



ECS GREEN POLICY
Board Approved
11/20/2018

APPROVED

It is the policy of the Environmental Charter School (ECS) to continue to actively seek opportunities to institute workplace practices and purchases that are energy efficient, reduce waste, and minimize detrimental environmental impacts, without reducing safety or workplace quality.

PURPOSE AND OBJECTIVES

The purpose of this Policy is to institutionalize procedures that will minimize direct and indirect environmental impacts of our operations. The objectives are to strengthen our existing programs and continue to make progress in a number of areas:

- energy independence and efficiency;
- conserve water;
- reduce waste and use of harmful substances;
- lower criteria, toxic, and greenhouse gas emissions;
- improve indoor air quality;
- minimize environmental impacts; and
- encourage employees to improve the environment at work and home.

IMPLEMENTATION

For each of the following major topic areas, staff will evaluate potential practices, purchases, and other actions that can help improve the current situation. The topic areas include ECS management office and other ECS schools, our fleet and travel, and others, such as employee education. A brief description of the types of actions that could be taken is given below. Attachment 1 provides more specifics on options to be evaluated.

An internal taskforce will meet at least quarterly to evaluate different potential approaches and review progress. Goals for different areas will be considered. An annual report will be given to the Governing Board including, but not limited to, program implementation and ECS annual carbon footprint. The Policy can be updated in the future, as more information is available.

BUILDINGS

Energy

- Continue to test and/or employ renewable energy sources.
- When equipment needs to be purchased or replaced, consider purchasing the most energy efficient models available.
- Whenever practical, replace existing lighting with more energy efficient equipment.
- Develop a comprehensive plan to maximize efficient heating and cooling system.

Electronics

- Include end-of-life “take back” provisions for acquisitions for electronic equipment.
- Consider giving preference in specifications for electronic equipment to equipment manufactured with recycled materials, less toxic components or processes.
- Give preference to equipment meeting Energy Star performance criteria.

- Upon installation, activate all energy management features as the default setting.

Water

- Purchase water-saving products whenever practical.
- Properly maintain plumbing and fix leaks right away.
- Use reclaimed water in landscaping, and other applications when practical.
- Minimize storm water runoff to the extent feasible.

Landscaping

- Seek to ensure that workers and contractors providing landscaping services for the District employ sustainable landscape management practices whenever possible
- Plants and trees should be selected to minimize waste, and be California- native, low biogenic VOC emitting and drought-tolerant.
- Hardscapes and landscape structures constructed of recycled content materials are encouraged.
- Requests for Proposals and contracts for landscaping services will contain contractors' sustainable practice requirements in their entirety.

Reducing Waste

- Require vendors to recycle discarded lighting fixtures and lamps appropriately.
- Institute practices that reduce waste and result in the purchase of fewer products whenever practical and cost-effective
- Expand the current recycling program.
- Purchase products with the highest post-consumer content practical.
- Require vendors to eliminate packaging or use the minimum amount necessary for product protection, to the greatest extent possible.
- When possible, consider life cycle analysis for school purchases.
- To the extent practical, the building's organic waste, including yard clippings and food matter, should be disposed of as green waste or composted in order to minimize landfill disposal.

Purchasing Environmentally Preferable Products

- To the extent practical, no cleaning or disinfecting products (i.e. for janitorial or automotive use) should contain ingredients that are eye or skin irritants, neurotoxins, carcinogens, mutagens, or teratogens.
- Use janitorial equipment that reduces building contaminants and minimizes detrimental environmental impacts and energy use.
- To the extent practical, cleaning or disinfecting products should be biodegradable, be in concentrated form, be non-aerosol, and be in recyclable containers.
- Future contracts for cafeteria services should include specific requirements related to green operations.
- ECS will seek to purchase products and equipment with no lead or mercury whenever possible.
- The use of chlorofluorocarbon-containing refrigerants, solvents, and other products should be phased out to the extent feasible.
- Fire suppression systems should not contain any ozone harming chemicals (e.g. halon).
- Reducing or eliminating products that contribute to the formation of dioxins and furans.
- To the extent possible, do not procure wood products such as lumber and paper that originate from forests harvested in an environmentally unsustainable manner.

Other

- When roof refurbishment is necessary, consider heat island effects.
- Consider cooler paving materials when the parking lot needs repaving.

FLEETS AND TRAVEL

- Continue to replace existing traditional gasoline vehicles with automobiles that use clean fuels or alternative energy sources to maximize the fuel efficiency and reduce carbon intensity of our vehicle fleet.
- Continue to reward ridesharing and alternative transportation modes by employees and try to increase average vehicle ridership by school employees.
- Carefully evaluate other travel modes, such as air travel; evaluate the greenhouse gas impacts, and seek to mitigate or reduce impacts from school travel.
- Enhance ECS webcast and teleconference capability to reduce travel for ECS-sponsored meetings and workshops.

OTHER

Employee Awareness

- Provide a quarterly reminder to employees to turn off desktop computers prior to leaving.
- Provide employee education regarding sustainable office practices, including minimizing energy and paper usage, and recycling.
- Provide information to employees about our agency's per capita energy use over time and enlist their help to lower energy usage.
- Employ a staff education program that provides building maintenance staff with information on building and building system operation, maintenance, and achieving sustainable building performance.
- Seek employee suggestions and implement, when feasible.

Miscellaneous

- Regular maintenance and cleaning of heating, air conditioning, and ventilation systems.
- Improvements in building ventilation should consider additional outdoor air ventilation but should not be near areas where cars idle, or where tobacco smoke or cooking emissions are present.
- School staff will monitor implementation of this Policy, including building energy and waste consumption, such as water, electricity, natural gas, and building equipment efficiencies.
- Continue to apply for state and federal funding that allows ECS to utilize its building for new sustainable energy and water practices.
- Provide outreach material of our Green Building practices for other businesses and individuals to utilize.
- Enhance the ECS website to make information and resources available regarding reducing greenhouse gas impacts.
- Offer the ECS facilities as a test site for innovative low-carbon, low-emitting products and technologies.

Attachment 1

Potential Approaches for Evaluation

BUILDINGS

Energy

- Continue to test and/or employ renewable energy sources such as additional microturbines, solar, and wind generation.
- When equipment needs to be purchased or replaced, consider purchasing the most energy efficient models available.
 - All appliances purchased by ECS and for which U.S. EPA Energy Star certification is available should meet Energy Star certification. Typically, this would include motors/pumps, exhaust fans, water heaters, computers, exit signs, water coolers, and appliances such as refrigerators, dishwashers, and microwave ovens.
 - When Energy Star labels are not available, the District should look for energy efficient products that are in the upper 25% of energy efficiency as designated by the Federal Energy Management Program.
- Whenever practical, replace existing lighting with more energy efficient equipment. Ideas to consider include:
 - Incandescent, mercury vapor and T12 fluorescent lamps replacement with compact fluorescent lamps, high-intensity discharge (HID) fixtures, low-mercury T8 or T5 fluorescent lamps and Light Emitting Diodes (LED).
 - The magnetic ballasts used in older fluorescent lighting could be replaced with electronic ballasts.
 - New lighting designed to use no more than 85% of the power allowed by Title 24 Energy Code.
 - Staff will continue to investigate technologies that reduce the energy requirements of existing lighting such as sensors, timers, and frequency regulators.
- Develop a comprehensive plan to maximize efficient use of heating and cooling systems.

Electronics

- Include end-of-life “take back” provisions for acquisitions for electronic equipment.
 - Where possible, require the vendor to accept old equipment back for recycling and proper disposal when it has reached the end of its useful life or is no longer working.
- Consider giving preference in specifications for electronic equipment to equipment manufactured with recycled materials, less toxic components or processes. Evaluate a company’s corporate environmental policy and how actively it is being implemented.
- Give preference to equipment meeting Energy Star performance criteria.
- Upon installation, activate all energy management features as the default setting.

Water

- Purchase water-saving products whenever practical. This would include toilets, low flow shower heads, faucet aerators, and no flush urinals.

- Properly maintain plumbing and fix leaks right away to prevent excess water use.
- Use reclaimed water in landscaping, and other applications when practical.
- Minimize storm water runoff to the extent feasible.

Landscaping

- Seek to ensure that workers and contractors providing landscaping services for the District employ sustainable landscape management practices whenever possible, including:
 - The use of Integrated Pest Management (IPM), including minimal pesticide use.
 - Pruning on an as-needed basis, with thinning as the preferred method of pruning with minimal heading or shearing.
 - Slow release and/or organic fertilizing on an as-needed basis, possibly as indicated by a soil analysis.
 - Irrigation scheduling based on weather, whenever possible, and drip irrigation where feasible.
 - Recycling of plant debris by composting and/or maintaining a minimum 2-inch layer of mulch under all trees, shrubs and groundcovers and a minimum 3-inch layer in all open areas is strongly encouraged.
 - Allowing leaf drop to become part of the mulch layer in tree, shrub and groundcover areas.
- Plants and trees should be selected to minimize waste by choosing species that are appropriate to the microclimate, species that can grow to their natural size in the space allotted them and perennials rather than annuals for color. Also native low biogenic VOC emitting drought-tolerant plants that require no or minimal watering once established are preferred. To minimize heat island effects, shade trees are preferred.
- Hardscapes and landscape structures constructed of recycled content materials are encouraged. Concrete substitute, such as rosin emulsion paving, are encouraged for walkways.
- Requests for Proposals and contracts for landscaping services will contain contractors' sustainable practice requirements in their entirety.

Reducing Waste

- Require vendors to recycle discarded lighting fixtures and lamps appropriately.
- Institute practices that reduce waste and result in the purchase of fewer products whenever practical and cost-effective. Possible options include:
 - electronic communication instead of printed media;
 - double-sided photocopying and printing;
 - recyclable or washable and reusable dishes and utensils;
 - rechargeable batteries;
 - streamlined and computerized forms;
 - electronic and "online" publishing via CD, Internet and intranet;
 - "on-demand" printing of documents and reports as they are needed and where electronic publishing would be unsatisfactory;
 - leasing long-life products when service agreements support maintenance and repair rather than new purchases;
 - sharing equipment and occasional-use items;

- choosing durable-rather than disposable-products;
- reducing product weight or thickness when effectiveness is not jeopardized in products such as, but not limited to, paper and plastic liner bags;
- buying in bulk, when storage and operations exist to support it and balanced with the costs of inventory management; and
- reuse products such as file folders, storage boxes, office supplies, and furnishing.
- Expand the current recycling program from paper, bottles, and cans, to include batteries, CDs, and other commonly used items.
- Purchase products with the highest post-consumer content practical, but no less than the minimum recycled content standards established by EPA, such as those for printing paper, office paper, janitorial paper, construction, landscaping, miscellaneous, and non-paper office products.
- Require vendors to eliminate packaging or use the minimum amount necessary for product protection, to the greatest extent possible.
 - Packaging that is reusable, recyclable or compostable is preferable, when suitable uses and programs exist. This could include the use of biodegradable food packaging, including biodegradable paper products meeting Green Seal's GS-01 standard for Tissue Paper and GS-09 standard for Paper Towels and Paper Napkins.
- When possible, consider life cycle analysis for school purchases.
- To the extent practical, the building's organic waste, including yard clippings and food matter, should be disposed of as green waste or composted in order to minimize landfill disposal.

Purchasing Environmentally Preferable Products

- To the extent practical, no cleaning or disinfecting products (i.e. for janitorial or automotive use) should contain ingredients that are eye or skin irritants, neurotoxins, carcinogens, mutagens, or teratogens. These include chemicals listed by the U.S. EPA or the National Institute for Occupational Safety and Health on the Toxics Release Inventory and those listed under Proposition 65 by the California Office of Environmental Health Hazard Assessment.
 - If products must be used that contain these materials, only the minimum amounts should be used and the product must be disposed of properly.
- To the extent practical, cleaning or disinfecting products should be biodegradable, be in concentrated form, be non-aerosol, have a recyclable container made of plastic numbers 1 or 2, and meet Green Seal's GS-37 standard for Industrial and Institutional Cleaners. Surfactants and detergents should not contain phosphates.
- ECS will seek to purchase products and equipment with no lead or mercury whenever possible, including automotive vehicles, equipment, and lighting. For essential products that contain lead or mercury, preference could be given to those products with lower quantities of these metals and to vendors with established lead and mercury recovery programs.
- Future contracts for lunch services should include specific requirements related to green operations.
- The use of chlorofluorocarbon-containing refrigerants, solvents, and other products should be phased out to the extent feasible.

- Fire suppression systems should not contain any ozone harming chemicals (e.g. halon).
- Reducing or eliminating products that contribute to the formation of dioxins and furans, such as:
 - Purchasing paper, paper products, and janitorial paper products that are unbleached or that are processed without chlorine or chlorine derivatives, whenever possible. Process chlorine-free (PCF) paper is preferred. Elemental chlorine-free (ECF) process should include enhanced processes such as extended and oxygen delignification whenever possible. Vendors and successful bidders should supply certification of the paper's chlorine-free processing status from either a recognized certifying organization or the pulp and paper manufacturer.
 - Prohibiting purchase of products that use polyvinyl chloride (PVC) such as, but not limited to, binders, flooring, and lab supplies, whenever practical.
- To the extent possible, do not procure wood products such as lumber and paper that originate from forests harvested in an environmentally unsustainable manner. When possible, give preference to wood products that are certified to be sustainable harvested by a comprehensive, performance-based certification system, such as the Forest Stewardship Council.

Other

- When roof refurbishment is necessary, consider heat island effects and whether the District roof could comply with Title 24 regulations for Cool Roof requirements.
- Consider cooler paving materials when the parking lot needs repaving.

FLEETS AND TRAVEL

- Continue to replace existing traditional gasoline vehicles with automobiles that use clean fuels or alternative energy sources to maximize the fuel efficiency and reduce carbon intensity of our vehicle fleet.
- Continue to reward ridesharing and alternative transportation modes by employees and try to increase average vehicle ridership by school employees.
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- Seek employee suggestions and implement, when feasible.

Miscellaneous

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