



C H A B O T - L A S P O S I T A S

| *Community College District*

Sustainability & Climate Action Plans

April 2020



The American College and University Presidents Climate Action Commitment (ACUPCC)

- The District Chancellor signed on September 15, 2007
 - Commitment: Las Positas College is publicly committed to achieving campus carbon neutrality.
 - Annual Audit of greenhouse gas emissions
 - Take first two steps:
 - Inventory
 - Identify opportunities
 - Set specific targets and timelines



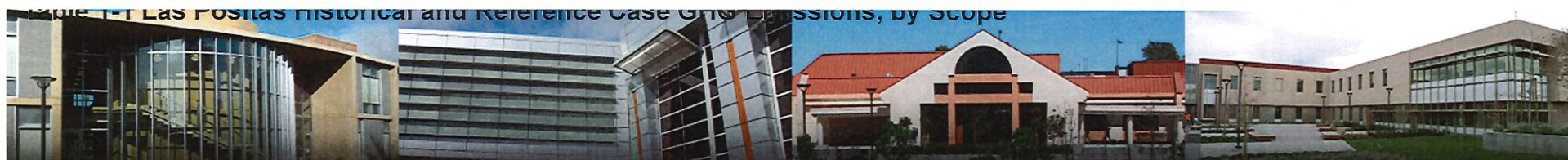
First Steps taken between 2007 to 2010

- Historical and Reference Case Green House Gas Emissions
 - Compile available data (2005 through 2009)
 - What are others doing?
 - Project GHG Emissions for 2015 and 2020
- What we learned
 - Transportation was 65% of GHG
 - Buildings and Facilities was 35% of GHG
 - Waste stream was not significant



First Steps taken between 2007 to 2010

- Small steps count, so do not overlook the obvious
 - Solid waste to landfill was declining due to prior steps taken (Integrated Waste Management Plan)
 - Bond Program would likely generate building debris, which should be avoided.
 - On site composting and mulching was working
 - Reclaimed water investment, did have benefits
 - Limited use of fertilizers
 - Reclaimed did not carry charges for wastewater in local utility billing
 - Paper use and consumption could only partially be offset with technology



First Steps taken between 2007 to 2010

(MTCO ₂ e)	2005	2006	2007	2008	2009	2015	2020
Scope 1 Emissions	37.6	37.9	22.0	33.6	44.9	67.9	76.1
Direct Transportation	37.4	37.7	21.8	33.4	44.7	67.7	75.9
Agriculture	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Scope 2 Emissions	2,297.8	2,723.9	3,205.4	3,189.7	4,151.4	6,287.0	7,052.4
Purchased Electricity	2297.8	2723.9	3205.4	3189.7	4,151.4	6287	7052.4
Scope 3 Emissions	5,530.1	6,000.3	6,402.6	6,214.8	8,157.7	12,354.2	13,857.9
Commuting	5,126.8	5,547.7	5,861.6	5,588.8	7,445.3	11,275.4	12,648.0
Directly Financed Travel	71.3	69.9	90.1	108.1	112.4	170.2	190.9
Study Abroad Air Travel	73.2	79.5	104.8	168.6	137.7	208.5	233.8
Solid Waste	18.2	19.1	14.3	17.9	31.9	48.4	54.2
Wastewater	1.0	1.1	1.3	1.3	1.6	2.4	2.6
Paper	12.3	13.6	13.5	14.6	18.2	27.5	30.9
Scope 2 T&D Losses	227.3	269.4	317.0	315.5	410.6	621.8	697.5
Total Gross Emissions	7,865.5	8,762.1	9,630.0	9,438.1	12,354.0	18,709.1	20,986.4
Additional Offsets	-3.5	-4.6	-4.8	-4.8	-6.0	-9.1	-10.2
Non-Additional Offsets (PV Systems)	0.0	0.0	0.0	-1,048.9	-1,157.4	-1,752.8	-1,966.1
Net Emissions	7,862.0	8,757.5	9,625.2	8,384.4	11,190.6	16,947.2	19,010.1

Steps along the pathway

- Board Policies:
 - LEED Silver Certified as minimum standard
 - Shared Governance Committee's Charge
 - Allocate Bond Funds to Energy Savings Projects
 - Information Technology Standards (dual sided printing)
 - Annual Reports to the Board



Energy Savings Bond Projects

- Central Plant Construction at Las Positas
 - Modulating Boilers & Ice Storage
- Co-Gen Plant at Chabot College
 - Waste heat used for heating 50 meter pool
- Additional Solar Panel Arrays
 - 2.5mw generation at LPC
 - 1.3mw generation at Chabot
- Modular Condensing Boilers allow right sizing for load within the central loop systems



Sustainability Based Projects

- Partnership with local bus for students, faculty and staff to use free with ID
- On-Campus compositing facility for community use (now discontinued)
- Landfill/Recycle/Compost bins on campus
- District Standards for sustainable products
- EV Charging (44 stations at 3 sites)



Prop 39 Projects

- LED Lighting for interior and exterior (90%)
- Pool covers (50 m, 25 m, and 35 m pools)
- EV Charging (44 stations at 3 sites)
- Package Unit retrofit/replacement



Continued Efforts

- 2020 Green House Gas emissions are 15% higher than 2010 with an increase of 50% in facilities square footage and 30% increase in student population
- Transportation (Scope 3 Emissions) continues to be #1
- LEED Standards may not be enough
- Electrification is difficult and will take years to undo what has been in place for over 50 years



Lessons Learned

- Reclaimed water does not have an aesthetic measurement
- Redwoods do not like reclaimed water
- Co-Gen Equipment needs constant attention
- Pool covers work great when the last one out of the pool installs the cover
- Commitment and engagement of campus committees, and annual reporting requirement to the Board can maintain the focus

