

A Proposal for The Ohio State University



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Executive Summary

The goal of our project is to create a new green purchasing policy at The Ohio State University (OSU) to incorporate sustainability into the university's purchasing decisions. With this policy we hope to meet the university's sustainability goals, specifically to develop university-wide standards for targeted environmentally preferred products with full implementation by 2025.

Currently, The Ohio State University lacks an umbrella policy for green purchasing, which is seen as a critical opportunity for improvement. Other leading universities have seen value in making their purchasing departments implement green purchasing policies, and it is our hope that Ohio State will also see this value through our proposal. We had three main objectives in this project: first, to benchmark against other universities with successful green purchasing policies, including Arizona State University (ASU), The University of Washington (UW) and The University of Michigan (UM). Our second objective was to draft a standardized purchasing policy that incentivizes green choices at Ohio State. Our third objective was to access and analyze comparable cost benefit analyses of green purchasing policies.

We conducted our research through qualitative interviews with leading universities of comparable size to Ohio State in order to establish realistic goals. John Riley, the former Chief Procurement Officer at ASU, emphasized the importance of administrative support rather than numerical analysis, like a cost benefit analysis (CBA). In the end, green purchasing was a priority to administration at ASU, which allowed them to create an effective green purchasing policy. The University of Washington also had strong administrative support coupled with progressive state laws, pushing the

university to adopt a green purchasing policy. The University of Michigan served as an important example of supplier relations with their comprehensive supplier code of conduct. Using all of these universities as guidance, we created a proposed green purchasing policy and supplier code of conduct for Ohio State to foster a culture of sustainability and a standard for green purchasing.

We recommend that Ohio State consider our policy to increase efficiency, raise our AASHE STARS score, and set ourselves apart as a sustainability leader in the Midwest. As discovered through our research, cost benefit analysis is not the only factor that goes into a decision to implement a green purchasing policy. Administrative support, meeting our sustainability goals for 2025, and continued growth are important motivations to implement this policy.

Introduction

Upon receiving the Request for Proposal from The Ohio State University Sustainability Goals Project, our team selected the purchasing goal as our focus. After extensive research, our team decided that creating a comprehensive green purchasing policy was the most effective way to fulfill this goal. Our team then developed research goals to support the creation of this policy, and universities with leading green purchasing policies were identified for benchmarking. Our research goals included finding a baseline for The Ohio State University, identifying leading universities through the AASHE STARS website, and consulting with contacts from other universities as well as OSU.

Our initial research indicated that Arizona State and Washington State had the best green policies for comparison, while the University of Michigan had a superior

supplier code of conduct. Most institutions on the AASHE STARS website did not meet both the supplier code of conduct and policy standards. This led us to prioritize developing a comprehensive green purchasing policy. A successful policy entails multiple working parts, including definitions, waivers, and incentive programs. By creating these documents OSU would also earn a substantial amount of points through AASHE STARS, propelling the university towards achieving Platinum status in 2018, which would allow OSU to be recognized as a leader in university-wide sustainability. However, to reach this step of implementation, administrative support, transparent communication between departments, and an ethical code with suppliers would first be needed.

Baseline: OSU

In order to effectively use the benchmarking method, it was crucial for our group to establish a baseline of the current status of OSU's purchasing department. In the most recent AASHE STARS rating the purchasing department received a 3.16/6 (AASHE, n.d.). Upon speaking with Sherry Heugel and Russ Chung, we learned that the purchasing department was indeed taking small steps to reach the overlying sustainability goals developed by the university (Appendix I). Currently the university has a required minimum for recycled paper content, which is 30 percent. They also have a program that recycles all toner and ink cartridges, as well as a buyback program for both apparatuses. Collectively these two initiatives have been going on for the last three to five years, but more recently the university has contracted out their office supplies to be bought directly and exclusively from Staples. Within this contractual agreement there is an environmentally friendly product option, which could support

OSU's sustainability goals (S. Heugel, personal communication, February, 2016). While this is not currently a mandated solution, it is a step in the right direction of purchasing more sustainable products.

Another initiative that has pushed OSU to become a leader in sustainability overall, is their ambition to convert all cleaning products into environmentally friendly alternatives, known as Green Seal Products. This initiative has earned a substantial amount of points for OSU in their AASHE STARS score. The final step that OSU is focusing on is ensuring that all newly bought electronics are Energy Star certified (S. Heugel, personal communication, February, 2016). Thus, OSU is actively searching for these products as well as other energy saving methods.

After learning about the programs already in place at OSU regarding sustainable initiatives, it was clear that OSU has good intentions and progress is being made to work towards the sustainability goals set by the university. Upon review of the AASHE STARS website, it became clear that there is no method to document this progress into tangible numbers, such as an AASHE STARS score (AASHE, n.d.). By establishing a comprehensive green purchasing policy, OSU would be able to evaluate progress and additionally display this progress towards becoming a more sustainable university. As of now, OSU does not have any sort of purchasing contract or policy available to hold departments accountable. Additionally, a policy would establish transparency as well as display what goals are being met.

Benchmarking: University of Michigan

When looking at standout schools on the AASHE STARS website it was important to take into account our Big Ten competitors. The University of Michigan

stood out among other schools when it came to benchmarking for a supplier code of conduct. Since Ohio State currently does not have a supplier code of conduct, it was important to look at how other schools have developed such policies. The University of Michigan mainly focused on state regulations as well as their own ethics code, which includes human rights, fair wages, nondiscrimination, environmental protection, and university vendor partnership. (AASHE, n.d.) By benchmarking their supplier code of conduct our team was able to develop our own code of conduct that meets the needs of OSU and the establishments with which OSU does business. Through the example of the University of Michigan and their AASHE STARS website we hope OSU will adopt a policy modeled after this document (Appendix II).

Benchmarking: Arizona State University

Arizona State University is a valuable case study due to its successful green purchasing policy and similarities with The Ohio State University. Data from AASHE Stars and conversations with John Riley provided an in-depth look at the success behind ASU's green purchasing policy and how they were able to build such a comprehensive and diverse framework.

Arizona State University was selected as a prime benchmarking target due to their overall success, comparability and institutional capacity. First and foremost, ASU implemented a green purchasing policy in 2006 and has since reported overall success. Like OSU, ASU is a public institution with comparable funding processes and infrastructure operations, meaning both schools have similar institutional capacity and may face similar barriers when implementing university-wide policies. Additionally, both

schools have similar total enrollment and dynamic sustainability goals so their quantitative purchasing needs and eco-conscious goals slightly align (Arizona State University, 2014). While there are many more similarities, the above aspects commend ASU as a sensible model for OSU's first green purchasing policy.

ASU has an overall AASHE Purchasing score of 5.12/6 and has full points in Purchasing Electronics, Cleaning Products, Local and Inclusive Goods, Incorporating Life Cycle Analysis, and Guidelines for Business Partners (Arizona State University, 2014). By comparison, OSU only scores full points in Cleaning Products purchasing. ASU has achieved such high scores simply because they have a green purchasing policy for almost all purchasing categories listed in AASHE STARS. ASU's process of achieving success in this category provides a model for gaining AASHE STARS points and improving OSU's sustainability reputation.

John Riley shared best practices that led to the creation and implementation of ASU's comprehensive green purchasing policy (Appendix III). Once they successfully navigated the details, John hired two undergraduates to study ASU operations and draft a policy based on other green policies from similar public and private institutions (J. Riley, personal communication, March, 2016). Ultimately, strong administrative support negated the need for a time-consuming and costly CBA, and allowed for ASU to very efficiently draft a policy that was well-supported and successful.

As previously mentioned, Riley shared that ASU's sustainability goals were a priority to university administration so the purchasing team was given a lot of support to develop a green policy draft. When asked about pushback, John stated that while they did experience friction, most opponents "shut up" once they realized the sustainability

goals were an institutional priority (J. Riley, personal communication, March, 2016). Essentially, ASU's determination to implement university-wide sustainability initiatives, specifically a green purchasing policy, contributed to their overall success. Because OSU also has administrative support for sustainability initiatives, capitalizing on this momentum could similarly lead to the implementation of a green purchasing policy.

Cost benefit analyses (CBA) were another crucial component that factored into the implementation and success of ASU's green purchasing policy. When asked about the need for CBAs, John mentioned that the already known data about the return on investment and long-term savings for energy efficient products was enough of an argument to implement a policy regardless of upfront cost differences (J. Riley, personal communication, March, 2016). He mentioned that many departments voiced their concern about higher purchasing costs, but those concerns were appeased once data about cost savings was presented.

While John emphasized the success of the policy after ten years, ASU has not tracked overall cost differences and purchasing cost fluctuations are either nonexistent or confidential (J. Riley, personal communication, March, 2016). This observation is problematic because implementing such a comprehensive policy at Ohio State will almost definitely require quantitative data about similar successful policies elsewhere. Moreover, ASU's centralized purchasing framework is one that must be replicated at OSU if they hope to ensure that all purchases include sustainable alternatives. Currently, OSU does not have a centralized purchasing system meaning individuals who do not make sustainable purchases are not held accountable. While ASU has a

successful policy, data tracking and slight modifications at Ohio State would be necessary to achieve similar success.

Benchmarking: The University of Washington

The University of Washington is another valuable case study in regards to its successful green purchasing policy and similarities with The Ohio State University in both size and structure. Data from AASHE Stars and conversations with Claudia Christensen, who is the current Purchasing Director at The University of Washington, provided an in-depth look at the success behind UW's green purchasing policy and its implementation (Appendix IV). UW also was a great case study on how to incentivize departments to increase the purchase of environmentally preferred products and create a culture of sustainability on campus.

The University of Washington was selected as an important case study for comparison due to their overall success, comparability and organizational structure. UW implemented their green purchasing policy in 2008 with the support of the president and a committee of passionate students and faculty. UW has the same organizational structure as The Ohio State University and is a large publicly funded university through the state of Washington. Washington has similar funding processes and infrastructure operations, meaning OSU will face many of the same barriers that UW faced when implementing university-wide policies. Both schools also have a similar number of student enrolled and have signed on to the White House Sustainability Climate Goal. (UW, 2016) Because of these similarities between OSU and UW, we assume that the successes at UW can be helpful at OSU for the creation of its own green purchasing policy.

The University of Washington has an overall AASHE STARS Purchasing score of 5.12/6.00 and marks very well in the categories of Cleaning Products Purchasing, Office Paper Purchasing, and Life Cycle Cost Analysis scoring 0.99/1.00, 0.93/1.00, and 1.00/1.00 respectively. (AASHE, 2014) UW has been so successful in these because they have taken into account every aspect of the AASHE STARS rating system and incorporated it into their policy. By investing time into implementing a policy such as UW's, The Ohio State University's score will increase substantially in the areas of purchasing and help increase the total number of points needed to reach platinum status by 2018.

Our contact at The University of Washington, Claudia Christensen was very helpful in sharing information on the development and implementation of their policy. Their story was a great example of students, faculty, and university leaders collaborating to create a culture of sustainability. The purchasing policy was just a small example of a bigger picture of creating a climate of environmental stewardship on campus.

Government regulations at the state and local level were a major driver in the push for sustainability within the university. The state of Washington requires the purchase of 100% sustainably sourced recycled paper (UW, 2009); the State of Ohio has no such law. Ohio State voluntarily uses 30% recycled paper, which is a step in the right direction, but is nowhere close to the commitment mandated by the State of Washington. On a local level, The City of Seattle requires mandatory composting and recycling. These forward thinking regional standards were a major reason why the purchasing policy was so easily and swiftly implemented. "We have an amazing culture

of environmental stewardship here at UW and the state of Washington as a whole. This made implementation easy for the university” (Christensen, Personal communication, March 2016).

The first step in the implementation process for UW was creating a standardized and centralized purchasing policy within each department of the university. Only one person does all the purchasing in each of the departments throughout the university, which has had many benefits in the implementation of the policy. By doing this, the education and training about the details of the policy were easier to communicate and the purchaser easily identified environmentally preferred products. Unlike OSU, every employee at the university did not have access to the purchasing website to make purchases. If someone needs to make an order, an order is placed to the department procurement officer and then the decision is made on whether to follow the policy or if the purchase is eligible for a write-up to forgo the policy. “Having an expert making the final decisions at this level in the process has significantly increased the amount of environmentally preferred products and sustainable choices” (Christensen, Personal communication, 2016).

The University of Washington also has very strong supplier collaboration in the areas of sustainability and environmental stewardship. UW makes every effort to align with other organizations that make sustainability a priority in their manufacturing and sourcing. They work in collaboration with these suppliers to overcome obstacles in their sustainability efforts and work to collaborate on solutions for best practices. This was key in identifying products that the University of Washington would purchase and which suppliers were best aligned with their campus’s long-term sustainability efforts. Every

three years all of the suppliers that work with UW come together at a sustainability summit to share this information more easily and create a community of awareness on what every company is doing to meet their sustainability goals. This has been instrumental in forming transparency of supply chains and life cycle cost of products being sold to the university. This partnership has built strong connections with environmentally conscious suppliers and created stronger business connections that align closely with key stakeholders' long-term sustainability and supply chain risk mitigation strategies.

In the area of campus wide purchasing and sustainability the university has also developed an incentivized program that helps to build a culture of sustainability within the university and surrounding community. This "Green Office Certification" is based on the LEED system of points and ranks departments on Gold, Silver, and Bronze levels. The creation of this program has made sustainability fun and competitive within the university. This competitiveness between departments creates friendly competition that has led to the conservation of supplies, increased recycling rates, and a greater number of environmentally preferred products being purchased by procurement officers in each department. Not only has this helped increase the amount of environmentally preferred purchases, it has also successfully engaged university faculty, staff and students to integrate sustainability into their lives and this passion has diffused into the surrounding university community as well. We have created an updated Green Buckeye Certification that is modeled after the department certification program found at UW (Appendix V). The implementation of this program has the potential to increase the amount of

environmentally preferred products purchased on campus while also building a culture of sustainability within all the departments around campus.

Recommendation One

Our overall recommendation is that OSU follow the example set by the University of Michigan, University of Washington, and Arizona State University in order to standardize purchasing at OSU. An umbrella green purchasing policy would not only create efficiency in the current highly disconnected university purchasing procedures, but also enable OSU to receive a higher AASHE STARS score. This would additionally help set up OSU as a sustainability leader in the Midwest and improve the university's overall image.

By using Arizona State University's green purchasing policy as a model, we have created a draft policy that OSU can look to as a starting point in the creation of its own university wide green purchasing policy (Appendix VI and Appendix VII). Arizona State University's green purchasing policy is broken down into nine different sections: energy, water, toxins and pollutants, bio-based products, recycling, packaging, green building, and landscaping. In our draft policy, we also used these nine comprehensive sections, and then altered the content of the sections to fit OSU. For example, in the Green Building and Recycling sections, we referenced OSU's Green Build and Energy Policy because it was applicable to these sections. When OSU decides to implement its own green purchasing policy, we highly recommend using ASU as the main benchmarking university. Arizona State University's green purchasing policy is comprehensive, easy to understand, and effective (ASU, 2007)

Recommendation Two

We also recommend that OSU not delay implementation of a green purchasing policy because of the lack of cost benefit analysis on the subject. As we learned from our benchmarking, universities with successful green purchasing policies did not see the need for CBAs. In the long run, purchasing high efficiency items and green products reduces costs and helps universities meet their sustainability goals. Additionally, these universities realized that the initial cost of an item is not representative of the full cost of an item, thus CBAs would likely be misleading (J. Riley, personal communication, March, 2016).

Recommendation Three

Administrative support and collaboration between department and key stakeholders is vital to the successful implementation of a green purchasing policy. In order to raise administrative support, vocalization of the importance and benefits of an umbrella green purchasing policy may be needed. Additionally, forming an open conversation with stakeholders, for example the suppliers, will also be necessary. In pursuance of this, we recommend the formation of a supplier code of conduct (Appendix II). This will make certain that suppliers have the same standards as the university as well as continue to raise OSU's AASHE STARS score under OP-17 (AASHE, n.d.).

Recommendation Four

In the interest of maximizing OSU's AASHE STARS purchasing score, OSU should also employ Life Cycle Cost Analysis (LCCA) as a policy and practice across all operations of the entire institution (ASU, 2007). Currently, OSU does employ LCCA

when evaluating energy and water-using products and systems. However, in order to receive full points under OP-16, the university must implement this across all operations (AASHE, n.d.).

Conclusion

Based on research and analysis, the administration at The Ohio State University has the opportunity to create a meaningful policy to cultivate positive change and elevate their sustainability reputation. As previously discussed, many universities are creating and implementing green purchasing policies as a way to increase environmental stewardship and address future resource scarcity concerns. OSU can use these lessons as a model for successful policy implementation and move forward with their own goal of mandating the purchase of environmentally preferred products.

The three key case studies discussed above provide valuable insight for OSU's own purchasing policy. The University of Michigan has a comprehensive supplier code of conduct detailing exactly what the university expects from their suppliers. Because OSU does not specify sustainability related requirements for suppliers, creating such a document is vital towards building a comprehensive green purchasing policy. Arizona State University capitalized on administrative support and a centralized purchasing system, which allowed their purchasing department to quickly compose and implement a successful policy. Most importantly, ASU did not require cost benefit analyses based on lower long-term costs when purchasing sustainable and energy preferred products. OSU can organize purchasing processes across the university and capitalize on current sustainability oriented administrative support in order to move forward with policy implementation. Furthermore, OSU should do their own research about sustainable

products and long-term costs in order to better understand and communicate the benefits of a green purchasing policy to their stakeholders. Lastly, The University of Washington complied with strict environmentally related state laws and created departmental incentives for sustainable purchasing allowing them to achieve their purchasing goals. While Ohio lacks similar environmental state laws, OSU can become a state leader by setting higher sustainability standards and creating similar incentives to diffuse a green purchasing policy university-wide. Based on the above conclusions, it is recommended that OSU employ specific best practices from each case study to create and implement their own comprehensive green purchasing policy.

While best practices have been thoroughly identified, OSU may still face some limitations and implementation obstacles. First, there is no specific data available to support other university's claims that a green purchasing policy does not increase costs overall. While each school cited that long-term cost savings trump present upfront cost, no school has tracked their progress over time. Second, OSU's purchasing structure makes it near impossible to track, in an organized manner, who is buying what. Because any university employee can purchase items upon completing a quick online purchasing course, there are thousands of individuals on campus that make purchasing decisions each day. OSU must centralize purchasing decisions if they wish to create efficiency and implement sustainable purchasing behavior. Third, while we have attached a green purchasing policy draft, the administration must take a critical look at this information and employ help from purchasing, legal and other key stakeholders to finalize a policy that works for the university. This step is particularly crucial if OSU decides to move forward with implementation. In conclusion, if the above stages are

followed, OSU can reliably succeed in creating and implementing a green purchasing program.

Literature Cited

- Arizona State University. (2007, December). PUR 210: Green Purchasing. *Purchasing and Business Services Manual*. Retrieved from <https://www.asu.edu/aad/manuals/pur/pur210.html>
- Christensen, Claudia. (2016, March). Email interview. *University of Washington, WA, US*. (n.d.). Retrieved from <https://stars.aashe.org/institutions/arizona-state-university-az/report/2014-02-28/>
- Eklund, Daimon. "University of Washington Signing White House Climate Pledge." *UW Today*. University of Washington, 18 Nov. 2015. Web. 10 Apr. 2016. <http://www.washington.edu/news/2015/11/18/uw-signing-white-house-climate-pledge/>
- Riley, John. (2016, March). Email interview. *Arizona State University Tempe, AZ, US*. (n.d.). Retrieved from <https://stars.aashe.org/institutions/arizona-state-university-az/report/2014-02-28/>
- Sherry, Heugel. (2016, February). In person interview. *The Ohio State University Columbus, OH, US*. (n.d.)
The Association for the Advancement of Sustainability in Higher Education (AASHE). (n.d.). *Sustainability Tracking, Assessment & Rating System (STARS)*. Retrieved from <https://stars.aashe.org>
- The Association for the Advancement of Sustainability in Higher Education (AASHE). (n.d.). *Sustainability Tracking, Assessment & Rating System (STARS)*. Retrieved from <https://stars.aashe.org>

Appendix I.

Dataset: The Ohio State University Green Purchasing Information

Source: Russell Chung and Sherry Huegel, The Ohio State University Purchasing Department. Phone: 614-688-1698 (R. Chung), 614-688-4415 (S. Huegel). Email: chung.592@osu.edu, huegel.1@osu.edu

Description: Notes from conversation with Russell Chung and Sherry Huegel regarding the steps OSU is currently taking to be more sustainable in relation to purchasing. In person interview on February 22, 2016. Questions included:

1. How does purchasing work at OSU?
2. What current efforts is OSU taking to be more sustainable with purchasing?

Appendix II.



Supplier Code of Conduct

General Principles

The Ohio State University is committed to a brighter and more sustainable future. In aligning its purchasing policies with its core values and practices the University seeks to recognize and promote ethical business practices as well as a sustainable environment for employees, students, and the general public. Any agreement between the University and a vendor will be pending providing the following standards are met.

Ethical Business Practices

In compliance with law all vendor and vendor's subcontractors shall comply with all applicable federal, state, and local laws, rules, and regulations in providing goods and services under any agreement with the University. Vendor and vendor's suppliers and subcontractors must further comply with all applicable University rules, regulations, and ordinances concerning University matters. This may or may not include nondiscrimination, affirmative action, safe working conditions, freedom of association and collective bargaining, labor standards, forced labor and harassment or abuse. These guidelines are in coordination with the federal government, the State of Ohio, and The Ohio State University to ensure safe working conditions as well as ethical business practices.

Sustainable Environment

The University shall strive to do business with vendors that show leadership in environmentally responsible practices and production methods that meet well-established certification standards as well as University sustainability goals. Specific factors to be considered that are outlined in our University purchasing policy include but are not limited to the minimization of waste products, use of recycled materials, recyclability after use, energy efficacy, minimal water usage, and the use of biodegradable material. Vendors are required to provide tangible evidence of their adherence to the green purchasing policy as well as state and federal regulations in compliance with environmental standards.

Compliance Procedures

The ideal University vendor relationship is a partnership, seeking mutually agreeable and important goals. Recognizing our mutual interdependence, it is in the best interest of the University to establish an agreement that complies with vendor standards. Upon a vendor breaking this code of conduct or falsifying information in order to obtain a vendor contract a charge will be filed and brought to the purchasing department as well as the office of sustainability for further review. A failure by the vendor to cooperate with the investigation or a guilty finding will be evaluated on a case-by-case basis. This course of action can vary in severity and can include but is not limited to termination of the current vendor contract. All efforts will be in the best interest of the University and its policies as well as the reputation of all parties involved.

Appendix III.

Dataset: Arizona State University Green Purchasing Information

Source: Email correspondence, John Riley, Chief Procurement Officer, Arizona State University

Description: This dataset contains the email correspondence including details about how ASU implemented a green policy, challenges and future expectations. As the Chief Procurement Officer, John Riley was able to hire undergraduate help, work with ASU administration and benchmark other successful green purchasing policies to create one for ASU.

Appendix IV.

Dataset: The University of Washington Green Purchasing Information

Source: Claudia Christensen, Purchasing Director at The University of Washington. Phone: 206-543-4156. Email: claudiac@uw.edu

Description: Notes from conversation with Claudia Christensen regarding their colleges green purchasing policy, its implementations and incentives for purchasing environmentally preferred products university-wide. Phone conversation on March 12th 2016. Questions included:

1. What is the organizational structure of the university and who is in charge of purchasing those products?
2. Who was involved in developing the green purchasing policy at your university? What is the history of sustainability initiatives university wide?
3. What were some challenges and how did you overcome them?
4. How do you successful target environmentally preferred products?
5. Who are your biggest suppliers and how do you collaborate with them on sustainability goals?
6. What helps incentivize green purchasing at your university?
7. What were the Anticipated costs before implementing and the actual costs after implementing the green purchasing policy?
8. Can you provide me with any research documents or CBA to support business case for policy?

Appendix V.



The Ohio State University Green Buckeye Certification Program 2.0

Purpose: Promote the outreach and expansion of the Green Buckeye Certification Program to help encourage sustainability and increase the awareness/purchase of Environmentally Preferred products.

Introduction

The Green Buckeye Certification Program at The Ohio State University encourages staff, faculty, and students to help make their office or workplace at OSU sustainable. Any member from campus departments can participate in an informal review of their office practices. Qualifying offices will be recognized at different levels of certification based on the criteria they meet. The certification is based on workplace practices in action areas such as energy conservation, green meetings, paper conservation, publications and marketing communications, purchasing, and waste diversion.

Certifications:

The levels are determined by the percentage of points that the office achieves over the total points the office is capable of achieving. If points are not applicable to the department the total number of points possible will be adjusted accordingly and the department will not be penalized.

Gold (85%+)

Silver (70%-84%)

Bronze (55%-69%)

Strategy for Outreach and Program Implementation Success:

1. Promote through OEE, Office of Student Life, and other social media outlets.
 - a. Post each department's certification level on those outlets to spread awareness.
2. Make the application online and easy.
3. Set up a meeting with the department head and identify a person who will champion the certification process in their office.
4. Present at a staff meeting. Answer all questions thoroughly.
 - a. Next step: Present a certificate with their "level" on it and also bring free coffee and donuts to meeting to celebrate.

Certification Check List

Office Information

Office Title: _____

Location: _____ How many people work within your office? _____

Contact Name: _____ Email: _____

Phone Number: _____ Office is comprised of primarily: __Faculty __Staff __Both

Purchasing 17 Points Possible, 1 Bonus

___ We have a system for sharing excess office supplies (1)

___ We purchase remanufactured toner cartridges (2)

___ We refill empty toner cartridges (2)

___ We purchase reusable and durable office supplies, such as rechargeable batteries, refillable pens & mechanical pencils (2)

___ We purchase products with the maximum post-consumer recycled content available (3)

___ When purchasing office furniture and larger equipment, we check OSU Surplus for used items first (2)

___ If purchases must be made, we opt for equipment that is durable and can be easily repaired (2)

___ When our office purchases catering, we use local caterers who provide sustainable food and service ware options (2)

___ When we purchase supplies and equipment, we use local and small businesses whenever possible (2)

- We purchase products with minimal packaging, including:
- We buy in bulk to reduce packaging (1)
- We consolidate supply orders so that delivery is less frequent (2) *Vendors may offer additional discounts for order consolidation.*
- BONUS: When new furniture is needed, we purchase Greenguard Certified furniture to ensure emissions meet acceptable Indoor Air Quality standards (1)

Energy 21 Points Possible, 3 Bonus

Lighting

- Our office has reminders to turn off lights when they are not in use (1)
- Energy-efficient lightbulbs (CFLs/LEDs) are installed in all task lamps & applicable building lighting (1)
- We utilize natural daylight in offices with windows, turning off overhead lighting when possible (2) We do not have windows
- We have dimmers, motion sensors, or occupancy sensors to automatically turn off lights where possible (3)
- The lights in our vending machines are turned off (3) We do not have a vending machine in our building

Equipment

- Our office has reminders to turn off computer monitors on nights and weekends (1)
- Our office is equipped with Energy Star/EPEAT-rated products (2)
- Our office has conducted an appliance audit and eliminated any unnecessary appliances (2)
- There are no refrigerators or other appliances older than 7 years in use by our office (2)
- Controls to our office's thermostat are set at the recommended settings of 65-68°F in winter and 78°F in summer (1) *(This is university standard for buildings connected to the centralized thermostat control system, however some buildings can control their thermostats.)*
- We have a system (timer, reminders, assigned person, and/or power strips with switches) for turning off applicable equipment at night including desk and kitchen appliances (i.e. printers and coffee makers) and other applicable office appliances (3)
- BONUS: Our bathrooms are equipped with hand dryers (2)
- BONUS: Our office occupies a building that is registered or certified for LEED certification for new or existing buildings (1)

Green Meetings 8 Points Possible

- We send meeting agendas and information electronically instead of providing printed copies (1)
- If handouts are required, we utilize duplex printing or print multiple slides on one page (1)
- We ask presenters/speakers to use electronic presentations as opposed to printed handouts and provide their presentations to participants prior to the meeting (2)
- We use a laptop to take meeting notes, rather than paper (2) *Encourage one note-taker who will circulate minutes of the meeting electronically to reduce duplication of effort and resources.*
- When providing refreshments/water, we provide reusable or compostable containers and service ware (ie no bottled water) (2)

Paper Consumption Reduction 23 Points Possible, 2 Bonus

Paper Reduction

- Our printers and copiers have duplex capability, or we have a migration plan with a deadline for machines that do not have duplex printing capability (1)
- Our **printer's** default setting is to duplex print (3)
- Our **copier's** default setting is to duplex print (3)
- We have an electronic process for sharing meeting agendas and notes (1)
- We have worked with campus units to suppress printed reports and switched to electronic versions (3)
- We are tracking the number of pages printed and displaying a graph to encourage print reduction (2)
- We are currently using a network printer (3)
- We use Ohio State Managed Print Services for our printing needs (3)
- BONUS: We have one or more office members who work paperless (1)

Document Length Reduction

- We use narrow margins when possible (1)
- We use a small 10 pt font size when printing when possible (1)
- We use single or 1.5 spacing rather than double spacing (1) **2**

- When printing presentations, we print multiple slides on one page (1)
- BONUS: We reuse our one-sided misprinted paper or out-of-date stationery as notepaper (1)

Publications & Marketing Communications 18 Points Possible

- We have replaced our recurring printed publications with online versions (2) 50-100% (2) Less than 50% (1) None (0)
- We do not produce recurring printed publications
- Our publications do not use foils, lamination, or other effects that make the printed piece unrecyclable (1)
- We do not regularly print any publications
- We use paperless means to promote events or causes rather than mass-distributing brochures or flyers (2) Always (2) Sometimes (1) Never (0) We do not have events/causes that require promotion
- When printing publications, we take into account which paper size and printing format will be most efficient and use the least resources (1)
- We use postcards to send our audience to an online publication, rather than printing and sending the publication (2) Always (2) Sometimes (1) Never (0) We do not promote our publications
- All marketing publications are printed on Forest Stewardship Council (FSC) certified or 100% recycled paper (3)
- Our office comments digitally on publications (i.e. through Adobe Acrobat Professional) rather than printing proofs (3)
- We use email for inter-office announcements, rather than printing posters or flyers (2)
- If our department requires form completion, all forms are online/digital (2) All (2) Some (1) None (0) We do not create forms

Recycling, Composting, and Waste Reduction 37 Points Possible, 1 Bonus

General Recycling

- Recycling bins have decals and/or recycling poster is hung above the bins (1)
- Copy rooms have a mixed paper bin to encourage proper paper recycling (1)
- All workstations are equipped with a self-service, desk-side "mini" waste bin and 28-quart recycling bin (3)
- The following places have collection bin sets that include Landfill, Mixed Paper and Mixed Containers recycling Public areas (reception areas, hallways, etc) (1) Conference rooms and classrooms (1)
- Kitchen or break rooms (1) We do not have a kitchen/break room

Composting

- The following places have collection bin sets that include containers for Compost alongside Landfill and Recycling bins Public areas (reception areas, hallways, etc) (2) Kitchen or break rooms (2)
- We do not have a kitchen/break room
- A composting poster is hung on or above compost bins (1) We compost paper towels in our restrooms (3)
- Approved compostable service-ware items (plates, cups, and utensils) are available for staff use instead of non-compostable service-ware items, for times when reusable alternatives are not appropriate or available (1) **3**
- Location of nearest compost bin is posted if there is not one readily available on your floor or in your building (2)

Waste Reduction

- Our office promotes & encourages use of reusable food containers and discourages the use of foil, plastic wrap, and other disposable food packaging through informational posters & signage (1)
- Our office uses durable water bottles instead of buying bottled drinks (1)
- Our office promotes use of reusable service-ware by providing or having staff bring in their own durable plates, cups, and utensils (3)

Specialized Recycling

- We know the location of the nearest e-media recycling bin and utilize it whenever possible (1)
- When our office hosts events we make sure recycling and compost bins are available. If not, we reserve special event containers through OSU Recycling's special event recycling program (3)
- Office recycles Styrofoam (Peanuts or Blocks) (1) Office recycles plastic bags/film (1)
- Office recycles printer cartridges (1) Office recycles bottle caps (1)

Staff Education & Information Sharing

- New employee orientation includes information about the University's recycling and composting programs and a link to the OSU Recycling website (1)
- Staff meetings or other means of communication (email, etc.) regularly include agenda items regarding the office's current waste reduction, composting, and recycling strategies (2)
- OSU Recycling has given a presentation at a staff meeting (2)

Transportation 22 Points Possible, 4 Bonus

- Most of our staff walks or bikes to off-site campus meetings (1)
- Our staff is allowed to telecommute when possible (2) Telecommuting is not possible in our office
- Our staff is allowed to work a compressed work week when possible (i.e. an alternative work schedule that regularly allows a full-time employee to eliminate at least one work day every two weeks by working longer hours during the remaining days) (2)
- Compressed workweeks are not possible in our office
- We provide and utilize the resources for conference calls, rather than travelling to off campus meetings (1)
- When traveling to off-campus meetings, staff is encouraged to carpool, use shuttles, bus or bike when possible (1)
- Our building provides secure, safe bike parking (2)
- Our office had a Ride in the Rain or Bike to Campus Month team in the past year (2)
- At least 50% of vehicles used by our department are fuel-efficient or hybrid/electric (2)
- We have optimized vehicle operation routes or schedules to reduce fuel consumption (2)
- We do not have vehicles operating on routes or schedules
- Our staff take the train or bus to a conference instead of flying or driving alone whenever possible (3)
- We do not attend conferences/alternate means of travel to conferences are not possible
- This percentage of our staff uses greener commute options to travel to and from work, such as walking, biking, carpooling, and public transportation, or eliminates a commute trip by telecommuting (2) 75-100% (2) 50-75% (1) Less than 50% (0)
- BONUS: We have an incentive program for employees to purchase and use the COTA pass (i.e. rewards/parties) (1)
- BONUS: We provide accommodations for bicycle commuters such as shower facilities (2)
- BONUS: We provide complimentary COTA cards or Zagster/COGO bicycles to use to access off-campus meetings (1)

Additional Criteria 9 Points Possible, 9 Bonus

- A sustainability topic is part of the agenda at staff meetings or in newsletters (2) Always (2) Sometimes (1) Never (0)
- Our office members are aware of the OSU Climate Action Plan and familiar with its policies (2) 4 50-100% (2) Less than 50% (1) None (0)
- Our common areas are supplied with green cleaning supplies (i.e. dish soap) (1)
- Our office has an active Green Team, or members of our office are part of one (2)
- BONUS: Our staff regularly volunteers at or donates to sustainable events, causes and organizations (3)
- BONUS: Plants at workstations – plants act as air filters and can absorb some pollutants. (Please be aware of your coworker's allergies to indoor plants before bringing in any plants to live at your workstation) (1)

BONUS Points for Innovation Please describe any additional sustainable features of your office that this certification program has not captured. (i.e. Patio gardens, CSA membership, etc). (1 pt each, 5 pts max)

- Innovation 1: _____
- Innovation 2: _____
- Innovation 3: _____
- Innovation 4: _____
- Innovation 5: _____

Appendix VI.



Green Purchasing Policy EEDS Capstone Purchasing Group New Policy Proposal

Proposal to develop a new policy university policy

Responsible party:	Ohio State University Purchasing Department
Responsible executive:	Russell Chung
Primary contact name, e-mail, phone:	Russel Chung, chung.592@osu.edu, 614-688-1698
Policy name (& number if applicable):	OSU Green Purchasing Policy
Policy applies to:	University-wide purchasing activities
Implementation target date:	Fall 2016
Date Policy Proposal submitted:	Spring 2016

1. Draft policy statement:

The Ohio State Green Purchasing Policy is designed to further the university’s long-term sustainability goals stated in the [Climate Action Plan](#) (Ohio State aims to be carbon neutral by 2050) and achieve [ASHEE STARS](#) ‘Platinum’ ranking. This comprehensive green purchasing policy will be used to standardize sustainable purchasing university-wide to help mitigate environmental impact today and far into the future.

2. Reason for policy and desired result:

The Ohio State Green Purchasing Policy is a pivotal set of regulations that organizes existing green purchasing practices and expands on a variety of green purchasing opportunities at a university-wide level. The desired result is a structured purchasing system in which buyers have all necessary information needed to make environmentally responsible decisions when assessing sustainable and non-sustainable product options. Furthermore, this policy aims to minimize long-term risks, avoid dynamic resource scarcity issues, set higher sustainability standards for Ohio State and set a precedent for other large public institutions.

3. Individuals and entities affected by the policy; policy stakeholders:

Generally, all areas of the university including faculty, staff and students will be affected in varying degrees. Departments, faculty, and other university buyers will be required to evaluate sustainable purchasing products and services and make an environmentally responsible decision. Students and parties that do not purchase products through OSU will not be affected or bound to this policy. OSU Purchasing and/or suppliers will be required to provide sustainable alternatives that lead to environmentally responsible decisions. Any questions, feedback or problems can be directed towards OSU Purchasing and the Green Purchasing Policy.

4. Anticipated impact of the policy on the university: (Who, what, when, cost, etc.)

The OSU Green Purchasing Policy will create a more environmentally responsible university, which will mitigate the cumulative environmental impacts associated with unsustainable product purchasing. By investing in sustainable alternatives, the university is minimizing long-term costs, long-term risks and conducting purchasing in a responsible manner with regards to potential resource scarcity in the future. It is expected that some sustainable products will have higher upfront costs, however, in the long-term, costs will be minimized. Therefore, we do not anticipate an increase in purchasing costs, tuition, fees, etc. over time.

5. Writing group members: (Add rows as needed)

XXXXXXXXXX



Green Purchasing Policy
EEDS Capstone Purchasing Group
New Policy Proposal

Name	Position	Department	Phone	E-mail
Kristina Bomberger	EEDS Capstone Student	N/A	216-239-9077	Bomberger.8@osu.edu
Elizabeth George	EEDS Capstone Student	N/A	210-213-3060	George.596@osu.edu
Haley Noll	EEDS Capstone Student	N/A	585-880-0871	Noll.84@osu.edu
Brian Trainor	EEDS Capstone Student	N/A	513-532-0657	Trainor.18@osu.edu
Kaitlyn Williams	EEDS Capstone Student	N/A	740-418-4977	Williams.4326@osu.edu

- 1. Legal Affairs attorney** for legal counsel during policy development: (name, email, phone)

The university legal department will handle all legal affairs. Specific Attorney TBD.

- 2. Policy interactions.** *(List all current university policies and any federal, state, or local legislation and regulations that relate, govern, or require the policy.)*

Current Purchasing policies and procedures including but not limited to: authority, conflict of interest, key contracts and social responsibility.
 (<http://purchasing.osu.edu/socialrespons/default.aspx>)

- 3. Risk interactions.** *(List any university risks that are mitigated, affected, or created by the policy; university risks are available from OUCI.)*

Long term risks regarding resource scarcity, life cycle costs and other environmental risks associated with unsustainable purchasing will be mitigated. Financially, higher initial costs are expected but overall long-term costs are not expected to fluctuate greatly.

- 4. See below for** the timeline and communication/implementation plan.

Dates	Policy Process/Communication Step	Who's Responsible/Involved
April/May 2016	Communicating first draft of policy to OSU administration	OSU EEDS Capstone Purchasing team
May-August 2016	Meet with OSU administration and legal team to finalize and fine tune policy details to meet OSU standards	OSU EEDS Capstone Purchasing team
May-August 2016	Allow OSU Purchasing to revisit and revise key contracts to allow transparency for sustainable alternatives and respective prices	OSU Purchasing and OSU administration

Appendix VII.



Green Purchasing Policy University Policy

Applies to: The Ohio State University

Responsible Office

Purchasing

POLICY

Issued: 04/11/2016
 Revised: 04/11/2016
 Edited: 04/11/2016
 Reviewed: 04/11/2016

The Ohio State University Green Purchasing Policy

Purpose of the Policy (required; include regulatory or legislative references)

The Ohio State Green Purchasing Policy is designed to further the university’s long-term sustainability goals stated in the [Climate Action Plan](#) (Ohio State aims to be carbon neutral by 2050) and achieve [ASHEE STARS](#) ‘Platinum’ ranking. This comprehensive green purchasing policy will be used to standardize sustainable purchasing university-wide to help mitigate environmental impact today and far into the future.

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Definitions

Term	Definition
Customer:	The person placing the order for acquisition of goods, or the person on whose behalf the order is placed and who is responsible for the selection and use of the goods.
Environmentally Preferable Products (EPP)	Products that have a lesser or reduced negative effect on human health and the environment when compared with competing products or services that serve the same purpose. This comparison applies to raw materials, manufacturing, packaging, distribution, use, reuse, operation, maintenance, and disposal. Environmentally preferable products possess more than one environmentally friendly attribute.
Environmentally and Socially Responsible Purchasing (ESRP)	The purchase of products and services that minimize negative impacts on society and the environment when compared to other products and services that serve the same purpose.
Fair Trade	Trading designation and movement whose goal is to help producers in developing countries get a fair price for their products to reduce poverty, provide for the ethical treatment of workers and farmers, and promote environmentally sustainable practices.
Locally Sourced	STARS (Sustainability Tracking Assessment and Rating System) defines as “local” those products or services sourced from local community-based producers (directly or through distributors) within a radius of 250 miles from campus. Local sourcing is included within the ESRP standards.

Applies to: The Ohio State University

Term	Definition
Preference	A 5% allowance applied to goods or services meeting EPP standards when competing directly against goods or services that do not meet EPP standards.
Post-consumer Waste (PCW)	Material that has served its intended end-use and been discarded by a final consumer.
Recyclable	The ability of a material to be reused in manufacturing.
Recycle	To reprocess and reuse used material to create new products.
Recycled Products:	Products manufactured with waste material that has been recovered or diverted from solid waste. Recycled material may be derived from post-consumer waste, industrial scrap, manufacturing waste, or other waste that would otherwise have been wasted.
Reduce:	Using less of products and utilizing other means of doing business when available to reduce the amount of toxicity of trash discarded.
Remanufactured	Indicates the product has already been used before but has been refurbished to use again.
Sustainability	Meeting today's needs without compromising the ability of future generations to satisfy their needs.
Volatile Organic Compounds (VOCs)	Organic chemical compounds that have significant vapor pressures, can affect the environment and human health, and are emitted as gases from certain solids or liquids. They are generally found in higher concentrations indoors than outdoors, and have been linked to hazardous health effects.

PROCEDURE

Issued: 04/11/2016 (required for all policies)
 Revised: 04/11/2016 (required when there is a revision and remains on the policy until the next revision)
 Edited: 04/11/2016 (required for an edit)
 Reviewed: 04/11/2016 (substitutes for the last "revised" date, which gets moved to the history section)

1. Energy

- 1.1. All desktop computers, notebooks/laptops, monitors/displays, and imaging equipment purchased should meet all Electronic Product Environmental Assessment Tool (EPEAT) environmental criteria designated as "gold" as contained in the IEEE 1680 Standard for the Environmental Assessment of Personal Computer Products whenever possible. All televisions purchased must meet the highest EPEAT rating available at the time of purchase.
- 1.2. Copiers and printers purchased shall be compatible with the use of recycled content and remanufactured products.
- 1.3. All electrical products purchased by The Ohio State University will meet the US EPA Energy Star certification when available and practicable. When products with Energy Star labels are not available, products that are in the upper 25% of energy efficiency as designated by the federal Energy Management Program should be purchased.
- 1.4. Suppliers of electronic equipment, including but not limited to computers, monitors, printers, and copiers, shall be required to take back equipment for reuse or environmentally safe recycling when deemed appropriate by OSU.
- 1.5. When acquiring vehicles, the university shall purchase/lease less polluting alternatives to diesel or gasoline, such as compressed natural gas, bio-based fuels, hybrids, electric batteries, and fuel cells, as available and suitable for the use intended.
- 1.6. When acquiring or replacing inefficient interior or exterior lighting, highest possible energy efficient equipment available shall be purchased.

2. Water

- 2.1. Purchase the most water efficient appliances available, when possible. This includes, but is not limited to, high performance fixtures like toilets, low-flow faucets and aerators, and upgraded irrigation systems.

Applies to: The Ohio State University

3. Toxins and Pollutants

- 3.1. Cleaning solvents should be biodegradable, phosphate free, and citrus-based when their use will not compromise quality of service.
- 3.2. Industrial and institutional cleaning products that meet Green Seal certification standards or environmental preferability and performance shall be purchased or required to use by janitorial contractors.
- 3.3. All surfactants and detergents used shall be readily biodegradable and shall not contain phosphates.
- 3.4. Vacuum cleaners that meet the requirements of the Carpet and Rug Institute's "Green Label Testing Program—Vacuum Cleaner Criteria" (capable of capturing 96 percent of particulates measuring 0.3 microns and operating with a sound level less than 70dBA) shall be used by in-house staff and required for janitorial contractors.
- 3.5. Whenever possible, products and equipment should not contain lead or mercury. For products that contain lead or mercury, preference should be given to those products with lower quantities of these metals and to suppliers with established lead and mercury recovery programs.
- 3.6. Pest control shall be managed through prevention—physical and mechanical—and through the purchase of environmentally friendly products. As a last resort, use of the least toxic pest control substance is required.

4. Green Building

- 4.1. Green purchasing concepts shall be integrated into architectural designs, final construction documents, and the final construction of all university buildings and renovations of property or facilities owned by the university. Each new building or renovation with a budget of \$4 million or more is required to achieve U.S. Green Building Council Leadership in Energy and Environmental Design (LEED) Silver certification or higher (as stated in OSU's Green Build and Energy Policy #3.10).
- 4.2. When maintaining buildings, products such as paint, carpeting, adhesives, furniture and casework with the lowest amount of volatile organic compounds (VOCs), highest recycled content, and low or no formaldehyde shall be used when practicable.
- 4.3. All carpet distributors and/or manufacturers of carpet installed at the university shall have a carpet recycling plan that is approved by the Purchasing Department.
- 4.4. The use of chlorofluorocarbon and halon-containing refrigerants, solvents, and other products shall be phased out, and new purchases of heating/ventilating/air conditioning, refrigeration, insulation, and fire suppression systems shall not contain them.

5. Recycling

- 5.1. Thirty percent post-consumer waste recycled paper (or more) for all applications shall be the standard when quality of service is not compromised nor the health and safety of employees prejudiced.
- 5.2. When specifying asphalt concrete, aggregate base, Portland cement concrete, or other concrete for road construction projects, recycled, reusable, or reground materials shall be used when practicable.
- 5.3. The use of reclaimed stone and brick and the use of secondary or recycled aggregates shall be specified.
- 5.4. Transportation products, including signs, cones, parking stops, delineators, channelizers, and barricades shall contain the highest postconsumer content practicable.
- 5.5. Products that are durable, long lasting, reusable, or refillable are preferred whenever feasible.
- 5.6. All construction projects over \$4million must meet LEED criteria including a 50% diversion rate of waste from landfills to maximize recycling efforts (see Green Build and Energy Policy).

6. Bio-based Products

- 6.1. Bio-based plastic products that are biodegradable and compostable, such as bags, film, food and beverage containers, and cutlery, shall be acquired by the university and/or used by our contracted suppliers. Contracted suppliers must provide biodegradable and compostable options whenever possible.
- 6.2. Compostable plastic products purchased shall meet American Society for Testing and Materials (ASTM) standards as found in ASTM D6400-04. This standard ensures that plastics which are designed to decompose under aerobic conditions do in fact decompose. Biodegradable plastics used as coatings on paper and other

Applies to: The Ohio State University

compostable substrates shall meet ASTM D6868-03 standards. This standard ensures degradable and decomposable items are properly labeled for easier identification for the buyer.

- 6.3. Vehicle fuels made from non-wood, plant-based contents such as vegetable oils are encouraged. When research and development allows, the expansion of compressed natural gas vehicles should be preferred.
- 6.4. Paper, paper products, and construction products made from non-wood, plant-based contents such as agricultural crops and residues are encouraged.

7. Packaging

- 7.1. Packaging that is reusable, recyclable, or compostable is preferred, when suitable uses and programs exist, as is eliminating packaging or using the minimum amount necessary for product protection to the greatest extent practicable. The supplier is expected to pick up packaging and either reuse it or recycle it.

8. Forest Conservation

- 8.1. Ensure that all wood and wood contained within the products that OSU purchases is certified to be sustainably harvested by a comprehensive, performance-based certification system. The certification system should include independent third-party audits, with standards equivalent to, or stricter than, those of the *Forest Stewardship Council* certification.
- 8.2. Purchase or use of previously used or salvaged wood and wood products are encouraged.

9. Landscaping

- 9.1. Landscape renovation and construction are required to use techniques and vegetation that encourage a habitat native to central Ohio.
- 9.2. All landscape management plans should employ sustainable landscape techniques such as but not limited to integrated pest management, drip irrigation, compost of discarded environmental material, use of environmentally friendly mulch, organic lawn care products, limited water usage, low impact development, etc.
- 9.3. Landscape structures constructed of recycled content materials are encouraged as well as permeable surfaces for walkways and other paved surfaces whenever possible. The amount of impervious surfaces in the landscape shall be limited and the canopy cover should be increased whenever applicable.
- 9.4. Organic lawn care products are required, which could include but are not limited to organic fertilizers, pesticides, insecticides, etc. in the use of maintenance, construction, or renovation.
- 9.5. Minimal water use is encouraged when managing landscapes as well as the use of low maintenance plants to reduce water and fertilizer usage.

Policy Review

This Policy is to be reviewed at least once every five years.

Responsibilities (required; number responsibilities if more than one for any position or office)

Position or Office	Responsibilities
1) Purchasing	Ensure policy is being followed and revise policy on a regular basis.
2) Office of Energy and Environment	Assist in revising policy and technical support.

Applies to: The Ohio State University

Resources

- 1) Energy
 - "ENERGY STAR Certification." *ENERGY STAR Certification*. N.p., n.d. Web. 11 Apr. 2016. <<https://www.energystar.gov/buildings/about-us/energy-star-certification>>.
 - "Home - EPEAT." *EPEAT RSS2*. N.p., 26 June 2013. Web. 11 Apr. 2016. <<http://www.epeat.net/>>.
- 3) Toxins and Pollutants
 - "Certified Vacuums." *The Carpet and Rug Institute (CRI)* -. N.p., n.d. Web. 11 Apr. 2016. <<http://www.carpet-rug.org/CRI-Testing-Programs/CRI-Seal-of-Approval-Program/Vacuums/Certified-Vacuums.aspx>>.
 - "Green Seal Home." *Green Seal Home*. N.p., n.d. Web. 11 Apr. 2016. <<http://www.greenseal.org/>>.
- 4) Green Buildings
 - "LEED | U.S. Green Building Council." *LEED | U.S. Green Building Council*. U.S.G.B.C, n.d. Web. 11 Apr. 2016. <<http://www.usgbc.org/leed>>.
- 6) Bio-Based Products
 - "ASTM International - Compass Login." *ASTM International - Compass Login*. ASTM International, n.d. Web. 11 Apr. 2016. <<http://compass.astm.org/Standards/HISTORICAL/D6400-04.htm>>.
- 8) Forest Conservation
 - "FSC Certification." *FSC International*. Forest Stewardship Council, n.d. Web. 11 Apr. 2016. <<https://ic.fsc.org/en/certification>>.

Contacts (required)

Subject	Office	Telephone	E-mail/URL
Russell Chung	Purchasing	614.688.1698	chung.592@osu.edu
Sherry Huegel	Purchasing	614.688.4415	huegel.1@osu.edu
Aparna Dial	Office of Energy and Environment	614.247.4762	dial.15@osu.edu

History

All changes must be listed chronologically in the format below, including all edits and reviews. Note when the policy name or number changes. Note the Board of Trustees resolution number and date if board action was taken. Note if a revision date is exclusively for the policy section or the procedure section.

Issued: MM/DD/YYYY
 Revised: MM/DD/YYYY
 Edited: MM/DD/YYYY
 Revised: MM/DD/YYYY (e.g., procedure section only)
 Edited: MM/DD/YYYY
 Edited: MM/DD/YYYY
 Edited: MM/DD/YYYY
 Reviewed: MM/DD/YYYY