

Windward Community College Sustainability Plan

1. Introduction

Windward Community College is dedicated to innovation and leading the Koolaupoko and Koolauloa Communities towards a more sustainable path by being an example of sustainable business practices, developing innovative research, training students, and collaborating with community organizations. This plan articulates a series of concrete goals to work towards this goal. This plan is organized around the UH System-Wide sustainability plan and describes how Windward Community College will implement the mandates and vision provided by the UH Executive Policy 4.202 on Sustainability (All italics are quotes directly from UH Executive Policy 4.202). The plan also seeks to collaborate with existing projects and programs like the Hawaii Green Business Program and Blue Zone Work Program. (Matrix in appendix).

2. Purpose

The purpose for this plan is to clearly establish the pathway to making Windward Community College more sustainable through data-based performance measures in each of the five areas outlined by the UH system-wide sustainability plan.

- Operations
- Curriculum
- Research and Scholarship
- Campus and Community Engagement
- Cultural Connections

3. Sustainability Plan

3.1 Operations

“The University is committed to continuous improvement in reducing its negative environmental impact and becoming ecologically restorative in buildings, climate, food systems, energy, grounds, purchasing, transportation, waste and water.”

Operations is one of the key areas for sustainability because much of the resources consumed by the University are during its day to day operations. In order to effectively reduce energy consumption, water use, and waste production we need to monitor and evaluate current practices and then find constructive ways to reduce the consumption of energy, water, and raw materials while simultaneously reducing waste. We will adopt the Hawaii Green Business Program standards and use them to conduct a review of current practices at Windward Community College while also making recommendations to improve. Operations can be divided into several key areas including energy production and greenhouse gas production,

Energy Production and Greenhouse Gas

1. *Commit to minimize greenhouse emissions and become carbon neutral by 2050.*

2. *Reduce fossil fuel sourced energy through increased efficiency and use of renewable energy sources. The University shall meet or exceed the following energy reduction and renewable targets relative to a 2008 baseline: 10% increase in efficiency and 10% renewables*

5. Develop an energy management system that will inform the University community on the progress toward the energy and carbon neutrality goals.

In order to achieve these goals WCC will:

- Conduct ongoing research to understand the patterns of energy consumption and identify ways to reduce usage and increase efficiency at WCC.
- Adopt, implement, and review energy reduction strategies suggested in Hawaii Green Business Program Checklist sections F, G, and H and others as suggested by the above mentioned research.
- Design and implement an educational campaign with faculty, staff, and students to improve energy efficiency and communicate about campus wide sustainability initiatives.
- Work on a system-wide level to increase solar and other green energy production sufficient to offset entire campus energy usage.

Building and Renovation

3. Adopt building and design standards for new University construction and renovation that are grounded in energy and design principles consistent with Hawai'i's climate and conditions.

4. Ensure that all new construction and major renovations will achieve a minimum of LEED "Silver" designation and will strive for LEED "Gold."

In order to achieve these goals WCC will:

- Conduct research to determine the relative efficiency of existing structures and potential improvement for renovations and new structures.
- Work to retrofit existing buildings to be more energy efficient.
- Include LEED Certification as an integral component of any new construction and major renovations at WCC.
- Work with building contractors who are capable and informed about sustainable construction methods.

Solid Waste and Recycling

6. Establish metrics and reporting mechanisms to track total solid waste generated, waste source reduction, recycling, re-use of materials, green waste, food waste, electronic waste, use of single use plastics and bioconversion

In order to achieve these goals WCC will:

- Conduct research to determine the extent of recycling currently on campus and the revenue potential of increased recycling programs.
- Provide easy access to recycling for all types of materials recyclable in Hawaii for students, faculty, and staff.
- Adopt, implement, and review the Hawaii Green Business Program Checklist sections C,D and section J.

Water Conservation

7. Establish metrics and reporting mechanisms to track water conservation, water efficiency and best management practices methods for rainwater/stormwater storage, recharge and re-use on the campus and wastewater management to reduce effluent discharge into local surface water supplies.

In order to achieve these goals WCC will:

- Research current water usage, leakage, and potential areas for increased efficiency and conservation.
- Expand and develop rain gardens and water catchment systems to reduce run-off
- Adoption and review of Hawaii Green Business Program Checklist sections I and K.

Transportation

8. Establish metrics and reporting mechanisms to track fuel efficiency and sustainability for campus fleets.

9. Establish policies and programs to reduce single occupancy vehicle trips to campuses, including support for optional modes of transportation and bicycle and pedestrian friendly campuses and communities.

In order to achieve these goals WCC will:

- Research the current transportation networks and obstacles to sustainable transportation networks.
- Provide bike parking, access to showers, and other incentives to encourage biking and walking.
- Create a virtual space to connect and support ride-sharing and carpooling among faculty, staff, and students.
- Work with state mass transit organizations to improve bus services to WCC and work to make current bus routes more student friendly.
- Adoption and review of Hawaii Green Business Program Checklist section L.

Food Production and Services

11. Establish a tracking mechanism and establish targets and milestones for the implementation of sustainable food service practices, including where financially feasible, purchasing local and sustainable food products.

In order to achieve these goals WCC will:

- Create for a policy for sub-contractors on campus that prioritizes sustainability and local food production.
- Create systems such as composting and worm bins to reduce or eliminate food waste.

Green Purchasing Policies

12. Establish a Green Purchasing Policy for all supplies, equipment and building materials (including computers, cleaning products, paper and other material goods) which strives to integrate sustainability criteria into vendor selection processes

In order to achieve these goals WCC will:

- Adoption, implementation, and review of Hawaii Green Business Program Checklist section E.

- Check with Media Technology and Computing Technology to advise on green purchasing and to avoid purchasing duplicates.

3.2 Curriculum

“The University will encourage, facilitate and support curriculum development that advances the principles of sustainability and enables cross-campus collaborations that integrate teaching and research with solutions at the campus and community levels.”

The purpose of a University is to teach students to think about the world in a more critical, reflexive, and purposeful way. Windward Community College is committed to building ecological literacy, that is, teaching students fundamental principles of sustainability across a wide range of disciplines. To this purpose, a Sustainability Curriculum Committee has been established to promote the creation of s-designated courses and train faculty on how to incorporate sustainability into their curriculum in meaningful ways.

Curriculum and Program Development

1. The development of appropriate new courses and programs related to sustainability that articulate across campuses.

2. The integration of sustainability principles into existing curricula where appropriate

In order to achieve these goals WCC will:

- Establish a Sustainability Curriculum Committee under the Faculty Senate and connected to the Campus Sustainability Committee.
- Create a broad offering of sustainability designated course across campus departments and curricula.
- Encourage the creation of interdisciplinary learning communities that connect two classes across disciplines around themes in sustainability. These learning communities will be approved by the Sustainability Curriculum Committee.
- Develop an Academic Subject Certificate or Associate Degree in Sustainability with different areas of concentration that complement other offerings across the UH system and could potentially include eco-tourism and recreation, resource management, non-profit management, or environmental science that would feed into relevant industries and baccalaureate programs.

Co-curricular and Community Based Learning

3. The development of campus and community based sites for laboratory or field-based learning related to sustainability, including engagement by students in the University’s operational improvements in sustainability.

4. The incorporation of sustainability practices and learning into student life and other co-curricular activities.

In order to achieve these goals WCC will:

- Expand and develop existing programs like SENCER, PaCES, Marine-Option program, service learning and others to promote hands-on work and research in sustainability.
- Expand the number of courses using campus ecosystems and sustainability initiatives into course content.
- Develop partnerships with relevant community environment organizations and relevant industries to create internships and volunteer opportunities for students.
- Create an online database to communicate jobs, internships, fellowships, undergraduate and graduate programs in sustainability.
- Expand, fund, and develop the Student Sustainability Hui.

Professional Development Opportunities

5. The development of professional development opportunities for faculty and students related to curriculum development and delivery in sustainability

In order to achieve these goals WCC will:

- Create two part time student sustainability employment positions to help implement the WCC Sustainability Plan.
- Create a new position or alter an existing position to create a counseling and advising position to advise students on the newly created sustainability program, s-designated courses, articulation to four year programs, and employment related to sustainability.
- Create a student position on the sustainability curriculum committee and campus wide sustainability committee.
- Work with Staff Development Committee to incorporate sustainability initiatives into trainings and workshops for students, faculty, and staff.

3.3 Research and Scholarship

“The University will encourage, facilitate and support basic and applied research initiatives that advance the principles of sustainability and enable cross-campus collaborations that integrate teaching and research with solutions at the campus, community and global levels.”

Critical to teaching at any college is research and scholarship. Although a community college is principally focused on teaching, we will include a research agenda that complements teaching practices and gives students opportunities to work with faculty on meaningful projects that are connected to learning about and solving local environmental challenges.

Promote Sustainability Research and Scholarship

1. Establish metrics to monitor and promote increased research and scholarship in sustainability at all levels.

2. Professional development and collaboration opportunities for faculty and students in sustainability scholarship.

In order to achieve these goals WCC will:

- Create research courses that give credits/compensation to both faculty and students for doing undergraduate research.
- Create an online database of current sustainability research being done by students and faculty at WCC as well as conferences and funding opportunities for this research
- Provide training to students and faculty to get sustainability grants to conduct research.
- Create mini-grants for students to develop innovative sustainability research, technologies, and projects.

3.4 Campus and Community Engagement

“The University is committed to the engagement of students, faculty, staff and the local community across disciplines to prioritize and implement sustainable practices. The classroom, the campus and the community comprise an interconnected educational environment.”

Development of Partnerships with Community Organizations, Private Sector, and other educational institutions

1. The development of mutually beneficial partnerships with community organizations, non-profit organizations, the private sector, and other colleges and universities in Hawai‘i and beyond to advance sustainability initiatives.

2. The creation of internship opportunities for students with external partners and collaborators.

In order to achieve these goals WCC will:

- Adopt, implement, and review of Hawaii Green Business Program Checklist section M
- Create speakers series, demonstrations, and workshops to bring community members and organizations to campus.
- Work with service learning organization to expand and develop service learning opportunities in sustainability, on campus to implement the sustainability plan and with off campus organizations.
- Develop and fund internship opportunities for students with industry, government, and non-profit organizations.
- Communicate with sustainability industries to develop curriculum and programs that meet local economic needs.
- Work with outside organizations to reorganize and develop the sustainable agricultural programs at WCC.

Promote Sustainability in K-12 Education

3. Supporting sustainability and related science education initiatives in Hawai‘i’s public schools.

In order to achieve these goals WCC will:

- Use early college courses to introduce sustainability concepts and s-designated courses into high schools in Windward Oahu.
- Promote sustainability sciences into existing high school programs like Hawaii State Science Fairs, History Day, Speech and Debate, Model UN, and others.
- Strengthen connections with high school agricultural programs and sustainable agriculture at WCC.

3.5 Cultural Connections

“Recognizing the unique and respected Hawaiian host culture, the geographic remoteness of the islands and the rich diversity of cultures in Hawai‘i, the University will create a sustainable living and learning environment that honors its cultural foundation and addresses the challenges and opportunities of its location. The University will proactively form working relationships with external partners to understand community, workforce and business needs to bring higher education, research and service outreach value to the community, and to help shape economic structures, employment opportunities and integrated, 21st century sustainable solutions for Hawai‘i, the region and beyond.”

Windward Community College has been recognized as one of the most diverse undergraduate institutions in the country. That diversity is a valuable source of cultural knowledge, practices, and values that can contribute to building a more sustainable institution. Especially important to creating a culture of sustainability on campus is recognizing, valuing, and promoting knowledge of Hawaiian culture and practices. Through support of the existing Hawaiian studies and language courses and building upon these programs we can enhance sustainability efforts.

Create a Campus Community that Values Cultural Diversity and recognizes Hawaiian Cultural Contributions to Sustainability

1. Embrace the culture, wisdom and fundamental values of the indigenous people of Hawai‘i to advance sustainability.

2. Cultivate an inclusive university community with varied characteristics, ideas, cultures and world-views through which our students, faculty and staff celebrate difference and respect tradition and wisdom.

In order to achieve these goals WCC will:

- Include a representative from Ke Kumu Pali on the Campus Sustainability Committee
- Work to get courses related to Hawaiian cultural values of sustainability as s-designated courses

Create a Hawaiian Sense of Place on Campus

10. Support imparting a Hawaiian sense of place on all campuses through landscaping, signage and the creation of gathering spaces to enable social and cultural sustainability of campus communities.

In order to achieve these goals WCC will:

- Expand, support and develop Hawaiian cultural initiatives on campus related to malama ‘aina and malama kai such as the Hawaiian Garden, Hale o Kahoe, Polynesian voyaging, etc.
- Promote public artwork such as murals, sculpture, and architecture that teach Hawaiian cultural values and knowledge.
- Promote events that teach and communicate about culture and sustainability.
- Create a walking tour on campus that incorporates the history, cultural knowledge of place, botanical collections, and artworks.
- Prioritize the inclusion of native and canoe plants in campus landscaping.

4. Planning, Coordination, and Oversight

4.1 Campus Committee on Sustainability

To achieve this purpose a permanent Campus Sustainability Committee will be established to plan and implement the WCC Sustainability Plan to create a more sustainable campus. The Committee will periodically update and revise the Plan as needed to encourage progress. In order for the Campus Sustainability Committee to be effective we recommend the composition of this committee should include:

Other members of the Committee will include:

VC Administrative Service or designated rep.
Cultural Connection Liaison from Ke Kumu Pali
Community and Campus engagement Liaison
Chair of Sustainability Curriculum Committee
President or Representative of Student Sustainability Hui
Student Sustainability Interns

From the members of the committee a chair will be selected by a simple majority vote. In addition to the members for the Committee there will be part-time paid student internships to support the implementation of the plan and provide a valuable mentorship opportunity for students to participate in the implementation of sustainability across the campus. These student workers will help research current campus sustainability needs and help to implement the plan.

The committee will work to fully implement the WCC sustainability plan and annually revise and update the plan as needed to provide the guidance and direction for continued improvement in sustainability. Other contractors and representatives of other initiatives will be invited as necessary to broaden the work of the committee. The committee is also open to anyone who wants to come and participate and sub-committees can be created as needed to focus on specific issues.

4.2 Sustainability Curriculum Committee

The Sustainability Curriculum Committee will include a volunteer representative from each of the academic departments (Humanities, Language Arts, Mathematics and Business, Natural Sciences, Social Sciences), Office of Academic Support, Office of Students Affairs, the Office of Career and Continuing Education, and a student member with a chair selected from among the members by a simple majority. The Chair shall serve for two years with the possibility of renewal by a vote. Members shall serve for one academic year or as determined by their respective departments. The Sustainability Curriculum Committee will function as a committee under the direction of the Faculty Senate but will also report the Campus Sustainability Committee.

The primary responsibility of the Sustainability Curriculum Committee is to encourage, support, and train faculty in increasing the focus on teaching students about sustainability across the curriculum at Windward Community College. These responsibilities include

1. Creating and periodically reviewing and revising an efficient and transparent process for creating and assessing s-designated courses,
2. Encouraging, training, and recruiting faculty to propose and teach these courses,
3. Developing other initiatives to increase instruction in sustainability at Windward Community College.

4.3 Operations

The Campus Sustainability Committee will be responsible for overseeing the implementation and development of the WCC Sustainability Plan. They will work closely with existing managers and workers to develop, implement, and monitor sustainability initiatives.

Funding for Sustainability Initiatives

An essential component of this position will be identifying funding opportunities for expanding sustainability initiatives. These funds should come from diverse sources including loans, grants, and system wide funding opportunities. As a way to incentivize, expand, and develop these initiatives the savings that result from sustainability initiatives should be reinvested through the UH Green Revolving Fund in sustainability initiatives. Proposals initiated by the committee should be evaluated in terms of their financial impact in both the short and long-term.

4.4 Mechanisms to track and report data for indicators

Student sustainability interns will be responsible to generate mechanisms to track data on different indications of sustainability related to the Campus Sustainability Plan. They will conduct research to understand the current situation and then use this research to implement solutions. Work with Institutional Research Team to track and monitor sustainability indicators.