FAMU [SUSTAINABILITY INSTITUTE]

FLORIDA AGRICULTURAL AND MECHANICAL UNIVERSITY
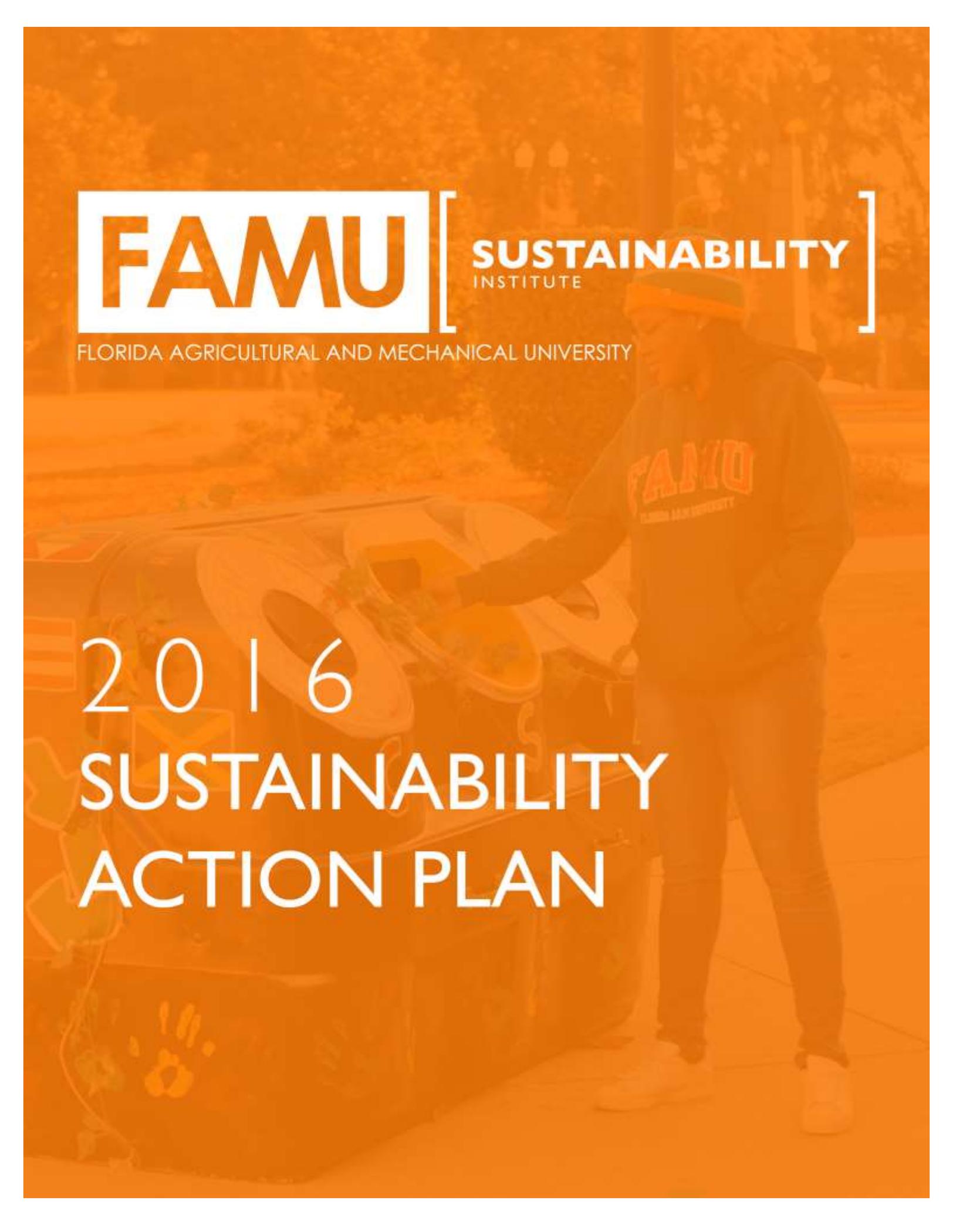
2016
SUSTAINABILITY
ACTION PLAN

CONTENTS

INTRODUCTION

Sustainability is a strategic priority for Florida A&M University. One that provides an organizing principle for promoting innovations in teaching and research, saving money and resources, and positioning FAMU as a best-in-class university engaged with addressing urgent challenges. As a campus community, we are embarking on a journey to become a model institution that promotes stewardship of economic, social, and ecological resources while preparing our students with essential skills for the global economy.

Seizing the opportunity to address urgent sustainability issues is a reflection of the university's commitment to exercise societal leadership and to enhance its own resilience as well as that of the communities of which it is a part. Many leading thinkers identify making strides toward improved sustainability as a leading challenge of our age and a moral responsibility. Lively academic engagement with the many aspects of sustainability from local to global scales opens a wide set of opportunities for innovative teaching, research, and service. Together, our efforts will advance sustainability knowledge and practice in order to positively impact our campus, community, and the world.

This Sustainability Action Plan was created with broad participation from campus faculty, staff, and students to provide an initial roadmap for how the holistic concept of sustainability will be integrated into academic, operational, and engagement pursuits at the university. The plan is intended to align with FAMU's newest Strategic Plan and Campus Master plans. While oriented to address sustainability comprehensively, the plan also includes recommended actions by which FAMU will work to become a more environmentally resilient campus. This plan is intended as a living document that will be expanded, revised, and updated on an ongoing basis.

BACKGROUND

The sustainability mission of our university is consistent with its designation as a Land-Grant institution in 1890. The interrelated elements of sustainability have been hallmarks of our university since its inception and remain vital to its future. Florida A&M's commitment to sustainability can be traced throughout its history as an institution founded to advance opportunities in higher education for African Americans and to disseminate knowledge about best practices for agriculture and land stewardship. Today, FAMU is a Carnegie classified doctoral research institution serving over 7,400 full-time equivalent (FTE) students studying across 98 degree programs and supported by over 1,700 faculty and staff.

Along with a continuing commitment to its traditional foundations, the university has taken bold steps to assume leadership for addressing sustainability teaching and research, as well as global environmental security as demonstrated through campus operations. In January 2014, under the direction of Dr. Larry Robinson, FAMU signed the American College and University Presidents' Climate Commitment (ACUPCC), since renamed The Carbon Commitment.

In April 2014, the Sustainability Institute, which was charged with supporting and expanding university wide sustainability research, teaching, and action.

CAMPUS GREENHOUSE GAS EMISSIONS

Tracking energy use is a starting point for making management decisions and behavioral changes to achieve the ultimate goal of net zero greenhouse gas emissions. The goal will require improved energy efficiency, behavior change among all campus populations, a shift to renewable, non-carbon based energy sources, and carbon sequestration initiatives or purchase of carbon offsets. By implementing measures that reduce greenhouse gas emissions, the university will reduce spending for utilities and other energy-related costs and advance other sustainability goals.

The university conducted its first greenhouse gas (GHG) inventory in Spring 2015 using data for the 2014 fiscal year (July 1, 2013 through June 30, 2014). The report presents an approximation using best available information of FAMU's greenhouse gas emissions derived from an inventory of fossil fuel sources used for heating, cooling and lighting buildings, operating the campus fleet of vehicles, business air travel, and estimates for commuting by students, faculty, and staff. FAMU's total emissions for the fiscal year 2013-2014 were estimated at 118,100 metric tons of carbon dioxide equivalent (MtCO2e).

Employee and student commuting was found to be the biggest source of GHG emissions, contributing an estimated 76 percent of emissions (89,400 MtCO2e), followed by purchased electricity, responsible for 14 percent (16,600 MtCO2e). A lesser proportion of GHG emissions were released through combustion of natural gas to fuel the campus central energy plant (9 percent, 10,600 MteCO2e), followed by a small percentage from operation of FAMU campus vehicles (rounded up to 1 percent), 900 MtCO2e, and air travel (0.5 percent, 600 MtCO2e). The full baseline report is available online at http://sustainability.famu.edu/operations/carbon-footprint

EMISSIONS COMPARISON BY CATEGORY
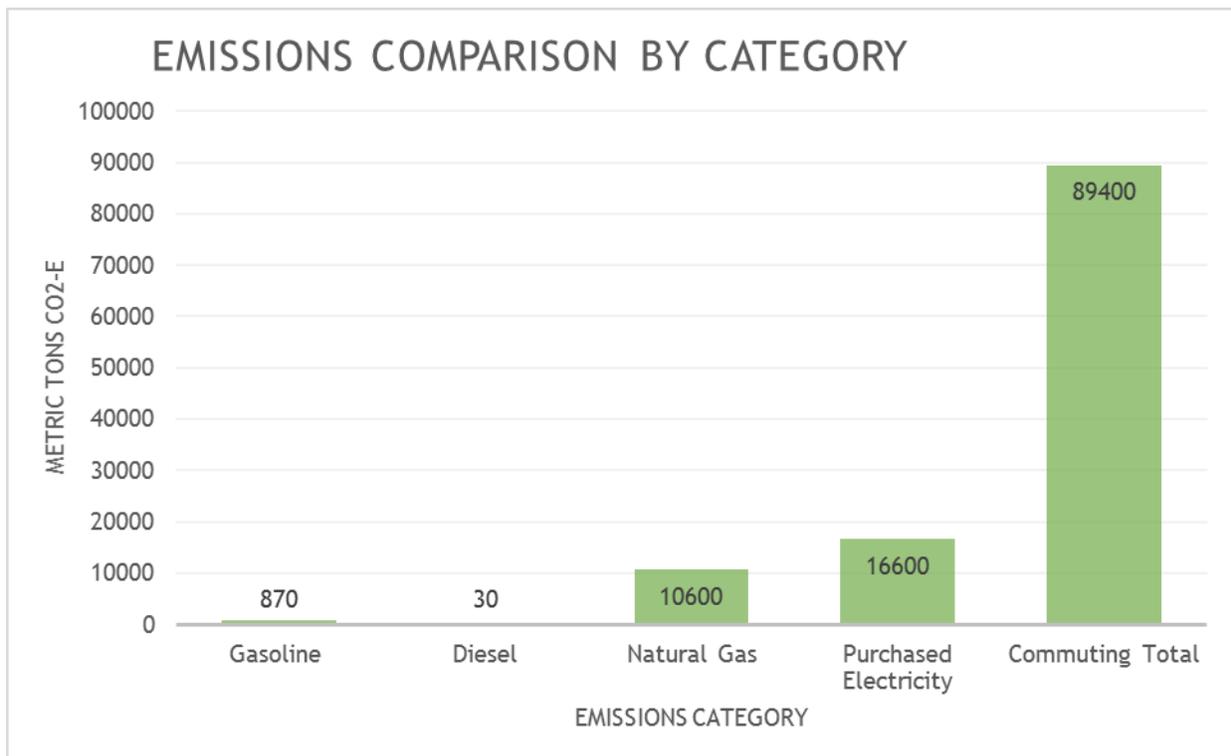
VISION

Recognizing that being responsible stewards of our natural and human resources is socially and financially beneficial for our university and for society as a whole, Florida A&M University will be a resilient, living laboratory of innovations and learning experiences that models responsible resource stewardship and creates solutions for a healthy and livable world.

MISSION

Sustainability is about finding solutions for current problems to ensure the collective survival and prosperity of people, organizations, and the planet, now and in the future. At Florida A&M University, we will advance economically sound, environmentally responsible, socially just and culturally competent solutions in order to achieve our unique mission for present and future generations, locally and across the globe**.**

OVERARCHING GOALS

Each recommended action in this plan addresses one or more of the following broad overarching goals that altogether enhances our mission:

> *Engaged Scholarship* **-** Action, advocacy, and service learning that supports healthy communities

> *Transformative Research* **-** High impact, solutions-oriented research, outreach and extension for human and ecological security

> *Resilient Campus* **-** Environmentally and socially responsible campus operations
> *Green Buildings & Infrastructure -* Best practices for buildings, grounds, and water stewardship
> *Zero Waste -* Material reuse, recycling, and total life cycle cost planning with a long-term goal of no waste
> *Carbon Neutrality -* Alternative energy and transportation to reduce greenhouse gases (GHGs) to net zero
> *Healthy People -* Promotion of healthy campus food systems and lifestyles for students and staff

FOCUS AREAS & OBJECTIVES

Recommendations in this plan emerge from ten focus areas that together present a strategic leadership opportunities for Florida A&M.

FOCUS AREA	OBJECTIVE
Curriculum	Increase sustainability instruction to prepare students leaders, address sustainability challenges, and use the campus as a living learning laboratory for resilient solutions.
Research	Create new knowledge that leads to solutions for social well-being, economic prosperity, and ecological health; position the research enterprise for long-term viability.
Engagement	Integrate sustainability into campus culture and the community at large through service learning, community partnerships, peer-to-peer programs, and other extra-curricular activities.
Better Buildings	Model resource efficiency in campus buildings and energy use, reduce campus greenhouse gas emissions, and move towards renewable sources and carbon neutrality by 2050.
Grounds and Water	Improve the health and biodiversity of campus grounds and landscape, use water efficiently, and minimize stormwater pollution.
Transportation	Provide sustainable transportation options to improve human and environmental health and move reduce campus carbon footprint.
Waste	Eliminate waste by refraining from unnecessary acquisition, and by reducing, reusing, and recycling materials.
Purchasing	Preference the use of environmentally and socially responsible products and services while creating a culture of life-cycle resource planning.
Food	Support healthy and local food systems, pursue low-impact campus dining operations, and strengthen agricultural aspects of the university.
People	Exemplify diversity, inclusion, access, health and safety, and empowerment across the campus, including through shared governance.

RECOMMENDATIONS

Each Focus Area has a series of recommended actions that will help us achieve our mission and overarching goals, along with supporting metrics to help us track progress. Several recommendations include strategies for mitigating greenhouse gases generated from our campus operations. These greenhouse gas mitigating actions are found primarily under recommendations in the Better Buildings and Transportation Focus Areas; however, a host of recommended actions to promote broader campus awareness about sustainability, including the urgency of addressing environmental security, are embedded across all Focus Areas.

In the initial implementation phase of the Sustainability Action Plan, Focus Teams will set interim milestones, prioritize the recommended actions into near-term (1 to 2 years), intermediate term (2 to 5 years) or longer term action frames, and spearhead achievement of initiatives.

CURRICULUM

Objective: Increase sustainability instruction to prepare student leaders, address sustainability challenges, and use the campus as a living learning laboratory for resilient solutions.

Initiative Area	Recommended Actions	Metric
Course content	▪ Increase the number of courses with primary focus on sustainability and with corresponding learning outcomes	# or % courses with sustainability learning outcomes
	▪ Increase the integration of sustainability components in existing courses.	% courses with sustainability focus or components
Degree programs	▪ Create sustainability minors and certificate programs.	# minor and certificates offered
	▪ Incorporate sustainability in general education requirement.	Sustainability included in General Education outcomes
Living/Learning Lab	▪ Use campus operations as opportunities for hands-on sustainability learning.	Focus Team to develop

RESEARCH

Create new knowledge that leads to solutions for social well-being, economic prosperity, and ecological health; and position the research enterprise for long-term viability.

Initiative Area	Recommended Action	Metric
Research Support	▪ Reduce faculty teaching load to enable more time for research on sustainability topics. ▪ Provide technical and staffing support for researchers.	Supportive policies adopted Establishment of technical support programs
Incentives & Finance	▪ Provide financial and recognition incentives. ▪ Adjust indirect costs to return more money to principal investigators and host departments.	Incentive programs established Increase in indirect cost return to PIs and departments
Culture	▪ Create regular research forums focused on sustainability. ▪ Share regular communications about sustainability research. ▪ Promote sustainability research via databases.	# forums # articles distributed Establishment of database
Leadership	▪ Establish consortia and increase the number of centers related to sustainability issues. ▪ Increase publications and opportunities for publication, including on-line journals.	Centers/consortia established # of sustainability related publications
Living/Learning Lab	▪ Use campus operations as opportunities for hands-on sustainability research.	Focus Team to develop

ENGAGEMENT

Integrate sustainability into campus culture and the community at large through service learning, community partnerships, peer-to-peer programs, and other extra-curricular activities.

Initiative Area	Recommended Action	Metric
Student-focused initiatives	▪ Provide volunteer and internships opportunities. ▪ Institute sustainability learning opportunities from orientation onward.	# volunteer and internships opportunities # ongoing campus programs for which sustainability component is added
Employee-focused initiatives	▪ Offer office sustainability and other outreach & training programs ▪ Incorporate sustainability into employee orientation.	# trainings/programs offered Implementation of program
Community-related initiatives	▪ Collaborate with community partners regarding sustainability efforts that address local issues.	# partnership efforts that are either: a) supportive; b) collaborative; or c) transformative
Widely applicable initiatives	▪ Develop communication and outreach initiatives (green map, sustainability Apps, social media, website, etc.).	# channels employed and campaigns conducted
Living/Learning Lab	▪ Educate and engage the university and wider community with campus activities as platform for sustainability advancement.	Focus Team to develop

BETTER BUILDINGS

Model resource efficiency in campus buildings and energy use, reduce campus greenhouse gas emissions, and move towards renewable sources and carbon neutrality by 2050.

Initiative Area	Recommended Action	Metric
Upgrades	▪ Replace aging and inefficient utility equipment.	% of Energy Star equipment
Policy	▪ Implement green building design policy and standards. ▪ Establish a preventive facilities maintenance policy. ▪ Create a low-impact development policy. ▪ Institute an Energy Use Intensity (EUI) standard for various building types.	Adoption of policies Track energy consumption per square foot
Management & Monitoring	▪ Adopt energy efficient building operations standards. ▪ Develop air quality assessment and mitigation strategies. ▪ Install utility monitoring meters and smart controls. ▪ Track progress toward interim goal of 20% reduced energy use by 2020. ▪ Track progress toward goal of carbon neutrality by 2050.	Adoption of standards & implementation Assessment report % of buildings with utility metering Preparation and dissemination of annual GHG reports due to The Carbon Commitment
Living/Learning Lab	▪ Educate and engage the campus community on sustainable buildings.	Focus Team to develop

GROUNDS & WATER

Improve the health and biodiversity of campus grounds and landscape, use water efficiently, and minimize stormwater pollution.

Initiative Area	Recommended Action	Metric
Upgrades	▪ Improve stormwater management systems.	Report on projects implemented
	▪ Provide more trash receptacles where needed to prevent litering that flows into water bodies (FAMU Village, track ponds, retention ponds).	# new receptacles
Education & Outreach	▪ Increase education and outreach, including through student government participation.	# new outreach materials/outlets
Policy	▪ Implement sustainable landscape management policy (site appropriate trees and vegetation, landscape waste minimization, protection of rare species etc).	Implementation of policies
	▪ Create low-impact development policy.	
Management & Monitoring	▪ Comprehensive water monitoring (e.g. testing for pH, chemicals, etc.) in ponds.	Establishment of program
	▪ Inventory trees & other species on campus.	Completed inventory
	▪ Develop and implement landscape enhancement & restoration programs.	Existence of programs to enhance sustainability & biodiversity of landscape
Living/Learning Lab	▪ Use grounds, landscaping, and water systems as a basis for educating and engaging the university community on sustainability.	Focus Team to develop

TRANSPORTATION

Provide sustainable transportation options to improve human and environmental health and move reduce campus carbon footprint.

Initiative Area	Recommended Action	Metric
Alternative Transportation	▪ Increase bus ridership by improving frequency, enhancing bus stops, and increasing awareness including through use of Apps. ▪ Develop a bicycle program with bike share/rental, education, and public relations campaign. ▪ Make physical improvements for walking and cycling (trails, paths, bike lanes, bike racks). ▪ Support Ride Share and/or ZipCar. ▪ Develop an App for FAMU transport.	Bus ridership Development of program elements Inclusion of improvements in budgets and master plan; construction Development of program Development of App
Alternative Fuel/ Fuel Reduction	▪ Offer a telecommuting option for employees. ▪ Offer incentives for students/employees that carpool (preferred parking, reduced parking fees, etc.). ▪ Implement a no-idling policy. ▪ Analyze fleet for fuel economy. ▪ Install electric vehicle charging stations.	Implementation of program/policies Installation of stations Fleet report
Air Travel	▪ Improve reporting process for air travel to obtain better data on air miles traveled.	Revised Travel Authorization Request/instructions
Living/Learning Lab	▪ Educate and engage the university community on sustainability aspects of daily transportation choices.	Focus Team to develop

WASTE
Eliminate waste by refraining, reducing, reusing, and recycling materials.

Initiative Area	Recommended Action	Metric
Research & Administration	▪ Conduct a waste audit for baseline information and estimated economic returns from improved stewardship.	Audit report
Recycling	▪ Hire a full-time staff campus recycling coordinator.	Position established and filled
	▪ Enhance existing recycling program (service expansion, additional outreach/education).	Diversion rate
	▪ Enhance electronic waste recycling and/or reuse programs.	Quantity of items recycled/reused
	▪ Conduct systematic donation programs, including for student move-out.	
Organics recycling	▪ Develop a campus composting program using food waste from campus dining	Pounds organics diverted
Reduction	▪ Reduce purchases of laboratory chemicals and share unwanted purchased chemicals with others.	Quantity chemicals purchased
	▪ Encourage all offices to transition to a paperless operation in cooperation with Purchasing Focus Team	# of fully electronic processes; % reduction in paper procurement
Living/Learning Lab	▪ Educate and engage the university community on refraining, reducing, and recycling to reduce material waste.	Focus Team to develop

PURCHASING
Preference the use of environmentally and socially responsible products and services while creating a culture of life-cycle resource planning.

Initiative Area	Recommended Action	Metric
Social	▪ Adopt small, local and/or minority-owned businesses preference policy. ▪ Request socially and environmentally responsible policies or guidelines from vendors, contractors, and franchisees.	Policies adopted
Environmental	▪ Develop policies or guidelines for: energy-efficient electronics; eco-friendly construction materials & furnishings; use of recycled paper; green cleaning products; recycled/ultra-efficient ink cartridges. ▪ Request environmentally responsible policies or guidelines for vendors, contractors, and franchisees. ▪ Support a transition to a paperless campus.	Policies adopted Track % vendors with sustainability policies
Accounting	▪ Implement Life Cycle Cost Analysis (LCCA) policy & practice and/or Total Cost of Ownership (TCO) in budget planning or vendor pricing.	Policies adopted
Living/Learning Lab	▪ Educate and engage the university community about sustainability aspects of procurement.	Focus Team to develop

FOOD

Support healthy and local food systems, pursue low impact campus dining operations, and strengthen agricultural aspects of the university.

Initiative Area	Recommended Action	Metric
Awareness	▪ Increase campus awareness of local food and connections to area food producers.	Media materials
	▪ Expand opportunities for students to take part in organic farming (internships, tours, volunteering).	Website listing opportunities
	▪ Promote dissemination of nutritional information at campus dining venues (via signage, table tents, etc.).	# campaigns conducted
	▪ Sponsor workshops and class projects to increase awareness of nutritional value of meals/food.	# workshops & projects (list)
Real Food Campaign and Procurement	▪ Sign and implement a "Real Food" Campus Campaign.	Implementation of campaign
	▪ Procure regionally produced food for campus dining, including from FAMU. Agricultural Research & Extension Center in Quincy.	% local/regional food used
	▪ Engage students in developing a FAMU Food Policy.	Adoption of policy
Living/Learning Lab	▪ Use campus dining operations to educate and engage the university community around sustainable food.	Focus Team to develop

PEOPLE
Exemplify diversity, inclusion, access, health and safety, and empowerment across the campus,
including through shared governance.

Initiative Area	Recommended Action	Metric
Student Educational Access	▪ Lobby for federal legislation and policy to help low-income students (e.g., Pell grant funding, FSEOG).	Lobby efforts conducted
	▪ Offer more need-based scholarships.	# need-based scholarships
	▪ Provide funding for a FAMU program to serve students facing hunger and homelessness.	Establishment of program
Faculty and Staff Development	▪ Provide more opportunities for merit increases.	Establishment of program
	▪ Bring faculty salaries to parity with other SUS schools.	Annual salary report
	▪ Start safety incentive or recognition programs.	Establishment of programs
	▪ Prioritize faculty diversity in strategic plan.	Diversity %
	▪ Establish an employee Assembly or Senate and conduct employee town halls.	Establishment of body & town hall meetings
	▪ Incentivize participation in wellness programs (highlight healthcare cost saving).	% employees participating
Campus Community	▪ Promote participation in wellness initiatives including group exercise classes.	Participation levels
	▪ Conduct annual campus climate survey.	Survey
Living/Learning Lab	▪ Utilize human resources operations to model and educate the university community on social responsibility.	Focus Team to develop

IMPLEMENTATION PLAN & STRUCTURE

Florida A&M's sustainability agenda is developed and implemented through a distributed network of stakeholders and a collaborative governance structure spearheaded by the Indaba Council. The Zulu/Xhosa word Indaba means *a gathering of concerned community members to resolve issues.* Established in Fall 2015, the Indaba Council is a diverse group of sustainability champions from various campus departments who develop recommendations and support sustainability action across the university. In February 2016, a campus-wide 'Sustainability Indaba' (summit) convened over a hundred faculty, students, staff and community partners to collaboratively envision and define sustainability at FAMU, and prioritize specific actions to improve sustainability across 10 strategic focus areas.

Following the spring Sustainability Indaba, a draft plan was written and further input was solicited from the entire campus community including the Faculty Senate, student organizations and the university senior leadership.

As FAMU begins to carry out recommended actions identified in the plan, the Indaba council will begin staging the implementation of actions, identify interim milestones, enlist additional campus partners, and explore financing options to carry out efforts to enhance the campus as a living, learning laboratory for sustainability. The Sustainability Institute will continue to provide administrative support to the Indaba Council and help coordinate alignment of the Sustainability Action Plan with the university's strategic and master plans.

UNIVERSITY PARTNERS

Executive Leadership
The University executive leadership includes the President and Vice Presidents, who together have responsibility over every aspect of the university. The Executive leaders develop policies, implements the university's strategic plan and ensures sustainability is a core principle in everything we do.

Master Plan Steering Committee
The Master Planning Steering Committee provides leadership for planning all aspects of the physical campus and its utility plant and operations.

Sustainability Institute
The Sustainability Institute (SI) serves as the hub for the many sustainability-related activities at Florida A&M and collaborates with others to advance the university's mission to be a leader in interdisciplinary sustainability research, teaching and outreach.