



# Texas A&M Sustainability Master Plan Presentation

Presented by Gresham, Smith and Partners

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# Sustainability



“Meeting society’s present needs without compromising the ability of future generations to meet their own needs”...Environmental Protection Agency (EPA)



# Development of the Sustainability Master Plan



- **Researched and Reviewed**
  - Selected 10 of 15 Vision 2020 peer institutions
  - Top three peer leaders:
    - University of California at Berkeley
    - University of North Carolina
    - University of Texas
  - Association for the Advancement of Sustainability in Higher Education (AASHE) Sustainability Tracking and Rating System (STARS)
- **Prepared “Gap Analysis”**
- **Interviewed Staff, Faculty, and Students**



# Definition of Sustainability



Texas A&M University defines “sustainability” as the efficient, deliberate and responsible preservation of environmental, social and economic resources to protect our earth for future generations of Texas Aggies, the Texas A&M community and beyond. The university defines “stewardship” as the act of conserving precious resources for a better future

# Purpose and Scope of the Plan



- The Plan strives to drive and continually improve sustainability by setting sustainability goals with associated metrics.
- The Plan encompasses all facets of University operations, academics, research and student life.
- For success, participation is necessary from all Aggies including faculty, staff, students, former students, and campus visitors.

# Sustainability “12”



- Management of Climate Change
- Purchasing of Sustainable Goods and Services
- Optimization of Energy Use
- Sustainable Food and Dining
- Management of Water Resources
- Waste Management
- Sustainable Land Use
- Use of Green Building Practices
- Utilization of Alternative Transportation and Fuels
- Improving Social and Economic Factors
- Education and Research
- Management and Funding Support



# Sustainability “12”



- Example programs from the “Sustainability 12”
- View the entire master plan at <http://sustainability.tamu.edu>

# Example Programs



- **Management of Climate Change**
  - Texas A&M has already developed a greenhouse gas inventory.
  - Based on this inventory, Texas A&M will develop greenhouse gas emission reduction goals and document in a Climate Action Plan (CAP) with key strategies and associated reductions.





# Example Programs



- Purchasing of Sustainable Goods and Services
  - Review existing Green Purchasing Guidelines and develop and implement a University-wide “Green Purchasing Policy”

# Example Programs



- Optimization of Energy Use
  - Complete lighting retrofit project in 32 buildings.
  - Replace older chillers with high efficiency chillers.
  - Evaluate potential for on-site renewable energy production.

# Example Programs



- **Sustainable Food and Dining**
  - Identify opportunities to develop new or expanded programs to increase purchases of locally grown and/or organic foods; evaluate and develop a list of criteria to be used to define sustainably produced dining products.
  - Increase number of water bottle filling stations on campus to increase the use of reusable water bottles.

# Example Programs



- **Management of Water Resources**
  - Evaluate implementing additional landscape level water conservation practices, such as xeriscaping, rainwater harvesting and recycled water, to reduce the use of potable water.



# Example Programs



- **Waste Management**
  - Develop recycling strategies and goals which include recycling services in all campus buildings, accompanying educational materials, signage and staffing.
  - Enhance athletic event recycling program. Encourage student involvement and leadership in the program.

# Example Programs



- Sustainable Land Use
  - Establish and implement a policy and plan for sustainable land use including management of green spaces, invasive species management, construction impacts, and native plants.



# Example Programs



- Use of Green Building Practices
  - Evaluate and prepare a list of green building practices to be incorporated into building renovations.

# Example Programs



- **Utilization of Alternative Transportation and Fuels**
  - Develop a bicycle plan and associated bicycle maps to increase use of bicycles as transportation to campus. Consider bicycle storage, shower and lockers. Coordinate with local municipalities on bike lanes.





# Example Programs



- Improving Social and Economic Factors
  - Develop a green jobs website for students interested in pursuing sustainability related jobs. Provide information on green careers and associated degrees.
  - Review and enhance guidelines for student organization diversity-related education.



# Example Programs



- **Education and Research**
  - Develop a comprehensive list of sustainability-focused and related courses by Department and publish on website. Identify any gaps and work to fill areas of importance.
  - Incorporate sustainability into Fish Camp and New Student/Transfer Student Orientation Programs.

# Example Programs



- Education and Research (continued)
  - Continue the efforts of the Smart Energy Campus Initiative (SECI) with research in the five areas of interest: solar generation, use of electric vehicles, use of alternative technologies for assuring continuous electricity supply, optimization of energy uses in clusters of buildings, and energy efficient computational resources.

# Example Programs



- **Management and Support**
  - Evaluate potential for sustainability savings to be captured into separate fund for future initiatives.
  - Engage and collaborate with former students on sustainability initiatives.

# Conclusions



- Sustainability Master Plan represents Texas A&M's commitment to continually improve campus life and the surrounding community.
- The Plan is a living document that will be updated, as required, and results will be reported on the Sustainability Website.
- Success of the Plan depends on active participants across the University and surrounding community partners.