Part I: Campus Sustainability – A Balancing Act

While carbon emissions are not currently regulated in the United States, many institutions of higher education have adopted voluntary measures to reduce their impact on climate change. As of June 2013, 673 colleges and universities have signed the American College and University Presidents’ Climate Commitment (ACUPCC), a voluntary pledge to eliminate net greenhouse gas emissions from campus operations. Signatories of the commitment recognize the unique role that higher education can play in developing environmental leaders and promoting action on this global climate crisis. Yet despite professed goals of carbon neutrality, many colleges and universities acknowledge the challenges associated with implementing this mandate. This exercise is designed to highlight the various competing interests associated with sustainability interventions on a college or university campus.

Context and Framework

City University, a large public, urban university located in the northeast, is facing pressure from environmental activists on campus to install on-site solar. While City University has adopted sustainability as one of its core values, stakeholders on campus are divided on whether the university should proceed with the project.

The class will be divided into groups, with each group representing the interests of a different stakeholder on campus. The stakeholders include: Students for Environmental Action, the Office of Facilities Management, the Office of Sustainability, University Admissions and the Board of Trustees. Each group will be provided with a unique vignette that includes details informing the group’s position. No two vignettes are identical, reflecting the reality that stakeholders have access to different pieces of information.

Upon reading the vignette, the group members will discuss the information presented and will develop their position on whether the university should install solar panels on campus. The group will be expected to present its case to the Board of Trustees, who will ultimately be deciding the future of on-site solar. The group designated as the Board of Trustees will be responsible for understanding the Board’s roles and responsibilities, and also for preparing questions for the individual stakeholders. With the exception of the Board of Trustees, each group should designate a spokesperson, who is responsible for making the group’s case to the Board. Each member of the Board of Trustees is responsible for asking questions that enable the Board to make an informed decision on behalf of City University. After each group presents its case, the Board of Trustees will allow rebuttal testimony. Each group can ask clarifying questions of the other stakeholders and can also make a final case to the Board supporting its position. Once the rebuttals are completed, the Board of Trustees is responsible for reaching and announcing a decision on the future of an on-site solar project.

Follow Up Questions

1. Was the decision on the solar project unanimous? Which stakeholders had competing interests? What were the motivating factors that drove their position?

1 See instruction note #1.
2 See instruction note #2
2. From the perspective of the university, what is the ethical way to proceed on on-site solar? Are there competing ethical arguments to be made? How should a university balance those competing ethical arguments? Identify criteria for the decision making process.

3. Give an alternative example of the balancing act faced by institutions and organizations in their efforts to promote sustainability and combat climate change.

Part II: Expanding the Alternatives – Finding a New Balance

In the previous exercise, stakeholders at City University participated in an adversarial approach to decision making. Each stakeholder acted on information that promoted its own self-interest or perspective. Stakeholders engaged in self-censorship when developing their positions, not allowing themselves to think outside the box and develop creative solutions that meet the interests of all of the groups at the table. Instead they staked out positions and movement away from those positions was defined as a loss or failure.

In the classic work “Getting to Yes”, Roger Fisher and William Ury make a case for an interest-based model for negotiation and problem solving, which emphasizes the role of solution development as the key element of the negotiation. Under an interest-based model, stakeholders are encouraged to work toward identifying a resolution that meets the needs of both parties.

Re-Grouping: Context and Framework

In this exercise, new groups will be assembled comprising representatives of each stakeholder group. This new group will be tasked with identifying a resolution to the question of whether solar panels should be built on campus. This resolution should reflect an interest-based approach to negotiation, and can incorporate creative solutions, such as alternatives methods to reduce greenhouse gas emissions, creative financing for solar, etc. Each group will be required to report out its negotiated agreement.

Follow Up Questions

1. How did your interaction with the other stakeholders change in the second part of the activity? Did you view the other stakeholders differently? If so, how and why?
2. Did you notice that there were more alternative solutions to the problem than originally conceived? Why do you think the new alternatives were not suggested in the first place?
3. How could this paradigm shift in negotiation strategies change how policymakers approach the climate change crisis? What do you think will need to happen to achieve that shift in thinking?

Instruction Note #1

A key aspect of this exercise is that students only see the information presented for their individual stakeholder group. It may be helpful to remind students that each group has separate information and that they need to pay attention to each presenter and take notes for their rebuttal.

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4 See instruction note #3.
**Instruction Note #2**

The Board of Trustees is responsible for the flow of the exercise. They invite each stakeholder group to the front of the classroom to provide testimony and their rebuttal. They are also responsible for monitoring the time and asking questions of the stakeholder groups. It is recommended that you explain the Board’s role in the exercise. You may also want to recommend an order for the testimony. One successful order is: 1) Students for Environmental Action, 2) Office of Facilities Management, 3) Office of Sustainability, 4) University Admissions.

**Instruction Note #3**

Prior to the second breakout of the group, you may want to give a talk on the difference between adversarial negotiation and interest-based negotiation. Encouraging creative problem solving with examples is also helpful.
Solar Demonstration Project at City University?

**Students for Environmental Action and Allies:** SEA was pleased when President Green signed the American Colleges and Universities’ Presidential Climate Commitment (ACUPCC) in 2008. This commitment stated that City University would be carbon neutral over time. Carbon neutrality means that the university would not be emitting more greenhouse gas emissions (the gases that contribute to climate change) than it could offset. Each year the university produces a greenhouse gas inventory. In 2012, City University emitted 189,983 Metric Tons Equivalent of Carbon Dioxide (MTECO2). Approximately 48% of the greenhouse gas emissions at City University could be attributed to electricity.

In 2010, City University adopted a Climate Action Plan, which set forth the goal of reducing City University’s greenhouse gas emissions by 30% by 2030 while the university embarked on a building campaign. In 2012, the university announced an energy conservation campaign with the goal of reducing energy consumption by 25% in two years. These campaigns encouraged the members of SEA, because they seemed to indicate the university was moving forward with specific steps to implement its goals on carbon neutrality.

SEA and environmental advocates point to solar as a way to reduce energy consumption and the greenhouse gas emissions generated on campus. While natural gas has fewer carbon emissions than oil, they note that it still contributes to greenhouse gas emissions, is limited in supply, and requires environmentally damaging practices to produce, such as fracking, which results in water pollution. Solar, they point out, is a renewable source of energy that is clean and naturally abundant. They recognize that solar is currently expensive, but they view City University as a large institution with significant buying power that could help push this fledgling solar industry along. The environmentalists recognize that it is not feasible to power City University entirely from solar, but they would like at least one large-scale solar demonstration project. They view this as a way for City University to showcase the university’s commitment to sustainability. Environmental advocates argue that this would be key to increasing enrollment at the university during a time when competition between colleges and universities for new students is fierce. They point to the 2012 College Hopes and Worries Survey conducted by Princeton Review, which found that 68% of college applicants surveyed said that having information about a school’s commitment to the environment would influence their decision to apply to or attend the school.
Solar Demonstration Project at City University?

**Board of Trustees:** City University’s Board of Trustees serves as the steward of the university with respect to academics, finances and ensuring its position in the marketplace. Over the last several years, the Board has been faced with the reality of declining state appropriations. Since 2008, City University’s total state appropriation is down $40 million. In Fiscal Year 2008 state appropriations accounted for 20.7% of the university’s total revenue; by FY 2013 they were less than 13% of the total budget. As a result, City University has become increasingly reliant on tuition, endowment and fundraising as sources of revenue. Of these three, tuition is by far the most important. City University’s endowment of under $300 million is puny compared to its competition, which have an endowment between $1.7 billion and $2.5 billion. Fundraising, while an effective way to finance major building projects on City University’s campus, has never been a major source of revenue. In Fiscal Year 2012, 77% of the university’s total revenue comes from tuition.

This trend is particularly challenging to the Board, since a core part of City University’s mission is to provide affordable access to high quality education, or “Access to Excellence.” City University has been able to distinguish itself as a leader in affordability in higher education. In fact, in FY 2012, City University’s in-state tuition was 27.1% less expensive than its rivals Big State University and 23.4% less expensive than Western University.

While the Board has indicated that maintaining the affordability of City University is a primary concern, the Board also values the long-term impact of investments. The Board has embraced the university’s Climate Action Plan and its energy conservation campaign, which includes the goal of reducing City University’s energy consumption by 25% in two years. The Board recognizes that energy prices fluctuate and that cutting City University’s energy waste will put the university on firmer financial footing in the future.
Solar Demonstration Project at City University?

Office of Sustainability: In 2010, the university adopted a Climate Action Plan, which set forth the goal of reducing City University’s greenhouse gas emissions by 30% by 2030 during a period of heavy projected building growth. The Office of Sustainability is charged with implementing the Climate Action Plan and has a three point mission to:

- Green City University’s buildings and its culture;
- Integrate Sustainability into the academic curriculum; and,
- Lead sustainability related outreach efforts on campus and with its neighbors.

The Climate Action Plan discusses the role that solar energy can play in reducing City University’s reliance on purchased electricity (a fossil fuel driven industry in PA); however, it never commits the university to installing a solar system. The plan recognizes the expense of a solar system, but says that the university would be able to offset the cost of the system by selling solar renewable energy certificates (essentially carbon credits) to those who need to reduce their emissions. Since the development of the Climate Action Plan, the price for solar renewable energy certificates plummeted in the State, making them virtually worthless as a means of subsidizing the City University solar system.

The Office of Sustainability recognizes that there are energy efficiency projects that have a better rate of return on investment than the solar panels. Yet, the Office sees the value of solar to raise the profile of sustainability efforts on campus and within the community. The Office also sees it as a valuable teaching tool, as it would provide students with the opportunity to learn about solar, how much power is produced, and the efficiencies (or inefficiencies) of the current technology.
Solar Demonstration Project at City University?

Office of Facilities Management: The Office of Facilities Management was interested in exploring solar technology as a way to diversify its energy stream, so that the university was not beholden to the high variability of the commodity markets. Moreover, the Office of Facilities Management is working under a university directive to reduce City University’s energy consumption by 25% in two years. Using solar energy would reduce the amount of energy consumed from the grid.

The Office of Facilities Management conducted a solar study during the summer of 2012. The study revealed that only five buildings on campus were viable for roof-mounted solar panels. The solar panel installations were quite costly and the best payback period for a solar installation was 25+ years, much longer than the 15-year warranty of the solar panels and the typical life span of a roof. Moreover, the roof-mounted arrays would account for only a small percentage of any one building’s energy consumption (typically under 5% of the building’s energy consumption). City University’s status as a non-profit contributed to the long payback period for the solar array, as the university is unable to take advantage of tax incentives that are offered for solar. Moreover, the university did not have enough viable roof space typically required for a “power purchase agreement”—an agreement in which a private entity leases roof space to put solar on and then the university buys back the energy from that entity at a discount. This is partially due to City University’s urban nature, as the university’s buildings have small building footprints, but are highly energy intensive due to their height. Although the project cost for solar was only a fraction of the total energy budget, a project with a 25 year payback would be hard to justify during a period of constrained funding.
Solar Demonstration Project at City University?

Office of Admissions: The Office of Admissions is aware of the fact that City University has adopted a Climate Action Plan, along with a commitment to reduce greenhouse gas emissions by 30% by 2030. In principle, the Office is in favor of the idea of improving energy efficiency at the university and views that as a worthy long-term goal. The Office is also aware that the 2012 College Hopes and Worries Survey conducted by Princeton Review found that 68% of college applicants surveyed said that having information about a school’s commitment to the environment would influence their decision to apply to or attend the school. Yet in the present competitive climate for student applicants, sustainability cannot be the Office’s primary concern.

In the coming years, City University will be competing with other area schools for a shrinking pool of potential applicants: Between now and 2021-22, the number of high school graduates in the Northeast will decrease by 13%. This is due to changing demographics and the fade-out of the “baby boom.” The Office has also been concerned that the effects of the recent recession, which will reverberate for years, will further decrease the number of college-bound individuals. City University has not yet felt these effects, however. Undergraduate freshman and transfer applications for the past few years have been holding fairly steady:

<table>
<thead>
<tr>
<th>Year</th>
<th>Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>28,558</td>
</tr>
<tr>
<td>2009</td>
<td>27,982</td>
</tr>
<tr>
<td>2010</td>
<td>26,142</td>
</tr>
<tr>
<td>2011</td>
<td>28,146</td>
</tr>
<tr>
<td>2012</td>
<td>27,978</td>
</tr>
</tbody>
</table>

Hopefully, City University can continue to accentuate its exciting advantages—the new branding effort has helped in this regard—and the university will continue to hold its own in this tough competitive environment. The Office has surveyed new students as they arrive on campus and when asked about the most significant factors that influenced their decision to choose City University, “affordable tuition” is a very important factor for nearly two thirds of all respondents. Whatever City University decides to do regarding energy efficiency or solar power, the Office hopes it will not change the university’s ability to maintain its relatively low tuition rates.