# Washington & Jefferson College Climate Action Plan

Founded in 1781 as one of America's revolutionary colleges, Washington & Jefferson College is a private liberal arts institution whose students are dedicated to becoming people of uncommon integrity, competence, and maturity who are effective lifelong learners and responsible citizens, and who are prepared to contribute substantially to the world in which they live. To help our students prepare for the opportunities and challenges presented by climate change, in 2008 W&J became a signatory to the American College and University Presidents Climate Commitment, joining nearly six hundred other institutions that are educating their communities about climate change while moving towards zero net greenhouse gas emissions.

The College's efforts to reduce its net greenhouse emissions is founded upon the scientific consensus that global warming is occurring, that it is largely due to increasing greenhouse gas emissions, that the potential harm is great, and that the benefits of reducing global warming far outweigh the costs.

# **Implementation**

The Climate Action Plan is carried out by the Campus Sustainability Committee, which was formed in 2008 by our College president to lead the College's efforts to reduce its impacts on the environment. The Committee is composed of faculty, staff, and students from a broad spectrum of the College community.

The Plan is informed by the culture of the College, by the scientific consensus on climate change, and by the best practices of signatory institutions to the American College and University Presidents Climate Commitment that are comparable to W&J.

# **Greenhouse Gas Reduction and Mitigation**

W&J is reducing its net greenhouse gas emissions through programs that have a broad range of benefits for the environment and for the development of our students.

#### **LEED-Certified Swanson Science Center**

In January 2010 we opened our first Leadership in Energy and Environmental Design (LEED) building, the Swanson Science Center, whose gold-level LEED certification was awarded in spring 2012. LEED is a nationally recognized certification program for the design, operation and construction of high-performance green buildings, ensuring that they are environmentally responsible and provide a healthy work environment. The Swanson Science Center is a model for the renovation of existing buildings and the design of new ones.

# **Emission Reduction from Electricity and Natural Gas Usage**

In 2008 the College began purchasing annual wind-power offsets for fifteen percent of its electricity purchases. We increased the offset to twenty percent in 2010, and to fifty percent in

#### 2011.

The College raises thermostats on air-conditioning systems and takes similar electricity-reduction actions during daily peaks in regional electricity demand, thereby reducing both costs and air pollution, and lessening the need of our regional electricity producer to increase its generating capacity.

All the computers the College purchases are Energy Star certified, with the latest generation of computers using up to seventy percent less power than previous generations. All of the servers we purchase are energy efficient. We enable power-saving features before putting new computers into service, and we shut down all computers in computer labs during long holidays.

We reduced the number of file servers the College requires by linking classroom-based computers into networks that share software and media files. We are considering creating similar systems for computers used in offices and computer labs.

We have reduced our electricity consumption by replacing the web servers that had hosted our student e-mail and Sakai course website systems with shared time on much more energy-efficient off-site servers. We are considering doing the same with other web-based applications.

We replaced conventional light bulbs with energy-efficient ones, and affixed "turn off when not in use" stickers on all public light switches.

As alterations and repairs are made to buildings we install insulation, energy-efficient window systems, low-flow toilets, and other environmentally-responsible upgrades.

The Sustainability Committee's web page provides comprehensive instructions on the recycling of a wide variety of materials as well as instructions for the electronic submission and grading of student essays. <a href="http://wiki.washjeff.edu/display/Sustain/Home">http://wiki.washjeff.edu/display/Sustain/Home</a>

We are considering installing timers or motion sensors on light fixtures and vending machines, and conducting an audit to determine if the number, type, and operational settings of vending machines can be modified to reduce energy consumption.

#### **Photovoltaic Power Generation**

Under the initiative and with funds provided by College benefactor Dr. John Swanson the College installed a five kilowatt array of photovoltaic cells in 2012. The student team that manages the array conducts experiments to determine optimal operating practices.

#### **Materials Exchange**

We have a web-based Materials Exchange on which faculty, staff, and students list surplus goods that others are free to take, such as furniture and electronics.

## **Recycling and Materials-Usage Reduction**

We recycle glass, metal, plastic, and paper products to reduce net greenhouse emissions and other environmental problems.

We have installed recycling bins throughout the campus.

In May 2016 we installed security bins in office and classroom buildings for the collection of tests and other confidential materials that are then shredded and recycled.

Before students execute print commands a notice appears on their monitors that tell them the number of sheets of paper that will be consumed and the total number of sheets they have printed thus far during the semester. This system reduced student printing by seven percent during its first year of operation.

We encourage faculty to allow students to submit essays electronically when doing so is consistent with pedagogical objectives, and to use double-sided printing when printed versions are required.

The paper used in computer labs and by our Information Technology Services offices is from recycled material, and recycling bins are installed near all printers.

We keep in use computers that would otherwise be discarded by linking them to data and program modules resident on more advanced computers.

We sponsor the collection of computers, televisions, and other electronic equipment for responsible recycling.

## **Purchasing and Food Services**

The College purchases goods and services from local producers when practical.

The College is playing a leading role in the revitalization of the City of Washington. We want it to become one of the nation's emerging "Livable Small Cities" that offer environmentally and socially attractive alternatives to residency in dispersed suburbs and commutes to distant places of work and leisure.

We reduced food waste and consequent methane emissions through the removal of trays from our dining facilities.

We employ an environmentally-responsible food service provider, Bon Appetit.

- V Menus are built around seasonality and the availability of fresh local ingredients, with at least twenty percent of ingredients sourced from small farms, ranches, and food crafters within 150 miles of campus. When possible, fruits and vegetables are purchased from local producers who use sustainable organic practices.
- V Food waste is minimized by preparing it in small batches. Edible leftovers are delivered to community centers by student and faculty volunteers.
- V Takeout containers are reusable or are made with post-consumer fibers.
- V Bon Appetite's Locally Crafted Program supports small food businesses that focus on environmentally friendly ingredients and socially responsible hiring practices.

- V Bon Appetite uses eggs from cage-free chickens, and chicken and turkey that is raised without the routine non-therapeutic use of antibiotics.
- V Milk and yogurt are produced from cows that are not given growth hormones.
- V Ground beef is from cows that are raised humanely, and without the use of growth hormones or non-therapeutic antibiotics. Other meats are preferentially purchased from producers that do not use non-therapeutic antibiotics. Pork is purchased from producers that do not confine sows to gestation crates for their entire pregnancies.
- V Seafood is purchased from sources that adhere to the Monterey Bay Aquarium's Seafood Watch program. Tuna is purchased from sources that do not use fish-aggregating devices.
- V Tomatoes are purchased from producers whose workers belong to the Coalition of Immokalee Workers.
- V Bon Appetit is a member of the Equitable Food Initiative, which strives to give farm workers a greater voice, to promote environmental stewardship, and to produce safer food.

Dining facilities provide the option of using reusable rather than single-use takeout containers.

In September 2019 we expect to resume composting some food waste.

We are reducing the purchase of bottled water, which entails greenhouse gas emissions during manufacture and transport, by installing spigots dispensing filtered water, and by replacing water fountains with filtered-water dispensing stations.

#### Landscaping

In 2012 Biology professor Jason Kilgore founded the Campus Arboretum. In 2013 the environmentally-responsible tree management and related educational activities that are led by the Arboretum won the College designation as a Tree Campus USA by the Arbor Day Foundation.

We carry out tree-planting and educational events during our annual Arbor Day observance.

We monitor the health of all of the College's nearly 1,200 trees, from eighty-four species. The location of all trees and information about them is on an interactive map on the Arboretum's website, http://www.washjeff-arboretum.com/

We have placed species-identification labels on more than 930 trees.

We have replaced trees that were dying from invasive insect infestations with species that are environmentally robust.

We have replaced many annual flowers with perennials.

We intend to replace some lawns with plants that provide food and habitat for birds and

butterflies. These areas will not require mowing, fertilization, or weed and insect control.

### Vehicle Use, Transportation, and Travel

We promote walking, bicycling, and carpooling to campus to reduce the use of motorized vehicles. We offer paper placards that program participants affix to their office or dorm doors to encourage others. We have provided an enclosed area for bicycle storage and have installed bicycle racks.

The College encourages faculty, staff, and students to patronize businesses in downtown Washington, several blocks from campus, to reduce reliance on cars.

Our Information Technology staff reduced their travel-related carbon emissions by increasing the proportion of web-based as opposed to on-site training classes that they attend.

## **Education and Communication Initiatives**

As an educational institution that recognizes our shared responsibility to act as wise stewards of the Earth we consider the most important goal of our climate initiative to be the instilling in members of our College community an understanding of the causes and potential consequences of global warming and of the constructive actions each of us can take. We consider every member of our College community to be a potential change agent.

The Sustainability Committee encourages students to initiate and lead new programs.

Students in Environmental Studies and other courses regularly engage in research and service projects that support the College's efforts to be environmentally responsible. Students present their projects to the College community during the annual student research poster session, and at regional and national conferences.

Our initiatives to move away from non-biodegradable food containers and the use of bottled water are part of a broader effort to transform the W&J culture into one that embraces ecologically-responsible behavior. Others include making it second nature to recycle, to turn off lights, to close windows, to turn down thermostats, and to report such things as dripping faucets.

We sponsor student attendance at conferences and other events that are supportive of environmental and educational initiatives, and public lectures held on campus.

Students may elect to live in a Sustainable Living Theme House.

We sponsor a wide range of activities during the annual Earth Month in April.

Green events that are conducted in the fall semester include campus clean up events and information sessions regarding the College's recycling practices.

We hold an annual Sustainable Sushi event to educate the College community about sustainable seafood.

We have a poster campaign that explains why W&J is committed to reducing its greenhouse gas

emissions, what the College is doing to achieve it, and how those efforts benefit the College, our students, and the Earth.

We have posted on our Wiki page a curricular materials guide for instructors to use if they choose to incorporate aspects of climate change, environmental protection, and sustainability, in their courses.

We intend to work with our Office of Alumni Relations to create a program that would partner students with alumni in environmentally-related careers, and to develop a permanent speaker series regarding environmental issues. Alumni and local professionals already speak to our students about sustainability issues in several Environmental Studies and Biology courses.

We extend our educational efforts to the surrounding community by welcoming our neighbors to lectures and other presentations. We expect to create lectures and other presentations specifically designed for our neighbors, to be conducted on campus and at such off campus locations as the public library. The College's weekly syndicated FM radio program *Earth Talk* focuses most of its show on the nexus between climate change and sustainable development.

Our Wiki page provides an annotated list of curricular resources, instructions for the electronic submission and grading of student essays, copies of some of our climate change posters, and other resources: <a href="http://wiki.washjeff.edu/display/Sustain/Home">http://wiki.washjeff.edu/display/Sustain/Home</a>

# **Embracing the Future**

W&J's Climate Action Plan is an integral part of our College Mission. The Plan guides the College's efforts to contribute to the global effort to ensure a better future, while helping our students thrive.

Sustainability is central to the wisdom that embraces opportunities to ensure a better future. W&J is committed to using resources in ways that enhance the ability of future generations to pursue meaningful lives in a healthy environment.

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