Sustainability Institute Final Report

A Green Purchasing Policy Roadmap

April 2008
NAEP conducted its first Sustainability Institute the first week of May 2007 at the Mission Palms Hotel in Tempe Arizona on the edge of the Arizona State University (ASU) campus. This report details one of the exercises the class undertook on behalf of NAEP. This exercise took place on the Arizona State University campus at the Decision Theater. The Theater is both a physical entity and a program where the dynamic state of the art marriage of social science and computational and graphic technologies powerfully come together.

We participated in an abbreviated exercise of what takes place in the Theater on a routine basis—to assist organizations in large scale planning sessions in which there is a policy implication and a diverse stakeholder community. This was a one-of-a-kind opportunity for NAEP to utilize a world class academic innovation to address a major issue confronting higher education procurement professionals.

In preparation for the session NAEP fashioned a policy question and formulated detail questions to be used by the Decision Theater staff to populate a database to assist us in answering the policy question posed. Below I have provided the material that was utilized by the professional facilitators at ASU to conduct the exercise and
following that are results created by the participants of the Sustainability Institute.

This process clearly engaged our members and demonstrates the creative capabilities of our members. Because the process was so unique we thought was very important for all NAEP members to have access to the results of this process.

The Challenge

The overarching policy question posed to our Institute students was: Visualize that the President of your institution has given you the responsibility to implement a green purchasing program including a green power purchasing authorization under a broad institution-wide sustainable development initiative.

We identified seven detail questions designed to assist the participant in the discovery process for formulating a plan to implement a green purchasing program. The questions posed follow:

1. Who are your technical and policy resources? (i.e., peers, professional organizations, consultants, web searches, other public resources)

2. What information and data do you need to begin this task? (i.e., Commodities, dollars, transactions, policies, procedures, State laws, Federal laws, State and Federal Regulations, cooperatives)
3. When is it likely that the green purchasing program can be implemented? (i.e.: in months 1, 6, 12, 18, 24)

4. Where and how will you include your non campus stakeholders in the formulation of your program? (i.e.: regents, system administration, vendors, regulators, neighbors, political subdivisions)

5. How will you approach the implementation with your institution’s students? Faculty? Staff? (i.e.: tactics, techniques, policies, procedures).

6. What financial and human resources will you need to implement a program?

7. What are the critical success indicators for your institution with regard to a green purchasing program? (i.e.: metrics, outcomes, costs, feasibility)

The Process

The seven questions were asked by the facilitators and the responses provided by the participants in each of the six groups of NAEP Sustainability Institute participants on hand were captured. Each group of six or more participants engaged in dialog addressing the questions as posed and was facilitated by a trained Decision Theater professional facilitator. The facilitator captured the responses in the live interactive session and the responses were coalesced into a document which was subsequently published on the NAEP website.
Ninety days later NAEP asked for volunteers from the original group to serve as a Steering Committee for the entire group. Thirteen volunteers stepped forward. The volunteers were asked to consider the data provided and to force rank the participant responses using their best professional opinion. The results were tabulated in an excel spreadsheet.

Throughout the fall and winter, NAEP has worked with a smaller team of Institute participants to generate this report. The goal of the group was to share their work and assist other institutions who are getting ready to embark upon this journey. The group felt that a roadmap could be created such that the journey would not require the recreation of the steps undertaken in Tempe last May. We hope we can meet that expectation for you.

In the next section, the questions asked by the facilitators will be restated and the ten most frequent feasible answers provided by the six groups of NAEP Sustainability participants will be provided. These responses form the foundation for the roadmap.
Implementing a Green Purchasing Program
A Roadmap

Participant Instructions: Visualize that the President of your institution has given you the responsibility to implement a green purchasing program including a green power purchasing authorization under a broad institution wide sustainable development initiative.

Task Information
1. Who are your technical and policy resources for such an effort?

A. External Resources
1. Alumni and donors.
2. Peer institutions.
3. Local, regional, state, and federal regulations.
4. Entities that have developed standards, policies, and applicable practices.
5. Suppliers.
6. The internet, NAEP, Kevin Lyons, and Google.
7. City personnel, policy and procedure where the institution is located.
9. Private industry, operations reps, trade organizations, and cross functional teams.
10. Local utility companies.

B. Internal Resources
1. Purchasing Department.
2. Sustainability Office or Director.
3. Student groups, mainly official university-affiliated groups, but also grassroots and special interests.
4. Environmental Health and Safety Department.
5. Academics at the institution.
6. Faculty, staff, and students.
7. Dining and Housing operations.
8. The Facilities Manager or the whole Facilities Department.

C. Professional Service Vendors/Consultants

1. NAEP peers.
2. Local, regional, state, federal officials.
3. Associations – Association for the Advancement of Sustainability in Higher Education (AASHE), National Wildlife Federation (NWF), etc.
4. Third party consultants.
5. Entities that set standards: architecture, building, products (e.g., American Institute of Architects (AIA), Building Owners and Manager Association (BOMA), Association of Higher Education Facilities Professionals (APPA).
7. Architects and engineers.
8. Industry and academic best management practices.
9. The Institute of Supply Management (ISM).

D. Best Practices from Other Organizations

1. Peers and websites.
2. Industry and academic best management practices.
3. Local, regional, state, and federal regulations.
4. Resources from other universities who have successfully implemented a similar green purchasing program.
5. Information on what other institutions are doing, their policies and practices.
6. Communication mechanisms.

Task Information

2. What information and data do you need to have to begin the task of implementing a green purchasing program for your institution or organization?

A. Assessment of Current Policies

1. Determine where we are now
2. A support commitment, informal or formal from higher administration (i.e.: Governor's Office).
3. President's Climate Agreement (ACUPCC): what direction does administration want to take in terms of procurement and the university as a whole?
4. Data from facilities, architects regarding energy use, etc and relate past successes and past failures with the stated goal and objectives.
5. Opportunities for change in different categories (low-hanging fruit).
7. Benchmarking data from peers to see where you're at
8. State level guidelines, laws, state utility commission, and state buildings.
9. Are there barriers to the institution for this program?
10. An environmental footprint analysis.
B. Goals, Deliverables, Metrics

1. Mission and policy.
2. Set measurable goals, benchmarks, and time tables.
3. Definition of green?
4. Determine what the metrics are going to be and what our baseline is, and what our target is.
5. How much is the President of the university willing to support his request of me?
6. Need to know how to measure and certify.
7. How to make a business case; fit green purchasing into the fabric of the institution.
8. What is the project scope?
9. Decision tree or decision framework.
10. What is available? Interview private companies regarding the availability, viability and future of green products.

C. Available Human Resources

1. Who are the stakeholders?
2. Determine the resource availability.
3. Determine who is on the team.
4. Who will be the institutional players that are necessary to do this? And will those that are responsible have access to the people with the information?
5. Get students to be passionate about the program (student newspaper, larger mainstream media), keep up communication and awareness.
D. Budget

1. What is the projected payback (ROI)?
2. What are the historic costs?
3. What is the budget for the entire green purchasing project?
4. What is the pricing differential that will be allowed to purchase green products?
5. Learn to look beyond the product to a cradle-to-cradle assessment.
6. What is the budget for utilities? – What energy credits/purchasing agreements exist?

Task Information

3. Implementation Timeline: when is it likely that a green purchasing program can be implemented at your institution based on required resources and data needed? In months...and why that timeline?

A. Phased-in Implementations

1. This is a strategic planning process, brainstorm ideas, create the structure, and decide.
2. Define the resources.
3. There are things that don’t need funding and that can be implemented right away such as turning off the lights, and turning up the thermostat in the summer and down in the winter.
4. At least six (6) months is likely. Time depends on assembling data, partners, and stakeholders, writing a draft, re-writing the draft, creating a final, presenting a final recommendation, and getting a final approved.
5. Phase the implementation.
6. Set the deliverables.
7. Timeframe to put the policy and practices together is finite; the issue is what restrictions you have on the power side, and the decisions on how to handle it - this could be something that is ongoing, and continually worked on.
8. Go to the Presidential level and check for the timeline...identify the funding, upper administration driven for how quickly this can be implemented.
9. One (1) year? Policy is the foundation: training and education takes more time.
10. Mandates get push back and may slow down the process.

B. Short Term Implementations

1. Can decide what can be done easily and do them first.
2. If the President of the university wants to implement a green program, it has immediate support and can then be pushed through in less time.
3. The end of the month if you can identify the immediate things to implement. We can accomplish simple goals with communication from the top down. Appropriate communication means we can help spread the word around. This can help address recycling, and buy time to develop a plan with associated timelines and then present it back to an advisory group.
4. It depends, is a policy is already in place? If it is there, then it won't take as long.
5. Quick and intense, task force to gather data, don't lose momentum.
6. There are little steps that can be done along the way so you can make progress.
7. Amend the institution’s Request for Proposals (RFP’s).
8. You will still be doing these things (changing lamps and recycling).
9. Check your State laws to see if it may be a shorter timeline because you can piggy back off other contracts.
10. Data gathering becomes a starting point, three (3) months to collect the data and make the case to the right people.
11. Assuming Presidential approval six (6) months to implement may be reasonable. If most people agree with this but are in a smaller school, it will be longer (maybe 12 months) but if a majority agreed that it could be done in six (6) months, it might be sooner.

C. Long-Term Implementation

1. In a communication plan, roll out detail that has already been done and indicate that you are building on what has already been accomplished.
2. Start with a broad policy and narrow the focus as implementations take place.
3. Need a green purchasing mission statement.
4. Need to roll out an educational tool, also.
5. Run this like a project with a timeline.
6. Timeline will depend on the complexity of the project, which group initiates (upper administration vs. department level, vs. small group level)...could be six (6) to 12 months.
7. Increase buy-in within the university.
8. A few months to collect resources, a few to educate, maybe 24 months as a conservative estimate.
9. Private universities may have a different path than public universities.
10. If the decision is to buy green power, that would be six (6) months, but if it is installation of a photovoltaic array, then there are many other issues to work out over a longer time frame.

Task Information
4. People - How will you approach the implementation with your institution's students, faculty and staff? What will be required to make this happen?

A. Top-Down Approach
1. The President of the institution will want to make a statement about the initiative. This should address both social and environmental responsibility.
2. Identify benefits: cleaner environment, less waste, health, watershed, and long-term benefits (combat erosion, etc.)
3. Benchmark other universities.
4. Leading by example is very important.
5. Fundamental policy and authority changes are required particularly in business administration.
6. Link between departments (i.e.: between websites) to increase internal departmental promotion of green purchasing.
7. Student affairs.
8. Faculty Senate.
9. President makes the program part of the State of the University Address.
10. Start with small individual actions.

**B. Standard Marketing Efforts for Messaging**

1. Create a communication plan with the Public Relations team.
2. Make this a university wide theme for the year or a university student initiative.
3. Create a leadership group to meet monthly to discuss what needs to be done in the sustainability arena.
4. Create a university committee for a sustainable campus.
5. Advertising about recycling and other sustainable programs.
6. Include the green purchasing program in student orientation.
7. Include the green purchasing program in orientation for new employees.
8. Need to have a policy in place prior to implementation.
9. Work with Residence Life to talk about sustainability in dormitory meetings, etc.
10. Money and volunteers are needed for successful implementation.

**C. Education Activities**

1. Presentation at student and new employee orientation. Make available for employee development.
2. Communicate what the milestones are and which ones have been met
3. Target distributed purchasers throughout the system. Have a conference, workshop, bring in keynote speakers.
4. Teach students when they are freshman, so they carry the knowledge during their years at the university.

5. Create a mandatory general education class for all students to graduate.

6. Demonstrate what the outcomes are and how the green purchasing program moved forward.

7. Demonstrate recycle opportunities at an annual event.

8. Get a list of all informal groups that have had discussions to see what they are doing.

9. Some large universities are leaders in this, but there are small colleges and community colleges where this isn't as relevant. Should a small school take on this challenge at the same level as a large school, such as ASU? Should a large school, again, such as ASU be expected to carry the burden? What is an appropriate role for a small school?

D. Virtual Communications

1. Make it a media event.
2. Blogs and other websites.
3. Email programs.
4. Put the message on the webpage.
5. Market ideas that are important to different generations.

5. Novel approaches

1. Identify leaders (formal, informal) and engage them.
2. Be creative with ways to make the green purchasing program visible through recognition programs. Get students involved!
3. Faculty and staff will need different communication processes.
4. Use contests and competitions for innovative ideas.
5. Need to get out into the community to help drive demand.
6. Make sure the students know that they can participate as well. Help encourage them to develop grass roots organizations.
7. Bring in subject matter experts to show what's in it for each group.
8. Recycle for the children promotion. Funds generated from recycling at the sports events go to the local children’s hospital.
9. Purchasing and Facilities are the units on campus with the greatest ability to change the culture.

Task Information
5. Stakeholders - Where and how will you include your non-campus stakeholders in the formulation of your program? Why?

A. People

1. The non campus stakeholders would include: alumni, suppliers, city and state government, community at large, manufacturers, other universities, and other groups (AASHE, NAEP), and donors.
2. Talk to all vendors: This is where we are going and, if you want to do business with us, this is what you have to do.
3. Strategic suppliers: create case studies of green purchasing programs; use brochures created to promote program.
4. Identify and partner with proactive alumni.
5. Deal with the city, community, board of trustees, vendors, and suppliers.
6. Other focus-groups to communicate ideas and goals.
7. Parents of students: Are taxpayers being served?
8. Find out who they are (i.e.: the community; suppliers; governing board; alumni; or utility company)
9. Get a lot of buy-in at the onset
10. Peripheral stakeholders involved through awareness program, outreach, marketing program.

B. Places

1. The local community is highly impacted by the green purchasing program.
2. The university can impact local economy in both the positive and negative manner.
3. Community buy-in is essential to the success of the green purchasing program.
4. Elementary education is a prime stakeholder.

C. Tools, approaches, techniques

1. Form strategic alliances and community partnerships at the very beginning.
2. The university can give educational opportunities through the green purchasing program.
3. Create your vision, mission, and program structure and then approach the non-campus stakeholders.
4. Communication is essential. Explain what your vision is. Hold open forums and request their input. Ask what they can do for the green purchasing program.

5. Funding and grant requests.

6. The university would be setting an example and offering a way for the community to get involved.

7. We are all part of a greater good.

8. Get buy-in from governing entity and support from business administration on campus.

9. Sell them on the direction that you want to go and then ask for their assistance.

10. Include parents through focus-groups, surveys, and communicate in similar way to what PTA at the secondary education level do.

**Task Information**

6. **Resources - What financial and human resources will you need to implement a green purchasing program?**

**A. Dollars and Cents**

1. Sustainability funds will fund the office and programs and supplement funding for staff. Try to determine the savings achieved and then bring those savings back into sustainable programs.

2. Private grants!

3. Federal grants that are available to universities to begin these programs.

4. Marketing money to help promote program.

5. Target community groups fundraising for sustainable programs.
6. Use savings to expand other programs; requires shift in accounting.
7. Salary funds to pay full time staff.
8. Budget and accounting process needs to be more centralized (generate from budget department rather than waste management department).
9. Fund that would pay the differential.

B. Incentives

1. Ability to tie program into the environmental impacts that are affecting the community and the economy of the local area.
2. But if it is the right thing to do, then there should be some sort of financial commitment.
3. Assuming that they are giving you money and support, what would you do?

C. Human Resources

1. Public relations, education and a communication person.
2. One person in each building or department who can act as a champion.
3. Student involvement.
4. Director of Sustainability, and resources available within the university for the actual initiatives.
5. Student interns that can be used to help develop and promote the green purchasing program.
6. Someone to educate buyers, and others on the green purchasing program.
7. Full time staff person or more who can devote their time to the green purchasing program.
D. Alternative Incentives/Resources

1. Education and training procurement staff about the principles of sustainability and the right questions to ask.
2. Assessment of current systems, then determining how to optimize those systems.
3. Bring the university bookstore into the green purchasing program as a partner to bring green products to campus.
4. Self funded systems - showing the President the return on investment - savings transferred to cost avoidance, money saved to be invested into sustainability programs, cyclical. More systems can be documented to show how they are converting savings into more savings and more investment.
5. Creative negotiation.
6. Convenient place to look at what the policies and guidelines are and what the university is doing.
7. Have to figure out how to re dedicate resources in the system within a finite amount of resources.
8. Selling to administrators needs to show how it will benefit the student population, and academic programs.
9. Sustainability or survivability? Don't sustain - improve. Surviving as the framing mechanism. Reduce not recycle.
10. Supply chain faculty.
Task Information

7. Metrics - What are the critical success indicators for your institution with regard to a green purchasing program? Criteria?

A. Assessments

1. Survey students and faculty regarding awareness, satisfaction with the green purchasing program, and ask if individuals are participating. You can also ask them for suggestions on how to improve the green purchasing program.
2. Metrics for success would change on an annual basis - see what you have done and then go from there - process of continual improvement.
3. Energy conservation and consumption and then extend that campus wide to green purchasing - reduce the total amount of products purchased.
4. Measuring a number of suppliers with green programs; are universities participating in those programs? Use supplier statistics.
5. Important to be able to quantify how each building is performing.
6. Measure success on standards - LEED, ability of suppliers to comply with green specifications.
7. Recognition - public recognition of the administration, the business case of sustainability, talking about the results.
8. How much energy is sold back to grid?
9. Amount of paper used and recycled as a critical metric to measure success.
10. Look at how far the products have traveled to get to your university.
11. Success indicator would be to survey and test students when they leave the university to determine their sustainability IQ.

**B. Documentation/Tracking**

1. Purchasing reports on how much (%) of products purchased are recycled, green, etc... and then the goal and results are tied to increasing this percentage.
2. Reduction in total amount of waste going to landfill.
3. Measure any recycled products.
4. Ask vendors the important green qualifiers and keep track of the results.
5. Track progress among each department (competition)
6. Utility usage is a useful and relatively easy measurement.
7. Have the university sell renewable energy credits to fund sustainable energy projects, such as solar, wind farm, etc.
8. Measure the energy usage by the type of facility.
9. Procurement staff to include goals in their performance plans - performance goal within their areas of expertise (suppliers).
10. Require that suppliers provide quarterly reports on what was purchased.

**C. Analyses**

1. Determine how much sustainable energy per student, staff, etc. is used.
2. Energy consumption (utility bill, meaningful relationship between kilowatt usage, population, and buildings).
3. Determine how much sustainable energy is being generated by the university.
4. Are recycled products being recycled?
5. Determine how much sustainable power (renewable energy credit) is being purchased by the university.
6. Product cost analysis. Does it really cost more to be green?
7. Accumulate data for recycling paper products.
8. Movement from waste to recycling.
9. Amount of recycled products bought?
10. Reduced tonnage to landfill?

**Conclusion**
Our topic is concluded, the roadmap exists. For some of you this has been a really short introduction to the notion of sustainability through this exercise in creating an implementation plan for a green purchasing program including a green power purchasing authorization under a broad institution-wide sustainable development initiative. This topic green purchasing and sustainability can at times be a bewildering concept. Basically, the concept is trying to achieve a method of conducting human actions on, and with, the earth such that future generations do not encounter degradation in their ability to function as societies. There aren’t any bad guys in this story. There are simply alternatives to the way we have always done things. We hope that you find the roadmap useful for your purposes on your campus. These suggestions from your peers are given in the spirit of collaboration, friendship and professionalism.
**Note:** The roadmap is the result of a tremendous amount of pro bono labor. The roadmap is the story of the definition, the dream, the journey and hopefully, the building of a consensus among higher education procurement professionals to pave the way forward in the implementation of green purchasing. The roadmap could not exist without the service of the dedicated NAEP professionals who labored so long and hard to share their vision. It is absolutely true that without the wonderful donation of time and effort by Arizona State University there would be no roadmap. We want to especially thank the Decision Theater professionals we had the benefit of working with and Dr. Deidre Hahn and Michelle Roy from the Office of Sustainability Programs at Arizona State University.