SUSTAINABILITY COMMITTEE

TO: The Executive Committee
FROM: Ad Hoc Committee on Sustainability
SUBJECT: Report on CORE Building Project
PURPOSE: Approval of the Executive Committee

ACTION REQUESTED: That the Executive Committee accept this report and endorse its recommendations.

Background

At its meeting of November 7, 2017, the Executive Committee of the Academic Senate made the following referral to the Ad Hoc Committee on Sustainability (henceforth “the Committee”), which was forwarded to the Committee Chair (Garbesi) by the Chair of the Academic Senate (Karplus) on November 15, 2017.

The Executive Committee refers consideration of the CORE Building project to the Ad Hoc Committee on Sustainability, on condition that any committee recommendations related to the referral first come to the Executive Committee, and with the request that the committee provide an initial report to the Executive Committee no later than January 2018.

This report fulfils that directive, in accordance with the duties of the Committee, as set out in the Sustainability Committee Policies and Procedures for Committee Operation (16-17 CAHS 1). Specifically, those duties direct the Committee to:

- “Make policy recommendations to the Academic Senate regarding means to achieve the University's sustainability commitments and goals” and to
- “Promote sustainability as a focus of curricular and co-curricular activities, consistent with the University’s sustainability commitments and goals”
- “Promote opportunities for sustainability research and scholarship”

Report to ExCom

In response to ExCom’s referral and consistent with the duties of the Committee, on its meeting of 11/20/2017 the Committee interpreted ExCom’s referral as a directive to investigate the degree to which the design of the building is meeting the University’s sustainability commitments and goals, and the degree to which the process is incorporating potential curricular and co-curricular opportunities for students, and for faculty development in the area of sustainability research and scholarship. With respect to sustainable building design, the most pressing issue is designing the building for zero net...
energy use, for consistency with the President’s Carbon Commitment and with the Senate Sustainability Resolution (06-07 BEC 9).

Faculty librarian, Kyzyl Fenno-Smith, attended the Committee meeting of November 20, 2017, in her role as Chair of Library faculty. Given that her primary focus has been on user-related issues, not on sustainability related issues, she was able to provide information primarily on the general status of the project, but referred the Committee to Facilities Management staff for more information regarding sustainability-related issues.

Also on November 20th, Committee Chair Garbesi contacted Debbie Chaw, CFO and VP of Administration and Finance, regarding attending the Committee meeting of January 8, 2018. Chaw referred the Committee to Energy and Utilities Manager, Loralyn Perry and Campus Planner, Anne Leung, who attended the Committee Meeting of January 8, 2018.

The following paragraphs summarize the questions, answers, and related discussion from that meeting:

**Question 1:** Was Zero Net Energy (ZNE) and related educational opportunities included in the RFP?

**Answer:** Yes, and all of the proposing firms were willing to provide educational opportunities for students as part of the project. Facilities seeks to match opportunities with academic departments that can host internships.

**Discussion:** The Committee volunteered to facilitate those connections.

**Question 2:** We understand that the architect has hired a consultant to address the ZNE design issues. Who is the consultant? What is their experience in that area?

**Answer:** Anderson Brulé (programming architect) and Carrier Johnson (prime architect); Integral is the consulting sub-contracting company specifically addressing sustainability issues (Bay Area firm). The latter has extensive experience with ZNE projects (80 projects completed or in progress), and Perry has worked with them before.

**Discussion:** Garbesi asked if fossil fuel displacement strategies (heat pumps driven by renewable electricity in place of natural-gas combustion) are being discussed as part of the project design. Perry responded that that is being considered. Garbesi asked how faculty could be more involved in the design process. Leung did not want to involve faculty directly in planning meetings, wanted separate meetings to address faculty concerns.

**Question 3:** Is there a plan to include student sustainability educational opportunities into the design process for building? If so what is the plan?

**Answer:** Yes, as discussed in the answer to the first question.

**Question 4:** Is there a plan to include any of the following technologies into the building?

**Answers:**

a.) energy sub-monitoring in building possible
Yes

b.) environmental performance dashboards
The committee clarified that it meant a public dashboard in the building for educational purposes. Perry responded that the building will be equipped with the standard building management system; they will also be including the Ecovox energy analytics system. But these are for the use of Facilities Managers; they are not suitable for a public dashboard. No such dashboard is funded at this time.

c.) interactive energy efficiency controls
Active engagement displays and controls, as similar to Berkeley Lab, will be requirement as per the State Building Code (Title 24).

d.) other sustainability education opportunities (self-generation art / demo)
Facilities Management is open to including art projects and collaborative interdisciplinary cohort projects, but these are not funded.
Question 5: Will the design include green grounds concepts and if so how?
Answer: All buildings will use native drought tolerant plants and rain gardens; not necessarily edible, as edible is not necessarily sustainable.

At its meeting of 1/22/2018, the Committee finalized and approved this report, its conclusions, and recommendations.

Conclusions

Based on the review described above the Committee arrived at four main conclusions:

1. The process to date appears to be meeting the University’s commitments and goals with respect to sustainable building design.

2. Facilities management and the companies they have contracted are amenable to creating educational opportunities for students, with a view to providing internships for students in the near future.

3. However, to date faculty have had no involvement in the design of the building from a sustainability perspective. Moreover, there are no plans in place to include faculty, or to keep them appraised. Faculty should be involved in that process for two reasons: (1) some faculty have relevant expertise that might benefit the process; at least as important, (2) faculty doing research and teaching in relevant areas could learn from the process and thereby maintain more current experience in the field, which would in-turn improve related teaching at Cal State East Bay.

4. The CORE Building offers two potentially interesting opportunities for faculty and students to contribute to the CORE Building development process that are currently not funded.
   - The development of a public Sustainability Dashboard to be housed in the CORE Building, that tracks the sustainability outcomes of the Building (e.g. avoided greenhouse-house emissions, off-set energy use), which can be derived from building monitoring data that is budgeted to be collected by Facilities Management.
   - The development of educational, sustainability-related art work and demonstrations for the Building.

Recommendations

1. The Committee recommends that Facilities Management accept assistance from this Committee to identify faculty who can host student internships in their departments.

2. The Committee recommends that ExCom formally request that Facilities Management include faculty, to be appointed by ExCom, to participate in the CORE Building Design Process with respect to design for sustainability.

3. That faculty and administration explore the potential to include a public sustainability dashboard (in electronic display form) in the CORE Building so that the building itself can better serve as a source of sustainability education and awareness.

4. That faculty and administration explore the potential to incorporate sustainability-related artwork and demonstrations in the CORE Building.