UC BERKELEY
2020 LONG RANGE DEVELOPMENT PLAN
ENVIRONMENTAL IMPACT REPORT
ADDENDUM #5
COMMENTS AND RESPONSES

Table of Contents:

Courtesy attachment:
Late version of Sihvola letter

Clifford J Fred
<cafred1@juno.com>
07/06/2009 05:21 PM

To jmcdougall@cp.berkeley.edu
cc
bcc
Subject comments on UCB LRDP Amendment & LRDP EIR Addendum for Climate Change

History: This message has been replied to.

7-9-09
Jennifer McDougall
Please accept my attached comments on the LRDP Amendment & LRDP EIR Addendum for Climate Change. I tried to e-mail to you at 4:50pm, but it came back as not deliverable. Then I checked the web site and I realizeed I had put only one "l" at the end of your last name. Please let me know if you receive and are able to accept these comments.
thank you,
Clifford Fred

C. Fred Comments on UCB LRDP Climate Change Amendment & Addendum July '09doc.doc

July 6, 2009
Clifford Fred
1334 Peralta Avenue
Berkeley, California 94702

COMMENTS ON UC BERKELEY LRDP AMENDMENT & LRDP EIR ADDENDUM TO ADDRESS CLIMATE CHANGE

LACK OF NOTICE

1.A. Although UCB made sure that public officials and VIPs, including those far from Berkeley, were notified of the LRDP Amendment and LRDP EIR Addendum, UCB apparently made little effort to notify the public in the City of Berkeley. No advertisements or press releases appeared in either the Berkeley Daily Planet or in the Berkeley Voice. I urge UC to put off approval of the Amendment and the Addendum. Instead, UCB should re-circulate the document for at least 30 days, with clear notification of the availability of the document in the Berkeley Daily Planet and in the Berkeley Voice prior to the start of the comment period.

1.B. WHO ARE THE DECISION-MAKERS?
There appears to be no mention in the 139-page document as to who the decision makers are. Who decides whether or not to approved the LRDP Amendment? Who decides whether or not to make the necessary CEQA findings and to approve the LRDP EIR Addendum? Is the decision-maker the UC Regents, the UCB Chancellor, the UC Office of the President, or the UCB Physical and Environmental Planning Office?

People have a right to know who the decision-makers are, so as to be able to communicate with them directly as to their comments and concerns about the LRDP Amendment and the LRDP EIR Addendum. Otherwise, the process is seriously flawed.

WHAT HAPPENS TO THE PUBLIC'S COMMENTS ON THE LRDP AMENDMENT AND THE LRDP EIR ADDENDUM?
Will a revised LRDP Amendment be noticed and made available to the public for review prior to approval? Will a revised or Final LRDP EIR Addendum be noticed and made available tot he public prior to approval?

1.C. WHEN THE APPLICANT IS ALSO THE DECISION MAKER, IT SHOULD ERR ON THE SIDE OF MORE PUBLIC & ENVIRONMENTAL REVIEW
In regards to the LRDP Amendment and LRDP EIR Addendum, the University of California is the Applicant, the Plan Approval Staff, the preparer of the CEQA environmental documents, and the Decision-Maker. How can any critic of the LRDP Amendment or LRDP EIR Addendum have confidence their comments will be taken seriously when the University of California is both the Applicant and the Decision-Maker? This is all the more reason for the UCB to re-notice the availability of the LRDP Amendment or LRDP EIR Addendum, with notices in the Berkeley Daily Planet and the Berkeley Voice, and to extend the comment period by at least an additional 30 days.

1.D. MEMORIAL GROVE OF TREES
How does UCB's clear-cutting of the Memorial Tree Grove (adjacent in Memorial Stadium) in 2008 fit in with its Climate Change Plans? I am sure that most UCB scientists agree that trees keep the climate cool, and that cutting down trees has climate warming effects. When UCB ordered all the trees cut, did they consider the repercussions on climate change, either real or

symbolically? How much carbon dioxide was released into the environment as a result of the removal of the Memorial Grove trees?

GILL TRACT TREES
How does UCB's clear-cutting of the Gill Tract Tree Grove in Albany in 2008 fit in with its Climate Change Plans? When UCB ordered all the Gill Tract trees cut, did they consider the repercussions on climate change, either real or symbolically? How much carbon dioxide was released into the environment as a result of the removal of the Gill Tract trees?

What other trees has UCB cut down in the past year? How many trees will be cut down in the future as a result of the 2020 LRDP?

1.E. Q.3 - LOCAL PLANS AND POLICIES
Section Q.3 of the LRDP EIR Addendum states that it is UC policy to "to evaluate proposed projects for consistency with local plans and policies." This is not entirely accurate. In reality, it is UCB's policy to persuade or compel local communities to change their plans and policies so that they will conform to UCB's development plans. This is clearly evidenced by the 2005 so-called "Settlement Agreement" between UCB and the City of Berkeley. In this Settlement Agreement, the City of Berkeley agreed to increase height and density limits in its Downtown, and to more than double the size of the Downtown zoning district, so as to accommodate UCB's expansion plans.

1.F. CITY OF BERKELEY CLIMATE ACTION PLAN
On page 18, the LRDP EIR Addendum is not accurate in describing the recently adopted City of Berkeley Climate Action Plan as "a policy document that does not in itself trigger new development'. The Berkeley Climate Action Plan contains very specific plans, goals, and policies for significantly increasing the City of Berkeley's building and population density, and for changing Berkeley's zoning laws to allow higher density development.

Policy 1.a, of the Berkeley Climate Action Plan (page 25) states, "ADJUST ZONING TO ALLOW FOR GREATER RESIDENTIAL DENSITY and specified commercial uses along certain transit corridors and in proximity to the Downtown Berkeley, Ashby and North Berkeley BART stations." The Climate Action Plan intends that City Zoning be changed to accommodate this "greater residential density."

The Climate Action Plan's TRANSPORTATION & LAND-USE ACTION GOAL 1 is to, INCREASE DENSITY ALONG TRANSIT CORRIDORS (page 22). The narrative after the Climate Action Plan's Goal to "Increase density along transit corridors," states, "…direct new development to locations that are close to transit and have retail and other services within walking distance such as the Downtown" (page22).

The narrative after the Climate Action Plan's Goal to "Increase density along transit corridors," further states, "..design and zoning tools should seek to step down density into the neighborhood, while maintaining OR EVEN INCREASING what is permitted immediately adjacent to the major boulevard,"(page23).

1.G. TRANSPORTATION PRACTICES AND PROGRAMS
The Transportation Practices and Programs as outlined in Attachment 2 of the LRDP EIR Addendum would be of little beneficial effect. UC Berkeley and LBNL are both in the midst of a long-term massive development program. More development means more vehicular traffic, more

pollution, more green house gasses, and an exacerbated urban heat island effect. If UCB and LBNL were serious about reducing vehicle trips and reducing green house gasses, they would dramatically reduce their long-range development plans.

Last week, AC Transit, SF MUNI and BART all raised their fares. The result will be fewer users of public transit and more use of private automobiles. IF UCB and LBNL were serious about reducing vehicle trips, reducing green house gasses and promoting public transit, they would use their considerable wealth and fund-raising prowess to subsidize BART and AC Transit fares for ALL Berkeley residents. And they could help to fund free public transit on "Spare the Air" days.

1.H. ENERGY BIOSCIENCES INSTITUTE PROJECT

Attachment 3 of the LRDP EIR Addendum ignores the adverse environmental effects of Lawrence Berkeley's National Laboratory and British Petroleum's planned Energy Bio-Sciences Institute Project. In fact, the Project is a massive development project that would remove trees and plant life, destroy a natural habitat for wildlife, and would contribute to the urban heat island effect in Berkeley and environs. The project would put additional demands on the East Bay's limited water supply. By generating thousands of vehicle trips a day, the project would result in increased pollution and the generation of a significant level of green house gasses.

LBNL'S HELIOS PROJECT

Attachment 3 of the LRDP EIR Addendum ignores the adverse environmental effects of Lawrence Berkeley's National Laboratory's planned Helios Project. In fact, the Helios Project is a massive development project that would remove trees and plant life, destroy a natural habitat for wildlife, and would contribute to the urban heat island effect in Berkeley and environs. The project would put additional demands on the East Bay's limited water supply. By generating thousands of vehicle trips a day, the project would result in increased pollution and the generation of a significant level of green house gasses.

1.I. URBAN HEAT ISLANDS

Attachment 3 of the LRDP EIR Addendum acknowledges that cities are "urban heat islands, zones of higher temperature relative to the surrounding countryside." By clear-cutting the Memorial Grove and the Gill Tract Grove, UCB has exacerbated the urban heat island effect in Berkeley/Albany. By continuing to build large buildings, continuing to increase student enrollment, and continuing to remove trees, UCB is continuing to exacerbate the urban heat island effect in and around Berkeley.

1.J. CUMULATIVE EFFECTS

UCB's short and long-range massive development plans means more vehicular traffic, more pollution, more green house gasses, and an exacerbated urban heat island effect in Berkeley and environs. UC Berkeley should take this opportunity to seriously review all its development plans, and to cancel, reduce in size or delay its pending expansion and development projects. If climate change is as serious a problem as some people say it is, then slowing climate change should trump the glory that UCB seeks in its massive expansion plans.

Clifford Fred

Madeline Hovland
<mhovland@mindspring.com>

07/06/2009 10:45 PM

To jmcdougall@cp.berkeley.edu
cc
bcc
Subject Comment on EIR Addendum to address climate change

I hope the following comment will be considered even though it is late.

2.A. The EIR document is long and highly technical. I have not had time to read it closely. However, it seems to me that it mostly addresses the good things that any responsible university or large company should be doing in this 21st century to save energy, minimize transportation impacts, and "create environments that enhance human health."

2.B. However, the EIR odes not address any of the detrimental effects that will follow from adding more buildings as well as more traffic to Strawberry Canyon, and how those effects might be mitigated.

For example, I found nothing about the effects of cutting down trees. The number of trees to be cut down is not even mentioned--as if it is completely unimportant and not worth considering. Certainly the loss of trees should be considered, not just for the loss of carbon absorption and storage, but also the loss of filtering pollutants in the air, loss of shade, and other effects on global warming.

Madeline Lynn Hovland

merrilie Mitchell
<merriliem@sbcglobal.net>
07/06/2009 05:01 PM

To jmcdougall@cp.berkeley.edu
cc
bcc
Subject CAP /LRDP

Comments on UC B CAP adendum to LRDP
Big Problems—ignoring nature and continuing to deplete it

3.A. You cover senate Bills (political pressure, t numbers galore—too much and never enough if you aren't measuring the right things—such as the carrying capacity of the land, the health of the earth (land) and water that sustain us

The land the plant lifes trees, watersheds, the bay and the ocean -they take ou t the Carbon gases and make the Oxygen we breathe! You cut the trees , concrete over the earth, the labs pollute and use too much energy.

Those a t the top are not thinking wholisticly,same old, big game beat stanfor , more $ big buildigs

Ignoring nature—senate bills, statistics and sutainable groups
Politicians , numbers and gren spinning goop

But how are the trees on your campus park
Going gone
Not enoughTrees wetlands and healthy oceans--seve our planet!

merrilie Mitchell
<merriliem@sbcglobal.net>
07/06/2009 07:57 PM

To jmcdougall@cp.berkeley.edu
cc merriliem@sbcglobal.net
bcc
Subject CAP/LRDP//Hi JMcD--if there is more time to comment, please let me know-->

CAP/LRDP//Hi JMcD--if there is more time to comment, please let me know-->

I had a plumbing problem so did not get to write very well.

4.A. It would be good to extend the comment period, which certainly shouldn't be ended on a big holiday weekend.

4.B. Comments from the little guys, the regular folks, are what EIR's are supposed to include, and for good reason-- the "common" people have common sense, and often a down-to- earth perspective which is very important.

The VIP's at the top of orgs, UC, or in government, are fewer in number and may discuss with each other, missing the point altogether. Then they keep doing the same things that cause the problemsto begin with, and even upping the scale now to catastrophic damage. Are things getting better?

Over and over they go--more paving the earth, more cutting the trees, more polluting the air and land and water. And more extravagant use of energy and cavalier uses of radiation, nanotech,--potentially dangerous to living things.

Science at UC and the Labs is increasingly becoming more and more microscopic while losing perspective on the whole organism, community, ecology, living breathing planet-- or the once living breathing planet that is beginning to ccccccccccccccccccccccc cccchoke. How can this be when plants naturally take the carbon out of the air. We breathe out CO2, they breath it in and "breathe out" the fresh oxygen we breathe to live. How could we be outrageous enough to upset this balance of nature by paving too much of our earth, by cutting trees that don't need to be cut, by poisoning land, air and water.

Wetlands take as much C02 from the air as trees and grasses. The oceans which cover 70% of the earth have water plants and plankton which take C02 from the air as well.-- Huge amounts. But our energy and our industry and laboratories, are polluting and acidifying the oceans killing the photosynthesizers like the tiny plankton, and coral reefs (think about what the coral is made of--CARBON!). Amazing! and we don't have to pay these plants to clean our air for us.
Hey what values have the Regents, the Planners, the President, the Lab Directors, to put money and Nobel Prizes Big games and Big development before the health of our Planet, and before consideration and respect for their neighbors, as if they don't matter at all.

4.C. UC is a public trust college. Public trust is not about making money on cellulosic ethanol, and selling it to China and India so they too can cut their gasolene with it and buy cars and pave the earth copying America, the most polluting of nations, and the one whose leaders seem unable to clean up their act, unable to feel responsibility for what they do, or to change their ways.

Public Trust University.--That's not about getting Nobel Prizes for genetically modified, "Round Up Ready" trees for biomass or monocrop vegetables that deplete soils, poison water, destroy biodiversity and starve families that formerly farmed sustainably, even organically-- which amazingly takes much more Carbon from the air than agribusiness. Is trust more important than some money-making man-made invention and strategy that can never replace the real things that they are destroying?

Energy efficiency at it's best is about using the least amount, and buying less and better, safer, recyclable, safely-made, non-polluting, non-toxic, healthful things. You write about most of that in the EIR, but NOT about less stuff, less development, or limits to campus expansion--not sprawling all over--but being respectful of your neighbors and the environment, and our earth, our home.

4.D. The Labs should not build or rebuild in Strawberry Canyon or the hills adjacent. That area is earthquake zone. And it is the missing link of our Greenbelt between 2 East Bay Regional Parks! The (EBRParks) have money to purchase that land from the Labs, that beautiful canyon with clean cool air and birds singing, and it possibly still has a pristine aquifer.

The University/Labs are cruel to develop laboratories on that land and on an earth quake zone. Some of the Labs research should be nowhere near a populated area or near thousands of students who have put their trust in UC Berkeley. And think of the neighbors some of whom worked for the University, and moved there next to their beloved Campus, before it went off course, and lost respect for others, and became so important they forgot to notice they are polluting and destroying our earth.!

Some of the research up there and on campus needs to be in a safe, remote area or it may get all of us bombed off the face of the earth.

4.E. It is important for UC and for our Planet to have a more reasonably timed comment period for this EIR, and for UC to get the comments they may wish to avoid. but remember--"Even your best friends will not tell you". But your neighbors and down-to earth folk may tell you what is most important to know.
Sincerely
Merrilie Mitchell

RECEIVED
JUL 06 2009
PHYSICAL & ENVIRONMENTAL PLANNING

Committee to Minimize Toxic Waste

Emily Marthinsen
Assistant Vice Chancellor
Physical and Environmental Planning
Capital Projects
300 A&E Building, # 1382
University of California, Berkeley
Berkeley, CA 94720-1382

July 3, 2009

Subject: Comments on UC Berkeley 2020 Long Range Development Plan (LRDP) Amendment and 2020 LRDP Environmental Impact Report (EIR) Addendum to address Climate Change

Dear Ms. Marthinsen,

5.A. The above referenced documents, addressing UCB's contributions to climate change, are inadequate and deficient because they do not set goals for greenhouse gas (GHG) emissions reductions that equal or exceed those of its host city, the City of Berkeley.

5.B. UCB and the Department of Energy's (DOE) Lawrence Berkeley National Laboratory (LBNL), managed by UC for the DOE and located on land leased from the UC Regents, and all the other real estate leased to UCB and LBNL equal at least one quarter (¼) of the land area of the entire City of Berkeley. And yet, these two entities, UCB and LBNL have not been able to join the City of Berkeley in a compresensive, transparent way and address their contributions to GHG emissions in <u>one</u> cohesive Climate Action Plan.

On June 2, 2009, the Berkeley City Council unanimously adopted a version of the Climate Action Plan (CAP), that aims to reduce Berkeley's GHG emissions by 80% by 2050. (See attachments 1A and 1B) UCB's strategy is "a feasibility study...and a target of reducing GHG emissions on campus to 1990 levels by 2014." (Chancellor Birgeneau's congressional testimony of April3, 2008)

5.C. UCB's GHG emissions were 205,994.00 metric tons of CO2 (MTCO2e) in 2007, which equals over 35% what the City of Berkeley emitted in 2005 (i.e. 576,000.00 MTCO2e). Furthermore, UCB's GHG emissions in 1990 were 165,000.00 MTCO2e, thus the "feasibility study" goal is <u>less</u> than a 20% reduction from the 2007 (p.30) levels to reach the 1990 levels (Figure 1.) Two paragraphs (p.29) were dedicated to LBNL, but <u>NO</u> GHG emissions data were provided.Please, update the LBNL section with the most recent, comprehensive GHG emissions data.

THE DAILY CALIFORNIAN
Berkeley, California
Thursday, June 4, 2009
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City Adopts Final Version Of Climate Action Plan

by **Genevieve Head-Gordon**
Contributing Writer

The Berkeley City Council unanimously adopted the finalized version of the Climate Action Plan at Tuesday night's meeting.

The amended 20-year Climate Action Plan—which has been in the works since Berkeley voters passed Measure G in 2007—aims to reduce Berkeley's greenhouse gas emissions by 80 percent by 2050.

According to Councilmember Susan Wengraf, the adopted plan contains all the suggested amendments from the months of deliberation, except for the third clause—which calls for the rezoning of residential neighborhoods to accommodate more small stores.

Councilmember Max Anderson said he believes these neighborhoods should accommodate small stores because they can be vital in the city's economy.

"I can't support the clause on small mom and pop stores," he said. "In some parts of the city, corner stores serve as an important function."

Implementing the plan will cost $3 million in its first year, with the funds already allotted from the general fund. The plan will return to the council every year for revisions that address advances in science and progress on current projects, according to Councilmember Gordon Wozniak.

According to Mayor Tom Bates, the plan was recognized by the United Nations as the "best in North America."

"It has showed the way and it is now being used as a model for other cities," Bates said at the State of the City luncheon on Tuesday.

Despite such recognition, opponents of the plan argue that it lacks an environmental impact report, which assesses the potential environmental impacts resulting from approval, construction and operation of projects.

"The plan even admits itself that it ignores the environmental consequences, in spite of studies," said Shirley Dean, Berkeley resident and former Berkeley mayor. "We need (a report)."

Other residents also said the plan is not complete because it does not include UC Berkeley and the Lawrence Berkeley National Laboratory's environmental impacts.

"It is incredulous that the city has proceeded with its Climate Action Plan without any consideration of UC Berkeley and the (lab's) climate change impacts on Berkeley," said Berkeley resident Pamela Sihvola, reading from a prepared statement that also ran as an opinion column in The Daily Californian on Monday. "Without them, the plan is incomplete, a mere piecemeal implementation to fill only some sort of superficial PR purpose."

However most residents expressed excitement about the plan's potential for the city.

"This is Berkeley's chance to be a leader in the U.S. on climate action policy," said Pepper Yelton, who serves on the city's energy commission. "There will always be reasons to delay policy action on climate change but the plan has done a good job in trying to minimize costs and maximize benefits."

Contact Genevieve Head-Gordon at gheadgordon@dailycal.org.

THE DAILY CALIFORNIAN

Established 1871. Independent Student Press Since 1971.

Berkeley, California Monday, June 1, 2009 www.dailycal.org

Climate Plan Needs More Analysis

by **Pamela Sihvola**

Berkeley's Climate Action Plan (CAP) and current CEQA (California Environmental Quality Act) Negative Declaration documents are absurd. They completely ignore a quarter of the city's land area that is occupied by the University of California (UC) and the Lawrence Berkeley National Laboratory (LBNL).

It is incredulous that the city has proceeded with its Climate Action Plan without any consideration of UC and LBNL's climate change impacts on Berkeley!

These impacts must be analyzed and included in the city's Environmental Impact Report (EIR) for the CAP. Without them, the CAP is incomplete, a mere piecemeal implementation to fill only some sort of superficial public relations purpose.

Indeed, in a recent court action a judge ruled, in response to a case filed by members of the group, Save Strawberry Canyon, that LBNL must recirculate their Climate Change Impact Analysis in the Long Range Development Plan EIR.

Lawrence Lab, a high energy user nuclear-industrial complex with already many accelerators, has plans to further increase its energy consumption by building yet another high energy accelerator!

The proposed high energy plasma laser accelerator (HEPLA) is expected to accelerate electron beams to energies in the order of 10 billion electron-volts. What will the annual energy consumption of this new facility be, in addition to LBNL's approximately half dozen other accelerators? This information must be made a part of the city's action plan.

It should start with the highest energy consumers, UC Berkeley and LBNL, the biggest contributors to the city's greenhouse gas emissions (GHG) load, who pay no property taxes, rather than burdening the residential property tax payers. Furthermore, under the California Medical Waste Management Act, LBNL is a large-quantity generator of bio-hazardous medical waste.

It also generates, in huge quantities, radioactive and hazardous waste and mixed waste (both radioactive and hazardous), often shipped to other counties and states! Berkeley Lab, a federal facility, could be a leader in the city's "Zero Waste to Landfills By 2050 Vision."

Instead, it is gearing up to dump hundreds, if not thousands, of tons of radioactive and hazardous debris from the demolition of the Bevatron accelerator, and other such projects, to landfills nearby and in other states.

Why hasn't Berkeley's CAP CEQA documents analyzed the impact of UC/LBNL's dozens of diesel buses, constantly circling around the city, campus, LBNL and downtown, which spew tons of diesel particulate matter/GHGs in the air? What is UC's and the Department of Energy LBNL's contribution annually to the City of Berkeley's GHG emissions in metric tons of CO2?

Berkeley's Climate Action Plan must have a full blown EIR under CEQA, including a very careful analysis of the climate change impacts of all the hundreds of buildings and facilities belonging to UC, the Department of Energy and LBNL, which are located in the impact zone for the City of Berkeley.

Pamela Sihvola is a Berkeley resident. Reply to opinion@dailycal.org.

3.

5.D. In a recent Environmental Assessment (EA), for DOE's proposed High Energy Plasma Laser Accelerator ("BELLA"), to be located at LBNL, under heading: Energy Use and Greenhouse Gases, LBNL's electrical energy consumption in 2008 was reported to have been 70,458 MEGAwatt hours (MWh), to that the new Laser Accelerator will add 500,000 to 600,000 KILOwatt hours (KWh) per year.

For comparison, LBNL's annual electrical energy consumption equals that of some 23,000 to 25,000 Berkeley households combined!

LBNL's annual natural gas consumption in 2008 was 1,800,000 therms. (BELLA EA, page 31). No conversions to MTCO2e, were provided, however, "BELLA's" contribution to LBNL's annual GHG emissions load (for electricity and natural gas alone) was reported to be 480 MTCO2e, which "would be less than one percent increase over 2008 LBNL emissions", which could thus be in the 50,000 MTCO2e range.

5.E. The third leg of the GHG emissions stool is transportation. LBNL's employee transportation is a huge GHG emissions contributor, including 100 diesel shuttle bus roundtrips a day to and from the hill site, i.e. some 73,000 one-way trips annually in addition to the hundreds of private cars driven by staff and employees daily to the Lab and the projected thousands of additional truck trips during the major demolitions (Bevatron) and new construction. UCB elected to exclude all construction generated GHG emissions from the annual calculations.

Since the release of the UCB climate change amendments, the City of Berkeley adopted a Climate Action Plan (exclusive of UCB and LBNL impacts), therefore we ask that sections dealing with the City of Berkeley's CAP (p.18) be correctly updated. Also, as previously stated, the LBNL section (p.29) must be updated and expanded to include the most recent GHG emissions data from all sources, including transportation (diesel and gasoline fueled), and that UCB include construction related GHG emissions in the annual inventories, at least for the 2020 LRDP time frame.

5.F. In summary, it is critical that there is at least one comprehensive baseline document, that takes into account all GHG emissions within the geography of the City of Berkeley, including all UCB and LBNL facilities in the eastern part of the Strawberry Canyon, within the Berkeley impact zone. When properly updated and supplemented, this UCB 2020 LRDP amendment and EIR addendum could serve that worthwhile purpose for the entire community.

Sincerely,

Pamela Sihvola
CMTW
P.O. Box 9646
Berkeley, CA 94709

JThomas621@aol.com
07/05/2009 10:23 PM

To jmcdougall@cp.berkeley.edu
cc
bcc
Subject Comments on Climate Change

Greetings.

Attached please find comments on the 2020 LRDP EIR Addendum to Address Climate Change.
A hard copy will follow.

J a n i c e T h o m a s

 Climate_Change_UCB_Comments.doc

Save strawberry canyon

p.o. box 1234

Berkeley, California 94701

July 5, 2009

Via Electronic Mail jmcdougall@cp.berkeley.edu

Jennifer McDougall - AICP
Principal Planner - Environmental Planning
Capital Projects - Facilities Services
300 A&E Building
University of California
Berkeley CA 94720-1382

Re: 2020 LRDP Addendum to Address Climate Change

Dear Ms. McDougall,

Save Strawberry Canyon welcomes the opportunity to comment on potential climate change impacts from proposed 2020 LRDP development especially as it relates to Strawberry Canyon and natural resources in the area.

6.A. UC Berkeley has proposed, and in some cases enacted, various development projects which were not included in the 2020 LRDP. As such, our first concern is whether the 2020 LRDP remains a comprehensive document against which climate change impacts can be analyzed.

The following development projects have been proposed since the 2020 LRDP was certified:

a. The recently announced stadium "reconstruction" at the mouth of Strawberry Canyon.
b. Expanded scope of hill campus development including the Helios Energy Research Facility (Helios). As stated in the now decertified EIR for the Helios project, "Once constructed, the facility would be operated and managed by UC Berkeley." (p.3.0-1, Helios DEIR). The 2020 LRDP EIR identified up to 100,000 GSF of "net new academic and support space in the Hill Campus." (p.4.3-17, 2020 LRDP DEIR) Yet the Helios building alone proposed in the second version of the project exceeds that amount by 44,000 gsf. Moreover, the Computational Research and Theory Facility (CRT) – a 140,000 gsf building – would house the joint UC Berkeley/Berkeley Lab Computational Science and Engineering program.

c. Fire Fuel mitigations programs in Strawberry and Claremont Canyons.
The scope of the fire fuel mitigations exceed that which was described in the 2020 LRDP or at least it appears that way from the scope of the 2020 LRDP Biological Resources Impact Analysis. The fire fuel mitigation programs are quite extensive and include "the removal of 66 acres of eucalyptus trees in Strawberry Canyon…(and the)removal of 45 acres of eucalyptus trees in Claremont Canyon" which will in combination total "over 23,000 trees will be removed in this effort." http://oep.berkeley.edu/news/2006/index.html#FEMAGrants retrieved 7/5/09.

At question is whether there have been substantial changes since certification of the 2020 LRDP. If there are substantial changes, then it would seem a supplemental EIR would be more appropriate than the Addendum to the EIR provided here.

6.B. Among the types of impacts from proposed development not previously considered in the program EIR and which would also have climate change impacts are the following:

a. Increased commute traffic from increased use of the reconstructed stadium.
b. Increased truck traffic from demolition and reconstruction of the stadium.
c. Air quality impacts from increased truck traffic during stadium reconstruction
d. Lost carbon sequestration from wide-scale tree removal that cannot be feasibly mitigated with a 3 to 1 ratio replanting scheme.

6.C. A related question is whether the geographic boundary for UC Berkeley's entry in the California Climate Action Registry includes the Hill Campus. The Hill Campus is included in the 2020 LRDP but not, apparently, the inventory prepared for the registry. As quoted from the Addendum: "The geographic boundary for the inventory is generally defined as those buildings central to the University mission and under operational control of the campus. This includes central campus buildings, all student housing, and off-central campus facilities in the Bay Area owned by the University including the Richmond Field Station."

6.D. The University of California's policy on sustainable practices is admirable in many ways. However, one of the deficiencies is in the area of conservation and reuse of existing buildings. The Addendum does not analyze the relative greenhouse gas (GHG) emissions from reusing an old building compared to building a new one.

6.E The University's analysis would also seem to fail if it is true that the analysis does not include GHG emissions from construction vehicles. Please clarify as to whether the emission source is attached to the contractor but not the developer. This would be unfortunate given that it is the developer's choice as to whether new buildings are constructed in the first place. Moreover, it is not enough to build to LEED standards when greening existing buildings might be more economically viable as well as more sustainable.

6.E. Also please clarify as to whether GHG emissions from demolition are included in the analysis.

6.F. The developer not only chooses whether to build but also where to build. And some locations would create more GHG emissions than others. For example, the Hill Campus and LBNL Campus are not in walking distance to the Central Campus and are far away from restaurants and other amenities.

6.G. Locations also matter in terms of the types of carbon resources which are lost during construction. This was seen most dramatically when a grove of oak trees was cut down to build the Student Athlete High Performance Center. How many years will it take before the newly planted trees will sequester as much carbon as the mature trees did?

Thank you for considering these thoughts and carefully considering these questions.

Yours sincerely,

Janice Thomas
Secretary, Save Strawberry Canyon

Response 1
Sufficient notice (Response to comment 1.A., 1.C., 4.A., 4.E.)
Notice of publication of Addendum #5 to the UC Berkeley 2020 LRDP EIR was sent by mail and electronic mail on June 4, 2009 directly to all addressees listed in the Addendum, and to numerous individuals who have previously commented or otherwise asked to be notified of University activities. The notice invited public comment for a 32-day period ending on July 6, 2009. Notice of the communication was distributed with the City of Berkeley Planning Commission agenda on June 10 (see http://www.cityofberkeley.info/uploadedFiles/Planning_and_Development/Level_3_-_Commissions/Commission_for_Planning/PC061009_Communication_McDougallLRDP.pdf) and with the Berkeley City Council's June 23 agenda packet. The Addendum document was available for review at the downtown branch of the Berkeley Public Library, as well as at the campus planning office. The Addendum was available for comment from June 4 through July 6.

Under the California Environmental Quality Act (CEQA), an addendum need not be circulated for public review. The comment and review period exceeded the requirements of CEQA.

Response 2
Process (Response to comment 1.B.)
The Notice of Availability was signed by Assistant Vice Chancellor Marthinsen, with a request that comments be sent to Principal Planner McDougall. Readers may communicate with whomever they wish at the University on any topic.

The Addendum will be reviewed at the UC Office of the President, and it is expected that the approval decision will come from Executive Vice President for Business Operations Katherine Lapp. However many individuals have responsibility for writing, reviewing and ensuring that the document is accurate, complies with the California Environmental Quality Act, and supports any decision to approve the proposed LRDP Amendment.

Response 3
Trees (Response to comment 1.D., comment 2.B., comment 6.B item d, comment 6.G.)
The LRDP EIR Addendum addresses climate change and trees at pages 37 and 38 of the document. As noted there, UC Berkeley's climate change inventory neither takes credit for the substantial carbon sequestration embodied by its leafy campus and canyon open spaces, nor does the inventory subtract credits when trees are removed. This is consistent with existing practices for institutional inventories as described in Addendum #5 (California Climate Action Registry). Specifically the loss of carbon sequestration due to the removal of non-native, high flammability fuel, reducing the risk of pulse carbon emissions due to wildland fire and promoting native vegetation growth, is not considered to be a net detrimental impact. See also page 41 of the document, where

2020 LRDP EIR measures CBP-BIO-1-a and CBP-BIO-1-c describe campus practices with regard to existing trees.

Response 4
Baseline and Cumulative Analysis (Response to comment 1.H. and Comment Letter 5.A, comment 5.B., and comment 5.F.)
The opinion of the writer that the Energy Biosciences Institute and the Helios Project should be considered in the Addendum (comment 1.H.) is noted. The University is reconsidering this project, and if part or the entire project is constructed on sites governed by the UC Berkeley 2020 LRDP, the campus climate plan would address it.

Other comments in Letter 5 suggest that the Addendum analysis should be more comprehensive, combining LBNL and UC Berkeley, and establishing a baseline that includes the City of Berkeley (comment 5.B., comment 5.F.).

The establishment of a meaningful area of cumulative effect for greenhouse gas emissions can be challenging from a CEQA perspective. The CEQA Guidelines state that "Lead agencies should define the geographic scope of the area affected by the cumulative effect and provide a reasonable explanation for the geographic limitation used" (Section 15130(b)(1)(B)(3.)). The cumulative impacts analysis "shall examine reasonable, feasible options for mitigating or avoiding the project's contribution to any significant cumulative effects" (Section 15130(b)(3)). Yet climate is a world wide resource that does not cohere to political or institutional boundaries, and nearly every human activity has unintended greenhouse gas impacts that cross such boundaries.

The scope of emissions estimates addressed in the Addendum is outlined at pages 7 and 8 of the document. The document also summarizes regional emissions at pages 27 and 28. Implementation of the 2020 LRDP as amended by the proposed action, is consistent with the direction of regional plans: see pages 15 through 17 of Addendum #5.

The state Natural Resources Agency has stated that

> "….public agencies, such as school districts and public universities, may … adopt greenhouse gas reduction plans to govern their own activities. Provided that such plans contain specific requirements with respect to resources that are within the agency's jurisdiction to avoid or substantially lessen the agency's contributions to GHG emissions, both from its own projects and from private projects it has or will approve, such plans may be appropriately relied on in a cumulative impacts analysis" (*Initial Statement of Reasons for Regulatory Action, July 2009, discussion under Section 15064* *see:* http://ceres.ca.gov/ceqa/guidelines).

The campus therefore concludes that the scope of analysis included in the Addendum as published is appropriate, and no further revisions are necessary.

At comment 5.B., second paragraph, the writer misstates facts. The Berkeley campus goal, as stated in the proposed LRDP Amendment itself at page 3, is "achievement of 1990 GHG emission levels by 2014, six years ahead of state mandated targets, and seeks to achieve climate neutrality at the earliest possible time, but not later than 2050." Neutrality is a more stringent target than the City's goal of 80% by 2050.

The fact that one agency states targets in percentages and another in equivalent years or as "neutrality" does not make the programs incompatible or contradictory.

Response 5
Construction (Response to comment 5.E., comment 6.E.)
The LRDP EIR Addendum #5 addresses greenhouse gas emissions associated with construction at page 8, and in Appendix 1 to the document, including emissions from construction vehicles.

Demolition creates no unique greenhouse gas effects. Construction or demolition period GHGs come primarily from CO2 from gas and diesel-fired heavy equipment (excavators, generators, cranes) and vehicles (trucks). The type of equipment used will differ somewhat for demolition versus building activities (e.g., a breaker/cruncher vs. a large excavator) but the sources are all part of "construction" as described and analyzed at page 8 and in Appendix 1 of the document.

See also response 4 regarding the appropriate scope of emissions estimates.

Comment 6.E. also suggests the need for evaluation of the comparative merits of new construction and greening of existing buildings. The University concurs. A key policy of the 2020 LRDP is "Evaluate a full range of alternative solutions in capital investment decisions" with the elaboration "As a general rule, the set of options for this analysis should include retrofit, renovation, adaptive reuse, replacement, relocation and, if relevant, noncapital solutions such as reorganization. The options should consider alternate models for project delivery…and sustainable design features, as described in [the] Sustainable Campus [chapter of the 2020 LRDP]. " See Chapter 12, Strategic Investment, of the 2020 LRDP (lrdp.berkeley.edu) and the Sustainable Campus chapter as proposed for amendment in Addendum #5.

Response 6
Development not in the 2020 LRDP EIR (Response to comment 6.A., comment 6.B. a through c, comment 6.C.)
The following addresses the lettered items:

a. The 2020 LRDP EIR analyzed an envelope of construction and development. The scope of the Stadium project is within the 2020 LRDP EIR envelope, as documented in the Southeast Campus Integrated Projects EIR (certified December 2006), which was tiered from the LRDP EIR.

b. The Helios and CRT projects have been proposed consistent with the Lawrence Berkeley National Laboratory Long Range Development Plan, and do not alter conclusions of the campus Long Range Development Plan EIR, which assumed substantial new development affiliated with the LBNL site. Further, as the commenter notes, the proposed Helios project approval has been decertified.

c. The fire fuel management projects are consistent with the 2020 LRDP, which included the following policy and associated discussion:

> POLICY: MANAGE THE HILL CAMPUS LANDSCAPE TO REDUCE FIRE AND FLOOD RISK AND RESTORE NATIVE VEGETATION AND HYDROLOGY PATTERNS.
>
> UC Berkeley maintains an ongoing program of fire fuel management in the Hill Campus to reduce fire risk to the campus, LBNL, neighboring residents, and recreational visitors to adjacent park and watershed lands. While the treatment used in a given area must be customized to address its specific conditions, including vegetation type, access, and proximity to roads and structures, in general the treatments are designed to meet one or more of the following goals:
> - reducing fuel load by removing dead material, reducing plant density, and favoring species with lower fuel content,
> - reducing horizontal spread by reducing fire fuel material and by separating dense clusters of vegetation with areas of lower fuel load, and
> - reducing vertical fire spread by increasing separation of understory and crown fuels.
>
> Whenever feasible, future fuel management practices should include the selective replacement of high-hazard introduced species with native species: for example, the restoration of native grassland and oak-bay woodland through the eradication of invasive exotics (broom, acacia, pampas grass) and the replacement of aged Monterey pines and second growth eucalyptus. ….” [UC Berkeley 2020 LRDP p. 57]

UC Berkeley works closely with the community and with the member agencies of the Hills Emergency Forum to ensure the fire fuel management projects comply with this policy.

A commenter questioned whether the Hill Campus is included in the campus GHG inventory (comment 6.C.). Buildings are included, and the commute, fleet and business air travel of the people that occupy the buildings are accounted for. In addition, the

traffic associated with the construction and use of the Stadium is within the envelope analyzed in the 2020 LRDP EIR, as documented in the Southeast Campus Integrated Projects EIR, certified in December 2006.

Response 7
Other Comments
The opinions of writers that University decision making processes are imbalanced (comment 1.C.) or otherwise failing the public trust (comment 4.C.) are not a topic for consideration under CEQA, are noted, and will be provided for the decision maker at the time the proposed LRDP Amendment is considered for approval.

The opinions of the writer regarding UC policy and local plans and the decisions of the City of Berkeley regarding height and density limits (comment 1.E.) are noted and are not a topic for consideration under CEQA; however, the comment will be provided for the decision maker at the time the proposed LRDP Amendment is considered for approval.

The opinion of the writer that the City of Berkeley Climate Action Plan triggers development (comment 1.F.) is noted. However, the City's approval of the Climate Action Plan and the policies cited by the commenter contained therein do not commit the City to approving development, and in fact, no such development has been proposed.

The opinion of the writer that the UC Policy on Sustainable Practices is insufficient to address transportation practices and programs (comment 1.G.) and the suggestion that UC Berkeley and LBNL should subsidize BART and AC Transit fares for all Berkeley residents is noted and will be provided to the decision maker at the time the proposed LRDP Amendment is considered for approval. These comments do not alter the conclusions of the Addendum.

The opinion of the writer that University actions that cut trees or produce large buildings (comment 1.I and comment 1.J.) exacerbates urban heat island effect is noted and will be provided to the decision maker at the time the proposed LRDP Amendment is considered for approval.

The writer suggests that Addendum #5 does not address detrimental effects of adding buildings and traffic to Strawberry Canyon (comment 2.B.). Insofar as these activities may be undertaken on campus properties in the canyon, these are analyzed in the 2020 LRDP EIR itself. See lrdp.berkeley.edu.

The opinion of the writer that UC Berkeley ignores nature and should think more holistically (comment 3.A.) is noted and will be provided to the decision maker at the time the proposed LRDP Amendment is considered for approval.

The opinions of the writer in comment 4.B, and of the writer in comment 2.A. do not address the adequacy of LRDP EIR Addendum #5 or the proposed LRDP Amendment. However, they will be provided to the decision maker at the time the proposed LRDP Amendment is considered for approval.

The opinions of the writer that University development is poorly located (comment 4.D.) is noted and will be provided to the decision maker at the time the proposed LRDP Amendment is considered for approval.

The request of the writer for additional information from LBNL (comment 5.C., comment 5.D.) is noted, and the comment letter has been forwarded to staff at LBNL and will be provided to the decision maker at the time the proposed LRDP Amendment is considered for approval. Please see response above under Baseline and Cumulative Analysis for additional response regarding Comment Letter 5. The LRDP EIR Addendum is a final document, which was published for comment as a courtesy, and no additional revisions were considered warranted in response to comments received.

The opinion of the writer that the UC Policy on Sustainable Practices should include analysis of reuse of existing buildings (comment 6.D.) is noted. The UC Berkeley campus works to restore and reuse existing buildings whenever possible. See, for example, the Hearst Memorial Mining Building; Durant Hall; LeConte Hall.

The writer's statement that locations have varying GHG emission impacts (comment 6.F.) is noted and will be provided to the decision maker at the time the proposed LRDP Amendment is considered for approval. By the same logic, the worldwide climate is better served by new development at locations well served by public transit and rich in housing and amenities, such as UC Berkeley, than by new development at suburban or rural locations.

Received by JKEM from Silvela Monday July 13 2009

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PHYSICAL & ENVIRONMENTAL PLANNING

Committee to Minimize Toxic Waste

Emily Marthinsen
Assistant Vice Chancellor
Physical and Environmental Planning
Capital Projects
300 A&E Building, # 1382
University of California, Berkeley
Berkeley, CA 94720-1382

July 3, 2009

Subject: Comments on UC Berkeley 2020 Long Range Development Plan (LRDP) Amendment and 2020 LRDP Environmental Impact Report (EIR) Addendum to address Climate Change

Dear Ms. Marthinsen,

The above referenced documents, addressing UCB's contributions to climate change, are inadequate and deficient because they do not set goals for greenhouse gas (GHG) emissions reductions that equal or exceed those of its host city, the City of Berkeley.

UCB and the Department of Energy's (DOE) Lawrence Berkeley National Laboratory (LBNL), managed by UC for the DOE and located on land leased from the UC Regents, and all the other real estate leased to UCB and LBNL equal at least one quarter (¼) of the land area of the entire City of Berkeley. And yet, these two entities, UCB and LBNL have not been able to join the City of Berkeley in a comprehensive, transparent way and address their contributions to GHG emissions in <u>one</u> cohesive Climate Action Plan.

On June 2, 2009, the Berkeley City Council unanimously adopted a version of the Climate Action Plan (CAP), that aims to reduce Berkeley's GHG emissions by 80% by 2050. (See attachments 1A and 1B) UCB's strategy is "a feasibility study...and a target of reducing GHG emissions on campus to 1990 levels by 2014." (Chancellor Birgeneau's congressional testimony of April3, 2008)

UCB's GHG emissions were 205,994.00 metric tons of CO2 (MTCO2e) in 2007, which equals over 35% what the City of Berkeley emitted in 2005 (i.e. 576,000.00 MTCO2e). Furthermore, UCB's GHG emissions in 1990 were 165,000.00 MTCO2e, thus the "feasibility study" goal is <u>less</u> than a 20% reduction from the 2007 (p.30) levels to reach the 1990 levels (Figure 1.) Two paragraphs (p.29) were dedicated to LBNL, but <u>NO</u> GHG emissions data were provided.Please, update the LBNL section with the most recent, comprehensive GHG emissions data.

ATTACHMENT 1A

THE DAILY CALIFORNIAN
Berkeley, California
Thursday, June 4, 2009
www.dailycal.org
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City Adopts Final Version Of Climate Action Plan

by **Genevieve Head-Gordon**
Contributing Writer

The Berkeley City Council unanimously adopted the finalized version of the Climate Action Plan at Tuesday night's meeting.

The amended 20-year Climate Action Plan—which has been in the works since Berkeley voters passed Measure G in 2007—aims to reduce Berkeley's greenhouse gas emissions by 80 percent by 2050.

According to Councilmember Susan Wengraf, the adopted plan contains all the suggested amendments from the months of deliberation, except for the third clause—which calls for the rezoning of residential neighborhoods to accommodate more small stores.

Councilmember Max Anderson said he believes these neighborhoods should accommodate small stores because they can be vital in the city's economy.

"I can't support the clause on small mom and pop stores," he said. "In some parts of the city, corner stores serve as an important function."

Implementing the plan will cost $3 million in its first year, with the funds already allotted from the general fund. The plan will return to the council every year for revisions that address advances in science and progress on current projects, according to Councilmember Gordon Wozniak.

According to Mayor Tom Bates, the plan was recognized by the United Nations as the "best in North America."

"It has showed the way and it is now being used as a model for other cities," Bates said at the State of the City luncheon on Tuesday.

Despite such recognition, opponents of the plan argue that it lacks an environmental impact report, which assesses the potential environmental impacts resulting from approval, construction and operation of projects.

"The plan even admits itself that it ignores the environmental consequences, in spite of studies," said Shirley Dean, Berkeley resident and former Berkeley mayor. "We need (a report)."

Other residents also said the plan is not complete because it does not include UC Berkeley and the Lawrence Berkeley National Laboratory's environmental impacts.

"It is incredulous that the city has proceeded with its Climate Action Plan without any consideration of UC Berkeley and the (lab's) climate change impacts on Berkeley," said Berkeley resident Pamela Sihvola, reading from a prepared statement that also ran as an opinion column in The Daily Californian on Monday. "Without them, the plan is incomplete, a mere piecemeal implementation to fill only some sort of superficial PR purpose."

However most residents expressed excitement about the plan's potential for the city.

"This is Berkeley's chance to be a leader in the U.S. on climate action policy," said Pepper Yelton, who serves on the city's energy commission. "There will always be reasons to delay policy action on climate change but the plan has done a good job in trying to minimize costs and maximize benefits."

Contact Genevieve Head-Gordon at gheadgordon@dailycal.org.

THE DAILY CALIFORNIAN

Established 1871. Independent Student Press Since 1971.

Berkeley, California Monday, June 1, 2009 www.dailycal.org

Climate Plan Needs More Analysis

by **Pamela Sihvola**

Berkeley's Climate Action Plan (CAP) and current CEQA (California Environmental Quality Act) Negative Declaration documents are absurd. They completely ignore a quarter of the city's land area that is occupied by the University of California (UC) and the Lawrence Berkeley National Laboratory (LBNL).

It is incredulous that the city has proceeded with its Climate Action Plan without any consideration of UC and LBNL's climate change impacts on Berkeley!

These impacts must be analyzed and included in the city's Environmental Impact Report (EIR) for the CAP. Without them, the CAP is incomplete, a mere piecemeal implementation to fill only some sort of superficial public relations purpose.

Indeed, in a recent court action a judge ruled, in response to a case filed by members of the group, Save Strawberry Canyon, that LBNL must recirculate their Climate Change Impact Analysis in the Long Range Development Plan EIR.

Lawrence Lab, a high energy user nuclear-industrial complex with already many accelerators, has plans to further increase its energy consumption by building yet another high energy accelerator!

The proposed high energy plasma laser accelerator (HEPLA) is expected to accelerate electron beams to energies in the order of 10 billion electron-volts. What will the annual energy consumption of this new facility be, in addition to LBNL's approximately half dozen other accelerators? This information must be made a part of the city's action plan.

It should start with the highest energy consumers, UC Berkeley and LBNL, the biggest contributors to the city's greenhouse gas emissions (GHG) load, who pay no property taxes, rather than burdening the residential property tax payers. Furthermore, under the California Medical Waste Management Act, LBNL is a large-quantity generator of bio-hazardous medical waste.

It also generates, in huge quantities, radioactive and hazardous waste and mixed waste (both radioactive and hazardous), often shipped to other counties and states! Berkeley Lab, a federal facility, could be a leader in the city's "Zero Waste to Landfills By 2050 Vision."

Instead, it is gearing up to dump hundreds, if not thousands, of tons of radioactive and hazardous debris from the demolition of the Bevatron accelerator, and other such projects, to landfills nearby and in other states.

Why hasn't Berkeley's CAP CEQA documents analyzed the impact of UC/LBNL's dozens of diesel buses, constantly circling around the city, campus, LBNL and downtown, which spew tons of diesel particulate matter/GHGs in the air? What is UC's and the Department of Energy LBNL's contribution annually to the City of Berkeley's GHG emissions in metric tons of CO_2?

Berkeley's Climate Action Plan must have a full blown EIR under CEQA, including a very careful analysis of the climate change impacts of all the hundreds of buildings and facilities belonging to UC, the Department of Energy and LBNL, which are located in the impact zone for the City of Berkeley.

Pamela Sihvola is a Berkeley resident. Reply to opinion@dailycal.org.

ATTACHMENT 18

In a recent Environmental Assessment (EA), for DOE's proposed High Energy Plasma Laser Accelerator ("BELLA"), to be located at LBNL, under heading: Energy Use and Greenhouse Gases, LBNL's electrical energy consumption in 2008 was reported to have been 70,458 MEGAwatt hours (MWh), to that the new Laser Accelerator will add 500,000 to 600,000 KILOwatt hours (KWh) per year.

For comparison, LBNL's annual electrical energy consumption equals that of some 23,000 to 25,000 Berkeley households combined!

LBNL's annual natural gas consumption in 2008 was 1,800,000 therms. (BELLA EA, page 31). No conversions to MTCO2e, were provided, however, "BELLA's" contribution to LBNL's annual GHG emissions load (for electricity and natural gas alone) was reported to be 480 MTCO2e, which "would be less than one percent increase over 2008 LBNL emissions", which could thus be in the 50,000 MTCO2e range.

The third leg of the GHG emissions stool is transportation. LBNL's employee transportation is a huge GHG emissions contributor, including 100 diesel shuttle bus roundtrips a day to and from the hill site, i.e. some 73,000 one-way trips annually in addition to the hundreds of private cars driven by staff and employees daily to the Lab and the projected thousands of additional truck trips during the major demolitions (Bevatron) and new construction. UCB elected to exclude all construction generated GHG emissions from the annual calculations.

Since the release of the UCB climate change amendments, the City of Berkeley adopted a Climate Action Plan (exclusive of UCB and LBNL impacts), therefore we ask that sections dealing with the City of Berkeley's CAP (p.18) be correctly updated. Also, as previously stated, the LBNL section (p.29) must be updated and expanded to include the most recent GHG emissions data from all sources, including transportation (diesel and gasoline fueled), and that UCB include construction related GHG emissions in the annual inventories, at least for the 2020 LRDP time frame.

In summary, it is critical that there is at least one comprehensive baseline document, that takes into account all GHG emissions within the geography of the City of Berkeley, including all UCB and LBNL facilities in the eastern part of the Strawberry Canyon, within the Berkeley impact zone. When properly updated and supplemented, this UCB 2020 LRDP amendment and EIR addendum could serve that worthwhile purpose for the entire community.

Sincerely,

Pamela Sihvola
CMTW
P.O. Box 9646
Berkeley, CA 94709