

Innovation: Campus Infrastructure, Sustainability, and the Built Environment

University System of Georgia: Staff Council

2021 Annual Conference Reboot: Evolution, Innovation, and Resilience

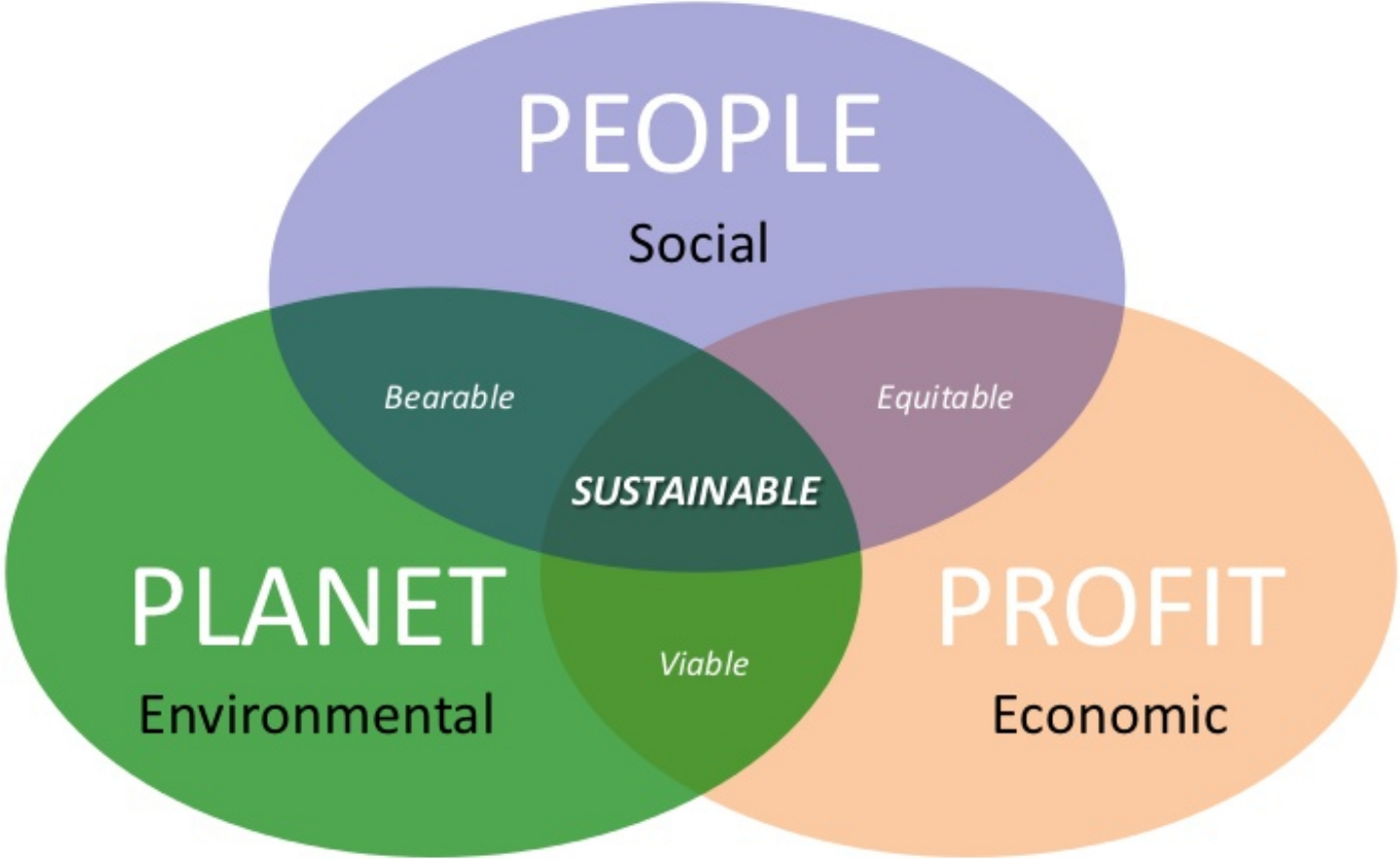
Friday, October 8, 2021



Welcome

- Kelly Fox, Executive Vice President for Administration and Finance
- About Administration and Finance
 - Infrastructure and Sustainability
 - Information Technology
 - Finance and Planning
 - Human Resources
 - Real Estate Development

Sustainability: The Bigger Picture



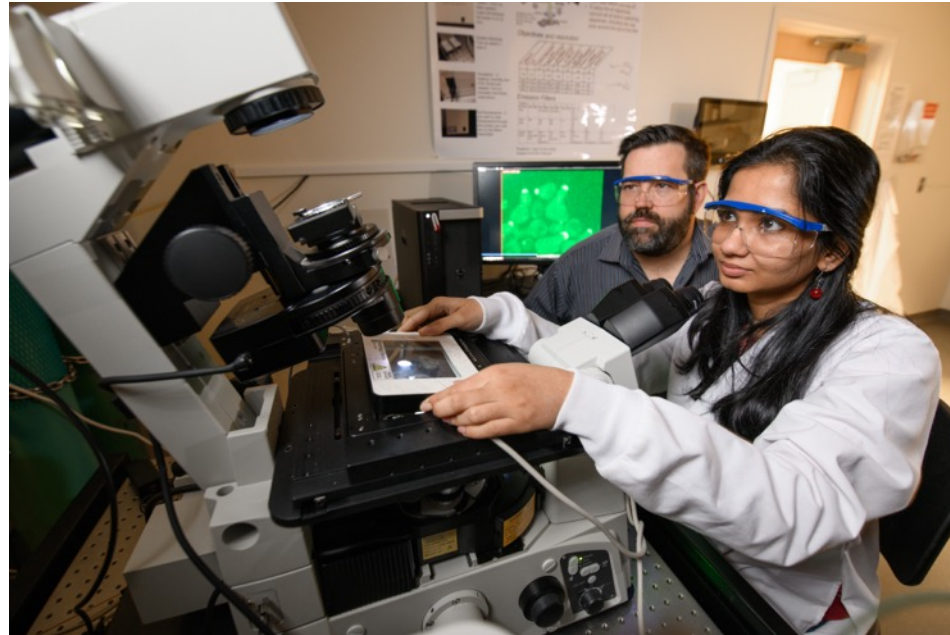
Testing Sustainable Solutions

Carbon Neutral Energy Solutions Laboratory



Creating Sustainable Interdisciplinary Spaces

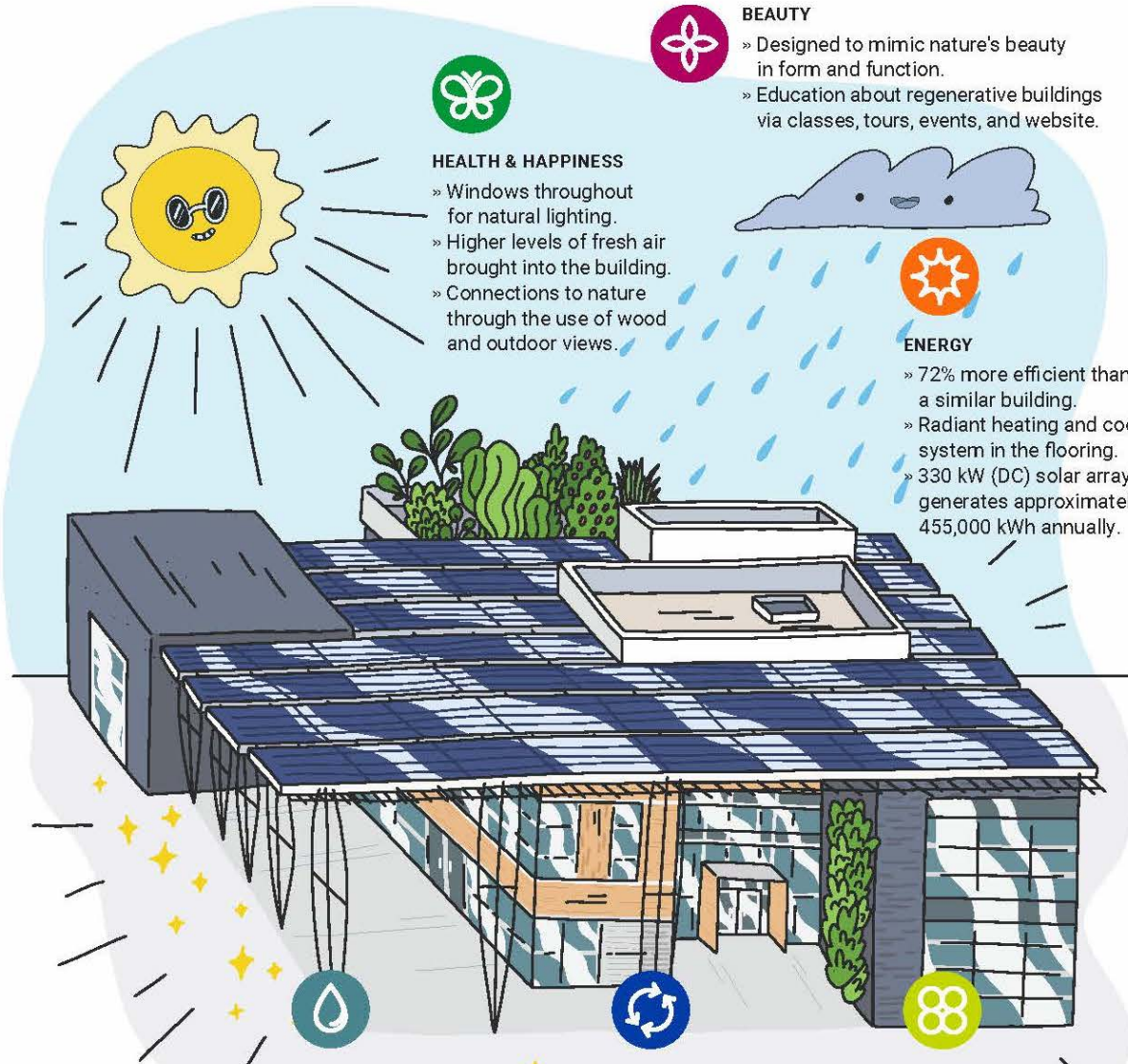
Roger A. and Helen B. Krone Engineered Biosystems Building



Designing and Building Regenerative Spaces

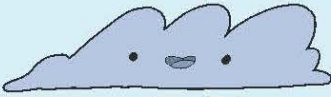
The Kendeda Building for Innovative Sustainable Design





HEALTH & HAPPINESS

- » Windows throughout for natural lighting.
- » Higher levels of fresh air brought into the building.
- » Connections to nature through the use of wood and outdoor views.



ENERGY

- » 72% more efficient than a similar building.
- » Radiant heating and cooling system in the flooring.
- » 330 kW (DC) solar array generates approximately 455,000 kWh annually.



BEAUTY

- » Designed to mimic nature's beauty in form and function.
- » Education about regenerative buildings via classes, tours, events, and website.



PLACE

- » Built on previously developed land.
- » Roof garden has bee hives, fruit, and vegetable plants.
- » Pedestrian-friendly features and bus stop.



WATER

- » Rainfall is stored in 50,000-gallon cistern.
- » Stormwater managed on site.
- » Greywater treated via constructed wetland.
- » Condensate water used for irrigation.
- » Composting toilets dramatically reduce water usage.



EQUITY

- » Centrally located ramp.
- » Project does not block natural daylight to surrounding buildings.
- » Portion of the floor deck constructed by participants of a workforce development program for economically disadvantaged Atlanta residents.



MATERIALS

- » Minimizes the use of materials that contain unhealthy chemicals to the greatest extent possible.
- » During construction, diverted more waste from landfill than sent to landfill.
- » At least 50% of products and services were sourced from within 1,000 km of the site.

- Holistic view of sustainability
 - 7 performance “Petals”
 - 20 imperatives
 - Extends beyond the “traditional” performance indicators
 - Equity
 - Health and happiness
 - Beauty
 - sustain.gatech.edu/sustainability-tours

Weaving Sustainability into the Campus Culture

- Care for the 400-plus acres on campus and our people
 - Protecting our pollinators
 - Managing invasive species
 - Reducing stormwater run-off
 - Green cleaning practices
 - Recycling and composting
 - Creating spaces for reflection and well-being

Weaving Sustainability into the Campus Culture



Weaving Sustainability into the Campus Culture



STARS Silver Rating

- Academics
- Engagement
- Operations
- Planning and Administration
- Innovation and Leadership



Institute Strategic Plan: Lead by Example

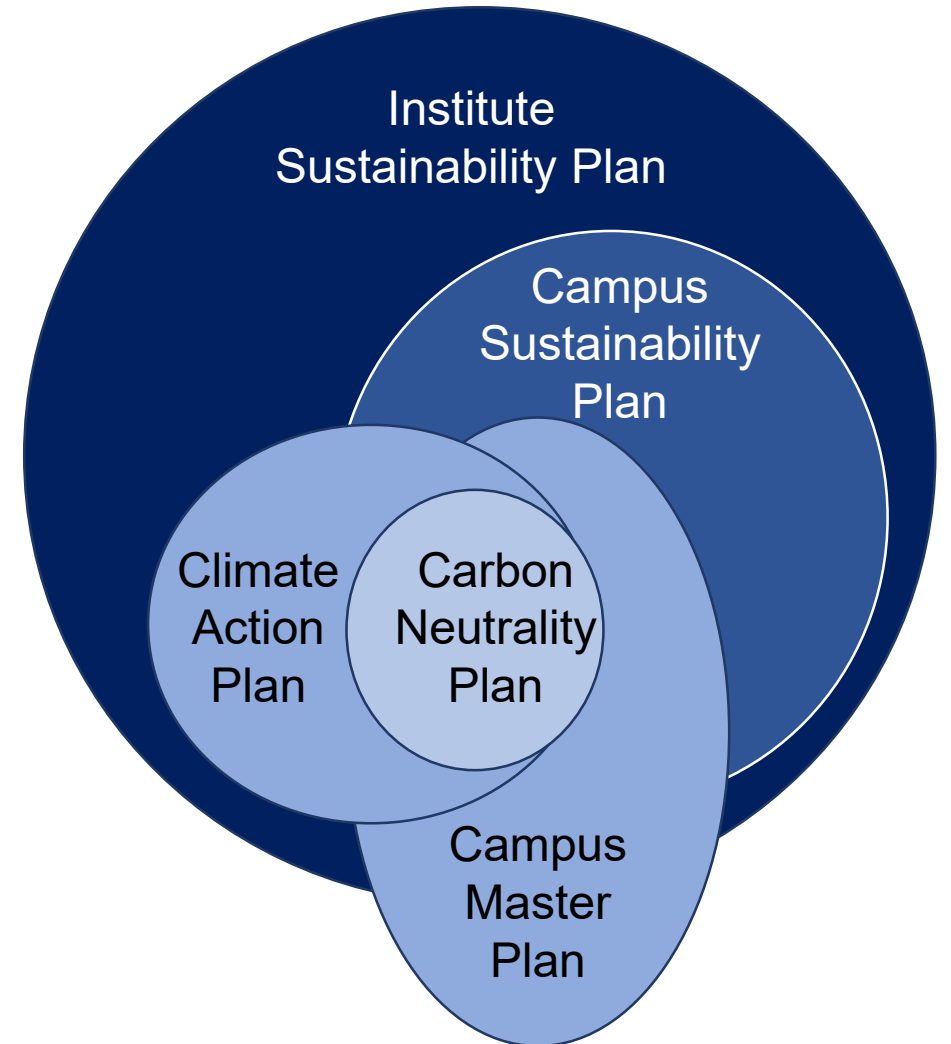


Institute Strategic Plan: Lead by Example

- Lead and inspire by example by creating a culture of deliberate innovation in all our practices and be an example of efficiency, sustainability, ethics, equity, and inclusion, we will:
 - Be a model of excellence through continuous improvement, deliberate innovation, and best practices in all services, systems, and practices.
 - Be a leader in leveraging data analytic tools and processes to inform decision-making and be an example in the protection, management, and governance of data.
 - Develop a world-class workforce committed to enhancing employee skills and providing a diverse, equitable, and inclusive environment.
 - Demonstrate our commitment to sustainability in the development and management of our campus.

Sustainability Planning and Goals

- Achieve zero waste (90% diversion)
- Implement Sustainable Procurement Policy
- Carbon neutrality by 2050, 50% emissions reduction by 2030
- Reduce energy use per square foot by 40%.
- 30% of staff and faculty take sustainable commute mode as primary mode
- Reduce potable water use by 25%
- 100% of buildings meet sustainability standards and protocols for building construction, maintenance and operation



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Build upon Lessons Learned for a Successful Future

- Measurable goals with metrics
- Access to accurate and timely data
- Collaboration with others on campus
- Invite the doer's to the table early in the conversation
- If a process, design, system, etc. was successful, do it again!