardize temperature assess air duct/flow	Large spaces and small spaces share one air flow unit
Cost. Climate (maybe)	More efficient HVAC system
AC is on a timer or program controlled elsewhere	Report issue as a WO

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Not knowing who sets temp. Too easy of access to thermostat	Pre-programmed thermostat
Auto controlled	Change HVAC programs
	Educate users
Building too hot or too cold	Wear layers

## APPENDIX C: ROOM OR OFFICE HEATING

Individual responses are listed below from focus groups and interviews conducted at Fresno State between October 18 – 22, 2021. Responses listed are compiled from students, faculty, and staff. Each row represents an individual response.

Internal Control	
Barriers to Reducing Usage	Possible Solution
Need extra heat and space heater	Extra sweater, wool socks, warmer shoes
I wish I knew the recommended temps, then I'd set my own HVAC	Look up online to find out recommended temps
The temperature control meter not working	Repair meters
Having insulated classrooms	Wear a sweater making sure windows are closed
Only turning on when being in the room	Using it when necessary
	Wear layer/ wear sweaters
	Bring jacket, bring sweater
Windows left open	
For settings to turn it off	Temp-sensed cooling
Optional room temp is hotter than Fresno weather	Larger up indoors. More blankets, wear layers
I'm basically a brick of ice	Wear a lot of layers and blankets
Leaves the heaters on often	Wear jackets & blanket
Personal comfort	

Small individual heater	Turn off and unplug when not in use
Thermostat doesn't work properly	Install proper system
People use their own items which is not really allowed	Better windows to block heat
Need to heat the office	
Open window	Close them
A/c pump also work for heating and I do the same during the cold weather	Keep the room/hall warm during the cold weather
Computers in the office need to stay cool	In the winter, run experiments on computer instead of turning on heater
Brining tons of clothing layers to stay warm. Too much stuff	Have jacket in office. I don't have to carry
Adjusting temp. To turn down when leaving at the end of the day	Having a note to remind me to turn off when leaving
	Portable heaters
	Don't use personal heater
Can't control own temperature	Allow for control
No real control of ac	Give control, more locally. Ability to set desired temp
They just turned on the heat in my building all the time	Set a thermostat to shut off at ambient temp
Need comfort	Wear more clothes. Use space heater
Unable to adjust the thermostat	Individual climate control
Not able to adjust temp to weather	Give us control over thermostat

Decentralized controls will limit access	Individual control for each room
No ability to adjust temp in the office	Allow to adjust assuming system can do
Don't have access to thermostat	Have access to thermostat
Fixed controls	Individual controls
Everyone has access to the thermostat	
Comfort defeat money	Upgrade AC
Inconsistent heating in rooms	Floor heaters
	Thermostat on roof in units
We have no control	Give us some control
	We have access to thermostat
Open space need temp control	More blankets and layer
No AC units in North Gym	
	Keep doors to outside shut
I can't control my office or building temp/ space heater in office	Calling a work order
No control to thermostat	
Space heater	Turn off
Units will be left running with no heat	Turn off myself
	Replacing the system with something easier to use
Too much clothing	Wear jackets/warm clothes

I am always cold	Blankets. Extra jackets. Layers
Same rooms are really not compared to others, I have no control	Allow Deans to adjust
Many people in offices do not agree on temperature	
Door kept open	Tell people to close doors
Wear warmer clothes	Work coats
	Communication training sensors
Heating room at higher temp	Minimize set point in thermostat
	Shut off
Reducing AC and heating	
Too hot	Use personal fan
Running thermostats constantly and probably setting it too high or low	Turn off at the end of the day. Only let it go to a certain temp
	Set thermostat
Auto heating	That can't be moved
Not dressed for office temp	Plan for temp
Turn off weekends and holidays	Turn off
Space heater	Do not use space heater
Using AC selectively	Only turn on when absolutely needed



Others set thermostat too high or too low using too much energy	Talk about conservation
Always too cold	Wear layers

External Control	
Barriers to Reducing Usage	Possible Solutions
No control of office temp	Ceasing AC usage when weather is cooler
	HVAC are set by time of the year not by the temperature of the day
Weather	Room control
As I work in the Tech building, classrooms and floors are over-heated/cooled	More working thermostat could be set at various areas
Having it on 24/7	Giving permission to turn off. It gets too hot for students
Don't know how to change temp in classrooms	Call facilities
Old windows	Replace with energy efficient windows
Having and separate AC unit and heater	Heat pumps
The heater in my room is broken so I leave the one in the other room to diffuse heat	Fix the heater
Local temps	
Contractor set with 2-degree margin	Set at appropriate temperature
Not able to change temp when too hot	Adding control in office

	Individual control in the office
Thermostats are set	
No thermostat in office	Zoned cooling to office
Centralized control of building heating	Adopt environmental architecture principles. Rooftop gardens that turn buildings into living structures
	Reduce the pump timer
Quality of the insulation	Better insulation
System in building subpar	Update building systems
Offices are colder than outside temp	
Can't control own temperature	
No real control of AC. This is a major problem in the old music buildings. Often rooms are too cold or hot. No local control	Give control, more locally. Ability to set desired temp
The HVAC is by the University, we have no control in the building. If they could install a thermostat, we could shut it off when needed	
No thermostat	In-room thermostat
No dedicated individual control	Office control
Super old building	Double windows & insulation
Gas operated systems instead of electric	Update system to current century
Placement of a thermostat and who controls it	Have the ability to cool/heat individual room

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No individual office control of temp (in most offices and buildings)	Individual office HVAC controls, some will prefer cold, some prefer warmer.
Old buildings	Remodel insulation
I don't have control	Put a thermostat in the office
	Change culture
	Jump ducts for closed doors
Reduced temp controls	Make temp controls where only one person could use
	Switch sensor
Auto	
	More windows needed
We can't control temp, doesn't distribute evenly	Fix AC unit and control
The work order doesn't always fix the problem	Calling someone else
Rooms too hot	
Units will be left running with no heat	
I find that some if the classrooms are too cold, I can't adjust the temperature because there's no control	
	Automatic off/on sensor
I can't control this, our maintenance team does	
Frequent doors opening	
Old buildings	Remodel the building, make it energy efficient

Use newer unit	Proper service every year
Mother nature	Keep all door closed
Thermostat location	
Bad vents in the building	
Leaky building. Poor insulation. Old equipment	
Personnel	Set heater at 68. Open the door and windows when no heat
Open doors/ windows in office throughout campus when no one is in rooms	Hold accountability
Auto set AC	Only we have keys
Last person in the office forgets to turn off	
	Smart thermostat
Old building. Poor insulation	New buildings
	Change windows, possible insulation
Cost. Climate (maybe)	More efficient HVAC system
AC is on a timer or program controlled elsewhere	Report issue as a WO
Not knowing who sets temp. Too easy of access to thermostat	Pre-programmed thermostat
Auto controlled	Change HVAC programs
	Educate users
Building too hot or too cold	Wear layers

## APPENDIX D: LIGHTING

Individual responses are listed below from focus groups and interviews conducted at Fresno State between October 18 – 22, 2021. Responses listed are compiled from students, faculty, and staff. Each row represents an individual response.

Internal control	
Barriers to Reducing Usage	Possible Solution
Prefer non-fluorescent light	Stop using multiple desk lams, replace bulbs w/LED
In its best way auto turn-off	The auto-off system works well
Lights get left on when people aren't using them	Maybe getting automatic lights to them and reduce usage
Don't turn all the lights on	
Having sensors to know when to be on/off	Turning it on when necessary
The lights on 24/7	Turn switch off
Some lights get left on, even often when people have left	Making sure someone turn them off before the is done.
Absent minded	Leave lights off in the office and classrooms. Notes/reminders
Lights are left on	Reminder in room
My LED lights are so cool	Not being cool anymore. Having on only at night
Lights on in rooms, no one using	Turn off lights
Switch is connected to more than one room	Install individual switches

Lightings automatic in office	We need lights
I turn off the lights when I leave the office/class but	It is possible to forget turning it off
Forgetting to turn off the light	Increase awareness of the potential saving of turning off lights
Stuff in front of window	Ask to move stuff to get better lighting
Sometimes I forget to turn off practice room lights in the music department	Putting signs on the doors of all music practice room doors
Poor inefficient bulbs	LED lights
	Turn off when leaving the room
Forget turn off	Motion sensor lights
Switches left on all day	Motion sensor lights
The lights turn on and off	Change bulbs
Forget to turn off lights	Auto turn off. Reminder sticker
Lights left on in office	Timer and motion sensor
Old lights in our building that are not energy efficient	Improve lighting/ motion sensor lights in the hallway
Leaves lights on when leaving office	Lights that turn off automatically that work
Fix light intensity	Dimmer switches auto on/off
Don't turn off	Motion sensors and timers
	I don't use the overhead lights
	Keep lights off on rooms being unused. Sensors

	Motion detection
Left on in rooms where no one is sitting or working	Dimmer switch
Turn off manual switches	
Turn off lights when leaving rooms	
	To have control of lights
Having extra lamp	
Need good lighting	
Can put more timers on light switches	
Flip the switch when I leave	Flip other switches as I needed
Forgetting to turn off lights when leaving a room	Have them set to motion sensor
Turn off lights in empty rooms	
Turn lights off	Turn lights off more regularly
	Motion sensors
Lights left on when not in use	Turn off lights switch
Set timers and turn off	When not in use please turn off lights
More sensor request for farm area	Put work order in
	By opening the blinds for more light
Not turning off lights	
Forget to flip the switch. Wattage on the light bulb	
Use the same light switch	Different sectioning of light/use outdoor lighting

Light switches	Put timer on all lighting
Lights kept on	Put motion sensor lights
Remember to turn off lights	use natural light
The lights outside of the grounds department remain on until someone shut it off	Add a sensor so it can turn on and off automatically
	Automation LED
Leaving lights on all the time	Use smart switches
Turn off when leave room	Sign
Lights on when not in use	Timers on lights or sensors
Leave lights on when not in use	Turn off when leaving. Add motion sensor
Keeping lights on all night	Turn off before leaving
	Auto lighting/LED
Took out 1/2 of bulbs in shop	Use LED
Lights left on	Turn off when out of room
	Turn off lights
Leaving without turning off	Sensor
	Turn lights off when not needed repair
Don't turn lights off when I leave a room	Sticker on switch to remind
Other people use the space and leave lights on	Talk about conservation with other group
	Turn off lights
Leaving the lights on	Turn off

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External control	
Barriers to reducing usage	Possible solutions
Funding for energy efficient theatre lights. Job requirement to use theatre lighting.	Replace old lights w/ LED instruments
Lightings in the hallway is on, motion sensor doesn't work	Put in a plant op request to fix lighting
	Solar paneled lights
Lights being left on	If bright enough, open the blinds, use natural lights
	Installing motion detection lights so they can automatically turn off after the day
Others leaves lights on	Leave sticky reminding others to turn off lights
	Motion detector
Lights always be on in the bathroom/other room	Motion sensor lightings
Light switches are no accessible	
Lights on 24/7	Having lights on a timer or at least off when all staff is gone on holiday breaks
Many lights used in the food court area	Maybe more efficient lightings, so we use less energy
	Maintaining sensors that turns lights off
	Sensors for lighting

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Lights are automatic	
Lights left on in the classroom after hours	Having campus police turn off all lights as they lock rooms and buildings
Most classes or bathrooms have a time for switching off. I think that works great	
	Have lights in certain rooms (bathroom) work on a timer
Could adjust in response to ambient light from window	Ambient dimmer switch
No solar lighting	Fresno State designs building to capture natural lights
Lights do not turn off automatically	Automatically light switches
Flood lights staying on after marching rehearsal	Asking utilities for a key to turn them off if they don't already
Lights in spaces take time to turn on, so people had to leave them on	
Too many lights left on in buildings overnight	Reduction
We have to order new bulbs	They could check regularly for outage
Nowhere to find light switches in hallway	Auto shut off
High wall switches	
Lights get turned on all the time	Automatic/motion-controlled switches
	Running sprinkler at night reduce evaporation
Replace with LED	

	Add sensors. Reminders via email to ask others to be mindful about turning lights off
	Change culture
More windows	Windows dimmable
Out of control. Janitors shut off when staff leave the room	
Turn lights off when leaving rooms	Sensor lights control
People in library sits every corner and does not occupy open sits	Switch sensor
Auto	Switches
	Need LED lights
Lights in north gym are always on	Have them update to just switch on and off
Students leave lights on	Reminding students
Lights can't be turned off	And lights sensors
Ask to create a work order	Follow rules if asked
	All lights should have a sensor
Lights left on when no one is in office	Leave a note for a reminder
Some rooms don't have switches	
Gets dark earlier, need to use more lights	
Turn off of not in use. Use lesser wattage light bulbs	Automatic off/on sensor
I can't control this, our maintenance team does	

Sensor lights	
Use LED lights	More sensors lights
By the time someone gets here to turn it off, it's too late	
Dark when active	None
Not always here	Timer
Not checking all the rooms at the end of the evening	Having timer lights
Inefficient lighting	LED lights
Lights left on and no one in the room	Turn off light switch
New LED lights	Auto/time
Lights left on	Motion + LED
Sensors	
People forget to turn off lights	Turn off lights/ lighting sensor
	Auto timer
Cost	Install auto/timer shut off. Window day lighting
Lights are on a timer kept on always	Report issue as a WO
Light switches are accessible to all	Automatic sensors
Library lights auto controlled	Change program, work in areas to allow for others to shut off
	Educate users

## APPENDIX E: WATER USAGE

Individual responses are listed below from focus groups and interviews conducted at Fresno State between October 18 - 22, 2021. Responses listed are compiled from students, faculty, and staff. Each row represents an individual response.

Internal Control	
Barriers to Reducing Usage	Possible Solution
Not applicable / may apply to labs	Install faucets to turn off water automatically
Watering plants is important to keep them alive	We can water things at night so we don't waste a lot
Only turn on the faucet when I'm ready to wash my hands	
Having a limit in which will turn off when it's reached	Using water wisely. Having sensors
The sinks that have push downs	Sinks with motion detectors
	Turn off water while using soap/ washing hands
Forgetting to bring my own water	Bring water from home
Leaving dishwasher and sink on and forgetting about them	Have a designated timer to remind to turn off
Broken sprinklers	
Bathroom sink knobs that do not work properly	Replace sink knobs with better quality
Wash hands/ use bathroom	
Not all bathroom water fixtures have sensors. People sometimes forget to turn off the water.	Put sensors to all the water fixtures.

	Install auto sinks in all bathrooms
Leaving sink water running while looking for soap	Never leave a sink without turning the water off
Toilet usage + hot water	On-demand water heaters
No hot water in music building	
The faucet is automatic, but I need to push it several times in order to get enough water.	Extend the length of time
Wash hands. Rinse too long	Auto shut off
Faucet left dripping	Turn off water after use
Not a huge problem in our building except when toilet runs continuously	
Existing infrastructure	Update infrastructure
Improve water equipment to monitor water waste	
We need people from the ground dept. to fix broken sprinkler	Adjust schedules to fix sprinklers
	Be aware of my usage
Hygiene	Don't run as long
Over watering the lawns	Have a drought friendly landscape so we don't use so much water to keep stuff new
	Report issues
Sprinklers running excessively	Calling a work order
	Report broken sprinklers
Bathrooms should have sensors for water faucets	Turn water off myself

Faucets and toilet	
Not wanting to touch the on/off knob after use	Use when you need to wash hands
None	Use bucket to catch water while warming up to water plants
We need more drought tolerant plants to save on water	
Hot summer days demand more water to landscape	
Water kept on in bathrooms. Too many sprinklers	Auto faucets in the bathrooms
Faucets leaking	Report, make work order
Wasting water washing concrete	Sweep concrete
Many others use same faucets	
Sprinklers malfunctioning	Replace areas with drip or dry/ landscape
Leave water on when washing hands	Add automatic faucets
Running water when not in use	
Forget to turn off lights	
Leave hose on while washing truck	Spray nozzle
Over run water when washing	Do not waste
Leave faucets on while soaping hands	Soap after you turn off faucet
	Wash hands faster

External Control	
Barriers to Reducing Usage	Possible Solutions
The flower were over-irrigated. some sprinklers wastewater on walkways	Close sprinklers
Dripping faucet/ running toilets	Call facilities
Only having 1 flush option in bathroom	Have a halt and full flush option
Quality of shower heads/ gallons per flush in toilet	
Leaving sinks on in the bathroom	Reminder to turn sink off where the paper towels are
	Call plant ops to take a look
Knobs used to be done by third party	New sinks
Small dishwasher. Many dishes, so we use a lot of water each cycle	A bigger dishwasher? Keeping up with plumbing issues in heavily populated areas
Regular faucets in bathroom	Automatic faucets in bathroom
	Recycle water at campus lead
Watering lawns. Intensive plantings	Xeriscape the campus
Watering trees	
Watering lawns. Reduced flow toilets	Less lawn watering
Sprinklers run inefficiently on campus	Update sprinkler system
FS watering system= out of my control	Bring attention to staff/admin to see what they can do/ take notes of where water waste it
Poor response rate by facilities	Change to low-flow toilets

*Information on this page is proprietary and subject to confidentiality restrictions.*



Sprinklers	Landscape with drought tolerant plants
Reduce the numbers of time I have to turn it on	
Running toilet	
Old lines and faucets	Water saving faucets
Leaving sprinklers run long time/ broken line	Perhaps pictures taken via drone to help monitor parts of campus wasting water outside
Love all the grass but huge water waste	More zero-scape areas (maybe 10-15% of existing turf?)
Need to grow plants	Better control
Leaky sprinklers	Repair pipes
Out of control	
Timer	
Turn off water when not in use. Take shorter shower	
Sprinklers need more length of watering	I don't know, I can submit a work order but no sure how long it takes
Toilet flush waste unnecessary	
Some faucets have timer	Use handle
Lots of fields to keep new on campus	
Hard to fix	Put sprinklers on timers
Over watering constantly. See water in the gutter	
Make sure all the water is turned off	

No control over the sprinklers	Less watering small sprinkler angle
	Automatic off/on sensor
I can't control this, our maintenance team does	

## APPENDIX F: COMPUTERS – ELECTRONICS

Individual responses are listed below from focus groups and interviews conducted at Fresno State between October 18 – 22, 2021. Responses listed are compiled from students, faculty, and staff. Each row represents an individual response.

Internal Control	
Barriers to Reducing Usage	Possible Solution
I leave my two monitors on 24/7	Turn off at end of the day
Basic need for working	Energy saving computers and monitors
Computers are constantly being used	
Maybe having a limit of using electricity	Only using when necessary
Plugged in wall 24/7 (teacher devices)	Unplug it once a while
	Ensure devices are charged enough to last the whole day
Most electronics need charging	Unplug when when/fully charge at home
Entertainment is online	Read a book or go outside
Necessary for school/entertainment	
Computer in office	Turn off after use
	Only use when is needed
Need to use at work	Have efficient computers
Monitors remain on too long	Reset power saving in computer
Phone and laptop need to be charged twice a day	Get a better phone and laptop

All office/classroom appliances/electronics left on overnight, not in use	Reminders to unplug or turn off
Forgot to turn off shared computer	Sign/note to help individuals remember
Leaving devices plugged in all night	Charging them during the day & night longer than needed
Kept on in the classroom	Reminding faculty to turn off
More control on electronics	Auto shut off features
	Turn off when not in use
	Increase or decrease Zoom
Local control is good. No real problem since most everyone has laptops	
I have extra monitors and equipment	Call to have them removed
Forget to turn off	Reminder. Auto sleep
Devices left on	Turn off or place in sleep mode
Daily usage	Power-save options
Cannot turn off anything	
Total reliance on computers for everything from email to Zoom meetings beyond	
Turn off/sleep mode	
I need to use two computers	Turn off when not in use
Small monitors	Single large monitor
Multiple computers on all the time	

Need to work	Only use when need it
Older equipment draws more	Invest in newer equipment
Leaving stuff on because sometimes it takes longer to turn on	Update computers
	Shut off sleep mode for computer
Students leaves computers on	Reminding students to turn computers off
Turn off when not using	Always off mode
	Turning them off
Need to charge phone and laptops for class	Knowledge about best time to charge device
Need it to be up and running when returning to desk	Turn off when not in use
Long hours of needed usage	Turning off when ending shift for day
Consistently on electronics	Use timers for all lights
Too many computers need to reduce them	We need to invest in tablets to save energy
Remains on	Turn off when not in use
Computer left on	
Electronic devices remain on during off working hours	Advice everyone to turn them off after done using it
	Incorporate habit post-it notes
Not supposed to turn off	Timer for shut off
Computers left on scanners	Turn off when not in use
Forget to turn off small electronic when I leave	Some kind of closing routine to make sure everything is shut off

Can not/should not turn off your computer because of updates that get installed after hours.	
Left on	Turn off
	Turn off when away for many hour
Sleep instead of off	Turn off at the end of the day

External Control	
Barriers to Reducing Usage	Possible Solutions
Items stay plugged in	Quick chargers
Online class	In-person class lmao
World runs on internet	End COVID
My computer doesn't live without being plugged	Buy new computer
Reminders to shut down computers	
Students recharging devices. Computer lab computers left on	
Computers in the computer lab are always on	Put a sensor to switch off the screen
	Auto switches in buildings
More in-person meeting	
I have extra monitors and equipment	The University can pick up old and outdated equipment
Lab computers on all the time	

*Information on this page is proprietary and subject to confidentiality restrictions.*

Others do not turn off	
Out of control	
Unplug electronics at night	
IT tech has admin. Control of computers	Have computers go to sleep mode on
	Don't leave it on sleep mode
Size of scope	
Students are/can be lazy	Leave a sign/reminder
Maybe set a timer	Plant ops
Desktops should be on timers or sensor unit	
	Automatic off/on sensor
Other using	
Device left on all time	Turn off manually
Left on	Motion detects. Auto turn off
Leaving computers on	Turn them off more
Turn off monitors for the weekend	
	Need efficient devices
	Educate users

## APPENDIX G: APPLIANCES

Individual responses are listed below from focus groups and interviews conducted at Fresno State between October 18 – 22, 2021. Responses listed are compiled from students, faculty, and staff. Each row represents an individual response.

Internal Control	
Barriers to Reducing Usage	Possible Solution
Heating and cooling temper not adjustable	Allow adjustment and auto-shutoff
Some appliances stay plugged in for accessibility	Making sure to turn off or unplug these things at the end of the day.
Needing to keep grocery cold	
Need for constant refrigeration	
Coffee brewers. Using freezer, fridge's doors open	Turning off certain things while we are closed
Mixer, heating cabinets, dish washer	Turn off after use
	Only use when is needed
Unplug useless things	
Old mini fridge in office. More energy efficient models available	Buy a new one = don't want to spend money on a new fridge when old is still works
Not an issue in music	
The refrigeration ran for 18 months and no one was in the office during COVID	
Keep food cool. Coffee heater on all the time. Personal use	Set level appropriately. Control appliances



Appliances left on	Turn off appliances
Too many supplemental appliances. Heating and cooling	
	Controlled environment
Cannot turn off anything	
	Minimal use of microwave, coffee maker in office
Need to work	Comfort
Fridge, microwave, coffee pots, hot pots	
	Replace old appliances!
	Buy energy efficient appliances
	Turn off appliances
Leave fridge door open while I am sorting through things	Close it every time not in use

External Control	
Barriers to Reducing Usage	Possible Solutions
Microwaves aren't too good, so have to run them longer	Better appliances
Many fridges/freezers in kitchen. However, much more difficult for staff	Use large warehouse freezer
The University can check offices during quarantine and unplug unnecessary equipment	
Old refrigerator	
	Dept. purchase energy efficient appliances
Only turn on when using	
More sensor units for appliances.	
The microwave and fridge in the break room are used by a high volume of people	
Not having energy efficient appliances	
Fridge and microwave that are old	Replace with newer ones
Unplug when not in use	
Fridge door being left open	Notes/signs to remind
	Educate users

# APPENDIX H: RECYCLING OPEN-ENDED

Responses are listed below from the web-based survey administered at Fresno State from November 17th, 2021 to December 7th, 2021. Respondents provided open-ended comments to "Tell us anything else about recycling." Responses listed are compiled from faculty, staff, and students. Each row represents an individual response.

Tell Us Anything Else About Recycling – Faculty/Staff.
I am aware that bins in offices are mostly recyclable material so there is no need to sort them. But I also am aware that people are confused about this and I think signage would help.
I was under the understanding that Fresno State goes through trash to pull out recycling. I would love to know if that is accurate. I have heard people say they do not need to separate it because it will be anyway. Myth or Fact?
I am grateful for the availability of so many recycling bins. I do wish that everyone would take care not to throw garbage in these bins, though.
Placing additional recycle bins across campus and in offices would be helpful. We have a bin to recycle paper only in our office.
There is a LOT of misinformation about recycling and trash on campus. We've been told many times that on campus the trash gets sorted for recycling anyway, but also told that campus recycling is practically useless in effect. I try to always do the right thing and put things where I believe they should go, but there is no strong messaging from Administration as to what to do, when, and what kinds of things can be recycled. It's very confusing and frustrating
We simply DO NOT have a recycling program at Fresno State. This is unbelievable to me. I wasn't even able to answer the questions above accurately because, how are we recycling as a campus? We're not. In my office, there's a waste bin. Same with all classrooms in which I teach. Recycle bins are few and far between. There is a massive amount of improvement needed in this regard.
Recycling is not an easy process. I have old equipment I'm supposed to fill out a form for and I don't know how to fill out. If I took it to the dump, they just let me drop it off. On top of everything else in my particular job I'm expected to learn this. You want everyone to do their part and most of us would be happy to if we weren't already over worked, under paid and stressed out. Make these processes as easy as us as possible and remove unnecessary paperwork. Another form not being there wouldn't kill anyone.

<p>Trash and recycling disposal should have signage of the proper way to dispose of trash. More than often, trash is placed in recycling bins. Fresno State needs to post signs at each trash and recycling bin to educate the public as to the proper items to go in the bins.</p>
<p>I have people to this day that ask about recycling when we use to have a recycling center on campus. We need to bring it back.</p>
<p>would love to see more recycling options at football games and other large events</p>
<p>Garbage is being disposed into the recycling bins. Recycling is being disposed in garbage</p>
<p>Having someone designated to pick up recycling separately would bring awareness to the fact that it is in fact being recycled. When the same person picks up trash and recycling and it seems to go in the same bin, it's hard to say that it is in fact being recycled.</p>
<p>My office has no recycle bin</p>
<p>Outside it is clear what is a recycle bin and what is trash, Inside I get asked all the time why we don't have recycle bins. I have been told but do not know for fact that FSU sorts trash from inside the buildings. I tend to think they do not. If they do they are contaminating all recyclables but put food in the same cans.</p>
<p>I often see people around campus not properly disposing of recycling.</p>
<p>Our communication around recycling on campus needs improvement. We've gotten somewhat better, but when the blue containers first arrived, there was no PR around it, they didn't include the symbol, etc. A couple years ago I had students do a group project where they researched the recycling programs on other California campuses, and the consistent theme was that Fresno State was behind. That sort of project would be useful at a more official level, i.e., finding out what others implement, and how we could follow suit.</p>
<p>Facilitate awareness and sense of personal responsibility through education and marketing campaign- announcements before events or more prominent placement of links to sustainable education resources and basic information on web pages. Splash screen at beginning of online streaming videos and other apps managed and supported by fresno state, etc.</p>
<p>Do we have a way to recycle our printer cartridges?</p>
<p>Perhaps a little plaque on top of the recycle bin with a picture of the "yes" items and a black line through items that should not be placed in that bin.</p>

<p>Prohibit one side printing except under rare occasions. Sign on top of all xerox machines asking to please avoid one-sided printing at all costs.</p>
<p>I do not print anything and have students submit all work electronically. Our waste bins are often overflowing. I usually just recycle anything I bring to campus at home.</p>
<p>In the office buildings employees are confused about the recycling. When everything is in the same bin, it is assumed it is not sorted. What about batteries? We are not told what to do with them.</p>
<p>If we aren't already, we need to be recycling gray water from our restroom facilities to either irrigate the campus farm or water the grounds of the campus. We need to move away from having vending machines on campus, as the packaging for most snacks is not recyclable, and most plastic bottles are not actually recycled, but end up in landfills. We need to be taking our recyclables and making use of them on campus, rather than diverting them to a recycling center - a service Fresno State pays for, but would not be needed if we looked at innovative ways of using our recyclables for the benefit of Fresno State and the broader community.</p>
<p>I would like to see the recycling bins brought back at Barstow and Maple.</p>
<p>How come there is no longer a recycling center on Barstow Avenue, west of the creamery? There used to be one there.</p>
<p>Your question "I recycle at Fresno State" is misleading. Fresno State had no explicit recycle bins for about a decade - supposedly, sorting by the waste hauler. I recycled some materials by taking them home to recycle. "Appropriate bins"?? What bins?? Also, what about green waste and composting?? I used to see a lot of green waste in dumpsters ~5 years ago (not paying attention recently), and as far as I can tell, there is no composting of food waste.</p>
<p>I indicated above that I've seen custodial staff properly process the recycling bins about half the time -- the reality is that I don't know that I've ever specifically noticed the custodial staff emptying a recycling bin and paid attention to where they were emptying it. As far as understanding which items can and can't be recycled, I think I know, but I would appreciate a reminder, a chart perhaps. Also, I would like to know where Fresno State's plastics go -- are they actually being recycled or are they headed for a landfill or the open ocean since China will no longer accept most US plastics?</p>
<p>I see custodial services emptying trash cans and recycling bins into the same container. Years ago I was told our garbage contractor sorted out recyclables (not sure if this is still accurate). Also, I see garbage bags replaced even when there's very little non-wet trash. The number of garbage receptacles can be reduced with strategic placement. I would love to see if Fresno State could do a big push to promote recycling. I'm not a huge environmentalist but campus does have a large footprint and everyone doing a little bit can make a big difference. Keep us informed on what we can do to help, so those of us that want to help can do our part.</p>

I wish that classrooms had both a recycling bin and a regular trash bin (or is that what you mean by "I see custodial staff properly process the recycling bins." Are they sorting the trash afterwards?
Recycling is a very good and necessary thing to do. Most plastics are not recyclable yet gazillions of plastic products are manufactured and sold daily throughout world.
Faculty members do not have recycle cans and they are none located in the hallways near our offices; only trash cans. Most faculty just put the trash and recyclables in the trash can; we can walk to find one, but frankly, most of us are lazy to do that. This is a big problem for a university that we are supposed to set the standard for environmental friendliness environment.
I think trash and recycling should be collected everyday
It's essentially irrelevant. Redirect wasteful edubureaucratic spending (advising, Office of Institutional Effectiveness, outside consultants, outcomes assessment, half the VP's and their staffs, silly "be bold" and leadership initiatives, etc. etc.) to solar and energy efficiency. With the money saved hire tenure track faculty and add classes so students can graduate on time.
Not every classroom or conference room has both types of trash bins, which requires students, staff and the public to hold on to their trash until they find the recycling bin. This leads people to put recyclables in the trash can out of convenience.
We don't have an ink recycling area, that I know of. Also, there are garbage bins everywhere, but recycling bins are not as available.
More education and reminders are needed for everyone (students, staff & faculty). So much paper is discarded! (Printed docs and materials)
The current recycling policy at Fresno State is confusing. It has changed many times over the years; I am not sure where we are at now. First, we were told to put cardboard boxes, etc. into the hallways to be picked up for recycling (by custodial I believe). Then, recycle bins popped up everywhere and it was very convenient. Then, the recycling bins all disappeared, and we were told to put everything into our office trashcans and that custodial would separate it. Now, I occasionally see recycling bins. I have no idea what the policy/plan is now. I either put my recycling into the trash or take it home with me, neither of which seems right.
I make sure my entire area is aware of recycling practices. I even use leftover K cups open them and use excess coffee grinds for my plants
I like the color coding for the receptacles.

<p>Recycling does not impact climate change as much as corporate and bigscale abuse. Focusing on individual responsibility is a distraction.</p>
<p>Education and creating a norm of recycling at Fresno State is needed. More recycling bins are needed. I often have a hard time finding bins to recycle paper or water bottles while walking on campus.</p>
<p>I think everyone is confused about what can and cannot be recycled sometimes, but why aren't food products, etc... sold in more sustainable packaging? TOO MUCH PLASTIC! Why can't my sandwich be wrapped in butcher paper? Why can't my Panda Express be served in compostable packaging?</p>
<p>We need a more aggressive campaign or advocacy group</p>
<p>Have the number of papers printed by each staff/professor published to reduce printing. This reduced the printing year or year.</p>
<p>There have been many instances that we ask a maintenance person why do they mix the recycled paper with the trash and they say that at the end of the day, everything is placed in the same place. This defeats the purpose of recycling at any workplace. It used to be, that a company came and picked up the recycle bottles, but then they stopped. Now even the recycled paper gets mixed with trash, why???</p>
<p>I'm quite confused what to put in recycling bin. On the bin there should be signs or text indicating the types of things to be put in. Right now, I'm only putting the bottles and cans in the recycling bin because I'm not sure if papers and plastic wraps are accepted there.</p>
<p>we couldn't state anything for energy use but can put something here. So in regards to energy use, we can't use any kind of efficient space heater due to the breakers. We have tried in our offices and it has shut of the power and we have been told that none of those types of plug-in heaters or coolers are allowed on campus. I can't turn off computers printers or lights because people are in the offices using them when I usually leave.</p>
<p>Large areas where students often congregate, like the library, do not have enough public recycling bins. Also, my graduate university offered trash, recycling, and compost bins. It would be neat if we also had compost/green/food waste bins. I've heard the City of Fresno is doing some pilot programs around this: it would be neat to partner.</p>
<p>I was told we don't need to separate out recycling because the trash is sorted. Is that true? Doesn't seem likely.</p>
<p>List of recyclable items for department bins is not clearly specified. Each bin should be accompanied by a list of typical items, including a list of items that should not go in the bin.</p>

I hear different messages about how Fresno State recycles items and I'm not sure what really happens with items placed in the blue recycling bins. I also am not 100% sure about what does get recycled and what does not get recycled, and frankly, what is recyclable. I have not observed how items are separated, so while I am sure that the custodial staff properly process recycling bins, I don't know how to best support what they do by placing only appropriate items in the blue bins.

I think we should have recycle bins in main office spaces to help with separating the two within buildings/offices. I recycle my own items in a bin in my office because it is not convenient to take them to the recycle bins which are mostly placed outside the buildings and I am not on the main level of the building.

Recycling bins are not found inside departments/areas usually. This could help increase recycling.

I don't see recycle bin very often. I understand at one point we shifted to putting everything in one bin and that it was sorted out later, not sure if this is still the care with office trash.

I wish there was stronger push for recycling and limiting the amount of waste that is taking place. Almost empty trash bins are being tossed with an entire bag that could have lasted longer. It would be helpful for the custodial staff if we as a Fresno State Community avoided dumping material that still has some type of beverage or fluid in them.

I would like to be able to recycle in my office.

Also, fast fashion creates a ton of waste, globally -- I would love to see more initiatives to collect and donate used clothing to the Fresno State closet, I forget what it is called, but it allows students to get clothes.

I don't think that recycling bins are clearly labeled or easy to access.

We are told that when campus trash is processed, recyclable materials are separated from waste. I doubt that it is true. There are areas/buildings on campus without ANY recycling bins for personal discards such as drink containers etc. I have not observed any attempt to properly handle recycling efforts during major events such as Vintage Days. Personally, I do not attend sporting events, but I imagine the situation is even more dire there.

There are not enough recycling bins in the Science building. There is no centralized area for recycling of batteries that I know of.

In Science I, there are numerous trash cans, but the only recycling bins I've seen are in lobby areas and meant for beverage containers. What about recycling bins in the labs for recyclable plastic items, cardboard, paper etc?



I have heard that custodians are collecting both recycling (cans/bottles and mixing it with regular trash since it will get sorted later.
It's all over the place. Little consistency which makes answering the above questions difficult. Please consider the responses with care.
Often times there are only regular trash cans in the library so if someone wanted to recycle, there is not a separate bin
We have not had recycling bins for years (blue). My understanding is that the recycling is sorted after the trash is collected.
Recycling is not a priority. Therefore I see trash and recycled materials being intermingled all the time.
Recycled materials are "commingled" with the rest of the garbage in the dumpsters, then separated at its destination. It matters not where it is tossed when indoors.
More education is needed.
Recycling batteries is hard at FS. You can't bring anything from home to recycle like we used to be able to do.
I am ALWAYS frustrated with seeing recycle bins with TRASH inserted. The stupid people who can't get this right really tick me off! I wish people could just pay a little more attention to prevent this problem. I don't think that most of them do it on purpose. I just think they do not give the trash/recycle issue enough thought/consideration. I wish ALL people would make this "sorting" process a greater priority!
Recycling takes as much of our natural resources as it "saves" Of course reasonable people are opposed to waste, but this "fake" recycling saving our earth has not had an impact. t Example, the carpool system at the university is non effective on saving the earth. It is abused and causes staff to drive more looking for a parking space.
We have been told that all trash gets sorted for recycling, therefore I see many people use any trash receptacle. It would be nice to get some messaging on whether or not this is true, since it seems there is confusion. Furthermore, there aren't many designated recycling receptacles inside offices. If all trash is sorted, why are there different receptacles?
We have too many "recyclers" coming in from the streets to dig through the trash.

I thought that even if recyclables were put in the trash, they are separated eventually. If this is not the case then the public should be educated on the process.
be more proactive with recycling. address this with custodians and grounds. monitor what and where recycling is being done.
There are no longer recycling bins in our offices. We were told by EHS that everything goes in the trash and recyclables are pulled out. I personally don't trust this system and am doubtful that anything is actually recycled from our area.
A few more recycling bins around campus would be helpful. A compost bin would be great. This would likely take other planning in the city but in San Francisco this has been arranged for many years.
I would love to print on both sides of a piece of paper, however I do not have access to a printer that has two-sided printing access. I was just complaining what a waste of paper it was not to have this ability.
Need recycling bins located around campus. I see outsiders coming in and digging in our trash to collect recyclables.
There use to be a blue bin for our offices, but that has been removed a long time ago. We are told that our general trash is sorted a processing center and things at are recyclable will be sorted out. I only see one recycle bin and it's for cans/bottles.
I'm not convinced that the items in the recycle bins actually get recycled. Everything gets dumped in together which promotes contamination of different types of materials which often results in large batches of stuff having to be landfilled. Would appreciate seeing more sorting options for recyclables along with signs showing what can and cannot go in each bin.
We need to educate students/staff/faculty about recycling. I see a lot of people just toss it in the trash can.
I would say that 50% of items in the recycling bin aren't recycled. Too hard or no market for it. Especially plastics. Metal has a better chance of recycling.
Recycling does not seem to be a priority at Fresno State.
More information on what can and cannot be recycled in the recycling bins on campus. Maybe even images on the bins themselves throughout the campus. Also, it would be nice to see a green bin as well.

Fresno State trash bins should have both a regular trash and recycling options.
There are not enough recycling bins. Some say "paper only" and others "plastic only". It doesn't seem like we can recycle cans in the office.
Recycling at Fresno State is a facade. The blue bins in offices are dumped directly into trash cans.
All recycling goes in the same bin as the trash
I seldom generate any waste on campus, so I haven't taken much notice of the waste receptacles. I haven't noticed any recycling bin in my classroom.
Our office suite participates in recycling by having designated blue bins for recyclables and are mindful to keep the trash separate from that bin. I don't know if the custodial team keeps them separate. I sure hope we do that.
I do not believe custodial staff is separating recyclable materials from our office waste bins as we have been told. Custodial staff is not even keeping up with the need for sanitizing supplies necessitated by COVID.
Need more bins around campus and in offices.
You need to get the word out about recycling!! Too many people here on campus don't bother, which I find very disturbing.
We were told that whatever we put in our individual trash cans at our desks would be sorted so recyclable materials would be recycled. Outdoors I see both regular trash and recycle bins next to each other but not inside. We have a sensitive material recycle bin in our office area but no regular recyclables bin for all to use.
What happens to the recyclables when they are not placed in the proper bin?
It's a breath of fresh air seeing trash cans and recycling cans throughout campus! Thank you!
There are rarely recycling bins available in my office and way too much paper is wasted/thrown away.
We need MORE recycling bins! Even as an active recycler, I hate that I have to search for the blue bins on campus. But because our recycling bins are so scarce, I'm sure those who even MIGHT recycle would just throw their recyclables in the trash. Also, doesn't the university make money on the recycled cans, bottles, etc.? If so, isn't it in the best interest of the university to collect MORE recyclables - both for the environment AND their economic bottom line? The initial investment of

<p>more blue bins would easily be paid off after a short time. And if custodial staff are already picking up garbage from every classroom, what's a few more blue bins? The labor costs would be negligible.</p>
<p>The paper recycling has been stopped on campus, and we are asked to just include it in regular waste. Recycled paper that is wet or contaminated with garbage can't easily be recycled and therefore is dumped.</p>
<p>We definitely need more recycling bins in the buildings around campus. There might be one per building but it is not encouraging to people to have to walk across a building to recycle. A lot of offices also don't have recycling bins in their front offices.</p>
<p>I was informed that in areas that don't include a recycling bin, the university sorted through trash to determine what was recyclable.</p>
<p>Does the campus still offer their recycling program where a staff member would stop by depts. to pickup paper that can be recycled?</p>
<p>I would love to have someone come to our department and explain what can be recycled and asset our departments' workload, and perhaps help find a balancing point of excessive use of paper and ink.</p>
<p>More education in recycling could be beneficial to everyone at Fresno State.</p>
<p>I am not sure what products the university recycles and what products I need to put in the waste bin. I also wonder if there is composting bins around campus or the viability of that option for organic waste.</p>
<p>We have heard it stated before that all trash collected at Fresno State is SORTED. Whether or not that's true, there's been mixed messaging about recycling on campus which can lead to confusion. I also think we could create a multi-receptacle bins, especially near the food court, to include a GREENWASTE bin.</p>
<p>Sadly, the blue bins are used as waste bins, too. I am not sure if it lack of awareness or is purposeful.</p>
<p>More recycling receptacles should be made available.</p>
<p>As far as the custodial staff, I am sure they are doing their best and doing a great job! I only selected half the time because of my previous comment of not being full sure if trash and recycling are actually separated at the end of the process.</p>
<p>We had our recycling bins taken away - again this survey was not designed for our campus. Everything goes in one bin and is post processed is what we were told. That is clearly not the case.</p>

<p>Many cardboard boxes on loading docks may never be recycled. It is not clear whether there is a place for bulk recyclables like cardboard packaging around campus.</p>
<p>Needs to be more visible and conscious campus about recycling, blue bin with gray trash bin. Label what is considered blue recyclable and trash gray bin. Should be accessible outside and inside (bathrooms, classrooms, meeting rooms).</p>
<p>no clear communication on which trash bins we should be using in the office. Last I heard we could use any bin and Fresno State would sort through?</p>
<p>My office does not have recycle bins, only trash cans.</p>
<p>Offices and floors of certain buildings need recycling bins</p>
<p>Need to make Fresno State community aware of more ways to recycle and what should be recycled</p>
<p>Printers (copiers) should have the default set to duplex and pressure staples (no metal).</p>
<p>In the space I work, it is highly used by students. The recycle and waste bin is typically full.</p>
<p>I only see recycle bins outside - what about all the recycling that can be done from trash in each building?</p>
<p>I don't have a recycle trash can at my desk.</p>
<p>Again, serious problems with wording on this questionnaire and how it will be read. The custodial staff at this university have been decimated and do a herculean job trying to keep up with ever increasing workloads. I say never because I'm not at work when they are working so I don't see what they do. I suspect this is true of lots of answers to this question. And if they are not giving appropriate training, equipment, time, and most importantly staffing, to do this work they are not to be judged in this witch hunt of a questionnaire by others. How does anyone "seeing them" have any capacity to even know if they are doing what they were trained to do without knowledge themselves?</p>
<p>We only have trash cans in our office, so it is not as convenient to recycle at my desk.</p>
<p>A lot of plastic bottles in regular waste bins.</p>
<p>My course textbook and materials are electronic and I don't print anything for the students.</p>
<p>In cubicles, we only get a single waste basket. I hope it gets sorted, but there's no way to know if it is. Perhaps having recycling bins for each cubicle, or at least one for a bank of cubicles, would help.</p>

<p>Beyond recycling bins everywhere, I don't know much about what Fresno State does for recycling. It could benefit from a communication plan - or better communication plan if there is one.</p>
<p>Not so sure it gets recycled since it ends up in the same container when cleared away by custodial staff</p>
<p>More is always good!</p>
<p>Rumor has it that Fresno State sorts all trash, so many think it doesn't matter if they separate recyclables.</p>
<p>I am still looking for designated recycling place for batteries.</p>
<p>At one point, staff was told that we did not need to recycle that they were separating recycled items elsewhere, such as batteries. Is that correct?</p>
<p>It would be nice to have a consolidated battery waste program for the entire campus. With the amount of batteries (personal use, mobile, laptop) processed by the University and its community, a more expansive effort is worth looking into.</p>
<p>I think to recycle bins need to say what can go in. Every city is different what it allows.</p>
<p>I was recently at UC Berkley and it would be amazing to include compost bins in our campus. I also noticed a few "Green Certified" buildings at UC Berkley- perhaps we could follow suit (specially with new buildings and updates to older buildings)</p>
<p>I would like to see more recycling bins around campus including different types of recycling (paper v. plastic v. cans v. batteries)</p>
<p>Recycling is hard too keep up with when half the time the recycling is mixed with food and liquid which is not recycled</p>
<p>Inside and outside of buildings are handled different - in my building anything recyclable goes into the trash. There's a lot of confusion about whether a bin is recycled or not, and where to even put things. Football events could use a lot of bin signage to help with proper waste placement.</p>
<p>Recycling of faculty papers (old exams, student projects) used to occur several times a year. Now, it takes an act of God/Congress to get anyone to schedule a recycling event. And when an event is scheduled, there is only one blue bin to deposit papers. It's not possible for all the faculty in a School/College to recycle in a single bin.</p>

I see a mix of paper recycling bins but seldom see bins for other items on campus. It is confusing because we used to have separated recycling bins but now, I have been told all waste goes into one bin and it is separated later. I am unclear if this is correct or not.
I am moving towards a paperless workspace.
I am not aware of any recycling bins in my area. If I have trash in my office, it only goes into my office garbage can with no ability to sort for recycling.
I don't understand recycling on campus. I sometimes see recycling stations.
After a year of working remotely, I print much less and use much less paper than before the pandemic.
I hear staff say that when trash and recycling get to the plant on campus, it all gets combined together.
Make it easier to recycle batteries, I submitted a work order request to have used batteries picked up over a month ago. No one has come by for them.
the blue bin is for plastic bottles or can only, but what about paper and cartoons?
Custodial staff requires more training and supervision on recycling. I saw my blue paper recyclable bin being disposed of the same way as the nonrecyclable grey bin.
The trash and recycling in my building are all emptied into the same trash dumpster. If we aren't going to recycle, we should at least remove the recycling bins so that the custodians don't use extra plastic trash bags, spend extra time emptying them and cause a large truck to empty a recycling dumpster for no reason. I think it would be best if the recyclables were actually recycled.
I've only seen one recycling bin when I walk from the Science building to the IT building. I think there should be signs all over campus encouraging everyone to recycle, what is recyclable, and why we should recycle.
There used to be recycling bins in campus, but I don't see them anymore.
I just don't see custodial staff, so I have no opinion there. I think I understand what can and can't be recycled but many others don't, ruining recycle bins with wrong materials (often with things with food waste remaining on them)
Provide an area to recycle electronics and batteries if one is not already

<p>some offices/professions cannot print in duplex (i.e. legal contracts, legal forms). Regarding recycling on campus, there is quite a bit of lore and misinformation. I have been told Fresno State does not have recycling bins and that someone sorts the trash from each back (HA) and I have also seen recycling bins, but have been told it's all dumped in the same place. I think an informational campaign would help educate us on what we can do to help.</p>
<p>There should be more ways to recycle, not just paper, but batteries and electronics.</p>
<p>What happened to the large recycling bins on campus?</p>
<p>We used to have recycling company come to office weekly to pick up paper in our recycle bin. Now we throw paper in trash and are depending on janitorial to pick up recyclables. Not sure if this is more efficient than having a recycling bin in office, we don't have this anymore and can only imagine how much waste of paper.</p>
<p>While I was sad to see co-mingled recycling go away, I understand the reasons why. I do see adequate recycling bins but I do think it would be helpful to know which items can and can't be recycled, especially in an office setting.</p>
<p>Need more recycling cans inside of buildings</p>
<p>There are not enough recycling bins and not enough emphasis on campus about the importance of recycling. There are misconceptions about recycling on campus particularly about co-mingled recycling.</p>
<p>I understand Fresno State has recently just started an on-campus recycling effort. I look forward to it getting started.</p>
<p>We need more bins</p>
<p>I hope that my office garbage is recycled. I was told that was the case, but when folks come by to empty it, they put it all in one place. I'm not sure that is happening.</p>
<p>There is a complete lack of transparency around recycling on our campus.</p>
<p>There needs to be more recycling bins on campus. They can often be hard to find. Although I don't actually see custodial staff empty the bins - they are always not full!</p>
<p>A recycling campaign to inform the campus community about appropriate recycling and to make it easy, could go a long way.</p>
<p>Would love recycling in the Lab School rooms</p>



<p>We have been told that someone goes through the trash to pick out recyclables. These questions seem to indicate differently. University is unclear with its recycling rules</p>
<p>I rarely see recycling cans on campus and was told that the trash was sorted for recyclables. I'm not sure I believe that.</p>
<p>The 'recycling program' is a mystery @ Fresno State. Very few containers, esp inside buildings. We all are left wondering what to do with potential recyclables; students put so much plastic in normal trash cans because they don't know what else to do. Colleagues may say that the standard trash is processed for recycling, but I have very little faith in that.</p> <p>Overall, so much education is needed! That would have a great ROI on so many fronts.</p>
<p>I would add that we should also reduce the amount we use (water, paper, energy...).</p>
<p>I have been told that Fresno State separates recycling and trash and it's ok to put it all in the same bin, but many people I know are skeptical that this really happens. Also, people are more likely to care about recycling and modify their behaviors when they can feel the benefits of their behavior. Having separate bins actually encourages good behavior.</p>
<p>Limited recycling opportunities and I have no idea how custodial staff handle the recycling bins Since the custodial staff in our building push around a single trash can I assume that everything, trash and paper recycling bins go in that single trash can</p>
<p>I always recycle but I feel others don't care. We have recyclable containers throughout the building.</p>
<p>There are some buildings with both a trash and recycle bin, but I rarely see recycle bins available to use.</p>
<p>Large bins behind buildings (e.g., S2) are not clearly marked as to whether they are recycling bins or not. There are mixed trash and recycled items in them all of the time.</p>
<p>It would be nice to have more recycling cans throughout campus and in buildings.</p>
<p>I was told that having any liquid residue (soda, tea) in a clear plastic cup when thrown in the recycle bins are not able to be recycled. Would love more best practice tips for using the blue cans on campus.</p>
<p>More containers are needed for recycling. Also have recycle containers and trash containers next to each other because some people are lazy and won't walk very far to throw trash away and also people may be assholes and not give a rip.</p>

Why don't use money for each department that recycle back to each dept
There are no more recycle bins that I am aware of at Fresno State. We were told by facilities years back that all trash was sorted for recyclables and that is why the recycle bins were removed.
as far as I know, we don't have any recycling bins. We were instructed to put everything in the trash and it gets sorted elsewhere.
Years ago the student paper ran a story tracking what was put in the recycling bin at Fresno State and found it was ultimately not recycled. Those who remember that have a perception our recycling program is bogus.
Custodians don't recycle. They put all the bags in the dumpster. It should be easy for them to separate. Dumpster and recycling containers are right next to each other!
Seems like there's the effort, but it can be difficult to know what can be recycled and what can't be.
Good recycling promotion
I do not feel that there are adequate spaces to recycle items at Fresno State. Additionally, I have received inconsistent information about how to recycle items on campus.
Each Department should have a recycling bin near by.
Many people do not pay attention and use the recycle bins as trash cans.
Recycle bins were removed around the outside of Joyal.
We have no recycle bins in or around our offices
There are no recycling bins or trash dumpsters near Speech Arts during the construction of the new Student Center.
It is my understanding that paper placed in the recycle bins is thrown away not recycled.
At the pool we only have trash bins
Need stronger efforts to recycle in every office. Also include cardboard processing properly.
Recyclable items that can be put in the recycle bins are very limited to paper. This is a problem!
it is my understanding that the trash company separates the trash and recycling...having two cans everywhere seems redundant.

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The use of a single-container for all trash and sorting later seems to discourage recycling awareness.
It is unclear to me what can be recycled and what can be put in the recycling bins.
Recycling is not labeled well and not near every trash can  Composting is nonexistent
I want to recycle. I used to be vigilant about it until I noticed custodial staff emptying both my trash and my recycling cans with plastic bags. I also ended up with two recycling bins - so I don't know which one gets trash and which one gets recycling.  I think printing on one side helps some of us process written work - so I'm not a fan of mandating two-sided printing. It's a disability access issue (visual processing, executive functioning)
I am unable to easily recycle as the University has decided to remove recycling bins.
I have no idea what custodial staff do to process the recycle bins
In our building there are very few recycling bins and the garbage is emptied so seldom that everything is overflowing.
I take my recycling home to put it in my house recycling bin because I see that trash and recycling are combined here on campus which makes no sense to me.
There are no recycling bins in our office. We were instructed that recycling is sorted in the trash cans, regardless of which bin it is put in.
I use about 10 percent of the paper I used before the pandemic.
I wish there was still a location to drop off cardboard for recycling
In general, there needs to be more recycling AND garbage bins around campus.
I don't think people are great about this -- I frequently see paper in the trash bin right next to the recycling bin. Working toward paper-free on campus would be a serious improvement.
Seems like they don't empty the recycle bins very often in the offices, ours gets overly full often.
I tend to use technology completely for my work & avoid the use of paper in classes

Recycling is a poor solution. Too many supposedly recyclable materials are not actually recycled and wind up in land fills. We need to produce less waste, not put out more bins of collecting supposed recycling.
Most buildings don't have both trash and recycling bins
More recycling education would be good.
There are no obvious places to recycle things in or near the Science building
There are no recycle bins in Joyal that I have seen.
Recycling bins in classrooms would be helpful
In our building - or at least our department . . . we are told to put all waste in the same containers . . . even though we have a blue and a black/gray waster basket . . . that is "gets sorted later." Does it? Until I was told that I conscientiously sorted to recycle.
I am pretty sure the custodial staff just dump the recycling in with regular waste
The blue dumpsters mean nothing. People throw regular trash in them all the time, which makes recycling large items (broken paper boxes, etc) useless
recycling is a difficult habit to instill. it's hard to get people to care and w/o adequate staff to really initiate comprehensive campaigns w/ incentives, good luck.
Office recycling policies are incredibly unclear in my building (science 1). Recycling bins are not provided, so I often just take my recycling home. I would appreciate receiving a recycling bin for my office, or at least having one somewhere in the vicinity of my office.
I'd love to see more paper bins for faculty use throughout the building.
Recycling? On this campus? We don't have ANY recycling bins in offices. PLEASE PUT THEM IN EVERY OFFICE!!!
Would recycle but not an available recycling dumpster.
Is recycling real or just performative? <a href="https://news.climate.columbia.edu/2020/03/13/fix-recycling-america/">https://news.climate.columbia.edu/2020/03/13/fix-recycling-america/</a>
recycling program is terrible

THE MANUFACTURES OF SAID PRODUCTS SHOULD ALREADY BE ABLE TO RECYCLE THEIR PRODUCTS, NOT PUT IT ON THE CONSUMER
waste of time and money - simply an exercise in 'feel-good'
Chevron is literally one of the worst perpetrators of disastrous pollution accelerating the climate catastrophe, and we are continuing to be affiliated with them: <a href="https://eandt.theiet.org/content/articles/2021/01/lasting-effects-from-the-rainforest-oil-spill-in-ecuador/">https://eandt.theiet.org/content/articles/2021/01/lasting-effects-from-the-rainforest-oil-spill-in-ecuador/</a>  Cut ties or stop this meaningless charade.
I was told that the recycling is sorted out of the trash and that's why recycling bins are no longer readily available indoors, but this is unclear to me and I'm afraid my recycling is being thrown away due to lack of signage.
My understanding is that we combined the recycle with the trash and manually sort it. If this isn't the case, better messaging would be helpful.
I think there needs to be signage that provides guidance as to which items can be recycled and so on.
I have a single garbage at my work area, I hope that items placed in there that can be recycled are because I do not have a choice except to use one.
I think there needs to be more recycling bins around campus.
Fresno State should provide or install more battery recycling bins or small stations on campus.
I am not clear on how recycling is processed by the private commercial waste companies once it is removed from campus.
I would appreciate more clarity about what can be recycled, and in which bins.
Recycling cans that are designed for paper and cardboard products, not just cans/bottles, would be most welcome.
Recycling on campus is limited and not equal in every office area or department. We luckily have a bin for recycling cans and bottles but not a general recycling bin for paper, etc.
Why don't we have recycle bins in our offices anymore?

I like that we have sustainability groups and forums. I think it would be good to include a "Recycling or Sustainability tip of the week" in our weekly Monday email so that we can be educated on how we can help and which items are actually recyclable and which are not.
I am guilty of my ignorance on which items are recyclable or not. Some easily-accessible information would be great.
There isn't much information or contacts to call about recycling pickup or drop off locations. Many months go by and the recycling bins in the buildings goes to waste
We do not have many recycling bins for cans and I do not see any green waste bins where I work.
It might be a good idea to have reminders of items that can be recycled (poster for office or emails).
I would like to have a recycling bin in my office. My office printer does not allow double-side printing, therefore there is an unnecessary waste of paper.
We need more recycling containers in offices and classrooms and throughout campus. I rarely see them anymore.
Paper recycling might be nice in classrooms, for students to use rather than throwing away paper?
Not enough bins provided. I do not see staff recycling because I am never around when they are cleaning.
OK, time to be honest here: CSU Fresno changed contractor and to the best of mt knowledge now contracts with a company that does its own 'sorting'. As a citizen of a country that has one of the most advanced systems for recycling, I happen to know that recycling is largely green washing, especially in the US. Plastic waste is waste, it gets downcycled at best. Most waste ends up as waste, not even downcycled. Folks in the US are too ignorant about recycling and ruin the quality of the material by mixing (a simple and totally bad thing such as putting paper with food or grease stains into paper recycle). Waste reduction is where it's at. And again, this goes well beyond the campus. I wish our campus was a better role model and leader on waste reduction and did less green washing.
Unsure of where to recycle items I know can be recycled.

## Tell Us Anything Else About Recycling – Students

More paper waste bins needed for staff, faculty and students. Strongly encourage staff/faculty to go paperless and accept digital submissions of assignments. Also, educational materials to inform students, staff and faculty what can/cannot be recycled. Recycling incentive programs might be helpful. Donate to clubs or student orgs who volunteer to help w recycling/sorting

I do the above-mentioned solutions of recycling at home. Like I said in my previous answer, I have not been on campus but I will make sure to recycle similar to these scenarios when given a chance to be on campus.

Food waste bin!!

Offices here at Fresno State needs recycle bins for paper and plastic materials.

Don't do it

Signage to delineate acceptable recyclable materials would be helpful.

Great way to help the environment

I don't think the printers in the library allow us to print on both sides of the paper, but I could be wrong.

POST IMAGES OF WHAT CAN BE RECYCLED

I would highly suggest making faculty responsible in reminding students of proper recycling. Constant reminder is part re-education, and students need reminders to keep the consistency of recycling to become a habit/second nature.

Recycling is one of the easier ways to save energy on campus.

There are a lot of trash cans but only a few recycling bins, the only area I saw these is at the library or maybe one at the student Union. Besides those two areas, all the other trashcans are just by themselves. For example, I want to throw something paper or plastic, then I just put it straight in the trash cause there's nowhere else to put it.

Recycling should have between bottles bin and box or paper bin.

I no longer use paper and pen to take notes. I use my iPad to take notes using an app called Goodnotes.
Yes I see recycling bins but doesn't mean everyone does so promote recycling
Everything seems neat and clear.
No compost available
I believe in many K-12 schools don't recycle but litter outside of their campus. In which, I believe in College we make the campus look clean by depositing our trash in the right place. Although, printing multiple should be used like scratch paper if that is right for you to do so.
The campus needs more recycling bins
Like we had required COVID training, we should have required training regarding sustainability. This would make students more mindful of their actions/decisions. Also, there is lots of plastic used in fast-food restaurants. We should transition to something disposable but also environmentally safe.
Not enough recycling bins noticeable outside.
No real signage
Nice to have if I don't need plastic, glass, or paper. But they are sometimes not as frequent to find as trash cans
Ease of access is critical to encouraging recycling!
Plastic water bottles, cans, banana peels
Fresno State has a great recycling stations. Near trash bins! Very accessible and convenient.
There are barely any recycling trash cans outdoor on campus.
Not enough students are mindful about which bin they toss trash/recyclables into. Some leave their trash on the tables and just walk away.
Need more bins for things like paper and cardboard not just bottles and cans

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I like to recycle
Recycling is one of the most important things you should do and it helps the environment stay clean
Fresno state should keep track of how many recycling bins are in campus, where they are, and how much they recycle each year.
I forgot, but if there aren't items of what can be recycled on the recycling cans, then there should if you want
Glad to see lots of the blue bins
I feel that there are not enough recycling bins as much there are trash cans on campus.
Terra cycle is another option for students in dorms, apartment outside campus, and everyone else. Some recycle centers only take certain items. We produce clothing/fabric waste and we can't often recycle certain items due to plastic consumption make it difficult to get rid of properly.
ID cards distribution uses a lot of plastic is there a way to use recycled cards or bottles?
Never noticed any recycle areas outside of classrooms
I use my common sense in regard to recycling. I do not know if there is any instruction somewhere about recycling at Fresno State.
More recycling bins are needed throughout campus
There should be more recycling bins around campus. I usually see more trash bins rather than recycling ones.
There should be more places/bins to recycle. Usage of plastic should also be cut down.
I don't always know what should be going in which bin so I just guess.
Recycle bins I see around campus, outdoors and indoors, are often filled with a mix of trash and recycles. Most times I see trash cans and no recycle bins.
Not many people are recycling the plastic Starbucks cups from the library.
I feel that more education on recycling can be provided to students so they can be more aware of what can and can't be recycled. The signs placed on trash and recycle bins are helpful, but more

information can be made available around campus. For example, helping students know what materials that are commonly used, such as drink containers sold at fast food places, can help decrease the amount of plastic and recyclable material that ends up in the trash.

If I don't get my deposit back, I will not recycle.

I do not see an emphasis of recycling at the university. For paper in the library where is the recycling bin? In the library where is the recycling bin for plastic? In the student union where they sell food, I wish the university would use more ecofriendly materials. In the bathrooms all over campus where is the indication on the type of paper towel or toilet paper that is used? Could the school change all their paper towels and toilet paper to 100% sustainably sourced bamboo or 100% recycled. The school should consider partnering with this brand or another similar brand

[https://us.whogivesacrap.org/utm\\_source=adwords&utm\\_medium=paid\\_search&utm\\_campaign=1024047963&utm\\_content=50759013539&utm\\_term=who%20gives%20a%20crap&gclid=cjwkc aia1aimbhaueiwacw25mbjvb8yqn\\_whw7m5jj7lhxhp9ppvjj4k8bpojzbn9dsl-Wozks5jhoCamoQAvD\\_bwe](https://us.whogivesacrap.org/utm_source=adwords&utm_medium=paid_search&utm_campaign=1024047963&utm_content=50759013539&utm_term=who%20gives%20a%20crap&gclid=cjwkc aia1aimbhaueiwacw25mbjvb8yqn_whw7m5jj7lhxhp9ppvjj4k8bpojzbn9dsl-Wozks5jhoCamoQAvD_bwe)

Also for the soap is it eco friendly? What does it come in? Does it come in plastic that is not recyclable? If the plastic is recycled, is it actually getting recycled? Maybe the school should consider a soap for the bathrooms that is more sustainable.

It is helpful if all waste bins are the same style, location, and signage. Also, making the student body aware of what is recyclable and compostable will make this more likely to do those actions. I would like to gladly help the university with some ideas to make the campus more eco-friendly.

Recycling bins should also be available/accessible in the parking zones.

In outdoor dining areas there are fewer recycling bins. People tend to not want to hold on to their trash, even if it can be recycled, and putting a clear recycling bin in these areas would help mitigate that

Not everyone recycles on campus.

Recycling bins should be available at the entrance and/or exit of buildings on campus.

I think recycling is important and that it should be taken more seriously by the students.

It is very important that we keep our school clean so that we can enjoy our beloved campus as very clean school.

Let's build a sculpture out of wire of animals to make a creative way to recycle
Regarding printing on both sides, many professors state that they want papers to be printed on one side only.
Something I always had done since I was a small child.
One-use recycling should not be used on campus. It produces more waste that is not reusable.
The stickers on what to recycle should be placed on all the blue bins on campus, there should also be recycle bins in the library
I noticed there are garbage bins but the recycling bin is missing. The bins should be next to each other. I would love to see a duplex discount for printing on two sides. I have noticed several printer paper that is left on the copy machines. I think that can be used for other things on campus.
I like that the dual bins of trash and recycling are being placed in the most common areas of campus in order to promote recycling and avoid pollution.
I see trash and recycling in separate containers most of the time.
More recycling bins needed on campus and in classrooms
There should be a compost bin alongside the trash and recycling bin. Also more education around campus about recycling
There are not enough recycling bins in the library, I always have to wait until I leave the main entrance to recycle recyclable items. There should be recycling bins in building, and at the Square/ Maya Cinema
There are not sufficient recycling bins throughout the campus, within the classrooms and hallways.
We should have a recycling bin in classes too
There should be more locations for recycling and trash bins, especially along the campus walkways in the outdoor areas. Current placements of recycling are located near campus buildings.
Not enough trash/recycle bins around the Social Science Building

More of them
Fresno State does very well at having bins for each particular waste.
It is important to keep things recycled to keep Fresno state healthy and good
I've read the information on the recycle bins and I believe I understand which items can and can't be recycled at Fresno State. However, that might not be enough to mark strongly agree on "I understand which items can and can't be recycled at Fresno State". Also, I seldom print on both sides of paper (duplex) but I always use the back side as scratch paper for another class.
Many professors do not want double sided papers therefor it is hard to conserve paper.
I hope there will be more recycling containers on campus in the near future.
Are there separate ones for landfill, paper, plastic, cans?
There are usually places outside when walking around campus that don't have options for recycling. I believe there is are only trash cans, I personally could have just missed them though.
On campus, you see trash everywhere - therefore, students and staff are not recycling enough. Recycling is important because it keeps our community clean and free of excessive odors.
Not all trash cans have the full chart of what can and can't be recycled. It would be nice for every trash can to have that info graphic.
Perhaps it would be helpful to have signs/posters near the trash that indicated what materials can or cannot be recycled.
Trash cans on parking lot (specifically lot P19) have no recycling bins next to them. But almost all trash cans on campus have recycling bins by them.
More people should be educated on what and what does not belong in recycling bins.
I don't know if composting is allowed, have not seen any compost bins or technology recycling receptacles.
There needs to be more recycling bins in offices.
Fresno State does a good job of recycling.

Recycling cans can sometimes be full and not be changed as fast as they should be.
It'd be good to have signs of what can and can't be recycled and where you can go to recycle specialty items like Christmas lights.
I don't remember seeing recycling bins alongside the trash bins in most buildings. I do know that my classroom in Kremen has a recycling bin which I use when appropriate but other than that one I don't recall seeing one. But this might just be that I haven't been paying close enough attention to spot one.
Recycling at Fresno state is easy
I think that there should be options for students to have paper that has already been recycled for scratch paper and printing instead of fresh paper for no reason
There should be more education to the students regarding proper recycling. Such as a mandatory video like the one we have to see regarding harassment.
More clear on what can be recycled on campus.
There needs to be more recycling bins on campus
This isn't 1991. People know how to recycle. Have you considered how much energy will be wasted to fill out this survey?
Recycling bins are noticeable on campus and near the dorms too and if possible to have recycling bins near vending machines.
I just think they should put more trash can on the open spaces as well as recycling ones so that people are able to find them.
I think some students do not know what can be recycled and what cannot. Education on those things would help as well as signs near the bins for examples of recyclable and non-recyclable items
It can be approved by placing more recycling bins on campus and in buildings.
It would be cool if there was a small recycling center at Fresno State for students and a place where we can donate clothes or any other stuff. Also, if there was a small shop where people donate things and can be sold for cheap like a thrift store but on campus.

The bins could be much more frequently placed
When the trash cans are filled by parking lots, there isn't much space for anything else in it, so sometimes landfill goes in the recycling can.
It truly doesn't even matter if we recycle or not since people do not know how to properly recycle, they end up ruining the bin and ends up not being recycled anyways.
Add more recycling bins
There are different types of recycling matter. I.e., Paper, plastic, glass.
Too many beer bottles in parking lots.
I have previously come across recycling bins that are overflowing multiple days in a row which make it hard to get rid of bottles/cans I've accumulated (I live in the dorms). I think it would also be nice to have paper recycling bins in some areas as I haven't seen one on campus so far.
I'm not sure which bin is for trash and which one is for recycling.
There has to be more waste bin options on campus, besides the most visited areas.
There should be a composite bin right next to the other two bins. There should be pictures rather than a QR code of what you can recycle or put in a garbage can.
Signs specifically talking about the particular trash produced in that area and how to dispose of it would be critical (i.e. Starbucks telling you what to do with DIRTY cups, napkins, new and used utensils)
I hear that trash and recycling get thrown in together when the garage truck comes and picks it up. I don't know if that's true but if so it really discourages recycling
The bins are always full because there's way more traffic and usage than what the bins can carry
To be at our peak performance in terms of recycling at Fresno State as students, we do need a proper compost, trash and recycling bin in every trash location.
Signs that indicate what would be appropriate in each bin would be helpful. M
It was hard to find recycling bins when I first looked for them. Now I know where at least one is.

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More recycling bins would be helpful to reduce waste, but there may be circumstances where trash may be placed in the recycling bin by others
There should be more recycling bins
I recycle when I can at Fresno state
I don't see recycling bins in the library so sometimes when I can't hold on to my empty water bottle, I just throw it away in any trash I see. There is no recycling in the 3rd-floor study area. If there is, it's not labeled as so.
Plastic does not decompose, so it's important to recycle as much as we can.
The benefits of recycling are incredible, they can also help you get some money (if you decide to recycle)
I see recycling as important. I tend to always recycle whenever I'm in Fresno State
I think it's important for items to be properly labeled with the recycling symbol.
For the most part I think in terms of recycling Fresno State is doing pretty good.
Fresno State does well in recycling but maybe they can post flyers about what to throw in each of the bins.
I would like more information about recycling posted around school.
The library does not have a recycle bin.
Food containers, cutlery, napkins, shopping bags either need to be compostable and/or made of fully recyclable materials (food court, student union food areas, bookstores).
It is said that many recycled materials are not really recycled due to some conditions I'm not sure about. Because of that, sometimes I'm not sure what I should put in the recycled bin.
There should be recycle bins in more offices and classrooms. The lack of recycle bins results in a likelihood of students disposing of recyclable items in waste bins
Recycling is very important so our environment doesn't get harm with other harm chemicals.

Recycling bins should be everywhere where a trash bin is to ensure things are going in the correct spot.
I think they are conveniently placed around campus.
More space for trash bins. Trash gets over full and then people start placing trash in recycling
More emphasis on recycling plus having recycling bins would be cool
The Music building can have a few more recycling bins in order to have more sufficient numbers.
Having a label or posting above the garbage and recycling bins to indicate what can and can't be put in either bin, like the one at Starbucks would be helpful to all students.
I find it hard to recycle on campus because there are not many recycling bins. Fresno should also have compost bins alongside trash and recycle bins, with images on the bins illustrating what items go in each. This not only increases recycling but also educates people on campus.
In some areas there are plenty of recycle bins, and in others, there are none at all or there are so few regular trash cans that they just get used as a regular trash bin instead of recycling. I have also seen the custodial staff put both recycle and regular trash in the same bag to be thrown out.
There are lots of recycling bins on campus
I recycle good
Some classrooms have both trash and recycling, but a lot don't
More bins = more students recycling
It isn't very clear. I would like tips in an email about recycling.
Needs more recycling bins by parking lots
There are not enough recycling bins near McLane Hall.
I suggest having more trash/recycle bins in wide open places where there are not many.
The recycling has been good as the recycling bin is cleaned out every often



Maybe a simple infographic near some trash cans would help with recycling.
Students need to remember and pay attention when recycling.
There have been times where our recycling bin in our office has not been emptied for weeks at a time.
I never truly understood which types of plastics were okay to be recycled, and which were supposed to be thrown away
Need more recycling, especially around parking lots and all of the outside benches and tables
There are not enough recycle bins on campus. Additionally, they are poorly placed and are usually full of compost or landfill
It's cool
More posters about what to recycle are needed
Some students don't bother separating their trash
I see many recycling cans which is good
I think the bins should tell you what can be recycled
It's good
There are enough recycling containers, but it is up to the people to use them.
We need more recycling bins around
More.
There are not enough recycling cans on campus, especially in the football stadium and inside classrooms.
I see lot of bottles in the trash
Get compost bins

I've been told that it just goes to the same bin and there's no recycling actually occurring
Not enough.
I usually leave my empty plastic water bottle in the recycling bin.
I need to learn more about recycling items. Even though there are some descriptions on the recycle bins, some of them are not legible and some of them are torn off.
An annual mandatory training for all staff and students that provides information about sustainability, as well as strategies and practices that we all can learn and perform would be ideal. After all, this is a worldwide priority.
I've heard that the recycling bins inside buildings are not recycled. I wonder why this happens.
I personally find it hard to decide what is recyclable and what is not so if there is like a flyer showing which item is recyclable it will help all students. Students will follow guidelines if there are any.
We can save the resources for future generations by efficiently using the resources by recycling
There could be signs indicating what to recycle and how important it is to recycle
People should be reminded of what items are recyclable therefore further encouraging them to recycle.
There are no recycling bins inside buildings; streams get mixed. It would be nice to know how contaminated recyclables can be in order to be recovered.
Art room, painting only has a hazmat can no recycling or trash cans.
I heard that when you recycle something, it's supposed to be clean. I wonder if some students have trouble rinsing their cups or packages before putting them in the recycling bin.
Make more recycling bins (like Panera or Costco) in certain areas for compost, paper products, plastic, etc
The 2nd floor library eating area trash cans could use more dumping to allow for better recycling in this area

Seems well managed
I just see a ton of bins around
It is always clean
Can be taken to a recycling collection for money!
I would like recycling bins, more than just "bottles abs cans"
Professors require essays to printed on one side of the page. So, to conserve paper, you may need to require professors to accept double-sided printed essays.
I think we should have more recycling bins on campus. Or even having recycled bins, trash bins, and green bins for any food waste or other items that can go in here.
I sometimes wish there were more bins around campus not just at certain stations
Conley Art doesn't have many recycling bins
Most student do not care of throwing recycling material in the trash bins
More emphasis on the "Refuse" "Reduce" and "Reuse" instead of Recycling. Recycling plastic doesn't really work anyways, so more effort should be made to inform students about the effects of plastic waste and how to use less of it. Bans on plastic bags and Styrofoam containers from on-campus food vendors would be more effective.
I feel like there should be more trash bins and recycling bins on campus. I often have to walk a far distance to throw something away.
Many of my instructors required reports to only be single sided. Many of them large reports (10+ pages)
I take my recycling back home with me
Recycling is difficult because there are different types of plastic. Where do you send the plastic and where does it get processed? What type of recycling does the plastic undergo?

I just don't know requirements for recycling so I don't always know if its ok to put something in the recycle bin, but I should probably look that information up myself. It's not necessarily up to FS to tell me that i guess
I'm very appreciative for the clear instructions on what belongs in each bin. I hope that the campus can continue reducing the amount of single use plastics provided at eating facilities as well, since I very frequently see them in the landfill bins.
I usually find more trash bins rather than recycling bins... I find it hard to find recycling, especially for students who only have one or two classes on campus. A lot of students/teachers tend to throw trash away in recycling bins, so I am uncomfortable recycling on campus.
The info graphics for what can be recycled are good.
For example, when pizza boxes are recycled, if cheese or other food particles touch, it can ruin the entire bin. Education posts on what is appropriate to recycle would be very helpful!
Might want to include some of those pictures that tell you what can and can't be recycled that would be a good addition. Other than that, I don't really see custodial staff empty the recycle bins but that's not say they don't do it. It just might not be at times when I am at campus
I think there should be some flyers in bathrooms or near a trash can showing which items can be recycled. I don't think that many people realize, however, only a clean object can be recycled even if it has a number 3 and a recycle symbol. Soiled pizza boxes are an obvious one but I don't think most recycled items are accepted if soiled. I am also unsure if this applies to soda cans. More awareness of this issue is needed because I also see litter all over the planters in the P5 walkway to the Craig School of Business building and the Conley art building.
The Dean's courtyard in the music building has not had the trash taken out for over 2 years, we the students did it. There has never been a recycling receptacle there. That courtyard has been completely abandoned by the staff. No landscaping no cleaning and it is such a beautiful place!
Maybe put signs around the waste bin/recycling areas that shows pictures of items that can be tossed in either bin. That way, students will get a reminder when they look at the trash and hopefully reconsider where they are throwing their garbage away.
Recycling is overstated, and does not make as much as a difference as other energy consumption problems we have would. I.e., Lights on all day, students not turning off computers, etc

The cafeteria and food court uses lots of plastic containers when they could use paper, all the plastic utensils in bags also add a lot of waste.
Some classes require printing on one side only, so it's hard to use less paper each time
Recycling bins are largely overrated in their benefits to the environment as, many times, ineffective, inefficient, or downright harmful processes are used to "recycle" some materials.
There are not as many recycles as trash
There should be a program for cans/bottles on campus. Maybe reimburse departments for those cans CRV to promote recycling on campus. Or simply fundraising.
It's good to reuse, reduce, and recycle. My household's trash bin is always much lower than our recycle bin.
I like the new stickers on the recycling bins that tell students what can and cannot go in them.
It should be encouraged but not forced. People need to understand the importance of recycling.
Some rooms only have a recycling bin (like classroom 323 in science 2) so I am forced to either hold on to the trash or throw everything in there.
There isn't a way to dispose of liquids so people tend to toss their soda cans and bottles into the trash instead of recycling after emptying the bottles/cans
It's cool to recycle.
Recycling should be made easily accessible (more bins and sectioned bins). Additionally, students should be shown what is appropriate to recycle in said bins, whether that be with pictures on the bins or email information on recycling in California and Fresno.
I rarely see recycling bins around campus.
I don't use the trash or recycling often at Fresno State so I don't have any recommendations.
I've never seen the recycling bins be disposed of, however I hope they are disposed of appropriately. The trash cans I've used around campus don't have a recycling bin right next to them, so I do see a lot of recyclables in them.

I drink canned sparking water, and I'm often searching for a place or recycle it.
There are never enough recycling bins on campus
We can do better
Doesn't exist on campus
I think people need to be more aware of how recycling is properly done.
I actually cannot remember seeing a recycling bin in any of the common areas
The recycling bins around campus were removed and only trash bins remain. We have been assured the trash is sorted for recycled materials, but I am skeptical.
Telling everyone what can and can't be recycled would help I think
It's not that I see the custodial staff process recycling incorrectly, I just never see it processed.
Not enough access to recycling cans
Where does the recycling money go?

# APPENDIX I: SUSTAINABILITY PROIORITIES OPEN-ENDED

Responses are listed below from the web-based survey administered at Fresno State from November 17th, 2021 to December 7th, 2021. Respondents provided open-ended comments to **“Please check three future sustainability priorities for Fresno State: Other (please specify).”** Responses listed are compiled from faculty, staff, and students. Each row represents an individual response.

Sustainability Priorities: Other (Please Specify)
Promote biofuels
Electric/ clean air vehicle priority parking spots and other incentives
Lights needs to be automatic (turn off or on with human heat)
Fix broken toilets and sinks
Water capture and storage from rainy season
Better WIFI for DORMS INITIATIVE AND/OR Options to bring own Wi-Fi routers
Light sensors in classrooms
Conserving is will never work, it's like growing oranges with less water; the oranges are dry and unpleasant. Please think outside the guidelines. These sustainability options are not applicable for the future.
LED lights
Buy all toilet paper and paper towels from a sustainably sourced corporation, either 100% bamboo or 100% recycled product. One great corporation to partner with is who gives a crap <a href="https://us.whogivesacrap.org">https://us.whogivesacrap.org</a>
More compost/recycling options to include dining
Refill water stations for water bottles
Green roofs if possible to reduce temperature and reduce energy consumption. An more biophillic approach would be preferred.

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Added benefits for carpooling
Reduce the number of students who drive their personal vehicles to school
More sensor powered lights
Battery operated equipment
Required courses (not major requirement) offered online. Only courses that should be in-person are those that require physical body present, labs can be online.
Add more solar shaded parking lots
Educate students instead of trying to save the world
Less vehicle pollution
Solar power parking lots
Coin machines to exchange \$ for coins (pay quarter machine)
Less light pollution
Agro-forestry
All of the above
Green grass
Add more online classes
Public transportation to rural areas.
The use of solar power battery banks for student/faculty use.
Recycling bins
More recycle and compost bins

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Electric scooters can be rented (please see lime electric scooter rentals). Therefore, this convenience provides fast and environment friendly transportation on campus, prevents scooter thefts, and the university can be funded by its students/staff.
Making sure rooms that are not being used have lights off and other electrical devices of.
Designing a special Electric Bike for all CSU campuses in California.
More and better parking locations to accommodate to the increase of scooters used
More recycle bins around campus
Building improvement with sustainability in mind
Tuition credit for those leasing or purchasing an electric vehicle.
Upgrade outdated building windows/insulation
Less equipment
Nuclear energy
Build more dams/ support building more dams
Limiting food waste and having sustainable food options
Bike paths to school from Fresno and Clovis
Improve traffic flow to minimize idle/waiting time. Chestnut does a good job with this on the roundabouts.
Put the earth's axis back where it was in 1900. That will reverse climate change
Consider cut-backs or removal of cattle associated with campus.
Discourage personal motorized vehicles in favor of public transportation
Better recycling options
More automatic lights

Trash cans in the parking lots. People litter like crazy at times, and I'm picking up 4 or 5 dirty masks off the street every week. Sometimes more!
Bottle fillers in every building.
Indoor heating and cooling needs to be better regulated
If Fresno State had a group that spread awareness about the safety and effectiveness of nuclear power, I'd sign right up, as such power generation could increase water availability, and produce very cheap power with no emissions.
I would suggest not changing campus to no grass.
Auto shut off water faucets
Light efficiency
Move classes online.
More energy saving alternatives for lights etc.
Stadium lights
I don't know
Better public transit
Fresno State bus
Lobby for nuclear power in the state of California
Turnstile doors, Energy efficient windows, etc. Why limit to three, and while I appreciate input, surely science should lead here, not my opinions
Better HVAC systems with auto shut off
Plant more trees to shade walkways and parking lots
Efficiently utilizing HVAC. Heat in winter AC in Summer. It should not be below 73 in November.

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New to upgrade old electrical infrastructure in buildings
Water/Hydration stations that allow students to refill their water bottles across campus (especially in Lab School area, as those water fountains do not work.
Sinks with sensors so water is not left running
A flexible work schedule so that we as a campus can easily lower our emissions. This would have zero cost with an immediate impact.
Newer heat and air units that are energy efficient
Reduced carbon emissions in building design, campus development, built environment
Closing buildings throughout the week so only buildings necessary are running
Monitor the water for trees in lot P30. Often they are watering the pavement
Consolidate classes to one or two buildings during summer and winter session.
Automated lighting systems and air conditioning
Heating/cooling efficiency; reduce number of refrigerators,
Double pane windows in older buildings
Less electric vehicles they are not sustainable. Create more waste from manufacturing waste and batteries are create from lithium mines. Have you see the mines and the environment that is destroyed from the harvest of lithium. I could go on.
Removing always on lights from buildings and putting night sensors, as well as putting recycling cans in every faculty and staff office.
I understand the importance of Green Initiative and the role we all need to play. However, each item listed sounds like hundreds of thousands of dollars, if not more. Shouldn't the University be using their resources to invest back into their employees? Aren't we still needing to rehire most of the positions which were eliminated due to COVID? I understand if this is special funding from the State, but shouldn't the State care about the internal operations of the CSU?
Digital forms and processes to replace paper usage

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Green campus policies
A work from home policy that could immediately lower the number of vehicles on campus, and the day-to-day energy requirements of campus.
Alternative Work/Operation Schedules
Improved temperature control in all spaces in buildings
More sustainable waste, less plastics.
Reduce commuter vehicles
Remove individual trash cans from individual offices to reduce plastic bags usage
Better recycling
Motion sensors in large rooms to turn off light automatically
Telecommute
Recycle education
Turn grass areas in to parking lots so parking is not a problem
Set limits on how low thermostats can be set at. Most offices are significantly colder than they need to be.
To help lower carbon emissions, offer free trials of electric transportation options for employees to get work.
Recycle
More efficient AC usage
Better HVAC control system
Better thermostats and temperature control
Support efforts to increase ground water reserves

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Motion sensor handwashing stations throughout the campus.
Fresno State Transportation System
Hold IAQ to limit standards
As part of FSTI, we are already working with Dr. Weinmann.
Rolling blackouts, on weekends.
Optimize cold/heat management in buildings
Recycling
More efficient buildings and better heating/cooling controls to maintain comfort as outside temperature changes
I would say hardscape - but it will look terrible because we do not take care of our campus landscape
Auto shut off sinks
Severe ties with businesses that are negatively impacting the environment and our communities. See: Named donors for new student center
More bike friendly
Give us climate control in buildings to minimize waste from overheating and overcooling
Reduce single use beverages
Light Fixtures automation
All good
Better, safer and more bike paths and bike access to campus.
Bldg./Electrical Updates

Please regulate the EV cars. I see them using the vending machine outlets to charge their plug in cars for free.
Better recycling methods and composting
Compost and "green certified" buildings
Work from home
Green walls
Fix the A/C
All campus food served in recyclable paper/cardboard containers
Shutting off lights, computers and projectors in classrooms
Trash recycling?
Work from home as an energy saving solution
We have electric vehicles that are always breaking down. I would be cautious of buying all electric vehicles for campus.
Leave some green space
Bicycle lane on Barstow east of the campus. It is a nightmare.
More efficient climate control units
Recycling
Fix the building HVAC
Fix the recycling system - with clearly marked bins and training for custodial staff
Adopt Hybrid Schedules with staff for telecommuting options
Motion activated light switches where appropriate

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Overall practice of waste, along with making investments in technology that can be reused
Less waste currently
Stop paper pushing and printing
Composting program
Adopting more WFH possibilities
RECYCLE!!!
More recycling bins
More recycling in personal spaces
Motion-activated lighting
No leaf blowers
So the results of the survey mean nothing ...? You are planning on moving ahead anyway... Why ask
Chevron is literally one of the worst perpetrators of disastrous pollution accelerating the climate catastrophe, and we are continuing to be affiliated with them: <a href="https://eandt.theiet.org/content/articles/2021/01/lasting-effects-from-the-rainforest-oil-spill-in-ecuador/">https://eandt.theiet.org/content/articles/2021/01/lasting-effects-from-the-rainforest-oil-spill-in-ecuador/</a> Cut ties, or stop this meaningless charade.
Rainwater harvesting from downspouts for irrigation
Advocate for nuclear power plants throughout the state of California.
Hybrid work schedules to reduce gas consumption by commuting employees.
More efficient AC system
Water from hand wash must go to the toilets
Way more EV charging stations and rules to stop plugins from using them, enforcement of the rules, etc.

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Telecommute
Energy Storage
Incentives for ditching ICE vehicles
Educate/remind employees to turn off office equipment prior to leaving for the night and week-end
Inform campus of items that can be recycled. More recycle bins around campus.
More recycling bins
Eliminate leaf blowers; reduce light/electricity usage
More efficient AC/heating system
Motion sensor lighting where permitted



# APPENDIX J: PLEASE TELL US ANYTHING ELSE

Responses are listed below from the web-based survey administered at Fresno State from November 17th, 2021 to December 7th, 2021. Respondents provided open-ended comments to **“Please tell us anything else.”** Responses listed are compiled from faculty, staff, and students. Each row represents an individual response.

Please Tell Us Anything Else - Faculty/Staff
<p>My heating/cooling system has been broken for almost six months. I have called multiple times and they did not fix it a few times. Most recently they did identify a problem but told me they had to wait for cooler weather to fix it. Every time I call, I emphasize that the fan is running loudly and the temp is either too hot or too cold (depending on the season) which suggests to me that we are using energy inefficiently. This has always been my main concern, but I think when I call to follow up people assume it's for my own comfort. I am concerned that it takes over six months to fix something like this and multiple follow up calls. How many other situations are like this on campus? Do we need more staff available to address these issues?</p>
<p>I travel to and from campus frequently to maintain equipment or pick up repairs. I always need a vehicle to transport equipment. I do plan to move to a plug-in hybrid sometime in the future. Having more accessible charging stations around campus parking lots would be nice. Lowering the need for heavy water consumption either by low-water landscaping or low-water toilets/sinks would be beneficial in our current climate situation.</p>
<p>It would be good to let folks explain their answers throughout this questionnaire as it seems to me much of it will be hard to interpret. As noted in the first set of questions: I think, for example, recycling is very important-- I just don't think the university has prioritized it, so I responded never. I am neutral on water because I have no idea what the university is doing here, and there was no "unsure" "need more information" options. Of course, I should help conserve, but my little contributions aren't the real issue, are they? This is a structural issue requiring real concrete money and commitment from the state and university, (resilient building, replacing all windows with dual pane windows, putting in revolving doors on entrances, massive solar and wind commitments, trees, water schedules, recycled water infrastructure, replacing all gas equipment, etc.).</p> <p>And, I was really disturbed by "rat on others" judge-mentalism inspired by a number of questions, rather than a community building attitude. As a faculty member, I was especially offended and angered that our hardworking, severely understaffed, custodians are the only group of employees that appear to be specifically singled out for random "policing" in this document. I'm glad the</p>

university is taking a pulse on this vital issue, but whoever put this questionnaire out should have a bit more care with tone and double-edged questions.

Don't have a fan. Don't have a window that opens. Need to have my computer left on, in case I need to work from home and need to access it.

Going virtual saved a huge amount on paper, printing, copying, etc. I saved a lot on time and gas without having to commute to campus. We should continue to have telecommute options for faculty and staff and virtual courses for students. Right now, with childcare issues for so many people, virtual classes makes education much more accessible to students who are also parents. Going virtual was the best thing Fresno State ever did for the environment.

I am absolutely delighted Fresno State is looking into this very important issue.

The above answer refers to when I am working on campus, rather than virtually as now.

I see a lot of mature, healthy trees removed unnecessarily and constantly replaced with young trees. Instead of properly taking care of trees, so they can grow and thrive, the staff (1) prunes them excessively and too often (2) doesn't water them properly. This constant removal and replacement is costly and leaves the campus with not enough mature trees. Also, all walkways on campus should be shaded by trees - during the hot months it's unbearable to walk on the hot concrete paths. So, MORE trees, better care of mature trees.

There should be a LOT more vegetarian/vegan options on campus for official campus functions. Everything is meat, meat, and more meat. Meat is INCREDIBLY wasteful and bad for the environment on so many levels, not to mention cruel and inhumane. The default should be vegetarian on the whole, with meat options for people that must have it. Meat (and dairy/eggs) is a huge contributor to global warming and pollution, and we need to start joining the 21st century and thinking globally, even if we think it has no immediate effect on our campus.

We have so much room for growth around sustainability practices at Fresno State. This should be one of the top priorities for our campus this decade. We live in the midst of the climate change. We need to do our part. We should seek to be a leader in sustainability and in maintaining a fully sustainable campus.

It's possible to support our students as an in-person campus and still save energy by reducing our presence during low population hours and time periods. After 4pm, after the thanksgiving holiday through the beginning of the Spring semester, Spring break, and Summer. Other CSU's don't all function on an 8-5pm schedule. San Diego State has departments that are 9-5pm M-Th and 9-4pm Fridays or 8-4:30pm M-F. If Covid taught us anything remote work is a viable option if 8-5pm is the schedule we'd like to keep and reduce the amount of hours we utilize here. There's an understanding of abuse, but there's also an insult to those of us who have a work ethic we apply here and at home.

Those who would abuse remote work abuse their job here as well, that's just who they are as a person regardless of their location. And spending more money on energy because there's some disillusionment keeping them here in the office changes that makes research like this moot and a waste of everyone's time. Because this is a huge obvious area we can reduce consumption, waste output on campus and in our community through carbon emissions by reducing commuting.

Fresno State is over 100 years old. Many of the restrooms have not been updated with water saving toilets, men's urinals, and faucets. Fresno State should be the leader in water conservation and provide true numbers as to water and energy savings. The droughts in the valley are only getting worse. Every department on campus needs to participate in this mission, from the grounds department to the farm and agriculture departments. We will save energy not pumping water out of the ground.

Most of the staff I know would love to understand why our university is not allowing employees, especially those who never have to deal with students directly, have some telecommuting capability. This could help the environment in so many ways. It would also help the staff to have more balanced and productive work environment. The university is doing great job, however we do have old buildings that are not energy efficient. Some rooms don't have working thermostats and setting up the right temperature is impossible. The rooms are either hot or cold and the employees feel uncomfortable and frustrated. Many of us have to drive old vehicles that consume a lot of gas and pollute the air because with the price increases that's what we can afford. There is a gap between our desire to preserve the energy and our ability to do so without feeling uncomfortable and unproductive.

Old electrical panels in my building hamper more efficient use of electricity and future expansion of more efficient equipment that could also save water use.

The water fountains do not work. There are multiple students who have voiced their need for water; however, having to walk far distances to refill their water bottles. There is a need for new water/hydration stations installed in Lab School Annex.

Bathrooms on campus are very outdated and not water efficient. If we can have new sinks with sensors and even water efficient toilets that would save lots of water. Sensors are also much safer as related to covid because there is less touching of surfaces.

I am currently saving up for the purchase of an electric vehicle for the personal work commute. I hope that the quest to save energy in the campus environment will not result in excess removal of green space (the trees and grass are important in removing carbon dioxide from the atmosphere, and they contribute to the beauty of the campus grounds, unlike the proliferation of shade-deficient campus parking lots).

I believe this survey was biased in the sense that it put the blame on employees rather than the University when it comes to wasteful practices. Asking how I see others waste energy is silly when I am in a building that either has the heater or air conditioner blasting to the point my colleagues and I are uncomfortable in our work stations. I believe the University needs to take accountability for their lack of energy preservation before you start asking us to point fingers at one another. I will also reiterate that I believe a flexible work schedule will assist with not only enhancing employee's work live balance but also in helping us as a campus to preserve energy and lower our emissions. That strategy is free and will have immediate results.

We work on a campus that has lots of animals. When I worked at ASU in Arizona engineering students designed lighting for a dog park that reused all the waste from dogs including the bags and it powered all the lights in that park. We need to start thinking about how to use the animal waste for here to power lights or other things. Articles provided  
<https://www.ibtimes.com/dog-excrement-keeps-lights-arizona-park-695028>  
<https://losetheleash.com/poop-powered-park/>

Lights are on in the library what seems like 24/7 and all through the pandemic. This seemed very unnecessary.

Really I wanted to click on all the items in the "future action items" question, but I was limited. One action item begets the next. So let's not limit to three. But the ones I listed are the ones I'd prefer first.

Also, some of the questions were poorly worded. Yes, recycling is important. Does Fresno State communicate it's important to us, collectively? Not always. So I left a few ambiguous questions blank.

There is no need for the staff I work with to be in the building 40 hours a week. Because we do not work with the student population at all - and a majority of us do our work out with the community and our alumni, we should be given the opportunity to work a flexible schedule allowing us to shut down the building multiple days a week. This is how our office specifically could contribute to using less energy.

Allow a few lawns, but convert more areas to native, water-wise landscape. Sprinkler heads can leak, break, or be pointing in the wrong direction.

The original four buildings on campus are a nightmare for matters involving sustainability and energy conservation. The heating-A/C systems are a model of inefficiency; as are the forms of lighting in the buildings. The restrooms still use paper towel dispensers, and there is a constant smell of excrement on the first floor of Social Sciences by the restrooms, which indicates leakage in

the plumbing system. The elevator in McKee-Fisk is inoperable more often than it is functioning, and this is the only point of access for the second floors of that building and Social Sciences for people with physical disabilities. Don't even get me started on the restrooms on the first floor of Family Food Science. These buildings need an overhaul if they are to be brought in line with initiatives involving sustainability and energy conservation.

A custodian told me a couple years ago that they collect all trash and recycles in the same bins and sort through them later. I'm not sure if this is a real practice but it seems like a time waster. Another related issue is safety. I live close enough to walk/bike to campus but I would NEVER actually do that because I do not feel safe on the streets around the perimeter of campus. If Fresno State made safety a higher priority, I believe more people would use alternative modes of transportation (walking/biking) rather than cars.

I plan to run PHYS 151 (Observational Astronomy) class during Fall 2022 semester. This class is popular among prospective science educators, since astronomy is the science with the greatest popular appeal. It would help current concerns about climate and the environment greatly if the public had greater science literacy. PHYS 151 (Observational Astronomy) class makes extensive use of Fresno State's Campus Observatory, which is on the lawn just west of the Downing Planetarium.

The lawn sprinklers around the Campus Observatory are a danger to the observatory. They come on without warning at night, often soaking planetarium visitors. They have also caused damage to the telescope when the dome is open. They should be removed, along with all the grass surrounding the observatory. It needs to be replaced with gravel, plain dirt, or some other ground cover that does not require water. This isn't rocket science, folks: I have repeatedly complained about this, but Facilities Management has done nothing for many years now.

Also: The trees to the north, east, and south of the Campus Observatory need to be shortened by at least 10 feet---or better, cut down entirely. This is because these trees block the view of the sky from the observatory. Again, why does Fresno State have so little concern for science education? Is Fresno State deliberately trying to cultivate a reputation for not being a serious university, where one can get a good science education, more concerned with how the lawn looks than our students' educations?

It's high time that our institution provide leadership, vision, teaching, training, and a good example for our region in sustainability. Seemingly, campus individuals have been doing what they can in their spare time, rather than there being some institutional concerted effort.

If we could go back to the topic of electric leaf blowers for a minute, all I want to say is Please! Please! Please! I hate the sound of gas leaf blowers and would really appreciate the change :)

At Kremen, I have not seen a recycling bin. Also, I'm not too sure where the recycling bin is at Kremen. I think making signs/advertising to students how they should recycle should be done. These separate trashcans should be consistent throughout the entire campus.

Though the campus works to be better stewards of energy and resources there are financial limitation that limit what can be done.  
But our personal habits at home and work can make a difference.

I can understand that the campus would want to keep some grassy areas where events involving the community happen but large parts could be replaced by mulch (the tailgating area for football games) or water-wise gardens (the one on the west side of the Health Center, for instance, is beautiful!). I suppose that the capital expenses would be large and it is probably easier to mow a lawn than it is to maintain a garden but it would show that this campus takes seriously the fact that we receive only 11.5 inches of rain a year on average.

Fresno State is a beautiful campus!

You need to create an education campaign about energy and recycling. We waste so much energy and don't recycle at this school. Start an education campaign directly from the president's office, going to the deans and make sure they make this a priority as we leave equipment such as projectors on in the classrooms, have lights in the outside of buildings always on when they should be on a sensor, and make sure every faculty, staff, and main hallways have a recycling can. I am very happy you are doing this survey, but I hope indeed something is done to fix our broken energy habits by all employees.

Though it is likely a product of the condensed format, this survey conflates our Fresno State ecosystem with the greater Fresno environment, as well as the global environment. These things should be approached separately, though they eventually impact each other. In this survey, there is also a conflation of individual responsibility with institutional bureaucracy (how institution property should be used).

The last thirty years has seen nonstop admin bloat at csufresno. Stop it. Cut the bureaucracy and nonessential programs in half. Use the money saved to invest in renewables on campus. With the energy savings hire tenure track faculty and reduce adjuncts to no more than 10% of instructional personnel. Make the university great again. Or continue the downward slide toward less than mediocrity.

Though I currently am housed at the UC Merced Center off campus, I have been housed with the Thomas Building and Lab Schools, which have provided me opportunity to observe some of the issues noted within my responses. In coming to the campus for meetings has provided me the

experiences regarding the traffic congestion and idling of cars. With conservation of water within the campus would make the University a great example to the community of our commitment to the valley and its residents.

Some of the questions were confusing in that they implied aspirational opinions

I would very much like to see the Aquatics Center go solar, if it were possible. I don't know if pool heaters can be changed to solar since it wasn't built that way; but if they can, let's consider it. The heaters go out all the time anyway, and the small pool heater has not worked for nearly two years. Let's change it to solar when we fix it.

I am huge on energy saving and recycling.

I was very disappointed by the tone of this survey. Rather than give us a platform to express our views on large scale systemic changes that would make a large impact on the energy consumption on campus, it seemed to place the responsibility on the individual. Fresno State leadership can take immediate action to reduce the number of vehicles driving to campus everyday and the day-to-day energy consumption on campus. There are a number of jobs on campus that don't require face-to-face interaction with students, that can successfully be done remotely, and that could immediately make that shift. Rather than have me snitch on coworkers for idling a car in the parking lot, why don't you remove the need for that coworker to even drive here. This whole survey is reminiscent of oil company tweets that encourage individuals to lower their carbon footprint. Considering Chevron is a large donor to Fresno State I should not be surprised leadership seemed to borrow that strategy from their playbook.

Please stop using herbicides on the landscaping and keep up the tree planting.

We need to direct action in ways that impact the valley to solve lingering local problems barred by politics. If the university cannot do it, who can?

Considering alternative work schedules and/or some form of telecommuting would help address some of these concerns. Using power at non-traditional times would lessen the strain on the power grid and save money. Telecommuting during the breaks would mean the entire campus would be shut down for an extended amount of time. Adjusting the temperature or investing in more efficient heating/AC systems would eliminate the use of personal heaters and fans.

Teach us how we could help conserve at Fresno State at every level from students, staff, faculty, admins, custodians, community visitors, etc.

<p>I work in several buildings, so I chose the building in which my office is located.</p> <p>I think there should be much more emphasis on waste, particularly plastic waste, on campus.</p>
<p>I use many other buildings every week.</p> <p>We can be a living laboratory by running experiments and documenting to find the way forward.</p>
<p>I have observed some classrooms start having smart lighting system, and that's great. I wish to see that in all offices and labs. If we can apply the auto sleep for lab computers if unused, that would save quite a bit of energy.</p>
<p>I am bike riding distance to campus, but I have seen too many people on bikes hit over the years and see it as too much of a risk with distracted drivers. It's just unsafe.</p> <p>I see heating and cooling in unused buildings and rooms as the biggest waste of energy.</p>
<p>Leaf blowers, whether gas or electric, should be BANNED from campus. They create too much noise and too much dust pollution. We should install roof-top solar on most buildings and batteries in some cases (e.g., the library).</p> <p>With regard to the question below about airpods, Apple is (IMHO) an EVIL corporation and the university should not have a relationship with it or push its products, so my answer to that question is a definite NO. Please do not enter me in that drawing, even though I supplied my email address earlier. Thank you.</p>
<p>Fresno State needs to prioritize energy and water sustainability leadership as the number one goal and number one identity of its brand. It should be the first thing the public thinks when it hears "Fresno State." Anything short of this is an embarrassment for an institution of higher learning in the 21st century US.</p>
<p>Thank you for this opportunity to provide input.</p>
<p>While I do agree we need to conserve energy, I also am aware that needs vary and in order to function properly some areas will need more energy to run and educate properly than other areas. I would not want to mandate restrictions that would impede education and research, which is why we exist in the first place.</p>
<p>I appreciate the water refill stations greatly!!</p>
<p>Great to find that we are looking closely at this issue and hopefully for making necessary changes as needed.</p>



<p>I really hope that education faculty, particularly those involved in science instruction, can connect with engineering faculty, environmental science and biology faculty, etc., over this issue because the infrastructure of our education systems is directly related to the quality of the cultural and instructional climates in K-16 schools!</p>
<p>The toilets in the restrooms in our building on campus always leak and often have to be flushed multiple times to work. It seems like updating them would be important for water conservation and also for sanitation purposes.</p>
<p>I certainly hope we are serious about this effort!</p>
<p>Low flush toilets require several flushes to empty the bowl, a waste of money and water. Also they are easy to clog, causing additional time to be fixed by custodians.</p>
<p>Many of the questions do not apply to me. So it was difficult to answer correctly and accurately. Perhaps next time, add a feature that says does not apply.</p>
<p>The trash/recycle bins at Costco are a good step in the right direction. They have picture examples on the containers showing what goes where. STILL there are idiots who don't take the time to properly sort things. But this is a step in the right direction. From what I have heard, Japan does the recycle thing FAR better than us here in the USA. I've heard that they have lots of sorting containers in Japan and that the people have been educated to use the proper containers for the proper recycle-able materials. I wish the USA could make that happen. Fresno State could help. While the containers at Costco STILL get messed up by people who don't care enough, I am sure it is better than the average trash/recycle container. I know from hosting parties and social events that people just don't look closely enough before dumping their trash or recycle materials. It frustrates the HELL out of me. My hope is that it will get better in time.</p>
<p>I feel strongly that the thermostat temperatures set in most buildings are too cold. A significant amount of energy can be saved by increasing the temperature a few degrees, or more. Furthermore, almost everyone I work with agrees that it is too cold, and space heaters are used regularly all over campus.</p>
<p>Methane digester at dairy to produce electricity and or power tractors</p>
<p>Placing solar panels on parking covers seems like a great idea! Let's follow the lead of the K-12 schools and get on this.</p>
<p>I work as a Community Service Spec. With public safety. Currently on graveyard shift which affords the opportunity to witness what others don't see during the day.</p>

One of the biggest problems with energy efficiency in our buildings is that our buildings are simply too old. Many HAVC systems are running at a substandard efficiency, not only it is energy-inefficient, but it is also uncomfortable. Using Engineering East for an example, in summer, the first floor is freezing and everyone has to wear a sweater to stay warm yet on the third floor, classrooms are so hot that students cannot even concentrate on learning. We have to keep the doors open so we have some airflow. Our buildings are approaching their end of service life and we need new buildings with new, energy-efficient systems. That's the best way to improve our campus energy efficiency in general.

We need to build energy-efficient class/office spaces. The PHS building is a perfect example of old construction costing the campus current funds due to poor building design.

The grass area (where the band practice) is over watering. During the summer months, we get a lot of mosquitoes. During the fall, we get a lot of flies. This happens every year.

The Joyal building needs water-efficient toilets and sinks and energy-efficient air conditioning and heating

Hopefully, you will share the results of this survey with faculty and staff.

This is not an energy usage comment. We have a wheel-chair bound student. He can ride the elevator up to our office, but the doors to get into the hallways are not accessible for the handicapped. There needs to be an automatic button to push or it should be an automatic door. He struggles getting into the hallways that lead to the offices.

The dearth of solar panels on campus is astonishing. Local public schools do a far better job of installing and using solar panels. It's obviously a very low priority for Fresno State and sets a terrible example for our community. Additionally, it is unconscionable that Fresno State uses so much water on lawn and grass. We are in the midst of a terrible drought and yet, we have giant fields of grass that require a tremendous amount of water. At night, anyone can witness the inefficiency of watering the campus, with water just pouring into streets and into drains.

It's great to see the separate recycle and trash bins outside our building. I hope our faculty, staff, and guests use them correctly.

What is going on with the trees on campus? Some are dying or have died from lack of water during the summer. This is not a good situation.

You ought to have an efficient "gray water" system -- reusing water for appropriate uses. ALL CSU vehicles should be ELECTRIC! The buildings should be solar-energized. Turn off the heat in the

buildings or at least limit it. Fresno is NOT that cold! People can put on clothes. MORE information around campus about the importance of recycling! (And what can be recycled.)
They do keep it quite cold in our office--it is like there is no thermostat, just full-on cold air or full-on hot air. The air flow is so strong that in certain places it is like a cold wind blowing indoors.
I would love to see motion sensors for light added throughout buildings. Interior and exterior.
It would be great to have a wall mounted filtered water bottle refilling station in the Thomas Building since there is a large amount of students who uses the rooms and resources in this building.
There is a lot of traffic between McKee Fisk (MCF) and Social Science (SS). While there are recycling bins in the quad and across the street in front of engineering, there should also be at least one in the corridor between these two buildings.
There is no heat in Science 1 from late spring to Fall and we must use heaters to comfortably use our workspaces. This can work for 100 sq ft offices but becomes highly inefficient for classrooms and graduate research laboratories.
Our building is extremely outdated and a lot of the bathrooms and energy here is wasteful due to the unkept building fixtures. Please look into the DeRosa University Center at University of the Pacific for an example of sustainable building structures that we could model after at Fresno State.
I would like to see more CAR CHARGING STATIONS in general, especially on the west side of campus.
CSU and CA in general needs to focus on maintaining current energy supplies rather than closing power plants before alternate energy options are available. We are heading toward a self-imposed energy crisis because of a premature push toward green energy, which is not ready for prime time.
I wish we had windows we could open and close to help with temperature control.
If the campus wants to invest - and this is a big if - then all parking should be covered in solar. This is the best way we can make a difference. I have heard that the current covered parking is disconnected and is not generating any electricity for campus though. Priority 1 should be fixing this, followed by covering every other parking area.
More dependable electric car charging stations would very useful and much appreciated. Thank you, Dawn

Lighting in our area is our biggest issue of not having sufficient lighting
Where I went to graduate school, Oregon State, our older building had windows that opened and could allow fresh air. There was a study done years ago at a French hospital, if I recall, that infections were dramatically reduced just by opening windows. I think buildings such as Peters should retrofit the offices so that windows can be opened. I am sure there is a window design that could be opened, but not allow someone to go out it, if that is a concern.
More recycling bins in office and higher floors of PB, as well as updated restrooms with water efficiency sinks and toilets
We need to focus on purchasing more recycled products (ex: cleaning chemicals, recycled tire-derived products, and other products that are made from recycled products.)
The windows in Family and Food Science are single pane windows that do very little to keep the building cool in the summer months and warm in the winter months. They are terrible for the energy efficiency of the building.
The water faucets in the restrooms I have used (mainly Peters Building) do not emit enough water to enable proper hand washing. While I am deeply concerned about wasting water, this is a matter of public health.
Please make it easier and safer to access campus by bicycle. There is no safe access on Shaw and it is dangerous on Barstow. Check Cal Poly and UC Santa Barbara's bike paths and bike access.
What is the objective of this initiative and why? Is it really to be energy efficient or is Fresno State trying to cut costs and masking it as greenwashing? The faculty, staff, and students deserve to be comfortable in the areas they work in. We already don't have control of our AC, especially in 100 plus weather. I had to resort to purchasing my own fan for my office because Foundation wouldn't approve for me to get one. Fresno State has so many unused grassy areas making walks between classes and buildings longer and unbearable in the summer. At least put Solar Panels that doubles as covering for students so they have shade.
Our building has a lot of windows- we could use more efficient blinds to block out sun during the summer
It is often too cold or too hot. The building is not efficiently run.
If our office or more offices turned off the lights and used reusable utensils and dishware it would make a difference. Specially those offices and areas that have a sink to wash the items.

I would like to help the campus move towards carbon neutrality. Thank you for this survey.
Before the pandemic, the geography club (I am the advisor) was working towards a proposal to create a living green wall on the south-central side of the Science Building. The club would be interested in revisiting the project if allowed to do so.
I often see sprinklers on at odd times and the range of these sprinklers often extends to the concrete sidewalk. I have seen broken sprinkler heads with water not effectively distributing water. It is a waste of water on our campus.
Some buildings in our area are very old and not energy efficient. It will be great if we can do some updates to these.
Speech Arts is an old building that needs upgrades.
Thank you for focusing on conservation.
Building insulation is also a big issue on campus. Lots of energy is being wasted by inefficient heating/cooling systems paired with poorly insulated structures.
I think traffic congestion could be reduced if employee start times were staggered by 15 minutes. Some people start at 7:45 and leave at 4:45 and others start 8:15 and leave at 5:15. It would make the traffic on Barstow flow faster and reduce the exhaust.
I observe classroom lights, computers and projectors on often. I teach evenings, so I am very mindful to shut everything down and off when I leave the classroom; however, in Kremen Ed building Room 181 there is a spotlight that in the corner of the classroom that is always on no matter if all light switches are in the off setting - it's very odd. There is also a computer monitor mounted to the desk in this classroom that is always on. I haven't tried shutting it off since I was told to use my own laptop; however, it's just odd that the computer monitor stays on.
Markers!!! We waste a ridiculous amount of markers and there is no way to recycle the ones we use. Is there a solution for this?
The A/C is set too high during cold weather months. Very cold indoor temperatures resulting in space heater usage.
I hope Fresno State can develop an implement a sustainability program that is bold.

<p>We need a more concentrated effort - with more publicity and promotion- make it more visible with signage and bulletin board displays- contests between the colleges to encourage teamwork.</p>
<p>Having short use fleet cars would be great alternative on campus and could spur use of public transit or bicycling. I live within cycling distance and less than a block from a Fresno FAX stop, but my role as a DOD frequently takes me off campus during the day for meetings. At other places I have worked there have been short use fleet cars available to facilitate situations like this. Electric or hybrid short use cars would make it even more efficient. Staff could use alternative means to reach campus, save on parking, and still take care of off campus business during the work day.</p>
<p>There is a faucet that won't turn off in the Women's bathroom on the 4th floor. I'm not sure who to contact about that.</p>
<p>Since pandemic repopulation, there is an ongoing and troubling lack of emptying trash and recycling cans throughout campus, especially outdoor cans.</p>
<p>As regards heating and cooling in my building - the HVAC is broken and so temperatures can move from 80 - 60 degrees. More efficient and properly repaired HVAC systems are important for sustainability.</p>
<p>It's better than it used to be.</p>
<p>Sustainability and conservation can be so much better at Fresno State, let's make it happen!</p>
<p>Heating and air conditioning being used in buildings during the breaks when no one is in the buildings. Hallway way lights being left on for no one.</p>
<p>I teach in Lab School and South Gym most frequently.</p>
<p>Doors are always propped open</p>
<p>I think there should be plants and trees that give out fruit or something that people can enjoy. Students and staff can take advantage of fresh fruit that is healthy and nice to have around.</p>
<p>I fully appreciate the need to conserve water but it cannot be at the expense of the campus beauty. Incorporating more drought-tolerant plants would be wonderful. The area along Barstow near the Police Station at the flag pole, has drought tolerant landscaping and it looks great.</p>

<p>Note that while the use of electric vehicles sounds great, with the excessive high cost of electricity in California and the source of generation, electric vehicles do not provide anywhere near the environmental savings you would like to think.</p>
<p>AirPod I'm DEAF no benefit to me gift card Walmart or Target thank you</p>
<p>The thermostats are always too high in winter and too low in summer</p>
<p>It does get hot in the parking lot in the summer, I don't know it would be possible to expand the solar panels to other parking lots so that can help with energy and shade. Also I work for CVHPI so I don't know if I even count for this survey now...</p>
<p>I love Fresno state and all we do to promote recycling and conserving energy.</p>
<p>I walk to other buildings for meetings as much as possible</p>
<p>The new music building has some sort of a heating/cooling flaw.  I believe efforts may have been made in the past to fix it, but haven't succeeded.  Classroom 236 is extremely hot--uncomfortable for students AND teachers--seemingly at all times of the year, while the adjacent faculty offices are so freezing cold that faculty must use space heaters to occupy their offices. That seems like a waste.</p>
<p>Replace older buildings. My building is 75 years old with 75-year-old windows. Whyyyy?</p>
<p>Kremen needs a great deal of repair in the restrooms as there are continually leaking toilets and dripping sinks. Also, recycling is not available everywhere in Kremen.</p>
<p>Thermostat could be monitored better often either too cold or too hot, doesn't always match outside temperatures.</p>
<p>This should be a priority for the campus.</p>
<p>I would bicycle to campus if there were changing stations.</p>
<p>HVAC is terrible in this building. It is very hard to regulate</p>

<p>I work from home and do not report to campus. Telecommuting is a good way to save electricity on campus, space on campus and parking. It is also a good way to reduce traffic and smog. It should be an option for many different jobs. A hybrid model would be perfect.</p>
<p>No idea how this impacts the energy use on campus, however, Joyal seems to be very inconsistent with the temperature in the building. Maybe if it were more consistent, people may be less inclined to use personal fans/space heaters?</p>
<p>I am rarely on campus, so many questions are pertaining to things I do not use or observe very little, if ever.</p>
<p>More vehicle charging stations!!</p>
<p>Useless survey</p>
<p>Chevron is literally one of the worst perpetrators of disastrous pollution accelerating the climate catastrophe, and we are continuing to be affiliated with them:  <a href="https://eandt.theiet.org/content/articles/2021/01/lasting-effects-from-the-rainforest-oil-spill-in-ecuador/">https://eandt.theiet.org/content/articles/2021/01/lasting-effects-from-the-rainforest-oil-spill-in-ecuador/</a></p> <p>Cut ties, or stop this meaningless charade.</p>
<p>I think this survey didn't think about that some of us aren't on campus</p>
<p>To encourage staff to carpool or switch to electric-powered vehicles can there be a stipend that could help fund these changes?</p>
<p>I have been restricted from the campus do to covid</p>
<p>Too compact there are about 11 of us in this trailer</p>
<p>We need produce more Clean Energy than the energy that we consume.  We need to convert the Fresno State Campus in Zero Net. There are many Parking lots that should be Solar Energy. The "terrazas" of the buildings should be converted in Gardens, in Green parks.</p> <p>Thanks for the opportunity to participate in the survey.</p>
<p>Really want to see more solar generation on our large parking lots. The University was a leader when the installation at Woodrow/Shaw was installed, but has fallen behind since.</p>



I don't have the answer to this but it happens everywhere -- new plastic bags are used to replace the old one because the one in the receptacle is dirty. It seems like we could have a place to dump food waste instead of putting it into the trash can so that the trash can liner is able to be reused a couple times. Also using plastic bags to collect recyclables has always seemed counter-intuitive and yet it's how most waste management websites tell the customer to put the items into the bins for pickup.

I wish we had more access to recycling in office spaces and common building areas.

I was very disappointed to see the amount of trash left on our campus after last Saturday's tailgating. Monday/Tuesday morning some trash cans around campus were still overflow and some portable restrooms were also still on campus. It's Wednesday today and there's still trash on some lawn areas. I think we need to do a better job of making sure that the people tailgating are informed that they must clean after themselves and leave our campus ready for Monday morning classes, it's sad to walk around seeing all that trash.

I trust Fresno State's top administration for their ability 'to do the right thing'. I sincerely hope that Fresno State will take actions discussed in this survey. Not only will it save us \$\$, but also make it a safer and more sustainable campus. More employees will be positively influenced by it and apply elsewhere including home. Family members of employees will in turn be energized and inspired to do the right thing.

Since recycling is apart of this survey, I feel it is important to mention that there is a larger need to place more garbage cans in convenient locations as opposed to "in-between" building exits. In addition, placing them in "high traffic" walking paths. Observations made: littering has increased throughout the campus which is impacting the beauty of this campus. Garbage cans are not easily visible nor accessible.

Work from home is most efficient and cost savings is highest. Puts the expenses on people and their homes. Best for fresno state.

I ride my bike to work as often as possible (2-3 days per week) 11.5 miles each way. I think it would be great to encourage employees to bike to work rather than use their car. Here are a few ideas that may remove barriers to bike commuting. While I'm able to park my bike in my office, it would be nice to provide employees with secure options to lock up their bikes for those who can't park it in their office. Allow those who bike commute to have free use of the showers in the student rec center. Invest in Fresno State branded bike promotional swag. These could include water bottles, cooling towels, cycling caps, low-end bike safety lights (many are already red), cycling jerseys, bike bells, etc. These items could be for sale in the Campus Pointe/Bookstore shops and be used in promotional giveaways. Lastly, continue to invest in cycling infrastructure around campus and encourage the city to improve cycling infrastructure for a mile or so around each border. The new

back lanes on Maple, south of campus should be the benchmark standard. The campus could use its own land asset to create a viable bike lane on Shaw Avenue. The redo of Barstow Avenue does not properly address bike infrastructure (but easily could be adapted) as there is only a bike lane in one direction and the bike lanes get choked off by intersections. The speed limit on Chestnut should be slowed down to under 30 MPH. This would also increase the safety of cars using the Save Mart Center parking lot and Campus Point. There is no bike infrastructure that connects the campus to Campus Pointe. While Bulldog Lane works, there is no speed limit posted on Bulldog Lane, and there are no bike lanes -- so the mix of cars and bikes could be problematic (this is a simple fix with low-speed limits and signage). I encourage all cabinet members to bike to work at least once per week (or even once per month) so they can see the issues for themselves. While Fresno State has pretty good bike infrastructure, there are ma

I wish you good luck with becoming a more sustainable campus. For years, I could not bring myself to pollute by using a space heater when my office was 60 degrees cold, but I have lived in this place long enough to have stopped caring. For years, I dutifully recycled, and then you switched contractor and explained how this contractors allows co-mingling, which is just code for 'it's all going into the trash'. I walk past the big dumpsters every day - it's all garbage because it's all dirty and co-mingled; and no, separating trash at the contractor's place is not an effective way to help recycle because the materials are too mingled and soiled (why do you think this contractor is cheaper!?). Stop greenwashing and own that this country has no intention of becoming sustainable because sustainability is not helping shareholders. Stop pretending that consumers are responsible for creating a sustainable economy while you let corporations and ag industry continue with their merry polluting ways. Tell your big donors to become more sustainable and you might actually make a dent. Oh, but you can't do that because you need their money. Well, don't bother me then either, I won't help with your green washing.

### Please Tell Us Anything Else - Students

My name is XXXXXXX and I am a Senior at Fresno State University. My major is in art, and I aspire to become an art teacher and therapist. I care very much about recycling which I use most recycle items in my art. I care about the earth by learning ways to contribute to making it healthier.

Fresno state needs to focus on placing native plants throughout campus. They are drought tolerant and better for our ecosystem.

Rakes & brooms instead of leaf blowers
I believe that global warming is a valid cause yet electrifying all vehicles in my opinion isn't an economic valid solution. I believe that research should be conducted on bio-fuels which are synthetic fuels created with renewable sources that burn cleaner than EV's. I suggest the reader of this message to look into said innovation:)
Sustainability is wise, but the world's resources is in a rapid depletion. Therefore, it's important to emphasize regeneration. Build the resources back by replanting and regrowing, and by building infrastructure that will greatly solidify the growth of resources.
Not really.
Offering more online courses will be a big win for the environment
I am very proud that you are using these kind activities to determine what is going on and take possible efforts to limit the usage of energy
From what I have seen at Fresno State from the past three-four years of attendance, I feel that the campus is considerate of sustainability efforts. My only concern is the power that is used in the unused areas. For example, classrooms that are empty but the lights remain on along with other equipment that may be in there. In the library, I have seen students leave the lights on in the study rooms. Maybe installing motion sensor lights in the group/ individual study rooms may be a great idea for the future regardless of consuming solar or other energy sources. Besides that, I have never had a complaint about our school's efforts in conserving energy and being mindful of the environment.
I like dolphins
I love the earth and would love to see Fresno State's effort to protect her match if not exceed my own.
I am involved in a variety of clubs and organizations on campus, including Doctors without Borders, Peace Corps, and research. TI highlights this because I believe this puts me at a great position to advocate for the communities I work with. My diverse involvement allows me to advocate for a diverse population.
Mechanical Engineering Major, Planning to Minor in Mathematics, Observe certain details pertaining to energy because of the classes engineers take for their degree.

I am a fan of hardscapes to reduce water usage and maintenance.
Nothing much to say, but I am concerned with the environment since it will impact my future.
I think we should all recycle
Energy saving is good because it can save money. That's it.
Interesting yet smooth experience with the campus so far living here with the resources I have on and OFF campus.
More parking so cars won't have to drive around and idle as much. Like a parking garage with layers of parking and solar panels on top.
It makes me happy that this is something my campus is thinking about and wanting to take an active step.
There AC/Heat is always being put on blast in some of the buildings. They need to turn them off sometimes like recently it's been freezing in the Peter's Building and it is already the middle of fall the AC should not be on. The library has the heat on and as soon as you walk inside it is super hot and inside the graduate studies room, the AC is very strong as well. The sprinklers need to be managed because they are either broken by the street to the peters building parking lot or are just spraying all over the cement that you have to exit through the silver double doors.
Thank you for making this survey and for starting this initiative to save energy.
I don't have anything else to say besides fixing the problems the campus has without forcing anything onto the students.
I would like Fresno State to make more sustainable choices.
The Association for the Advancement of Sustainability in Higher Education has a program called STARS that rates institutions based on how sustainable they are. I think this would be a great starting place for the university to start reporting their efforts and see what changes can be made to make the campus sustainable.  <a href="https://www.aashe.org/">https://www.aashe.org/</a> <a href="https://stars.aashe.org/">https://stars.aashe.org/</a>

Have students that attend campus grounds be more cautious in conserving water if using the restroom.
Great questions!
I believe that energy conservation is an important part of the campus culture since it impacts us all.
Hopefully things will get better soon so that we can continue with our education.
I just lost my AirPods and they were the 3rd generation so sad !!
Native plant species would be beautiful and water/energy efficient.
More water bottle filling stations should be placed around campus like they have in the north gym and science 1 and USU because many people bring their reusable water bottles.
I am interested in biophilic/biomimicry designs, and greenroofs if possible can really benefit. Greenroofs can reducing roof temperatures, growing more plants, and reduces power consumption especially in the summer.
I enjoy the fact that the leaders at CSU Fresno take the conservation of the environment seriously.
More effective design. In conjunction with land use and roadways around campus. But while still maintaining some greenery especially more trees. Trees can have a massive effect on temperature in a region and this also affects the health of those who walk and bike especially. So it's important to still maintain greenery and plenty of trees for shade for everybody to maintain health and safety for pedestrians, cyclists, and the public. Also focus on reducing plastic and pushing for legislation that does something about single-use plastic while using sustainable alternatives. USE TERRA CYCLE. Have a location on campus for drop-offs. Try strategic locations like near dorms for students to recycle Lysol spray cans, toothbrushes, etc. And SaveMart center or gym or somewhere near edge of campus for community drop off.
To get the students more involved in this topic and to help out the University
Thank you for caring.
I knew about Fresno State's conservation initiatives because I was in the BOND program and we learned about the initiatives. I don't think the general student population has a good idea of the energy conservation initiatives unless they've been in the BOND program.

I think Fresno State can be better at helping the environment. Teaching students about these things is important.
Thank you for creating this survey... Fresno State will hopefully become a better place/campus!
As of now, I cannot think of any other feedback.
Fresno State appears to be trying to be energy conservative. That being said, there is still much to be done to help.
This is urgent, we must take better care of our campus, our planet, moving to green practices ASAP. Be a leader for positive change.
Thank you for this opportunity.
Thank you.
Fresno State would do nicely with more seating areas outside. A few grass patches could be converted into native plant plantings with wood chips around a seating area.
I walked to campus for most of my undergrad but now that I don't live in the Fresno area, I drive.
I am a Freshman at Fresno State, and I believe that if Fresno State commutes more into saving energy, then less money would be spent on the unnecessary energy waste. The money that was saved from saving energy, can later be used to purchase more equipment or even use that money for the students who need it the most in these dire times.
I feel that building more solar panels won't help with providing a sufficient amount of electricity. As from what I know, the solar panels located at the parking lot don't provide a lot of power to operate most of the buildings and other items located on campus. I feel more charging stations are necessary for more hybrid/electric options, and ways to reuse water or ways to conserve water are another good priority.
The purpose of a university is to educate students. Stop wasting time.
The biggest thing for me is the EV charging stations. For the whole campus, staff and students included there are THREE working stations as one recently went out of order. I commute 45 minutes and my hybrid is out of charge by the time I reach campus. I can rarely charge because there are so few stations. It is frustrating as a student trying to be more energy efficient with a hybrid, but I cannot because the limited EV parking at the school.

I appreciate the initiative to prioritize energy consumption.
Water is the most wasted resource in campus. All restrooms should have timed faucets and we should have waterless urinals to save water
Generally things at fresno state seem fine.
New to Fresno State and due to Covid I have not gotten the chance to explore or look around campus. MY answers are based on the little I know about Fresno State.
Anything done to improve environment, shouldn't affect student tuition.
Great survey! Very detailed and informative!
The pool that forms everyday by the atrium is the stupidest thing in the world. Just rip out the grass there and make it look like AZ already. I am sick of having to walk around the pool (the water that forms by the atrium by the suites) put in drought tolerate landscaping. Also the suites were built to where you need to run your ac 24/7 because the bathrooms have no windows or (at least mine) no fans so there is always so much steam.
In an ideal world, we would use less/no plastic/non-renewable sources. Textbooks would be made of recycled paper; furniture would be reclaimed and eco-friendly. Building materials would be ethically sourced. A lot of leaders aim for 2050 to make huge changes regarding climate change, but we have to act now.
I would walk to school but I commute from Madera.
I'm technically a freshman but it's my second year and I love recycling.
Students use the campus as a resource and a safe place. Fresno State needs to modernize, before they put restrictions on students where and when they can study
Is there security at the parking lot on the Barstow one? I get scared at night
Why are AirPods being auctioned off in a sustainability survey?!
Having more online classes can greatly reduce electrical and water demands on the campus.
Add more water stations on campus. There are a few on campus but there should be one in every building.

There should be ecofriendly cycling stations throughout campus
I love to learn
Fresno State campus is generally good at not wasting energy.
I love Fresno State! But there are a ton of ways we can do better as a community to keep trash down and energy usage.
I work on campus and have been working on a project for recycling for the school.
Will there ever be like a composting system at Fresno state or a community fruit or vegetable garden?
About to graduate December 2021. Fresno State must be sustainable for an even brighter future for the city.
Overuse of the heaters in the building during Fall and Winter.
I am very interested about the conservation of energy
Freshman-Transfer
I love Fresno State
Electric scooters can be rented (please see lime electric scooter rentals). Therefore, this convenience provides fast and environment friendly transportation on campus, prevents scooter thefts, and the university can be funded by its students/staff. In addition, there should be more security cameras on campus. There is no wall around the campus so it makes the campus weak in terms of security.
I want to design an Electric Bike which can be used on all CSU campuses for Students and Faculty to create a gas and pollution-free environment on CSU campuses. I have a Mechanical Engineering background and I am also looking forward to electrifying the CSU vehicle Fleet as well.
I think it's really important to save energy, to be more respectful to our environment because nowadays the nature dies every day due to pollution control high coke from people who do not know how to properly use energy, electricity and water.



I love Fresno State. I just need better food joints at the USU and please reopen the bowling alley, and keep the gym open for longer.
I never really thought about all these baseline energy; it made me become aware of how important it is if more people take care it
If possible, you should look into nuclear energy sources above all others. Nuclear energy is by far the cleanest, most efficient, and most reliable energy source. It is completely zero-emission. Also, solar and wind energy do not provide concentrated energy, which means it takes extensive amounts of other resources, such as purified silicon, phosphorus, boron, and titanium dioxide, to produce the same amount of energy that a single barrel of oil does. The process of producing the "clean" energy sources is actually not that clean at all. The extraction of rare earth metals and formation of steel and concrete required to complete the solar and wind manufacturing process is not environmentally friendly, and also heavily relies on either slave or child labor within the continent of Africa, where many of the resources are located. It is also currently very expensive and difficult to store solar and wind energy, and every major solar and wind plant has a backup source, which is almost always fossil fuels. This means Fresno State would still need to be reliant upon other energy sources when the sun isn't shining and the wind isn't blowing. The U.S. ranks at the top of the world in nuclear energy safety and nuclear energy is by far the safest energy source. Hopefully Fresno and Fresno State will be able to utilize nuclear energy in the near future.
I am currently looking for work opportunities after graduation. I am an applied mathematics student and am interested to hear more about your project(s).
I think there could be more outreach/education on how we can be more energy conscious
Educating students on their personal use of water and gas-powered cars. Switch to low flow toilets. Movement sensors in some offices and classrooms
I am happy that Fresno State is making efforts to promote sustainability!
Updating old infrastructure where it makes sense could lower summer energy usage.
I am a Freshman with Junior standing.
Fresno Campus is well run.
First time transfer student

<p>More solar powered buildings could help our energy issue. Along with sensor lights that automatically turn off when no movement is detected. Low water plumbing or even recycling our water for the toilets and sprinkler system seems like a great idea also.</p>
<p>I take all of my classes virtually so don't know/observe most of this.</p>
<p>I often times find faucet left running, and maybe suggest to have automatic water faucet on and off for couple seconds.</p>
<p>Biking to school feels dangerous because there are very narrow bike paths and the roads are very busy. The public transportation to Clovis from Fresno State ends at 6:30 pm. There are very few options for getting to school without driving. This should change as to reduce carbon emissions; we need to drive less.</p>
<p>Overall, pretty decent. Electric vehicles will be the way of the future but are far too expensive for the average college student. In the meantime, traffic flow will do far more for our planet than charging stations.</p>
<p>I don't believe that humans can reverse climate change. As I have learned from my studies at this university climate change has been going on since the beginning of time and the axis of the earth in its orbit around the sun has a great deal to do with it. Don't blame my truck...blame mount Saint Helen.</p>
<p>I am very passionate about reducing personal motorized vehicle usage as much as possible. Having cities and campuses designed around them severely restricts the amount of space available for people to actually enjoy their surroundings. I feel like I see very little talk about this on campus and eh town, and I hope that the campus will at some point consider reducing parking spaces and helping to raise support for more robust public transportation.</p>
<p>I don't stay on campus for very long after my classes.</p>
<p>I have seen major improvements since my freshman year and it makes me very proud!</p>
<p>I think all of the options to reduce would be amazing but I think the first step would be to get Fresno state to point where they provide all their own energy via solar or other renewable resources. We have vast amount of land maybe we could add some solar planes on roofs or above pastors for cows and other farm animals.</p>
<p>Conserving water and providing more trash cans in the parking lots are important issues to me. There can be more areas of campus where grass is replaced with succulents or drought tolerant</p>

<p>plants, and also the water is too high pressure. Sometimes people leave the faucets on in the bathroom and forget to turn them off. I think people are more well-adjusted to automatic low-pressure faucets. That saves the most water, I think, unless the sensor breaks and the water flows continuously somehow.</p>
<p>More energy storage research should be done at Fresno State. As the country moves towards more green energy, we will be put in a unique position to research storage due to our proximity to the hardest working watersheds in the world. So far, the best way we've found to store energy is through hydro pumped storage. We have an opportunity to be on the cutting edge of that research, and some of the effects of that research can bleed into the energy management at the university.</p>
<p>Measures like many listed here are not nearly as effective as actions taken to upgrade the power grid to more effective forms of power generation, i.e., Nuclear power.</p>
<p>Any significant investment into these programs would make great PR and we could set our campus apart for the energy savings. Doing something radical would be best like taking out all of the grass or painting the roofs/parking lot white to stop heat absorption.</p>
<p>I like the fact this survey was administered. I have a heart for preserving energy, reducing, reusing, and recycling. My whole family has for as long as I can remember.</p>
<p>Please enforce students running their vehicles and parking in the traffic lanes in parking lots waiting for someone to leave a parking spot, as many near accidents occurred in front of me.</p>
<p>Don't throw away vehicles until you actually need to-- THEN you can get an electric vehicle.</p>
<p>I think getting more energy-efficient lighting in the buildings would be great. Motion-sensing lights. Dimming lights. Anything that reduces that area of consumption would be easy and efficient.</p>
<p>I would like to see more efforts for safe driving around cyclists. I'm sure there are many cyclists who would like to ride to school but don't feel it is safe.</p>
<p>I'll be glad to be a part in a project</p>
<p>Let's all do our part</p>
<p>I am only on campus 1 day a week to observe these things.</p>
<p>I live 30 mins away from campus, so my only option is to drive. I also am not on campus enough to be making a good enough judgement.</p>

# APPENDIX K: FRESNO STATE TIMELINE FOR ENERGY CONSERVATION

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- ▶ College/University renamed several times
  - 1911 - Fresno State Normal School
  - 1949 - Fresno State College
  - 1972 - California State University, Fresno
  - 1980 - Fresno State University, Fresno
- ▶ Energy conservation initiatives
- ▶ 1978 - Energy Conservation Committee was founded
  - Energy Conservation Committee instructed all faculty, administrators, and staff to conserve electricity
- ▶ 1988 - Pacific Gas and Electric Company (PG&E) education program started
- ▶ 2001 - Facilities and Campus Environment Liaison Committee noted that planned to develop a new Energy Plan for the coming summer
- ▶ April 2001 - Facilities and Campus Environment Liaison Committee noted that the Utility Management presented the new energy plan
- ▶ May 8, 2003 - D. Zoldolske discussed with Facilities and Campus Environment Liaison Committee for the first phase of the International Center for Water Technology
- ▶ 2004 - Campus Environment Liaison Committee noted that Helix Electric would be the contractor for the remodeling projects (unsure of the purpose of the project)
- ▶ 2006 - Chevron funded \$2.6 million to installed solar panels to cover Lot V
- ▶ 2006 - Groundbreaking for International Center for Water Technology
- ▶ 2006 - Campus Energy Master Plan was drafted
- ▶ May 2007 - Construction for International Center for Water Technology was completed
- ▶ September 2007 - HVAC upgraded in three buildings
- ▶ October 2007 - solar panels in Lot V were completed
- ▶ May 2, 2013 - PG&E's Agricultural Unit presented \$450,000 to Fresno State officials during the BlueTechValley Water Conference
  - The gift will support the demonstration of new water and energy technologies on the Jordan College of Agricultural Sciences and Technology's 1,000 acre farm laboratory
- ▶ 2014 - water conservation effort was created
- ▶ 2016 - Fresno State was awarded a \$5 million grant from the California Energy Commission to establish the Central Valley Energy Innovation Cluster

- ▶ 2017 - Fresno State officials were presented with incentive rebate checks by PG&E totaling \$138,379.80 as part of its Savings By Design Program to encourage energy efficient construction projects
- ▶ 2017 - Fresno State's International Center for Water Technology received a \$500,000 grant from the U.S. Department of Commerce to create the Central Valley Regional Energy Innovation Accelerator program.
- ▶ 2021 - Fresno State enters a P3 with Bulldog Infrastructure Group

2021

## Impacts of Student-Led Sustainability Efforts at Fresno State

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## Impacts of Student-Led Sustainability Efforts at Fresno State

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# Impacts of Student-Led Sustainability Efforts at Fresno State

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## Abstract

As California State University, Fresno (Fresno State) continues to develop institutional capacity to improve sustainability within the contexts of the Association for the Advancement of Sustainability in Higher Education (AASHE), the university mission, and strategic objectives identified by the California State University (CSU), student activism has played a critical role in establishing the groundwork for current efforts. Despite progress towards an overarching goal of integrating sustainability into all parts of the institution, near constant turnover within the institution and student-led organizations often leaves uncertainties about institutionalization, with questions often arising about the respective roles of faculty, staff, and students. It is also often unclear whether the sustainability efforts contributed by students act to empower them or if it serves as an additional burden. In our research, we compare a case-study of our student-led efforts towards the integration of sustainability at Fresno State to a landscape analysis of integrative sustainability efforts findable across websites of all other CSUs. The aim of this paper is to examine the current roles that students are playing in both campus and system-wide sustainability efforts. Case study and landscape analysis results suggest that while students look to their campuses to provide sustainability leadership, youth-led efforts are apparently the most numerous in advancing efforts across the CSU system. This supports more contemporary views of students and the need for asset-mindedness, as well as the idea that educational institutions--who are charged with leading sustainability (i.e., AASHE)--can increase equity and reduce student burdens by recognizing, supporting, and intentionally collaborating with leading student efforts.

## Introduction

*"It's one thing to encourage youth to participate, to come to events like this, but it's an entirely different thing to provide a space where youth feel empowered to drive change. We need to start recognizing young people for the value that they are."* -[Ernest Gibson, COP26](#)

*"Our generation wanted to not only change the world but to save it."* -Greta Thunberg

Efforts to achieve institutional sustainability at Fresno State can be characterized as a *bottom-up* approach made by successions of student leaders and activists who have played a critical role in establishing the framework for change. These



efforts share much in common with other youth-led organizations such as Fridays for Future, Sunrise Movement, and Future Coalition, as well as student-led activism that has been facilitated on other CSU campuses (e.g. the Stanislaus Eco Warriors or Channel Island's Green Generation Club). The Chancellor's Office provides important guidance, encouraging campuses to "integrate" sustainability within everyday academic, student, and facility-based operations (CSU Sustainability Policy, 2014). Unfortunately, these directives remain ambiguous in specifically mapping how sustainability goals can be achieved within the greater scope of Fresno State policy. The progressive pathway undertaken by student leaders at Fresno State between 2013-2021 led to collaborative decision-making roles with campus administration to find creative ways to apply funding and empower students to re-imagine their roles in building resiliency against the uncertainties and challenges from changes in our air quality, water and climate (Jasechko & Perrone, 2021; see also Hanak et al., 2017; Meixner et al., 2016; Lo & Famiglietti, 2013).

While students at Fresno State are leading campus climate action and sustainable change, the most common advancement of sustainability is often described as a *top-down* (Rowe & Hansen, 2016) academic process (Augustine, 2021; see also Buckley & Michel, 2020; AASHE 2010), where the institution creates a sustainability officer role and/or a sustainability institute (Fu, et al., 2020) responsible for beginning the coordination of sustainability across all sectors of the institution. Subsequently, campuses tend to join consortium networks like the Association for the Advancement of Sustainability in Higher Education (AASHE) and sign the American College & University Presidents' Climate Commitment, which then support sustainability-related development and accounting methods for senior leadership who possess an immediate ability to influence strategic planning and subsequent resource allocations for progressive advancements across several intersectional components of campus: academic affairs, student affairs, facilities, and administration.

Even at its best iteration, this typical top-down growth pattern misses the guiding narrative and lived-experiences from the youth that institutions serve: our students. Solutions and strategic planning without strong involvement from student leadership raises questions about their enfranchisement and the ability of the university to actualize youth power (Stone, 2021; see also Thew et al., 2020). Paradoxically, in the absence of a top-down initiative, institutions can have impactful, student-led movements that push sustainable advancement (Rowe & Hansen, 2016), although this approach can disproportionately burden students (Cheong et

al., 2016; see also Mitra et al., 2014; Mein, 2018; Thew et al., 2020). Here, we share a case study of the history of sustainability on our campus and explain how student leadership served institutional advancement when there was a perception that senior leadership was lacking. By mapping out both historical efforts and our most recent "road show," we also show that student-led sustainability efforts can be as institutionally transformative as more typical top-down approaches, while allowing for more inclusive and empowering roles for our young activists at all levels of the university. Then, we compare our history with a landscape analysis of sustainability across all CSU campus websites, in order to give a better sense of how students are contributing to their local campus efforts. We use the results to then infer the respective role our students are playing in driving much-needed, sustainable campus advancement.

### Fresno State's Institutional Setting

Fresno State is a Hispanic Serving Institution (55% Hispanic students) and an Asian American and Native American Pacific Islander-Serving Institution (12%), with the campus consistently ranking as one of the nation's topmost institutions in social mobility and equity (CollegeNET, 2020; see also Fresno State, 2021). Our actual graduation rates greatly exceed expected graduation rates estimated from incoming student metrics including financial support and other demographic information. This gives Fresno State a unique role in promoting social mobility, reducing achievement gaps, and promoting a more equitable and successful future for the diverse community we serve.

As currently written, the mission of the California State University (CSU) is to "advance and extend knowledge, learning, and culture, especially throughout California[...] prepare significant numbers of educated, responsible people to contribute to California's schools, economy, culture, and future[...] promote an understanding and appreciation of the peoples, natural environment, cultures, economies, and diversity of the world" (California State University, n.d.). Here in California's agriculturally rich Central Valley, challenges are presented in our region's high rate of food insecurity (Crutchfield et al., 2016), a disproportionately high number of the state's failing water systems (Reese, 2018), and some of the highest incidences of respiratory issues in the state and nation (Alcala et al., 2018, 2019; see also Schwartz et al., 2009). In line with our mission, Fresno State has to provide new skills, knowledge, and mindsets to prepare 25,000 students each year to meet the local and global challenges presented

by climate change, losses of biodiversity, population growth, limited water resources, health issues, energy inequities, extreme poverty and displacement (Joint Center for Political Economic Studies, 2012; see also UNDESA, 2019).

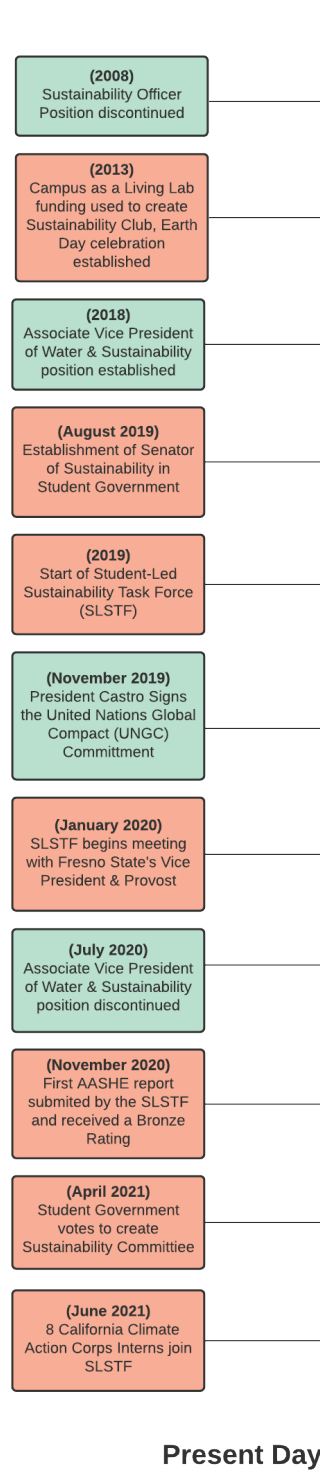
### Sustainability Timeline at Fresno State

Following many other institutional trends, Fresno State’s sustainability efforts began with a typical administrative-level type of sustainability coordinator position (Figure 1). There was a Sustainability Officer position in 2008, which was discontinued due to budget contractions during the recession. In its absence, three faculty leveraged CSU Chancellor’s Office Campus as Living Lab funding to establish Fresno State’s Sustainability Club in 2013, reviving an annual Earth Day celebration on campus and slowly growing to tackle much larger campus goals and community events. In 2015, students from the club demanded more high-level campus coordination by advocating for a new Associate Vice President (AVP) for Water & Sustainability position, which was successfully established in 2018 (Fresno State). This position enabled coordination at high levels and was a creative solution by the Provost at the time, who modified an existing water directorship to include sustainability in the position’s scope of work. During his brief tenure, the AVP for Water & Sustainability worked closely with the Sustainability Club to connect students and faculty with university administration, and he collaborated with the club on strategic planning for the 2018-2019 school year. These goals included creating a catalog of best practices being implemented successfully at other college campuses, conducting a sustainability literacy test of the Fresno State Student body, and expanding club engagement across all eight colleges.

During this time (2019), the Sustainability Club began reaching more students and created a network between faculty and student organizations, such as the Associated Students, Inc. (ASI) and the Fresno State Chapter of the National Association for the Advancement of Colored People, to further integrate sustainability across the campus. Citing an institutional stagnation of critical sustainable advancement university-wide, student activists quickly turned their attention toward both educating the general student population as well as advocating for university-wide change. Identifying a need for broader student governance involvement, the Sustainability Club collaborated with ASI to create a new senator position. This major advancement was the result of a successful referendum vote to create a Senator of Sustainability position, which passed with 89% of student voters in support (Casey, 2019). With this new position established, Sustainability Club of-

Figure 1

Timeline of Sustainability Events at Fresno State



Note. Visual representation of the history of sustainability at Fresno State. Green highlights administrative-led events whereas orange highlights student-led events. A more detailed timeline can be found on the Fresno State Sustainability Website. Timeline is not to scale.

ficers and the Senator of Sustainability planned to advance sustainability beyond student efforts. This led to the establishment of a student-led Sustainability Task Force (SLSTF) using remaining Campus as a Living Lab funds to recognize students' efforts of networking, brainstorming, disseminating information, and finishing sustainability related projects that benefit the campus. By creating the SLSTF, the Sustainability Club was able to focus primarily on the original intent of providing students with a sense of social belonging and identity instead of advocating for more sustainability on campus, alleviating some of the intense burden carried from other competing involvements. This solidified the distinction between the Sustainability Club and the SLSTF, with the latter taking on more administrative and institutional responsibilities.

In early 2020, the SLSTF held their first meeting with the current Vice President Administration and CFO and Provost to discuss and collaborate on sustainability efforts across campus, alongside the AVP for Water & Sustainability and an additional staff member from Facilities and Operations Management. This initial meeting was the start of a unique, impactful working relationship between students and higher administration. Encouraged to speak candidly with administrators, the SLSTF worked towards a common vision of supporting new and more integrative work to help disseminate knowledge of sustainability across campus (Figure 2). These meetings continue to this day, despite unexpected challenges due to the COVID-19 pandemic and the loss of two key positions; in July 2021, Fresno State lost both their AVP for Water and Sustainability as well as the lead sustainability staff from Facilities and Operations Management. This raised uncertainty about institutional top-down support for sustainability moving forward but the SLSTF moved forward and gathered data for Fresno State's first AASHE STARS report, eventually meriting the campus a bronze rating. Despite being lauded as leaders and recognizing the novelty of their youth-led transformative impact, questions also began to emerge as to whether this type of student-led work introduces elements of exploitive over-reliance on students. This was a large undertaking led by students, and in this contribution we make an effort to raise awareness of this new paradigm in higher education where students can lead major campus efforts, while also using our experience along with content across CSU websites to help recommend a newer understanding of student roles in the context of integrating sustainability within academic institutions. Specifically, we address how students can remain involved and empowered to make important societal changes without overburdening them with disproportionate pressures and challenges of being changemakers within the institution.

**Figure 2**

*Graphic Depicting Sustainability at Fresno State*



*Note.* Visual representation of sustainability at Fresno State's campus. The graphic was made as an educational tool to communicate what "sustainability" means for the campus. The graphic took about one year to develop, going through several iterations, with support and feedback from campus communications and higher administration. Student leaders use the graphic to explain sustainability in relation to the AASHE STARS framework and for campus outreach.

## Research Methods

### Fresno State Student Sustainability Literacy Survey

Serving as a barometer for student familiarity and favorability regarding topics of sustainability on campus, the SLSTF conducted a Student Sustainability Literacy Survey—with the objective of gauging student interest and understanding of sustainability—at the first Fall Sustainability Symposium hosted by the Sustainability Club in 2019. The survey was designed to assess cultural and literacy markers, which was modeled after a similar assessment used by CSU Sacramento (Agostinho et al., 2017), so that results could be shown to high-level administration on campus. The survey was started in November 2019, and ongoing outreach for student participation occurred through Earth Day (April 22, 2020). The survey was maintained through Fresno State's Office of

Institutional Effectiveness for data maintenance and quality assurance. Specific information on the survey, assessment questions, and more detailed information can be found in section EN-6 credit of Fresno State's AASHE STARS report.

### CSU-wide Sustainability Landscape Analysis

The Landscape Analysis Survey was conducted June–July 2020 by the SLSTF with guidance from a professor within Fresno State's Media, Communications & Journalism Department. A landscape analysis can be helpful in assessing an organization's efforts, especially for comparison to efforts being done by other similar and/or competing entities (see Garcia et al., 2020 and references therein). The analysis entailed thorough review of each CSU campus website and documentation of content found within the sites for reporting on these nine categories:

1. AASHE STARS Standing
2. Clubs and Events
3. Commitment Statement
4. Intersectionality
5. Graphic or Logo
6. Majors and Minors
7. Presence in Facilities and Operations
8. Presence in Student and Faculty Governance
9. Sustainability Definition

While it is possible for campuses to be included in this analysis who exhibit sustainability in these topics but who lack web accessibility and/or outdated web content, the landscape analysis still allows for a meaningful overview of how the CSU campuses are (or were) publicly communicating their respective sustainability efforts during the 2020 summer timeframe.

### Fresno State Sustainability Student Time Survey

In April 2020, the Sustainability Club President, who was also working in the SLSTF, interviewed some of the most active Sustainability Club members and officers to survey what other obligations they held, and the degree of time commitment dedicated to extracurriculars in addition to course workload. Ten students were surveyed regarding daily and weekly hours spent on academic course load, student research, campus involvement, time spent doing work related and unrelated to campus sustainability, and daily personal responsibilities.

### Campus Outreach Sustainability "Road Show"

A key aspect of the SLSTF work was, and still is, ed-

ucating students, faculty, staff, and the community on the meaning of sustainability and the importance of integrating sustainability across all campus efforts. Following the achievement of the [AASHE STARS](#) bronze rating, the Vice President and Provost encouraged an informational outreach effort by the SLSTF—coined as the *Sustainability Road Show*—which was a methodology developed to move outreach beyond student-to-student class visits and club tabling so as to encourage more cross-campus interactional engagement with faculty, staff, and student government. By sharing efforts with other parts of campus, the SLSTF could expand current understanding of how sustainability applies to all parts of the institution. Target audiences of the Road Show included the Campus Planning Committee, Leadership Roundtable, President's Cabinet, Curricula Committee, GE Committee, Academic Affairs Leadership Team, Alumni Association, and Council of Chairs. All groups except the GE Committee scheduled student-led presentations, with additional follow-up presentations requested by student and faculty governments, Athletics, and Advancement and Communications.

## Results

### Fresno State Student Sustainability Literacy Survey

The survey conveyed that over 70% of participants had a passion for sustainability or at least a considerable interest. When asked the degree of influence various factors had in shifting student attitudes regarding sustainability, respondents chose from categories such as: media; campus initiatives; college instructors/coursework; community activism (off-campus); campus activism; peers; family; high school instructors/classes. It was found that peers remained most influential in shifting positive attitudes toward sustainability, followed by college instruction then campus activism (Figure 3).

Similarly, when asked about their thoughts on the role of universities, 72.7% of respondents strongly agreed universities should be sustainability role models in their daily operations. However, only 42.4% of respondents agree that Fresno State was doing a good job of modeling sustainability in its daily operations (Figure 4).

### CSU-wide Sustainability Landscape Analysis

Nearly all CSU campuses are making significant progress in the integration of sustainability into their daily practice and are all at different stages in this transition. Data and qualitative summaries of the full analysis are available in [Supplemental A](#),

**Table 1.** *Main Findings of Website Landscape Analysis across 23 CSU Campuses.*

<b>Content Area:</b>	<b>Main Findings for June-July 2020 Websites:</b>
AASHE STARS Standing	7 gold campuses, 10 silver, 4 bronze, and 2 participating
Clubs and Events	18 campuses have at least one club or internship program related to sustainability, with 14 of those having multiple programs on campus. 13 campuses have Earth Day/Week events. Chico has a notable yearly “This Way to Sustainability Conference.”
Commitment Statement	Few campuses (~2) are externally committed (Second Nature or AAUPC), with a few more (~4) mentioning CSU-wide sustainability policy.
Intersectionality	4 campuses with messaging that includes the idea of sustainability as increasingly being embedded within social justice issues.
Graphic or Logo	7 campuses with a sustainability graphic or logo. Only 1 graphic, Chico’s, actually embeds sustainability within the university’s mission and strategic priorities.
Majors and Minors	8 campuses with “sustainability” related majors and/or minors; 3 campuses with bachelors or masters “sustainability” degree labels. 11 campuses with sustainability-related bachelor degrees, 9 campuses with related minors, 7 campuses with graduate degrees, 3 campuses with GE pathways, and 3 campuses with sustainability-related certificates.
Presence in Facilities and Operations	4 campuses with sustainability in facilities, appearing well integrated to other sustainability efforts on campus. 5 campuses with sustainability in facilities, unconnected to other campus efforts ( <a href="#">link</a> )
Presence in Student and Faculty Governance	13 campuses with sustainability committees and/or student senator position; 7 campuses with faculty committees in faculty governance and/or at the university. A few (~2) with campus-wide presidential or cross-governance and operational collaboration.
Sustainability Definition	Three-prong definition is most commonly used, like “people, profits, and planet,” reflecting the common rhetorical device of sustainability experts who use the three-legged stool as a symbol.

with the main findings across the nine categories summarized in table 1. Overall, most CSU campuses have some presence of the three-pronged sustainability definition (i.e., people, profit, planet), with 17 of the 23 campuses active and ranking silver or above in AASHE STARS. Additionally, most campuses (18 out of 23) have student clubs related to sustainability. About half the campuses (13 of 23) have sustainability representation in student governance, with slightly less representation apparent in analogous faculty structures (about seven). Half of the campuses similarly have sustainability-related majors and/or minors. Less frequently found are commitment statements, graphics, and intersectionality demonstrating the coordinated integration of sustainability across campus entities.

### **Fresno State Sustainability Student Time Survey**

Our survey revealed that students involved in sustainability activism at Fresno State were also exceeding expectations in

academic and extra-curricular activities, on top of other familial or household commitments. Students must take a minimum of 12 units as an undergraduate to be considered a full-time student, according to FAFSA. Of the ten students surveyed, nine were taking more than 12 units (average units taken: 16; maximum units taken: 21). Given that each unit represents about three hours of work each week, a student taking 15 units is easily committing 45 hours to school each week. We found that six of the 10 students surveyed were actively involved in at least two clubs, primarily in leadership capacities. Most students also held paid employment in some capacity, either on or off-campus. Taking into account time for meals, personal care, transportation, and sleep, we found that students were significantly encumbered with responsibilities. After totaling all the hours students were participating in daily activities, we found that students spend on average 21.19 hours a day (n=10) working on their responsibilities and health (Figure

**Table 2.** *Sustainability Roadshow Meeting Accounting Sheet.* Note. These meetings were intended to share sustainability efforts across campus, introducing Fresno State's AASHE STARS report, and provide recommendations for improvement.

Date	Measure	Count	New Connection	Notes
9/1/20	People	5	5	Initial Group
9/10/20	People	41	41	CSM 10 BOND
9/11/20	People	38	38	CSM 10 BOND
10/28/20	People	8	3	VP + Provost
11/16/20	People	10	7	Faculty Executive Senate
12/9/20	People	10	0	VP + Provost
12/10/20	People	25	13	W&S Committee
2/1/21	People	82	76	Faculty Senate
2/3/21	People	30	26	AALT
2/9/21	People	23+	22+	Presidents Search Forum
2/22/21	People	3	0	VP + Provost
2/24/21	People	22+	22+	ASI
3/11/21	People	5	5	Lecturer Appreciation and Virtual Service Fair
3/15/21	People	10	7	Cabinet
3/23/21	People	6	5	Athletics
3/24/21	People	27	26	Campus Planning
3/25/21	People	30+	30+	TWTS

5). These students are not only working a full schedule of classes, study time, extra-curricular activities, and work but also leading Fresno State's integration of sustainability.

### Campus Outreach Sustainability "Road Show"

As of June 2021 the SLSTF presented to over 300 unique students, faculty, staff and campus administrators. This outreach series (Table 2) enabled the SLSTF to meet with a variety of stakeholders at different levels within the institution. With every meeting, new perspectives and ideas were expressed and the efforts towards integrating sustainability continued to grow. This allowed the students' voice to be expressed among faculty, staff, and stakeholders that are key in influencing the changes being made so that they can better align their work and collaborate to benefit the students in which they serve.

### Discussion

Results of the combined analyses indicate a large degree of interest in sustainability among Fresno State students, and that most students tend to view universities as exemplary models for the integration of sustainability (Figure 4). Existing concur-

rently, however, is the perception that Fresno State is not meeting expectations in this regard. This may seem inconsistent with the system-wide AASHE STARS participation, and even Fresno State's recent Bronze rating, although it is consistent with landscape analysis findings that the most numerous efforts are founded in student-led efforts; clubs, internships, committees, and student senate positions (Table 1). The high number of campuses with active student-involvement (13 campuses hold Earth Day events; 18 campuses have at least one student sustainability-related club) relative to the lower number of campuses with ancillary academic (seven campuses with faculty committees), operational (nine campuses with sustainable facilities), and/or presidential-level involvement (six campuses with sustainability commitments) exemplify this high priority of sustainability across CSU student populations. Despite the fact that students often represent a large demographic of campus populations, our findings show that more student governments are directly engaged in sustainability efforts than their faculty equivalents (13 vs. seven, Table 1), suggesting that student-led efforts towards helping campuses improve and better integrate sustainability warrant more support and recognition (i.e., Stone, 2021 and Thew et al., 2020). It may also suggest

that student- and youth-led sustainability work can perhaps be used as an indication of whether or not an institution has asset-based mindsets (Mein, 2018). The prominence of student impact is also consistent with the findings of our Fresno State Student Sustainability Literacy Survey, where students self-report that it is their peers--their fellow students--who are the most influential in positively shifting their attitudes towards sustainability (Figure 3). If students and peer-support are truly more influential in affecting more sustainable behaviors, this may mean that student-leadership can play an even more impactful role than current curricula in reducing an individual's lifetime greenhouse gas emissions (i.e., Cordero, 2020).

Although the content presented online at the time of our analysis may not reflect the true breadth of campus sustainability initiatives, our findings suggest that student-led efforts appear to be prevalent across the CSU system and provide an overall sense of how committed and inclusive each respective university is to achieving sustainability goals. While the landscape analysis indicated there are areas (i.e. course development & sustainability GE's) that other campuses are outperforming Fresno State in, we found that the relationships between our students and higher administration was comparatively unique. While other CSUs typically engage student input through an intermediary sustainability coordinator, Fresno State students are able to collaborate directly with senior leadership. Furthermore, such collaboration and quarterly discussions held between Fresno State students and higher administration have fostered the development of subject-expertise in the SLSTF, which further bolsters the impact and reach of our student leaders. This is apparent in the outcome of the Sustainability Roadshow, where students met with students, staff, and faculty, reaching over 300 unique people in less than one academic year (Figure 6). The more stable rates of forming new connections in Figure 6 may reflect the influence of finals, midterms, and increased scarcity of time. Given the already high demands on our students' time (Figure 5), it is likely that a slow-down of progress can be mitigated with full-time staff positions specifically dedicated to campus sustainability. This would ensure more timely, equitable, and consistent progress, especially given the rapidity with which ambitious change is needed (UNEP, 2021).

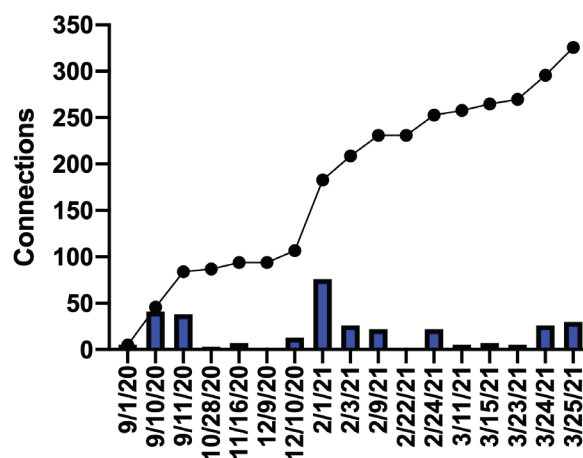
Though the timeline presented in figure 6 depicts successful progress that has occurred over the most recent academic year, it is also important to keep in mind the near decade-long efforts in which students have persisted and diligently worked to establish trust, foster collaboration, and create campus precedents. Combining longer-term campus timelines and contextual histories (Figure 1) with shorter-term outreach metrics

like Figure 6, it may be possible to quantify or better qualify rates of institutional transformation. Compared to where the campus was almost a decade ago, the recognition and support of sustainability as a top university priority is a culmination of bottom-up change affected by successive groups of student leaders. The critical relationships and history students have been able to build over both short and long time spans (Figure 1 and Figure 6) have further enabled a legacy and an inspirational outlook for campus sustainability. Students of Fresno State's Sustainability Club, SLSTF, and ASI have continually demonstrated their ability to produce actionable practices and policy adjustments, often outpacing parallel work by other campus committees and entities. Although student influence has led both rapid and long-term change, it is vital that work remains meaningfully coordinated across all the different parts of campus. Given the sheer importance of students in this work, their collaboration with the President, Vice President, Provost, faculty, and staff is crucial in further developing successful solutions. Students excited and anxious to see and be part of sustainable change should be supported to be part of taking action. Likewise, it is imperative that administrators view students as the leading assets they are (Mein, 2018) and remain actively receptive to working with students to develop effective solutions to these complex socio-environmental issues and challenges.

As important as students are in driving progress, it is important to consider the implications and potential burdens such work may bear on the student experience and, by extension, university learning outcomes. The results of the Fresno State Sustainability Student Time Survey indicate that

Figure 6

*New Connections Over Time*



students are overworked and spread thin between competing priorities of their sustainability work, coursework, clubs, committees, family commitments, social needs, employment, and self-care (Figure 5). Given the institutional setting of Fresno State, this added burden of sustainability work is not placed upon “typical” college students, but instead a diverse population of underrepresented, first generation, and Pell-eligible students. Research shows that such groups face significant barriers to civic integration and political power (Mitra et al., 2014) yet, within the context of our bottom-up approach, these students who already bear disproportionate disparities can be looked upon as sustainability experts and leaders. Research also shows that when viewed through asset-minded frameworks, these same student groups become valuable contributors to the wellbeing of their communities (Mein, 2018 and references therein). Furthermore, the integration of sustainability into coursework presents another tremendous opportunity for reducing student time burdens, while also connecting curriculum to real world problems. A full institutional integration of environmental and climate justice, social justice, and economic problem-solving within courses has the potential to produce an entire generation of well-equipped graduates capable of developing solutions tailored to issues of any age. Tailoring curriculum to include these sustainability topics (i.e., UNESCO, 2017) while also increasing the amount of available sustainability-related internships and service-learning courses allows students to more meaningfully engage with curricular material and leave lasting impacts on their campus and community. Overall, the net effect of higher education can then alleviate unnecessary burdens on its student leaders, which then can empower students to be even more timely and effective in addressing our imperative and intersecting social and environmental crises (i.e., COP26).

### Conclusion

Although a perception exists amongst student populations that Fresno State is not leading in the integration of sustainability, students have demonstrated that they are capable of affecting positive change in their own interest and in the greater interest of the University mission. The student-led sustainability efforts at Fresno State started as a grassroots and bottom-up approach, but have evolved dramatically over the past few years, leading to the establishment of paid positions and elevated responsibility. In this paper, we suggest it is necessary for the work of the students to be recognized and compensated in a way that empowers students to advance sustainability without being overburdened and detracted from other tasks.

Landscape results show that students have been key in making institutional changes within the campus community at Fresno State, across the CSU, and in other higher education environments. Activism and work provided by students not only contribute towards reaching sustainability goals, but can also be impactful on the general student population by ensuring expectations of meaningful learning experiences are met. It is necessary that these student-led initiatives are supported from the top-down and the work of the campus does not hinder student success. Fresno State is continuously evolving to develop the skills and talents of student leaders, supporting their efforts, and working towards a more sustainable future at both the grassroots and institutional level.

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