



Facilities Advisory Committee  
Meeting Minutes – February 9, 2022, 9:00 a.m.  
Via Zoom

## I. Welcome & Introductions

It was confirmed that we had a quorum in attendance.  
Chair Farzaneh called the meeting to order at 9:02 am.

Guests in attendance: Hannah Sandy, Olivia Rosas, Joe Cabrales, Delmy Spencer, Elaine Akers, Cheryl Alexander

Mike Strong made a motion to approve the meeting minutes, Brandi Bailes seconded it. A vote was taken, all in attendance voted to approve the minutes, there were Noes or Abstentions.

## II. Current Topics

### A. Mask Exemption Subcommittee

Chair Farzaneh shared that during the most recent SBCCD Safe Reopening Taskforce meeting, it was confirmed that there already is an established Ad hoc Committee to review student mask exemptions. This Ad hoc committee includes members from both campuses and the District. At this time, there is no need to have a Mask Exemption subcommittee under the Facilities Advisory Committee. A discussion was held on this topic to clarify any and all the questions from the committee members.

A motion was made for the dissolution of the Mask Exception Subcommittee by Brandi Bailes and David Stevenson seconded it. All committee members in attendance voted to dissolve the committee. There were no Noes or Abstentions.

### B. Sustainability Plan

Yash Patel, Sustainability & Energy Manager, shared a presentation that started with the history of sustainability at the District and the District's achievement thus far. The presentation reviewed draft goals and strategies that could be included in the new sustainability plan.

Yash mentioned that the version of the draft plan circulating a year ago was never brought forward as we were waiting for guidance from the California Community College State Chancellor's Office. The State Chancellor's Office recently released their guidelines; we intend to use them to develop a specific plan for our campuses.

The goal is to start from scratch with the intention of having an open discussion and receiving everyone's feedback. More importantly, bring everyone's ideas to the table. Evaluate them as a group and finalize the plan with collective efforts. We are now equipped with more tools than ever to take this to the next level. The new plan will include collaborative ideas and have goals that are smart, specific, measurable, and attainable. The categories for the plan will include carbon mitigation, energy, water, transportation, material, education, and ongoing engagement & transparency. The presentation included potential goals and initiatives for each of these categories.

Request to Follow-up: It was requested that the committee take this presentation to their respective constituency groups and provide ideas and methods to improve the plan. Yash shared his email address ([ypatel@sbccd.edu](mailto:ypatel@sbccd.edu)) with the group and is available to answer any and all questions.

Brandi Bailes suggested that a request could be made to the faculty to report on the curriculum they are writing which includes sustainability components. This could be achieved on Flex days.

Larry Cook and Michael Strong brought forward some information regarding the work Crafton Hills College has already done to improve the sustainability of the Campus.

Larry Cook felt it would be beneficial for the committee to see how the Sustainability concepts apply to campus operations. Larry has offered a sustainable tour of the Campus to anyone who is interested in learning. Also, Larry notified that on April 12th, as part of the Flex Day, CHC will be offering a campus sustainability tour. It is a walking tour, and good shoes are recommended.

The presentation was paused after covering the Transportation section with an intention to resume during the next committee meeting.

### **III. Next Meeting Date & Adjournment**

The next meeting of the Facilities Advisory Committee will be Wednesday, March 9<sup>th</sup> at 9:00 am.

The meeting adjourned at 9:59 am.



Facilities Advisory Committee (FAC)  
 Meeting Attendance – February 9, 9:00 a.m.

**QUORUM:** Definition of Quorum is established by Chancellor's Council. Committees cannot vote or make decisions unless they have met quorum, but in order to encourage participation, committee members can provide a designee or a proxy if they are not able to attend.

- yes 1) 50% + one of appointed voting members (not 50% of members plus vacancies).
- yes 2) Two persons from each site (CHC, SBVC, DSO)
- yes 3) Three of four constituent groups represented (faculty, classified, student, management)

	Representation	Member Name or Vacant	Site	Rep	Present or Absent?
1	Director Facilities Planning, Emergency Management & Construction, Chair	Farrah Farzaneh	DSO	MAN	<i>Present</i>
2	Associate Director of Environmental Health, Emergency Planning & Safety Administration	Vacant	DSO	MAN	<i>n/a</i>
3	VP, Admin Services, CHC	Mike Strong	CHC	MAN	<i>Present</i>
4	VP, Admin Services, SBVC	Vacant	SBVC	MAN	<i>n/a</i>
5	Facilities Director, CHC	Larry Cook	CHC	MAN	<i>Present</i>
6	Facilities Director, SBVC	Bob Jenkins	SBVC	MAN	<i>Present</i>
7	Measure CC Campus Project Manager	Leilani Nunez	DSO	MAN	<i>Present</i>
8	Measure CC Campus Project Manager	Ryan Smith	DSO	MAN	<i>Present</i>
9	Sustainability and Energy Manager	Yash Patel	DSO	MAN	<i>Present</i>
10	Facilities Project Manager	Hassan Mirza	DSO	MAN	<i>Present</i>
11	Emergency Manager	Paul Walker	DSO	MAN	<i>Present</i>
12	Police Department Representative	Kenneth Owens	DSO	MAN	<i>Present</i>
13	Faculty Representative, CHC	Brandi Bailes	CHC	FAC	<i>Present</i>
14	CSEA Representative	Dave Stevenson	SBVC	CLA	<i>Present</i>
15	Classified Representative, CHC	Sarah Yearyearn	SBVC	CLA	<i>Present</i>
16	Associated Student Government President or Designee, CHC	Amr Bahjri	CHC	STU	<i>Present</i>
17	KVCR Representative	Cheryl Alexander	DSO	MAN	<i>Present</i>
18	Print Shop Representative	Deborah Castro	DSO	CLA	<i>Absent</i>
19	TESS Representative	Vacant			<i>n/a</i>
20	Faculty Representative, SBVC	Vacant			<i>n/a</i>
21	CTA Representative	Vacant			<i>n/a</i>
22	Classified Representative, SBVC	Vacant			<i>n/a</i>
23	Classified Representative, DSO	Vacant			<i>n/a</i>
24	Associated Student Government President or Designee, SBVC	Vacant			<i>n/a</i>
25	EDCT Representative	Vacant			<i>n/a</i>
26	Black Faculty & Staff Representative	Vacant			<i>n/a</i>
27	Latino Faculty & Staff Representative	Vacant			<i>n/a</i>

# Facilities Advisory Committee (FAC) Meeting

Via Zoom: <https://cccconfer.zoom.us/j/94289042512>

Or Dial-In: 669-900-6833      Meeting ID: 942 8904 2512

February 9, 2022

# Agenda

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## 1 Welcome & Confirmation of Quorum

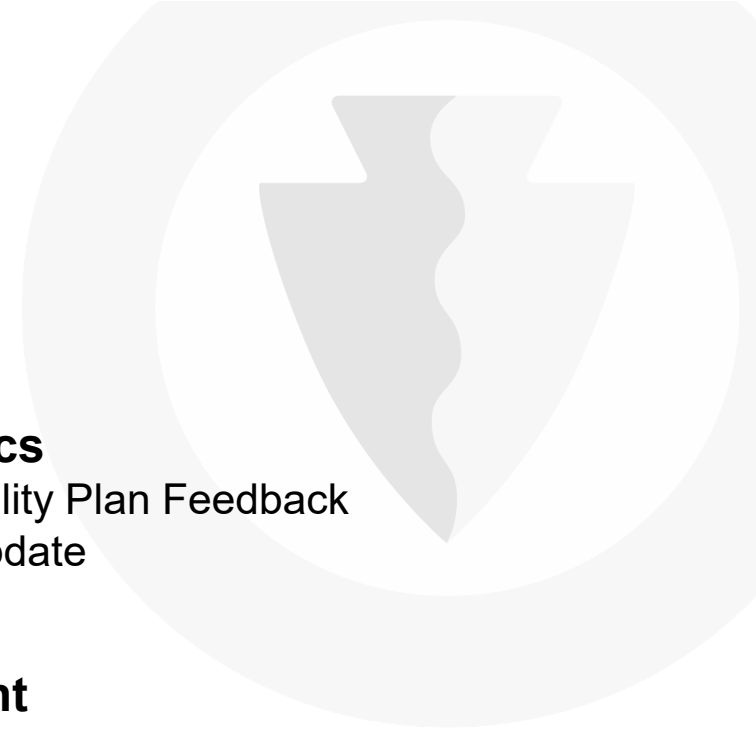
## 2 Current Topics

- A. Mask Exemption Subcommittee
  - Revisit Discussion
- B. Sustainability Plan

## 3 Future Topics

- A. Sustainability Plan Feedback
- B. COVID Update
- C. Co-Chair

## 4 Adjournment



# Call to Order....

- **QUORUM:** Definition of Quorum is established by Chancellor's Council. Committees cannot vote or make decisions unless they have met quorum, but in order to encourage participation, committee members can provide a designee or a proxy if they are not able to attend.
  - ❑ 50% + one of appointed\* voting members
  - ❑ Two persons from each site (CHC, SBVC, DSO)
  - ❑ Three of four constituent groups represented (faculty, classified, student, management)

*\*50% +1 will be calculated using 50% of total appointed members (not 50% of appointed members plus vacancies).*

# Outstanding FAC Appointments

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- TESS Representative
- Faculty Representative, SBVC
- CTA Representative
- Classified Representative, SBVC
- Classified Representative, DSO
- Associated Student Government President or Designee, SBVC
- EDCT Representative
- Black Faculty & Staff Representative
- Latino Faculty & Staff Representative



# Mask Exemption Review Subcommittee

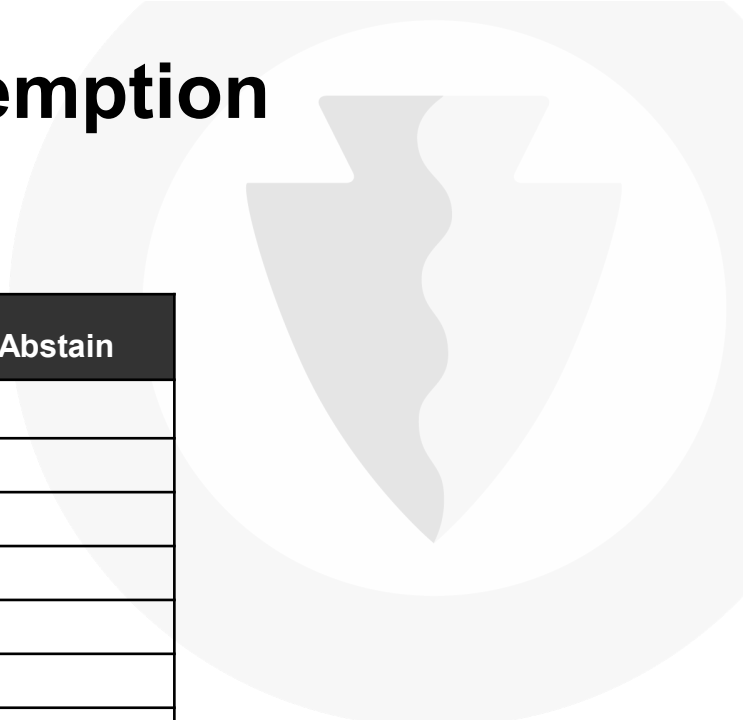
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- Discussion on feasibility of the Mask Exemption Committee
- SBCCCD Safe Reopening Task Force Meeting
  - Ad Hoc committee is reviewing the mask exemption as they are submitted
  - It includes Campus and District representatives





# Consideration of dissolution of the Mask Exemption Committee



Name	Yes	No	Abstain
Farrah Farzaneh, Chair			
Mike Strong			
Larry Cook			
Bob Jenkins			
Leilani Nunez			
Ryan Smith			
Yash Patel			
Hassan Mirza			
Paul Walker			
Kenneth Owens			
Brandi Bailes			
Dave Stevenson			
Sarah Yearyean			
Amr Bahjri			
Cheryl Alexander			
Debra Castro			

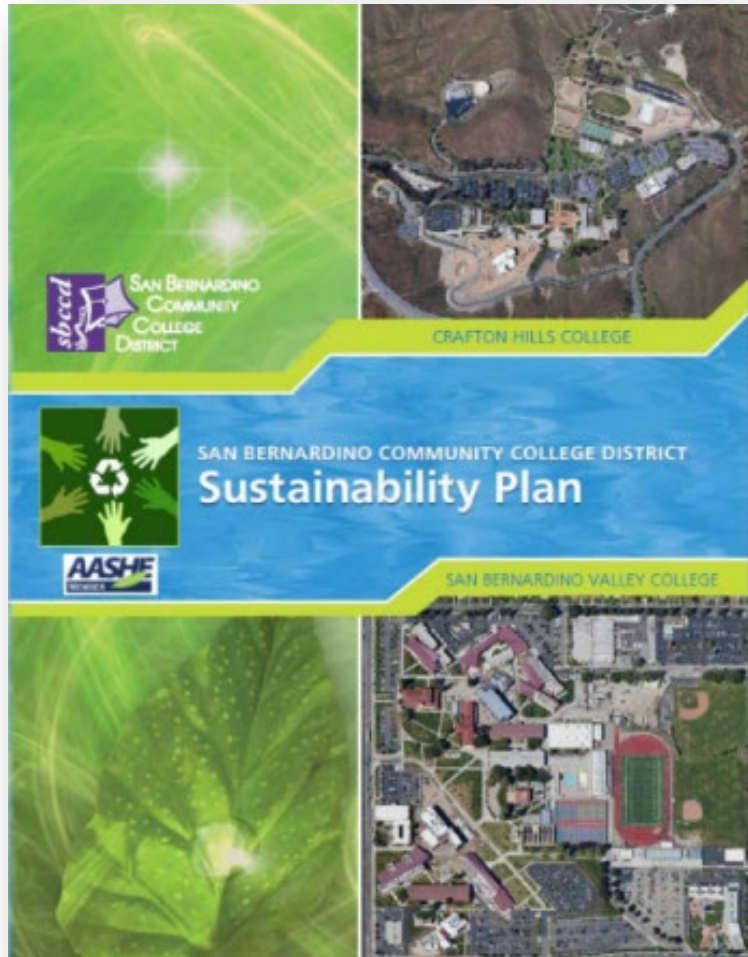


# Sustainability Plan Development



# History of Sustainability at the District

## Sustainability Plan 2012 (Version 1.0)



The image shows the 'Table of Contents' page from the Sustainability Plan. It features a decorative header with a blue and green gradient and a small graphic of a sun, solar panel, and water droplets. The title 'Table of Contents' is prominently displayed. Below the title is a list of sections and their corresponding page numbers. At the bottom of the page, there is a stylized tree illustration with green leaves and a brown trunk, and the text 'SBCCD Sustainability Plan' followed by a small green leaf icon and the number '1'.

<b>Background</b> .....	2
<b>Introduction</b> .....	3
Sustainability	
Successful Leadership in Implementing Sustainability	
Engagement of Stakeholders	
Board of Trustees Action	
<b>San Bernardino Community College District</b> .....	5
<b>Sustainability Plan</b>	
Vision	
Organization of Plan	
<b>Goals</b> .....	6
Create a campus-wide culture of sustainability .....	6
Incorporate sustainability into the development of	
new and renovated facilities .....	7
Invest in renewable energy and energy efficiency programs .....	9
Develop a more sustainable transportation system .....	10
Develop a more sustainable system for the purchase of	
supplies and materials .....	12
Enhance curricular educational opportunities for sustainability .....	13
Establish a commitment to climate action .....	15
<b>Appendices</b> .....	17
A. Sustainability Plan Committee Membership-2011	
B. Board Policy and Administrative Procedure	
C. Alternative Energy Concept Plans:	
Alternative Energy Plan Summary Powerpoint	
Crafton Hills College	
District Offices	
San Bernardino Valley College	

# Sustainability Plan 2012



- 1 Create a Campus-wide Culture of Sustainability
- 2 Incorporate Sustainability Into the Development of New and Renovated Facilities
- 3 Invest in Renewable Energy and Energy Efficiency Programs
- 4 Develop a More Sustainable Transportation System
- 5 Develop a More Sustainable System for the Purchase of Supplies & Materials
- 6 Enhance Curricular Educational Opportunities for Sustainability
- 7 Establish a Commitment to Climate Action

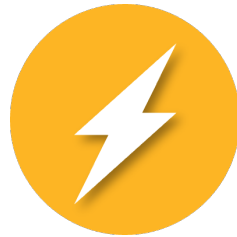
# Draft Sustainability Plan 2022

## Focus Areas

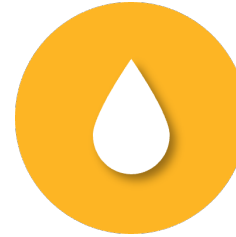
1. Carbon Mitigation



2. Energy



3. Water



4. Transportation



5. Materials



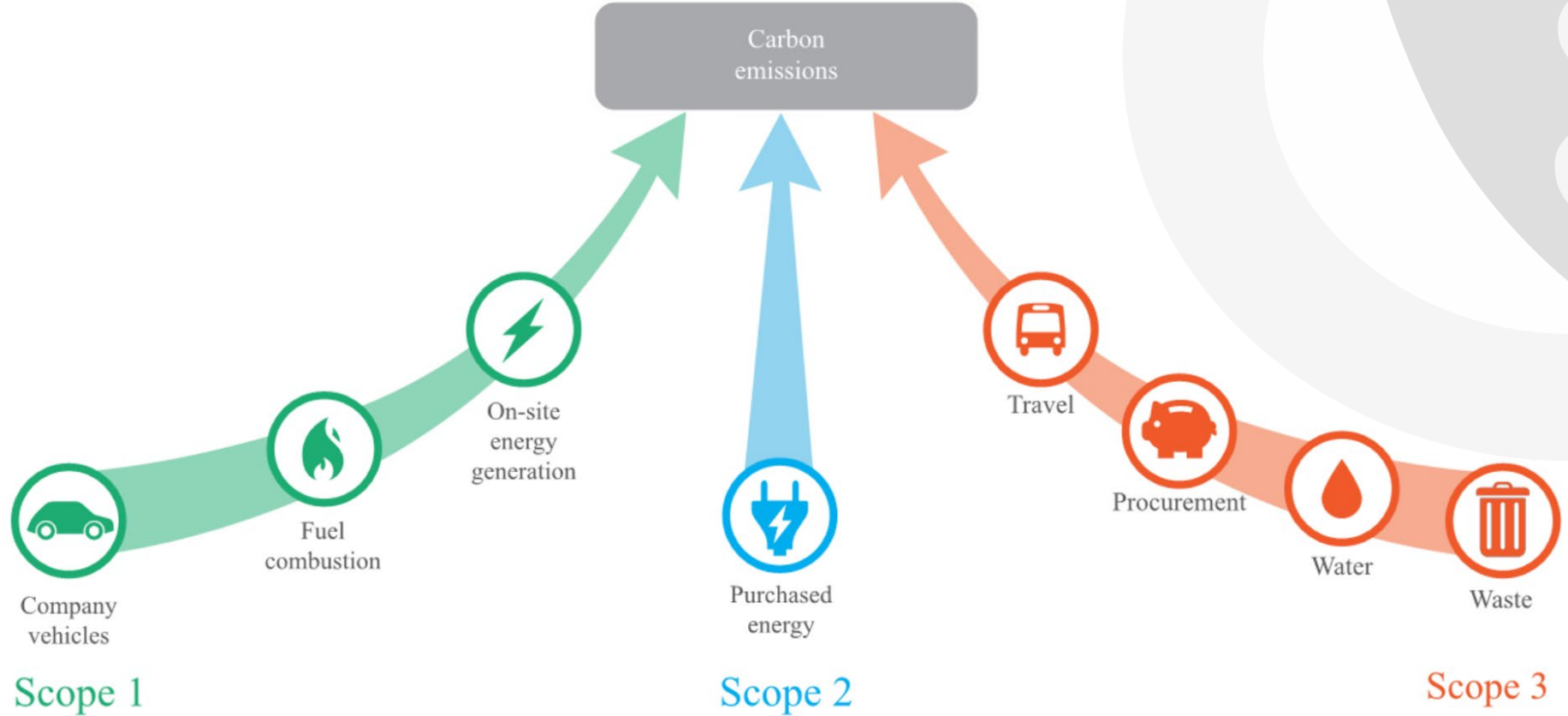
6. Education



7. Ongoing Engagement & Transparency



# Carbon Emissions Scope

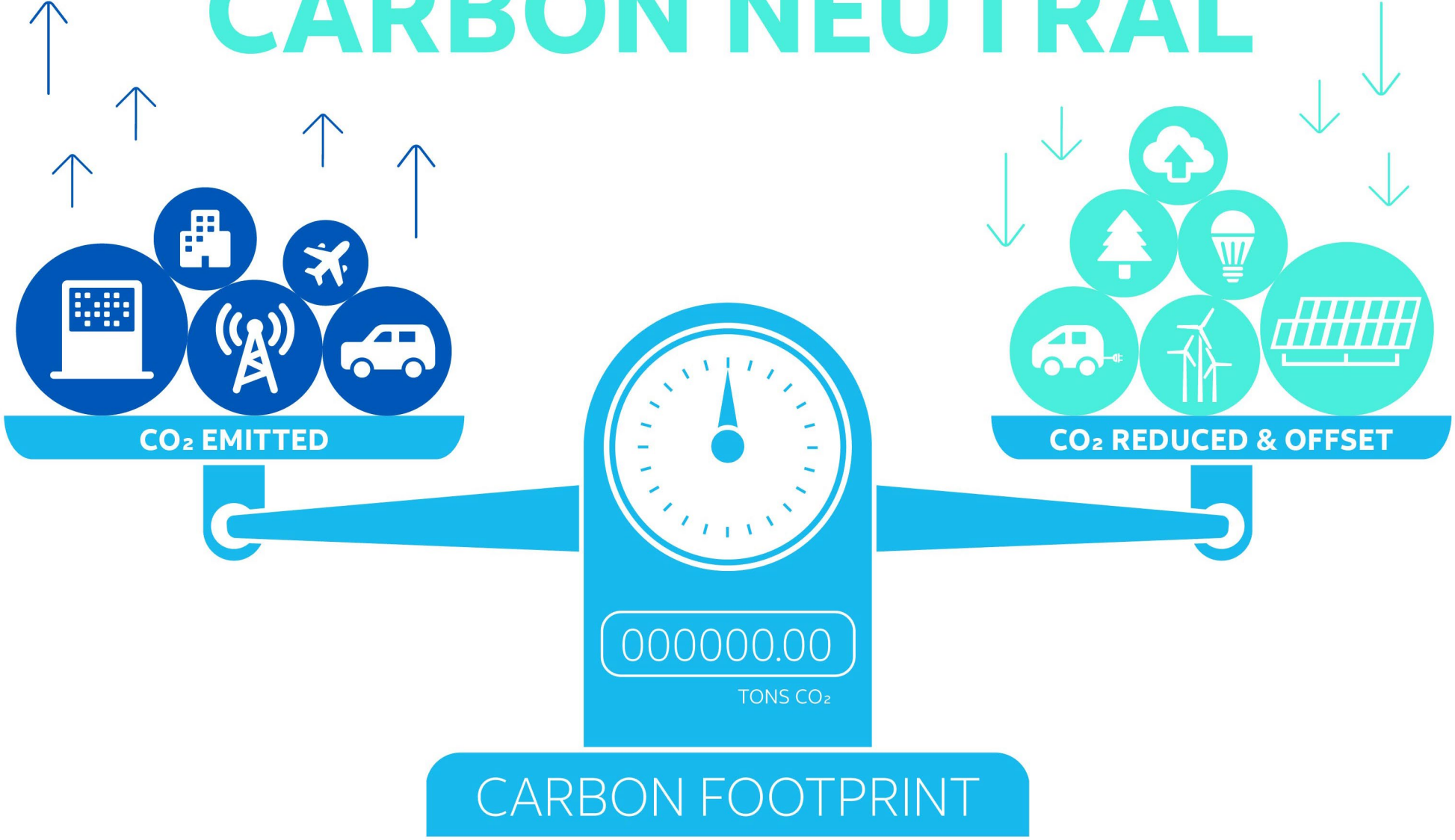


Scope 1  
Emissions from sources you own or control, such as boilers and fleet vehicles you own.

Scope 2  
Indirect emissions from the generation of purchased electricity, heat, steam etc.

Scope 3  
Indirect emissions which result from the organization's activities such as travel, procurement, water and waste.

# CARBON NEUTRAL



# Carbon Mitigation

## Goals

- Achieve Carbon neutrality by 20XX

## Initiatives

- Complete a GHG inventory (Scope 1, 2 and 3) and update it annually
- Complete a Climate Action Plan to meet or exceed campus goals





# Energy

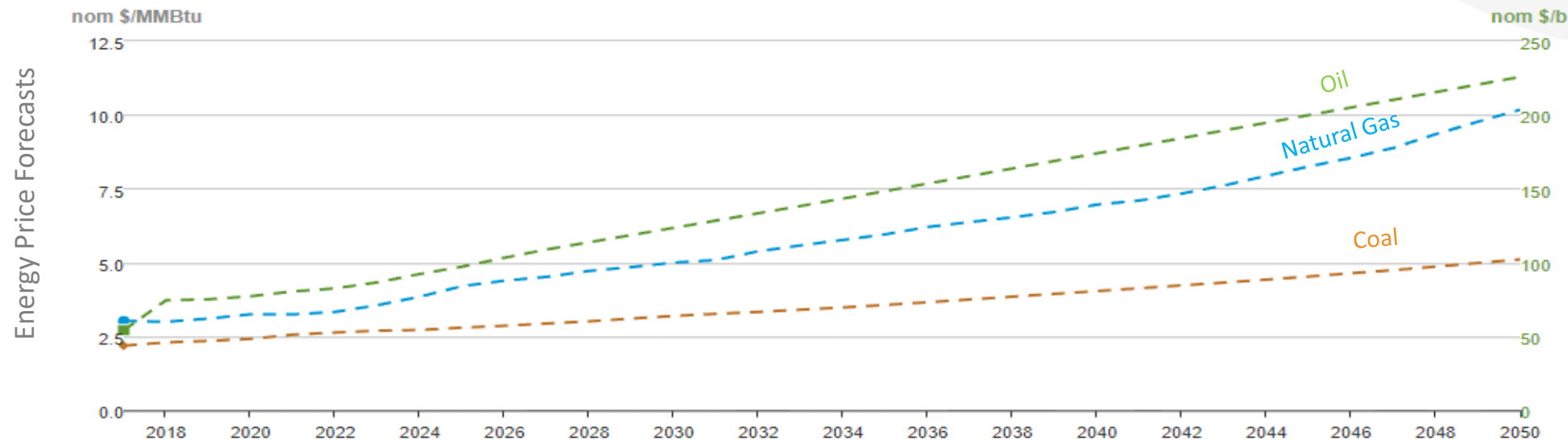
## Zero Net Energy

### Drivers

- Climate goals
- Rising energy costs
- Grid uncertainty
- Desire for healthy buildings

### Benefits

- Energy resilience
- Lower operational cost
- Media attention
- Avoiding legislative restrictions
- Employee and student retention and productivity
- Innovation and exemplar technology



# Energy

## Zero Net Energy

### Scale



ZNE BUILDING



ZNE CAMPUS



ZNE PORTFOLIO

### Site vs. Source

**ONSITE  
RENEWABLE**

**ENERGY USE**

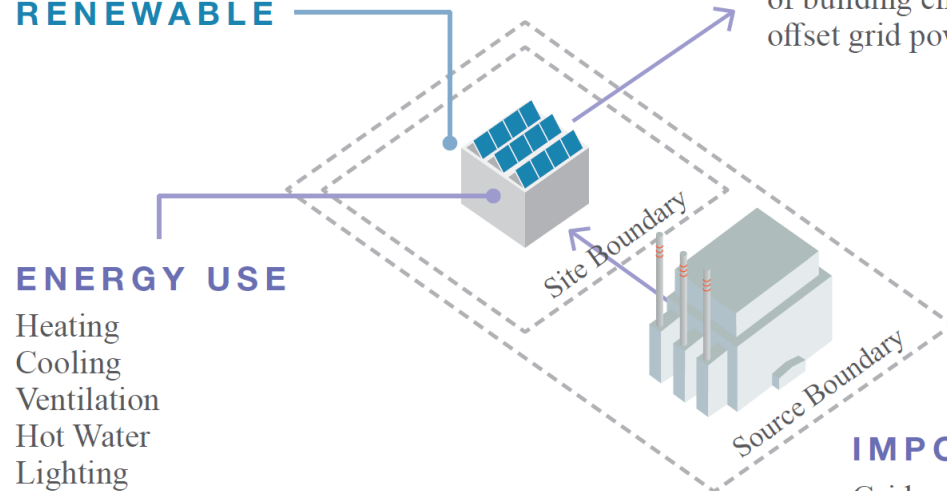
Heating  
Cooling  
Ventilation  
Hot Water  
Lighting  
Plug Loads  
Process  
Other

**EXPORTED**

Renewables in excess  
of building energy use  
offset grid power mix

**IMPORTED**

Grid power mix of  
renewable and non-  
renewable sources



# Energy

## SCE New Time of Use Rates

Summer Months

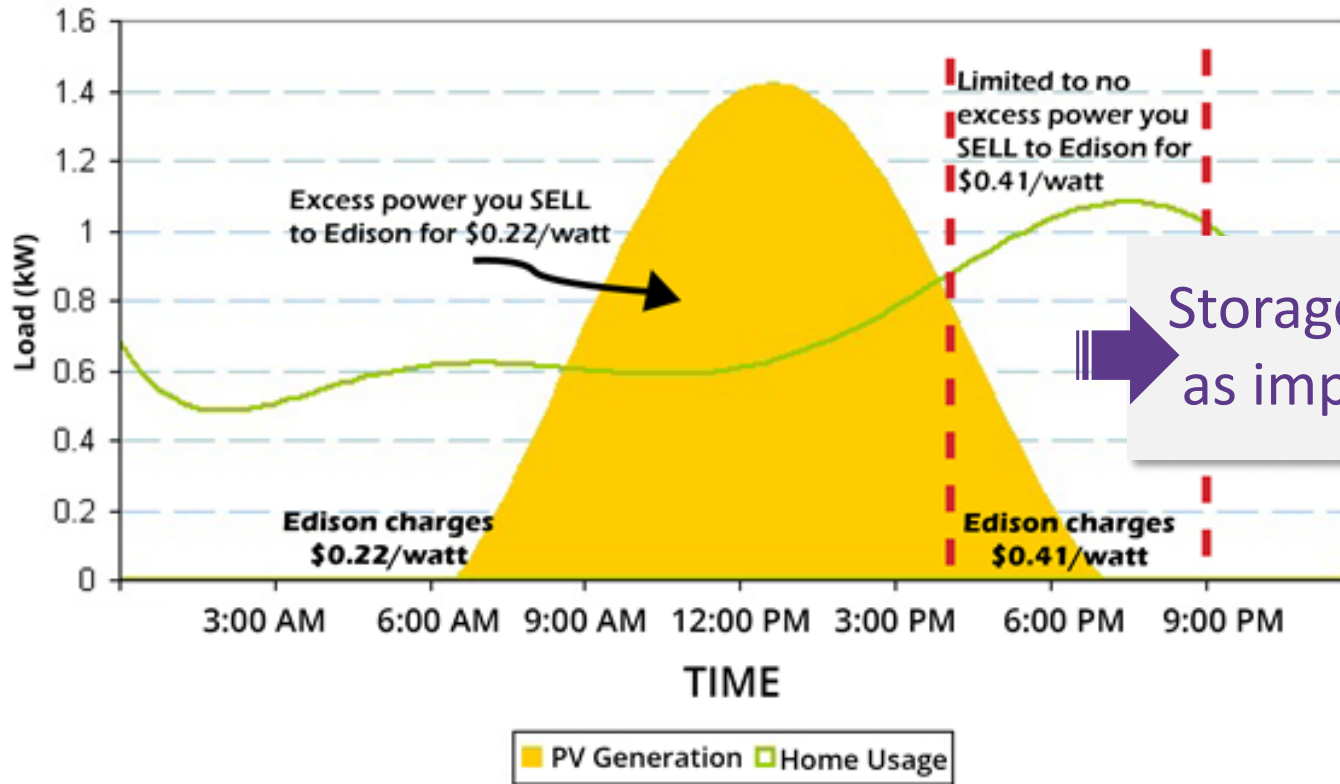
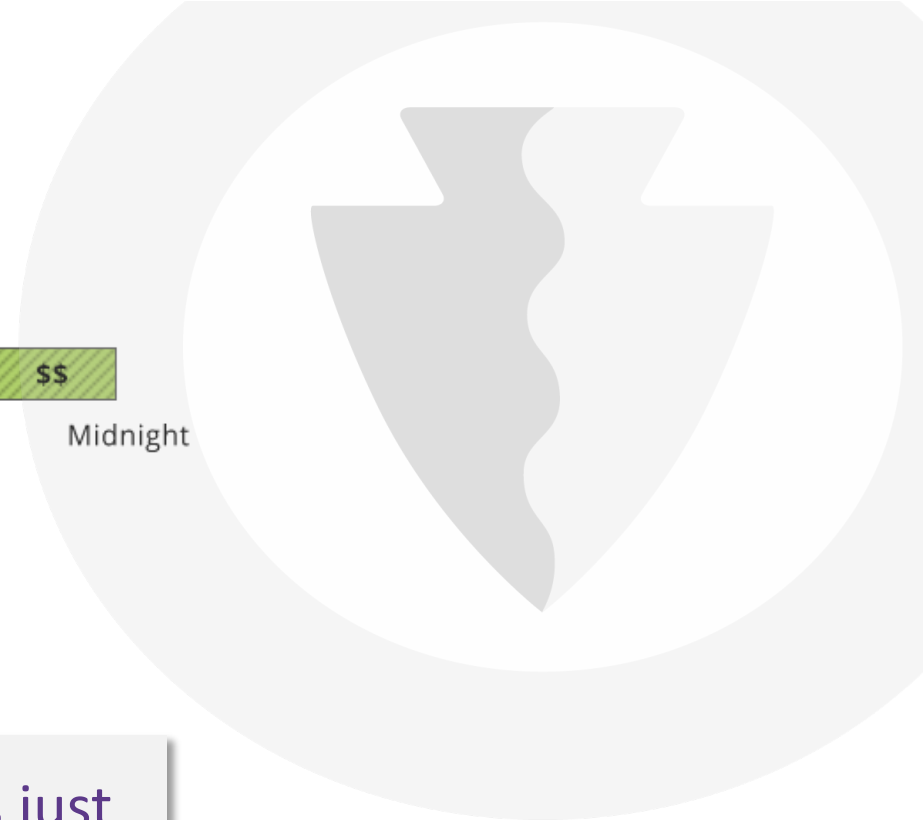


Midnight 4 p.m. 9 p.m. Midnight

Winter Months



Midnight 8 a.m. 4 p.m. 9 p.m. Midnight



Storage is just as important

# Energy

## Goals

- Conduct a ZNE-campus feasibility study and implement initiatives to move towards ZNE campus
- Develop a retro-commissioning program focused on existing building energy efficiency
- Maximize on-site renewable energy generation
- Move towards an all-electric approach for new construction and major renovations
- Consider establishing a Community Resilience Hub on each campus
- Collaborate with local utility to maximize cost-effectiveness of energy initiatives

## Initiatives

- Develop and implement a solar energy masterplan district-wide
- Conduct a district-wide electrification study
- Design the new building to be ZNE Ready
- Install building level electrical sub-meters
- Add sub-meters to measure major electrical loads (i.e. HVAC, lighting & plug loads) in new construction and major renovation projects
- Collaborate with Southern California Edison and other organizations to utilize incentives and grants

# Water

## Building Water Efficiency

Fixture / Fitting	CAL Green Mandatory
Toilet	1.28 gpf
Urinals	0.125 gpf
Lavatory Faucets	0.5 gpm
Kitchen Sink	1.8 gpm
Shower	1.8 gpm

### CALGreen

- **Tier 1** – 12% reduction in potable water use below required
- **Tier 2** – 20% reduction



# Water

## Site Water Efficiency

### Vegetation



Native



Water-intensive

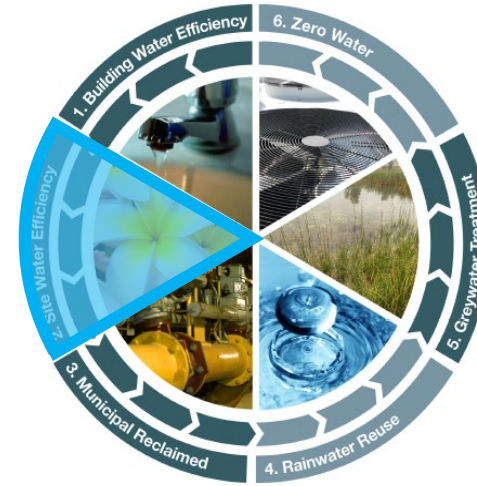
### Irrigation Efficiency



Drip



Spray



- >90% water efficiency
- Less water loss from evaporation
- Xeriscaping

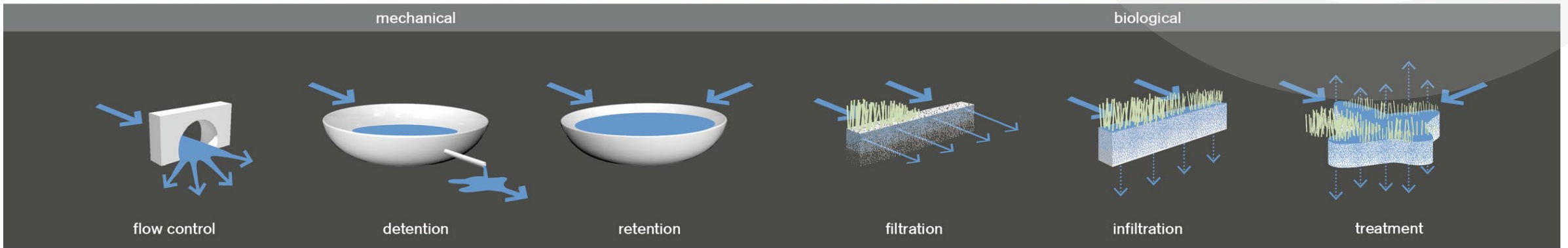
# Water

## Stormwater Runoff



mechanical

biological



flow control

detention

retention

filtration

infiltration

treatment

slow —————> spread —————>

**flow control:** The regulation of stormwater runoff flow rates.

**detention:** The temporary storage of stormwater runoff in underground vaults, ponds, or depressed areas to allow for metered discharge that reduce peak flow rates.

**retention:** The storage of stormwater runoff on site to allow for sedimentation of suspended solids.

**filtration:** The sequestration of sediment from stormwater runoff through a porous media such as sand, a fibrous root system, or a man-made filter.

**infiltration:** The vertical movement of stormwater runoff through soil, recharging groundwater.

**treatment:** Processes that utilize phytoremediation or bacterial colonies to metabolize contaminants in stormwater runoff.

# Water

## Goals

- Reduce potable water use by 20% by 2025, and 25% by 2030
- Utilize native and adaptive vegetation to minimize irrigation water use

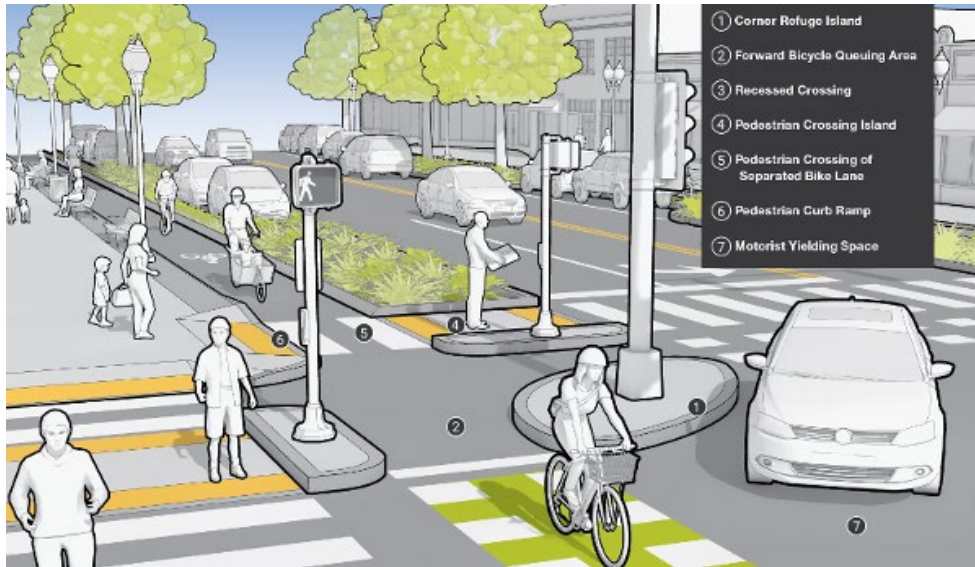
## Initiatives

- Retrofit existing building indoor water fixtures to low-flow fixtures
- Dual piping in all new construction, when recycled water is available
- Explore the opportunity for using non-potable well water for toilet flushing and potentially cooling tower make-up water
- Include dual piping in all new construction once recycled water is available 24 hours
- All new construction and major renovations shall achieve CALGreen Tier 1 prerequisites for indoor and outdoor water use
- Expand water metering networks and sub-meter at high-water-intensity sites

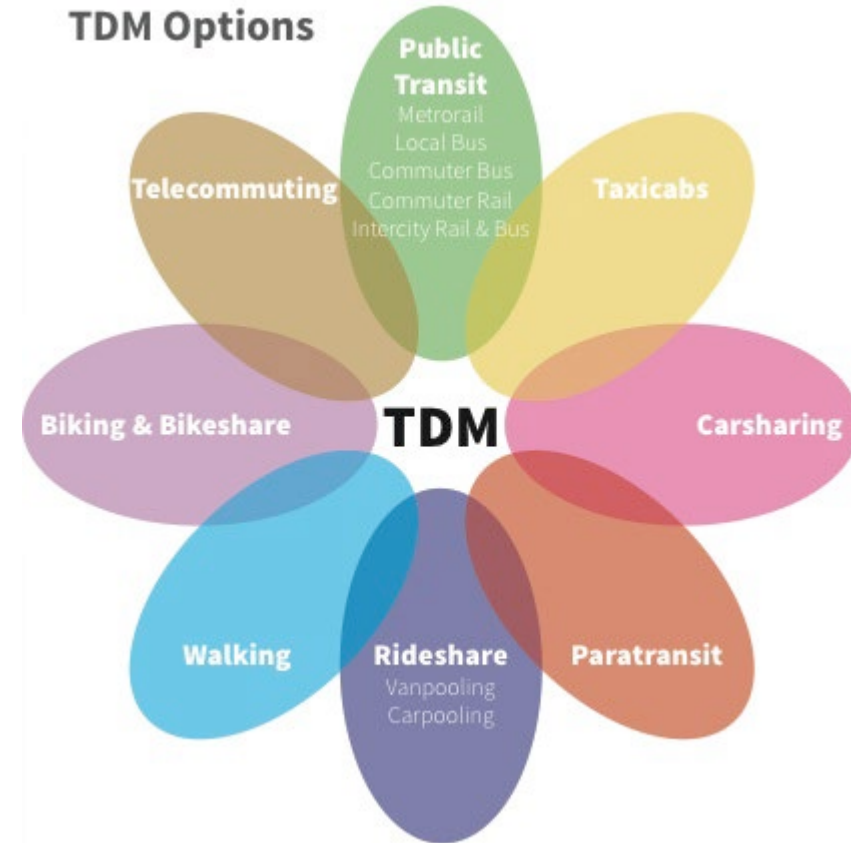


# Transportation

## Micro-mobility



Planning for **safety** and **efficiency** of operations to accommodate and encourage micro-mobility and rideshare trends



# Transportation

## Electric Vehicles Campus Fleet Vehicles

ZEV fleet conversion,  
Staged through procurement policies



## Faculty and Students

Anticipate transportation demands  
and patterns of facilities, faculty  
and students



Near-term and long-term design  
of electrical **network** and **charging**  
infrastructure **capacities**

# Transportation

## Goals

- Add Electric Vehicle (EV) Charging infrastructure to promote electric vehicles
- Establish a TDM plan to encourage alternative modes of transport and reduce single-occupancy vehicles demand
- All new purchases of fleet vehicles must be zero emissions by 2025, to achieve a full conversion of the fleet by 2040

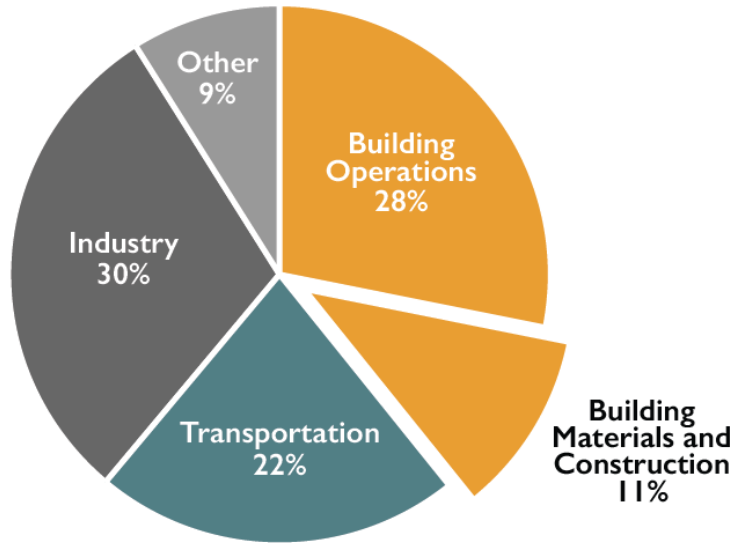
## Initiatives

- Build out all EV-capable parking spaces required by Title 24 with EV charging infrastructure
- Install bike racks near existing facilities and provide bicycle racks at all new facilities
- Develop a district-wide mobility plan
- Make pedestrian and bicycle access improvements
- Begin with transitioning campus security to zero emission vehicles, then target conversion of forklifts, courier vehicles, maintenance vehicles and any other company vehicles
- Provide a summary of transportation options to students and develop transportation resources section on the website

# Materials

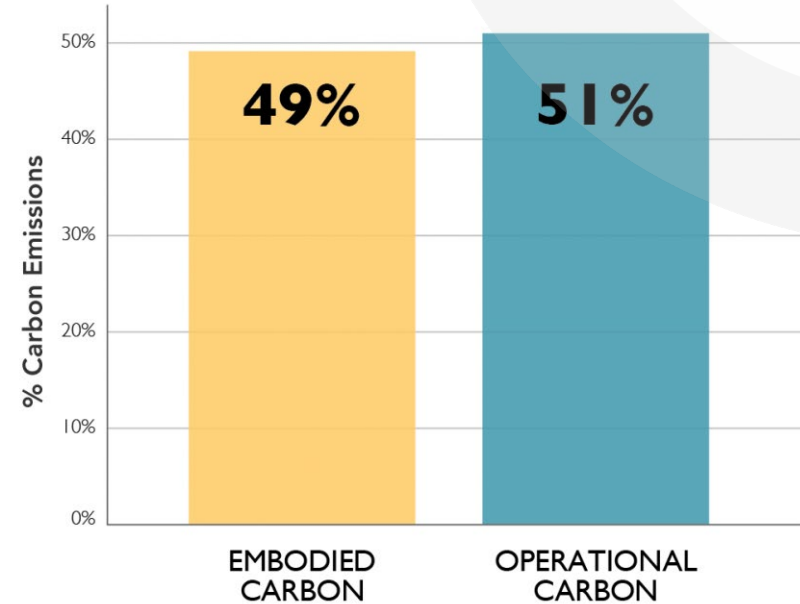
## Embodied Carbon

Global CO<sub>2</sub> Emissions by Sector



Source: © 2018 2030, Inc. / Architecture 2030. All Rights Reserved. Data Sources: UN Environment Global Status Report 2017; EIA International Energy Outlook 2017

Total Carbon Emissions of Global New Construction from 2020-2050  
Business as Usual Projection

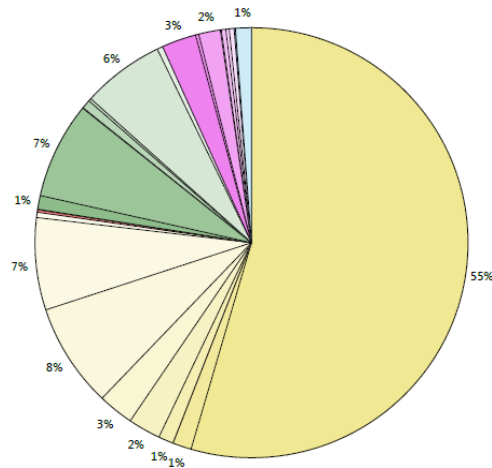


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# Materials

## Whole-building lifecycle assessment

Results per Division, itemized by Material



Global Warming Potential

### Legend

#### 03 - Concrete

- Admixture
- Cement
- Coarse aggregate
- Expanded shale
- Expanded slag
- Fly ash
- Glass fibers
- Lightweight concrete, foamed
- Perlite
- Sand
- Steel, reinforcing rod
- Structural concrete, 4000 psi, 25% fly ash
- Water

#### 04 - Masonry

- Hollow-core CMU, 8x8x16 grouted
- Mortar type S
- Steel, reinforcing rod

#### 05 - Metals

- Aluminum, extruded
- Cold formed structural steel
- Fluoropolymer coating, metal stock
- Galvanized steel form deck
- Galvanized steel roof decking
- Hot rolled structural steel
- Steel, sheet

#### 07 - Thermal and Moisture Protection

- Aluminum faced composite wall panel (ACM)
- Aluminum, extruded
- Expanded polystyrene (EPS), board
- Fasteners, stainless steel
- Fluoropolymer coating, metal stock
- Silicone joint sealant
- TPO roofing membrane, sheet, white

#### 08 - Openings and Glazing

- Aluminum, extruded
- Fluoropolymer coating, metal stock
- Glazing, double, insulated (argon), tempered

	Acidification Potential (kgSO2eq)	Eutrophication Potential (kgNeq)	Global Warming Potential (kgCO2eq)	Ozone Depletion Potential (CFC-11eq)	Smog Formation Potential (kgO3eq)	Primary Energy Demand (MJ)	Non-renewable Energy Demand (MJ)	Renewable Energy Demand (MJ)	Mass (kg)
Baseline (typical cement mix)	320,092	15,564	69,647,095	1.27	4,555,735	602,722,891	576,889,241	25,928,986	139,714,746
As-Designed (low-GWP concrete mixes)	280,400	14,649	61,930,455	1.21	4,051,094	571,850,604	545,971,939	25,971,372	139,887,038
Design compared to baseline	-12%	-6%	-11%	-5%	-11%	-5%	-5%	0%	0%

# Materials

## Procurement Policies

- Embodied carbon
- Health impacts
- Postconsumer recycled content
- Reuse

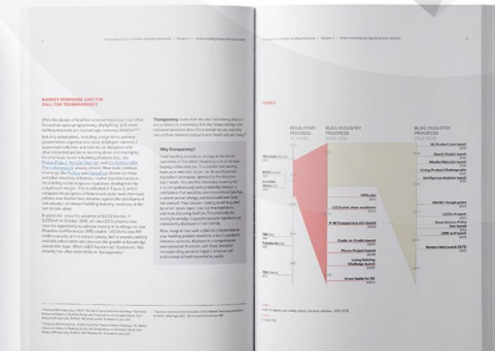
### GUIDANCE: STRUCTURAL COMPOSITE WOOD



FINGER JOINTED LUMBER [+adhesive]

PRESS JOINED LUMBER TOGETHER [+adhesive]

FINISH INSTALLED PRODUCT [+site-applied finishes]



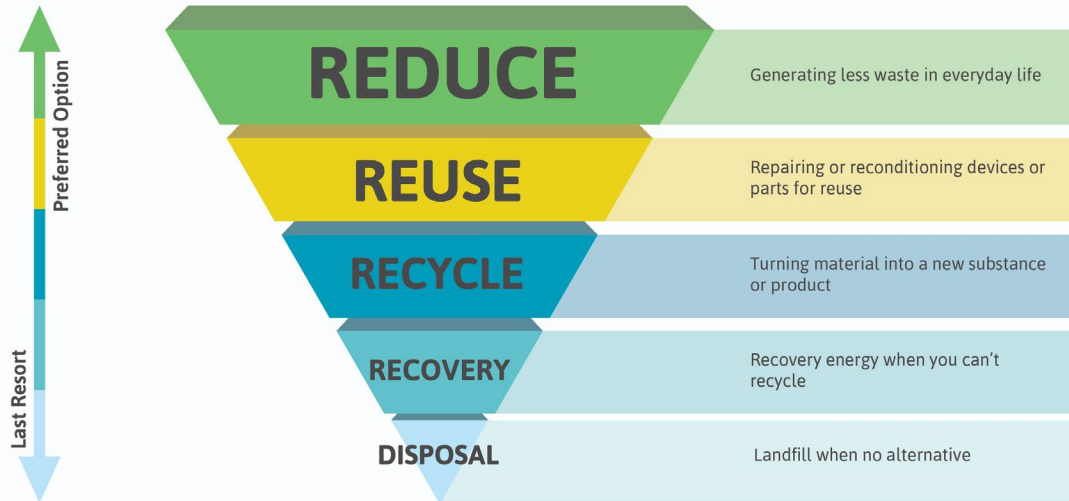
	LOW-VOC CONTENT SITE-APPLIED FINISH	ULTRA-LOW EMITTING FORMALDEHYDE ADHESIVE/FINISH	POLYURETHANE-BASED FINISH/ ADHESIVE
<b>Require</b>			
VOCs	1. Finish meets SCAQMD 1113	1. All previous VOC requirements 2. CARB Phase II	1. All previous VOC requirements
Healthier materials	None.	None.	1. Polyurethane-based adhesive.
<b>[+]</b>	Can be made with no added formaldehyde and no added urea formaldehyde binders.	Ultra low emitting formaldehyde label requires demonstration of low emissions.	No formaldehyde emissions.
<b>[-]</b>	Standard resins use formaldehyde.	Formaldehyde emissions still occur.	Polyurethane requires the use of an occupational asthmagen, but this is preferable to the formaldehyde-based adhesive.

INCREASING PREFERENCE →

# Materials

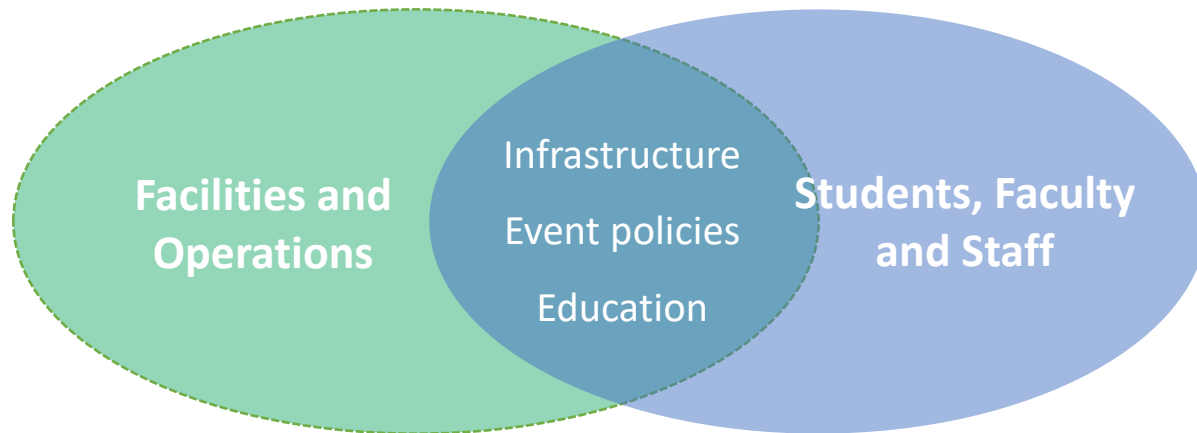


## Responsible Waste Management Hierarchy

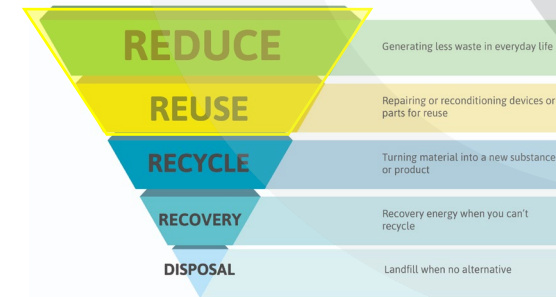


# Materials

Waste Diversion  
Source Reduction and Reuse



- Procurement policies
- Single-use items and reuse opportunities
- Circular economy – Upcycling byproducts or waste products
- Increase water bottle filling stations





# Materials

## Waste Diversion

### Recycling and Composting

- Waste audits - frequency, comprehensiveness
- Comprehensiveness of recycling program
- Integration of composting infrastructure



# Materials

## Goals

- Reduce waste going to landfill by 25% compared to current levels by 2025, and 50% by 2030
- Increase procurement of sustainable products and services by 20% compared to current levels by 2025, and 25% by 2030

## Initiatives

- Increase water bottle filling stations
- Track waste diversion percentages
- Establish a district-wide procurement policy that includes sustainable alignment on vendor procurement practices
- Conduct waste categorization assessment.
- Benchmark sustainability characteristics of existing products and services.
- Adopt a sustainable procurement policy and administrative procedure.
- Purchase environmentally and socially preferable electronic products.

# Education

Host Partnership events and conferences

- Illustration of stewardship and academia talent
- Educational opportunity

Sustainability and resilience education center for larger community



# Education

## Goals

- Expand knowledge of sustainability across all campus communities
- Establish the campus as a living laboratory

## Initiatives

- Partner with organizations to offer sustainable accreditation courses (e.g. CERT training, LEED)
- Involve students in sustainability initiatives and projects

# Ongoing Engagement & Transparency

## Goals

- Track and report ongoing sustainability performance against goals
- Incorporate sustainability initiatives into building standards for a transparent and holistic approach to sustainable practices in the district

## Initiatives

- Increase social media presence to increase behavioral changes
- Achieve LEED Gold, Platinum where possible, for new construction and major renovation projects over 30,000 sqft
- Achieve CALGreen Tier 1, Tier 2 where possible, for new construction

# Request for Feedback

- Follow-up discussion to be held on Next meeting

