

Sustainability Task Force

- Created 2+ years ago as a subcommittee of Facilities
 - VP Bob Kratochvil
- Successful thanks to participation and input from throughout the campus community
- Progress, challenges, and action items

Sustainability-

- using, developing and protecting resources at a rate and in a manner that enables people to meet their current needs and also provides that future generations can meet their own needs.
- simultaneously meeting environmental, economic and community needs



Economically
Sustainable

Environmentally
Sustainable

“Community Needs”
Or
“Socially Sustainable”

-LPC Sustainability Initiatives

- [Live Solar Electricity \(updated hourly\)](#)
- [Photovoltaic Project Overview Facts](#)
- LEED Construction Standards
- Recycling and Composting
- Paper Reduction
- Reclaimed Water and Water-efficient Bathrooms
- Curriculum: Environmental Studies, Environmental Science, and the teaching and learning of Sustainability
- Transportation(!?!)

LEED – Leadership in Energy and Environmental Design Standards

- **Sustainable Sites**
- **Water Efficiency**
- **Energy Efficiency**
- **Materials & Resources**
- **Indoor Environmental Quality (Natural light, clean air, etc.)**
- **Locations & Linkages (links to mass transit and services)**
- **Awareness & Education**
- **Innovation in Design**
- **Regional Priority**

From the U.S. Green Building Council

Paper Reduction

Las Positas College has been increasingly using less paper through a variety of measures:

- Online admission applications, registration and online grades
- Online course materials through Blackboard and instructional websites
- Reducing the amount of agendas and minutes printed for institutional meetings
- Instituting electronic Curriculum development, review and approval
- GoPrint stations in the Library, Computer Labs and classrooms
- Posting job opportunities online vs. a printed sheet in every mailbox
- Recycling "scratch" paper in the Math Lab and elsewhere on campus
- Using recycled-paper Green Books instead of traditional Blue Books
- Reducing paper class schedules (Fall 2010)

- Needs: recycled paper copies and online document management

Central Utility Plant

- Recently completed
- Hot and cold water are produced centrally
 - ~40% more efficient than individual HVAC units on each building
- Ice is made at off-peak hours at lower electricity rates in order to cool buildings in the summer.

Water

- Reclaimed water
 - no drinking water is used to water our lawns or landscaping
 - no fertilizers are needed
- District plumbing standards are high (Tim Nelson)
 - Sensors for sinks and toilets
 - Low flow toilets and waterless urinals

- **AA Degree is in Environmental Studies**

- The AA in Environmental Studies is an interdisciplinary program focusing on the interaction of humans and the natural environment. In particular, the AA degree will prepare students for upper division studies through the completion of a diverse course of study in the natural and physical sciences, mathematics, social science, economics, and elective options that include anthropology, political science, and philosophy. In addition to meeting transfer requirements, the Environmental Studies major at Las Positas will prepare students to participate personally and professionally in the national debate concerning sustainable Energy and environmental Policy, resource management, and wildlife protection.
- ** Career opportunities include Environmental Planners, Environmental Consultants, and Greenhouse Gas Emissions Permitting Consultants. Graduates will also have the potential to specialize in related areas such as water, air, and forestry resource management, finance, energy, and transportation analysis, waste management, low impact construction, and environmental remediation.
- ** Transferability: All of the program courses are transferable to most 4 year colleges in the state.
- Approved by Curriculum Committee and Board of Trustees, pending State Chancellor's Office approval

American College & University Presidents' Climate Commitment

- We, the undersigned presidents and chancellors of colleges and universities, are deeply concerned about the unprecedented scale and speed of global warming and its potential for large-scale, adverse health, social, economic and ecological effects.
- We recognize the scientific consensus that global warming is real and is largely being caused by humans.
- We recognize the need to reduce the global emission of greenhouse gases by 80% by mid-century at the latest, in order to avert the worst impacts of global warming and to reestablish the more stable climatic conditions that have made human progress over the last 10,000 years possible.
- While we understand that there might be short-term challenges, we believe that there will be great short-, medium-, and long-term economic, health, social and environmental benefits, including achieving energy independence for the U.S. as quickly as possible.

Signed by Chancellor Joel Kinnamon

- We will initiate the development of a **comprehensive plan** to achieve climate neutrality as soon as possible.
 - Create **institutional structures** to guide the development and implementation of the plan.
 - Complete a **comprehensive inventory of all greenhouse gas emissions**
 - updating the inventory every other year.
 - Within two years of signing this document, develop an institutional **Climate Action Plan** for becoming climate neutral.

- Initiate two or more of the following **while the more comprehensive plan is being developed.**



- ✓ Establish a policy that all new campus construction will be built to **LEED Silver standard** or equivalent.
- Adopt a **purchasing policy** requiring purchase of ENERGY STAR certified products where possible
- **Encourage use of and provide access to public transportation for all faculty, staff, students and visitors at our institution.***
- ✓ Within one year, begin purchasing or producing at least 15% of our institution's electricity consumption from renewable sources.

(Other possible actions not listed)

A.B. 32 – California Global Warming Solutions Act of 2006

- Sets a firm, enforceable emission cap that addresses all major sources of global warming pollution in California.
- It also requires reductions through 2020 — far beyond any other measure in the world
- Authorizes and encourages the California Air Resources Board to identify reductions beyond 2020.

Human Contribution to Global Warming



According to the Intergovernmental Panel on Climate Change,
Man made sources add about 25 Gigatons of CO₂ to
atmosphere per year.

The net increase is 15 Gigatons (15,000,000,000 tons) per year



I-580

- If you burn 15 gallons of gas, that's enough CO₂ to fill an average classroom
- Multiply that by 300,000 cars using I-580 per day or 5 Million cars in the Bay Area

Our Tasks...

- Create **institutional structures** to guide development and implementation
- Complete a **comprehensive inventory of all greenhouse gas emissions**
 - update the inventory every other year thereafter.
- Within two years of signing this document, develop an institutional **Climate Action Plan** for becoming climate neutral.

Institutional Structure: Sustainability Committee

Charge –

Elicit broad perspectives and provide advice regarding sustainability and how the college can influence the greater community. Encourage progress towards more sustainable use of energy, water, paper, open space and other resources. Encourage reduced consumption, reuse, recycling, composting and the teaching and learning of sustainability. The committee will provide an advisory linkage to the College Council, other members of the campus and the community on all sustainability matters pertaining to the implementation of strategic goals, the President's Climate Commitment and the design and implementation of a Climate Action Plan.

Reporting –

The Sustainability Committee will report to the College Council.

Institutional Structure: Sustainability Committee

Membership – (?)

3 student representatives

1 faculty representative from each division

3 faculty representatives at-large

1 adjunct faculty

3 classified representatives

2 Administrators (1 dean + VP of Business Services)

Term – 2 years

Ex-Officio -

Jeff Kingston, Vice Chancellor of Facilities

Tim Nelson, Director of M&O

Sustainability Task Force tentative working group (Spring 2010)

Janneice Hines - ASLPC
Justine Whitfield - ASLPC

Karen Kit
William Eddy
Jeff Sperry
Layne Jensen

Adeliza Flores
Amy Chovnick- adjunct Faculty
Candace Klaschus
Kimberly Tomlinson
Craig Kutil
Eric Harpell
Mike Ansell
Paul Torres
Elizabeth Hopkins
Nan Ho
Scott Miner

Neal Ely, Dean of MSEPS
Bob Kratochvil- VP of Business Services
Amber Machamer – Director of Research
Tim Nelson- M&O
Jeffrey Kingston- District, VC Facilities
Bruce Rich - PB
Tiffany Batac - PB

Greenhouse Gas Emissions Inventory 2005-2008

- A comprehensive inventory of all greenhouse gas emissions prepared by Tiffany Batac, environmental planner, PB (Draft Sept. 2009, update in progress*)
- Greenhouse gas emissions from all sources including buildings, electricity, gas, transportation, waste, paper, etc. were considered.
- What would you guess is our biggest problem?

*Thanks to Janice Cantua (A&R), Lydia Penaflor(HR), 511.org
Transportation Survey, IT, Ricoh, and many others

Conclusions

- **More than 70% of all emissions come from transportation**
- **The vast majority of all transportation emissions come from people commuting to LPC in single-passenger vehicles**

Understand the problem...

- The average commute is ~17 miles each way
- The Tri-Valley and surrounding areas are made up primarily of suburban, single-family homes.
- Bike Access is currently dangerous and inconvenient
- Wheels bus service currently only has one route –
 Bus 12 - servicing the college.
- BART to Livermore is 10+ years away
- Parking and traffic congestion has been deteriorating and will only get worse as the campus grows.

What can we do?

- Carpool – informal, 511.org, campus postings(?),
- Vanpools?
- Advertise the current alternatives
 - <http://www.laspositacollege.edu/green/>
 - ❖ Thanks to Elizabeth Noyes
- Lobby for better bike routes
- Lobby for BART to Livermore with a station at Isabel/580
- **Turn the bus into a better alternative**

A Proposal

- Meet with Livermore Amador Valley Transit Authority (LAVTA) the provider of Wheels bus services
- Could we seek an agreement where LPC ID cards will work as free bus passes for students and employees?
- Revenue will be needed for a sustainable agreement
 - (~\$120,000+ per year??)

Funding

- Grants for start up?
- Raising Parking fees for Students
(from \$30 to \$40/semester $\sim 9,000 \times \$10 = \$90,000$)
- Transportation fee for students instead of parking fee?

A rough proposal – a small amount taken out each month?

- Full-time Faculty:

$$\text{\$10/mo.} \times 10 \text{ mo.} = \text{\$100} \times 102 \text{ faculty} = \text{\$10,200}$$

- Administrators: $\text{\$150/year} \times 12 \text{ people} = \text{\$1800}$

- Classified + PT Faculty:

$$\text{\$5/mo.} \times 10 \text{ mo.} = \text{\$50/yr} \times 382 = \text{\$19,000}$$

$$\text{Total for Students + Employees} = \text{\$ 121,000}$$

Benefits

- Simple
- Everyone would ride the bus free with a LPC ID card.
- LPC would negotiate more bus routes, buses and service
- We should become their single largest group of riders
- Parking, Traffic, and Air Quality would improve for everyone
- Students with financial need would benefit the most

Future Initiatives

- Develop a Climate Action Plan by May 2010
- Wind – Feasibility study underway
- More Solar Parking Structures
- More Building and Water Efficiencies
- Continuing to improve Paper Reduction, Recycling and Composting
- Incorporating Sustainability into Teaching and Learning
- Discuss BART to Livermore?

