GEORGIA TECH’S SUSTAINABILITY PLAN (2023-2030)

SUSTAINABILITY NEXT
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Dear Yellow Jackets:

In our 2020-2030 Institute Strategic Plan, Georgia Tech commits to lead by example as we address the most pressing challenges of our time.

With a global population now exceeding 8 billion people, humanity faces a host of critical and complex challenges that will threaten our health and future unless we work together to create innovative solutions that lower our environmental footprint without reducing our quality of life.

As one of our nation’s foremost research universities, Georgia Tech has a responsibility to lead on these issues — to show the world how an institution of our size and influence can integrate sustainability into degree programs, extracurricular opportunities, research, and campus operations.

So, I am pleased to present Sustainability Next, the Institute’s first comprehensive sustainability plan. Taking its cues from our strategic plan, Sustainability Next provides our community with a blueprint for an Institute that teaches and embodies sustainability in everything we do.

Connecting Georgia Tech’s education, research, and operations, Sustainability Next represents a comprehensive collaboration among units and leaders across campus to address and advance the full range of the United Nations Sustainable Development Goals.

The plan will provide a lasting foundation for cooperation throughout the Institute and establish Tech as a national leader in sustainability.

The Plan calls on Georgia Tech to:

• Be a global sustainability thought leader
• Catalyze innovation through education and research
• Lead by example in the practice and culture of sustainability

To help us realize this vision and achieve our strategic goals, Sustainability Next emphasizes strategic investments in transdisciplinary research, pioneering sustainability curricula, inclusive entrepreneurship and economic development, and the cultivation of a robust culture of sustainability. It recommends just, ethical, and inclusive approaches to addressing urgent global challenges that will cement Georgia Tech’s role as a trusted institution for sustainability solutions.

This plan will help us build a better world for future generations to inherit, and I am pleased to present it to our Institute community.

Ángel Cabrera
President, Georgia Institute of Technology
LETTER FROM SUSTAINABILITY NEXT CO-CHAIRS

Following the creation of the 2020-2030 Institute Strategic Plan (ISP), the Georgia Tech Executive Leadership Team launched the Sustainability Next ISP Implementation Task Force and tasked us with creating a strategic sustainability roadmap for the Institute in alignment with the ISP.

As we embarked on this compelling initiative, the first question our Task Force sought to answer was: How will Georgia Tech have redefined sustainability leadership in 2030 if the Sustainability Next Plan succeeds?

This is the vision for the Institute that emerged from our participatory process:

Georgia Tech is at the forefront of creating the knowledge and solutions to solve critical global challenges, enabling people and nature to thrive, now and into the future.

Sustainability leaders in higher education look to the example of Georgia Tech’s transdisciplinary approach to research and education, innovative sustainability curricula, pioneering campus facilities and operations, and strong internal and external partnerships.

We exemplify a “whole-community” approach to sustainability where every member of the Georgia Tech community is informed and inspired to do their part.

Georgia Tech graduates meet key sustainability competencies and serve as change agents who collaboratively advance local and global progress toward the United Nations Sustainable Development Goals (UN SDGs).

Georgia Tech’s governance structures create the conditions for ambitious sustainability solutions by promoting effective collaboration and coordination across its research, education, operations, economic development, and commercialization functions.

Our culture of sustainability views technological progress as compatible with advancing environmental and social justice. Equity, access, and inclusion are foundational to all Georgia Tech processes, initiatives, and investments.

Georgia Tech is an anchor, partner, and leader in a city that has established itself as a thriving hub of climate and sustainability-focused startups, social enterprises, nonprofits, and community-based organizations.

The strategies in the Sustainability Next Plan are designed to transform this vision into reality. They build on the rich history of sustainability at Georgia Tech and of civil rights in Atlanta while inviting new and innovative collaborations that transcend the traditional silos of an academic institution.

We invite every member and unit of the Georgia Tech community to join in bringing the Sustainability Next Plan to life and expanding its ambitions over time so that we can build a just, equitable, and sustainable future — together.

— Jennifer Chirico, Maria Cimiluca, Jennifer Leavey, Laura Taylor, and Beril Toktay
Sustainability Next: Creating a Sustainable Future for All

We face unprecedented, urgent challenges that threaten the ability of our global community to thrive.

Cultivating farsighted sustainability scholars, innovators, and leaders equipped to tackle complex social, environmental, and economic problems is more critical than ever.

That is why it is so important to have an engaged higher education sector taking an active role in creating a sustainable future for all.

The Sustainability Next Plan recommits Georgia Tech to being a leader among institutions of higher education in the creation of that future. We embrace our role as agents of change, actively engaging with research, education, and on-the-ground actions at home and around the world to advance the UN SDGs, scale community-based solutions, and achieve lasting sustainability for all.

To that end:

- We will take a “whole university” approach to sustainability and draw on the strengths of all academic disciplines and core university missions.
- We will redouble our efforts to graduate students who drive innovation and lead positive change across multiple sectors and in communities.
- We will deepen our investments in transdisciplinary sustainability research.
- With our diverse partnerships and leading research faculty, we will catalyze discovery, innovation, and entrepreneurship on and off campus.
- We will strive to have an equitable and sustainable campus where we experiment, innovate, and lead by example.
- We will collaborate with community partners and local and state governments so that in our region and state, people can thrive within a healthy natural system and a resilient economy.
- Finally, we will take this collaborative approach to the national and global scale, too.

We have seen that challenges addressed by the UN Sustainable Development Goals are not just problems in faraway places, but realities in our immediate community.

— Ángel Cabrera, president

Our roots in the greater Atlanta community, one of the birthplaces of the Civil Rights Movement, inspire us to center environmental and social justice in our approach to sustainability.
History of Sustainability at Georgia Tech

The Strategic Energy Institute (SEI) was initiated in 2004. SEI showcased Georgia Tech’s impact by demonstrating how clean and diverse energy sources can reduce climate impacts and operational costs while improving social equity and national security.

In 2009, Georgia Tech expanded ISTD into the endowed Brook Byers Institute for Sustainable Systems (BBISS). BBISS embodies Georgia Tech’s commitment to a just, sustainable, and prosperous future through a comprehensive systems-based approach to developing scientific, technological, management, policy, and sociocultural solutions to our current sustainability challenges.

In 2017, Georgia Tech launched the endowed Energy Policy, and Innovation Center (EPICenter) to connect the Institute for Paper and Clean Energy, Policy, and Innovation Center (EPICenter) to connect Georgia Tech’s energy expertise to regional policymakers, elected officials, and the public in deploying equitable, resilient, low-carbon energy solutions.

In 2021, Georgia Tech restructured its facilities management into Infrastructure and Sustainability (I&S) as an outcome of the ISP to more intentionally integrate sustainability and lead by example with our campus operations.

In 2023, Georgia Tech launched its Climate Action Plan and became a key partner of the New York Climate Exchange, which will train and educate the next generation of climate experts, sparking cutting-edge research and innovation in the fight to combat the climate crisis.

The same year, the Kendeda Building for Innovative Sustainable Design, an embodiment of this vision, obtained Living Building Challenge certification. A nearby site in the EcoCommons was dedicated to three Black students who challenged racial segregation at that very location.

Georgia Tech’s Institute-wide focus on sustainability started in the 1990s under President G. Wayne Clough’s leadership. In 1992, the Center for Sustainable Technology (CST) became the Institute for Environmental Stewardship, which later became the Office of Campus Sustainability.

In 2013, the Office of Environmental Stewardship was established, which later became the Office of Campus Sustainability. To connect the Institute’s sustainability work to the business community, the Ray C. Anderson Center for Sustainable Business (ACSB) was launched in 2013 to act as a catalyst and connector for transformative business leadership.

In 2015, the campus-wide Serve Learn Sustain (SLS) Quality Enhancement Plan (QEP) was launched to equip Georgia Tech students with the skills to collaborate with community partners to address key sustainability challenges in their professions and their civic lives. SLS accelerated the emerging emphasis on social sustainability and equity in Georgia Tech’s sustainability ecosystem.

In 2020, SLS was anchored in Georgia Tech Climate Action Plan and spanning the local to the global, it was renamed: RCE Greater Atlanta (2017), the University Global Climate Exchange (2019), and the Drawdown Georgia Coalition (2019). The new office of Climate Action and Engagement was launched in 2021 to deepen our capabilities to conduct integrated community engaged sustainability research and education.

In 2022, the Office of Campus Sustainability was restructured into the Office of Sustainability within KES to serve the Institute in bridging sustainability efforts across research, education, and operations. It was expanded to include the departments of utilities, sustainable buildings, and the Kendeda Building for Innovative Sustainable Design.

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The Kendeda Building for Innovative Sustainable Design

The Kendeda Building earned the Living Building Challenge (LBC) certification in 2021, the first building in Georgia, and 28th in the world, to do so.

To advance the Equity petal of the LBC certification, Institute Diversity created the Living Building Equity Champions program to activate undergraduate students, especially those from underrepresented groups, to develop recommendations for how the building can further equity.

The Kendeda Building is part of the EcoCommons, an 80-acre green space designed for stormwater runoff reduction, carbon sequestration, ecological sustainability, and innovative pedagogy. The EcoCommons was completed in 2021 and was awarded the 2023 Society for College and University Planning “Jury’s Choice” Honor for Excellence in Landscape Architecture in General Design.

Equity and Sustainability at Georgia Tech

Our focus on equity has its roots in the City of Atlanta, one of the birthplaces of the Civil Rights Movement.

In 1961, Georgia Tech became the first major state university in the Southeast to desegregate without a court order. The year before, three African American seminary students tried to integrate the Pickrick restaurant — located in what is now the northwest corner of the EcoCommons — just one day after the Civil Rights Act was passed. They eventually prevailed.

Today, recognizing the ways that history surrounds us is a way of paying tribute to those integrators. From the EcoCommons space that memorializes the integration of the Pickrick, to ecology labs that bring students into the muddy beauty of Proctor Creek in neighboring West Atlanta communities, Georgia Tech’s commitment to keeping social equity at the forefront of its sustainability initiatives will shape future Yellow Jackets.

The more deeply those sustainability leaders integrate the Institute’s past and the region’s history into their vision for the future, the more just, equitable, and sustainable that future will be.

Our commitment to diversity and inclusion stems also from our institutional DNA as a public university that is committed to social mobility and social equity.

— Ángel Cabrera, president

As a Latina, I know firsthand what it is like to be in a space where you don’t feel welcome. I hope that we use this building as a standard in our society for not only environmentally sustainable building practices, but also for how we want to make all kinds of people feel in communal spaces. Let it set a precedent and create memories of acceptance and peace for all who walk through its doors, perfectly mirroring nature.

— Undergraduate Student and Living Building Equity Champion

The campus itself invites everyone to immerse themselves in our community. Walk up the LGBTQIA rainbow steps at Klaus Computing, where students are improving SDG tracking through dynamic data dashboards. Visit the “Three Pioneers” statue in Harrison Square, where nearby modern language courses are immersing students in intercultural connections crucial to global partnerships.

— Ángel Cabrera, president
Developing the Plan: A Collaborative Approach

Following the completion of the 2020-2030 Institute Strategic Plan (ISP), the Sustainability Next ISP Implementation Task Force was created in 2021 (see Appendix A, p. 33).

The Task Force was responsible for developing strategies that would achieve, by 2030, the cross-cutting sustainability objectives defined in the ISP.

To do so, the Task Force conducted a comprehensive review of sustainability data on campus programs, units, partners, and benchmarked peer institutions. They also hosted several town halls for students, faculty, and staff, and met one-on-one with leaders representing many Georgia Tech units cutting across research, education, economic development, and operations. The Task Force also closely coordinated with other ISP teams, particularly: Anchor Institution; Diversity, Equity and Inclusion; Comprehensive Campus Plan; Research Next; and Transformative Teaching and Learning (see Appendix B, p. 35).

The result is Sustainability Next, an action plan comprising strategies and measures of success that support the 2020-2030 Georgia Tech ISP sustainability objectives.

A Collaborative Plan

The Sustainability Next Plan does not live on its own. We intentionally designed this plan to achieve the sustainability objectives of the Georgia Tech ISP and to work in concert with other ISP Teams.

The Georgia Tech 2020-30 ISP has five sustainability-focused objectives associated with four of its goals. The three Sustainability Next focus areas collectively define 17 strategies to achieve these objectives and 26 measures of success associated with them.

FOCUS AREAS

1. Be a Global Sustainability Thought Leader
   Through transformative research, education, and partnerships, Georgia Tech generates and disseminates new knowledge that advances local, regional, and global sustainability solutions.

2. Catalyze Innovation through Education and Research
   Georgia Tech fosters a culture of innovation through sustainability education and research activities that challenge each member of our community to be a change agent in their spheres of influence.

3. Lead By Example in the Practice and Culture of Sustainability
   Georgia Tech demonstrates our commitment to sustainability and resilience in the development and management of our campus(es).
SUSTAINABILITY NEXT PLAN

AMPLIFY IMPACT
Embrace our power as agents of change for the public good and generate talent, ideas, and solutions with unmatched impact and scale to help define and address the most critical problems of our time, locally and globally.

CHAMPION INNOVATION
Champion our leadership position as an engine of innovation and entrepreneurship, collaborate with other public and private actors to create economic opportunity and mobility, and position Atlanta and Georgia as examples of inclusive innovation.

CONNECT GLOBALLY
Strengthen our role as a convener of worldwide collaboration and build a global learning network to expand our reach and amplify our impact.

LEAD BY EXAMPLE
Lead and inspire by example through creating a culture of deliberate innovation in our practices; be an example of efficiency, sustainability, ethics, equity, and inclusion.

DEVELOPING THE PLAN: A COLLABORATIVE APPROACH

PLAN CONNECTIONS

ISP GOALS

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ISP OBJECTIVES

Core Values of the Institute

The Sustainability Next Plan is grounded in and advances the Institute’s strong set of values:

- Students are our top priority.
- We strive for excellence.
- We thrive on diversity.
- We celebrate collaboration.
- We champion innovation.
- We safeguard freedom of inquiry and expression.
- We nurture the well-being of our community.
- We act ethically.
- We are responsible stewards.

DEVELOPING THE PLAN: A COLLABORATIVE APPROACH

SUSTAINABILITY NEXT PLAN

Focus Area 1: Be a Global Sustainability Thought Leader

Focus Area 2: Catalyze Innovation Through Education and Research

Focus Area 3: Lead by Example in the Practice and Culture of Sustainability

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Introduction to the Sustainability Next Plan

Focus Areas

The Sustainability Next Plan is organized around three cross-cutting focus areas.

In alignment with the ISP, these focus areas are grounded in thought leadership, innovation, and leading by example. They are designed to cut across the typical core functions of a higher education institution: research, education, and operations.

The strategies and measures of success corresponding to each focus area will create accountability and drive investment from the Institute and its partners.

Introduction to the Sustainability Next Plan Implementation Structure

- **3 Focus Areas**
  - Sustainability Next Plan strategies and measures of success are organized under three cross-cutting focus areas that collectively support the five Georgia Tech ISP objectives focused on sustainability.

- **17 Strategies**
  - Each focus area includes several key strategies that set the Institute on a course toward meeting ISP sustainability objectives. These strategies outline how Georgia Tech interprets the vision of each focus area and how it will be achieved.

- **26 Metrics**
  - To track progress towards our vision, each focus area includes several measurable targets that, once achieved, will indicate the success of the focus area.

Focus Areas

1. **Focus Area 1: Be a Global Sustainability Thought Leader**
   - Through transformative research, education, and partnerships, Georgia Tech generates and disseminates new knowledge that advances local, regional, and global sustainability solutions.
   - This focus area cements Georgia Tech as a globally influential thought leader that makes transformative contributions to both research and education. It is grounded in our belief that solutions to critical local and global challenges will necessitate unique partnerships enabling collaboration across multiple fields and stakeholders.

2. **Focus Area 2: Catalyze Innovation Through Education and Research**
   - Georgia Tech fosters a culture of innovation through sustainability education and research activities that challenge each member of our community to be a change agent in their spheres of influence.
   - This focus area highlights the importance of education and research in fostering the scientific, technological, business model, policy, and social innovations that are critically needed for people and nature to thrive. We cultivate an environment that not only prepares but also emboldens our students, faculty, staff, alumni, and partners to be innovators and thoughtful collaborators.

3. **Focus Area 3: Lead by Example in the Practice and Culture of Sustainability**
   - Georgia Tech demonstrates our commitment to sustainability and resilience in the development and management of our campus(es).
   - This focus area highlights how the Institute will leverage operations to support innovative sustainability education and advance research into cutting-edge campus management practices. Through this integrated approach, we strive to become a sustainability leader among universities, utilizing a Living Campus model that creates a culture of engagement by students, staff, faculty, and leadership.
Be a Global Sustainability Thought Leader

Through transformative research, education, and partnerships, Georgia Tech generates and disseminates new knowledge that advances local, regional, and global sustainability solutions.

Introduction

As a public technological institution operating in the Southeastern United States, we have a unique perspective and responsibility.

We must be fearless in articulating the challenges of equitable sustainable development, ambitious in the problems we choose to address, humble about what we do not know, and thoughtful about how we produce research and develop new educational practices.

As we seek to grow our impact and advance the UN SDGs, we understand the importance of bringing diverse stakeholders together in transdisciplinary partnerships to solve the right problems in the right ways — informed by a deep understanding of the social, economic, environmental, and cultural context. We also invest heavily in cultivating the next generation of engaged scholars.

Sustainability Next brings together the Institute’s innovations in sustainability research, education and operations, and will amplify our impact locally, nationally, and globally. This work gets right at the heart of our mission of developing leaders who advance technology and improve the human condition. Its emphasis on partnering with diverse stakeholders will help us advance our commitments to create a thriving city, state, and region that provide a model for building a more sustainable world.

— Steve McLaughlin, provost and executive vice president for Academic Affairs
FOCUS AREA 1: BE A GLOBAL SUSTAINABILITY THOUGHT LEADER

Strategies

1. Increase the breadth and depth of sustainability research and strengthen transdisciplinary research efforts across Georgia Tech, commensurate with its role as a global leader in sustainability research.

2. Grow, diversify, and cultivate doctoral, postdoctoral, and faculty talent dedicated to scientific discovery, the development of business, policy, and technology solutions, and humanistic approaches to addressing critical local and global challenges.

3. Develop deep and sustained local community, government, and industry collaborations that center community expertise, equity, and the public good in solution development and adoption.

4. Convene and coordinate diverse partnerships that connect research, education, and economic development to define and implement tomorrow’s solutions for climate mitigation, resilience, sustainability, and regeneration.

5. Develop, validate, and disseminate innovative and effective course design and pedagogy in Education for Sustainable Development.

Measures of Success

1. Establishment of strategic clusters of transdisciplinary research excellence via seed grants and cluster hires concurrently advancing growth in faculty diversity.

2. Growth in the number, diversity, and total funding level of sponsored research and education projects associated with each SDG.

3. Growth in the documented environmental and social impact of research translation activities.

4. Growth in the number, diversity, and post-graduation placement success of graduate students and postdoctoral associates.

5. Increased representation of sustainability-focused faculty, staff, and postdoctoral fellows in external advisory groups, in the authorship of intellectual products that inform policy, and in research communications metrics.

6. Expansion of Georgia Tech’s community and corporate engagement capabilities and deployment of recognized best practices to increase the number, size, and impact of sustainability-related research collaborations with diverse academic, industry, nonprofit, and community partners.

7. Expansion and demonstrated learning impact of strategic sustainability and SDG course design and redesign projects.

8. Increased dissemination and adoption of the findings of educational research projects that evaluate the effectiveness of innovative sustainability pedagogy.
Catalyze Innovation through Education and Research

Georgia Tech fosters a culture of innovation through sustainability education and research activities that challenge each member of our community to be a change agent in their spheres of influence.

Introduction

Faculty, staff, and students are proud to call Georgia Tech home because we are a public institution championing social mobility and real-world impact. We educate skilled graduates to enter the workforce, foster innovation, and cultivate entrepreneurship. Sustainability education can inspire and expand the breadth of these activities by enhancing awareness of environmental and social impact opportunities. Sustainability education also strengthens critical innovation-related competencies such as systems thinking, ethical reasoning, strategic planning and implementation, and global citizenship. Similarly, entrepreneurship is not only about encouraging business ventures, but also about fostering creativity and collaboration throughout value chains and through innovative partnerships. By integrating these competencies across our curriculum and research agenda, we are enhancing the quality and relevance of our education and research, increasing the impact of our discovery to commercialization pipeline, and contributing to the sustainable economic development of our region and beyond.

With our dual focus on sustainability and innovation, we strive to support and collaborate with partners to co-create lasting and scalable solutions that have a positive societal impact.

I believe sustainability is vital to every academic field. I believe that college students should be educated to think about the future of society not only in terms of advancing technology but also in terms of taking care of the world around them.

— Georgia Tech Student
Strategies

1. **Expand sustainability and SDG concepts and skills** across degree programs and co-curricular opportunities to ensure all students are equipped to innovate, collaborate, and lead change within their chosen professions.

2. Increase the number of **majors, minors, certificates, and co-curricular programs** that offer greater opportunities for in-depth exploration of sustainability and the SDGs.

3. **Grow experiential, community-engaged, and study abroad courses and programs** aligned with SDG areas to impart agency and promote student success.

4. Expand lifelong learning for **business, community, education, and government professionals** to co-create lasting and scalable solutions to critical global challenges.

5. **Cultivate a diverse and thriving innovation ecosystem** centered on climate technologies, sustainability entrepreneurship, and social innovation to rapidly scale solutions.

6. **Mature a faculty culture that places a high value on innovations in community-engaged and transdisciplinary teaching and research.**

Measures of Success

1. **Increased number of and enrollment in high-impact courses** (e.g. required courses, high-enrollment electives, experiential, problem-based service learning and study abroad courses) incorporating sustainability and SDG concepts and skills.

2. Increased number of and enrollment in interdisciplinary or transdisciplinary courses and co-curricular learning opportunities incorporating sustainability concepts and skills.

3. Increased number of and enrollment in majors, minors, certificates, and co-curricular programs with a primary focus on disciplinary or interdisciplinary lenses on sustainability.

4. Growth in the number of and enrollment in courses incorporating sustainability student learning outcomes with implementation plans for supporting and assessing student learning.

5. Increased participation in student internships and faculty and staff professional development opportunities that enhance the application of disciplinary skills to advancing sustainability.

6. Growth in enrollment for residential and online masters, certificates, and micro-credentials in sustainability that serve professionals in industry, government, or the nonprofit sector.

7. Establishment of additional sustainability-specific commercialization and entrepreneurship metrics (e.g. invention disclosures; patents; number, total valuation, and environmental or social impact of GT startups; women and under-represented minority founders; and inclusion of community-based social innovators).

8. Increased number and diversity of transdisciplinary research partnerships focused on developing and deploying sustainability solutions across the city and the state in alignment with best practices for community-engaged research.
Georgia Tech demonstrates our commitment to sustainability and resilience in the development and management of our campus(es).

**Introduction**

*Leading by example in the practice and culture of sustainability means using a cohesive and collaborative approach to integrate sustainability across Georgia Tech’s operations, curriculum, research, and governance.*

This includes ensuring our institute serves as a role model for sustainability and acts as a “Living Campus” for students and faculty to learn from and innovate on.

It also means taking our role as an anchor institution in the community to heart. Tomorrow’s leaders must be skilled in synthesizing multiple perspectives and complex systems to chart a path forward. For Georgia Tech, that starts on our campus and within the communities surrounding it.

**FOCUS AREA 3**

**Lead by Example in the Practice and Culture of Sustainability**
FOCUS AREA 3: LEAD BY EXAMPLE IN THE PRACTICE AND CULTURE OF SUSTAINABILITY

Strategies

1. Develop and implement a Climate Action Plan with the goal of reducing emissions by 50% by 2030 and 100% by 2050.
2. Collaboratively design an effective and streamlined governance approach for the decision-making, planning, resourcing, and implementation of cross-cutting sustainability initiatives.
3. Leverage our campus as a living-learning environment and platform for transdisciplinary research and education that engages students, faculty, and staff.
4. Enhance access, equity, and inclusion on campus through increased affordable housing, transit access, food security, green workforce development, curricula, and community partnerships.
5. Conduct a campus Vulnerability Assessment and subsequently develop a Resilience Plan.
6. Adopt anchor institution practices in areas such as sustainable procurement, zero waste, resilient infrastructure, DEI, community partnerships, and business development.

Measures of Success

1. Reduction of 50% of Scope 1 and 2 emissions by 2030 (with a goal to reach carbon neutrality by 2050) from a 2010 baseline.
2. Implementation of a Sustainable Procurement Policy and a Diversity in Procurement Policy.
3. Implementation of a program to train students, staff, and community members in the development of a local and campus green workforce.
4. Active engagement in the Living Campus initiative by students, faculty, and staff.
5. Achievement of campus zero waste, or 90% diversion from landfill, by 2050.
6. Increased affordable housing on campus.
7. Affordable and clean transit access to and from campus.
8. Increased number of research and education projects that use campus operations, infrastructure, and data and/or advance community sustainability and resilience.
9. Increased community service and partnerships with K-12 students and teachers exposed to sustainable systems through campus visits and external engagement.
10. Increase engagement with Georgia Tech’s investment portfolio leadership to align with environmental and social governance principles.
Today’s climate issues are urgent, and environmental justice and ecological sustainability necessitate action from leaders across the world. From increasing the emphasis on climate solutions in our Interdisciplinary Research Institutes and Centers to launching the Climate Action Plan and serving as a core partner of the New York Climate Exchange, Georgia Tech is committed to deploying its research expertise in service of supporting a just energy transition and combating climate change.

— Chaouki T. Abdallah, executive vice president for research

**CLIMATE ACTION PLAN**

Georgia Tech is already implementing one of the strategies in Sustainability Next: We are developing a Climate Action Plan in collaboration with faculty, staff, and students.

This plan will focus on developing mitigation and adaptation strategies, with a goal of reaching 100% emissions reduction by 2050, as well as bolstering the Institute’s capacity for climate research and partnerships.

Examples of the strategies and metrics that will be captured in the Climate Action Plan include the following.

**STRATEGIES**

- Increase the amount of **onsite renewable energy**.
- Increase **energy efficiency** in existing infrastructure.
- Prioritize **evidence-based equity, inclusivity, and sustainability** in managing the built environment.
- Implement Resiliency Hubs on campus to support **off-grid independence** in emergency situations.
- Transition the campus vehicle fleet to **zero-emission vehicles and equipment**.
- Reimagine our built environment for a **circular economy**.
- Develop a **blackwater and stormwater program** that integrates water reclamation.
- Identify deferred renewal needs to **renew infrastructure in efficient ways**.
- Invest in Georgia Tech’s existing strengths in **climate related research**.
- Leverage Georgia Tech’s unique “place” as a **platform for climate-related research**.
- Expand **transdisciplinary teaching and experiential learning** to equip students to advance climate action.
- Ensure opportunities for students to **engage in climate action outside the classroom**.
What’s Next?

We are committed to collaborating across our Institute and with our partners to implement the strategies in this plan.

The Sustainability Next Plan outlines the key strategies that will move us toward our vision of becoming a globally-recognized sustainability leader. We understand our whole-community approach will require sustained action and partnerships across campus leadership, faculty, staff, and students.

We pledge to develop a transparent implementation process that continues the robust stakeholder engagement process undertaken to create this Plan. We will release an annual progress report to share our accomplishments, including how they were achieved, who was involved, and lessons learned. We will also share our progress on the measures of success and include our next steps for the following year. This level of transparency serves as an accountability tool for our students, partners, and other stakeholders and exemplifies our commitment to making sustainability action tangible and replicable for others.

We understand that our environment and our society are constantly undergoing rapid, significant change. Every year, new information and technologies are developed and pioneered, and new environmental conditions and social issues arise. In an effort to reflect the changing state of play, we will treat our Sustainability Next Plan as a living document and update our strategies and metrics to reflect the latest innovations and changes.

Sustainability Next will ensure that Georgia Tech proactively evolves over time, adapting to local and global changes and innovations.
Acknowledgments

Georgia Tech would like to thank the following sponsors and contributors to the Sustainability Next Plan. The collaboration and dedication of these members of our community have been instrumental to get our vision for this cross-cutting, interdisciplinary approach to sustainability off the ground.

Sustainability Next Task Force

Executive Sponsors
- Chaouki Abdallah: Executive Vice President for Research
- Steven McLaughlin: Provost and Executive Vice President for Academic Affairs
- Shantay Bolton: Executive Vice President for Administration and Finance

Co-Chairs
- Maria Cimilluca: Vice President, Infrastructure and Sustainability
- Jennifer Chirico: Associate Vice President for Sustainability, Office of Sustainability
- Jennifer Leavey: Assistant Dean for Faculty Mentoring, College of Sciences; Principal Academic Professional, School of Biological Sciences, College of Sciences
- Laura Taylor: Chair and Professor, School of Economics, Ivan Allen College of Liberal Arts
- Beril Toktas: Brady Family Chair, Scheller College of Business; Faculty Director, Ray C. Anderson Center for Sustainable Business; Interim Executive Director, Brook Byers Institute for Sustainable Systems

Members
- Andre Calmon: Assistant Professor, Operations Management Area, Scheller College of Business
- Kevin Caravati: Principal Research Scientist, Georgia Tech Research Institute
- Jermaine Clonts: Associate Director, Utilities Management
- Kim Cobh: Former Georgia Power Chair; Faculty Director, Georgia Tech Global Change Program, College of Sciences; Former Sustainability Next Co-Chair
- Robin Cornel (CE 2019, MS CE 2022, M Arch 2022): Former Graduate Student, Architecture and Civil Engineering
- Linda Daniels: Former Interim Director, Capital Planning and Space Management, Infrastructure and Sustainability
- Ashutosh Dhekne: Assistant Professor, School of Computer Science, College of Computing
- Thiago Esslinger (EAS 2023, BCh 2023): Former Undergraduate Student, Biochemistry and Earth & Atmospheric Sciences
- Nancy Green Leigh: Associate Dean for Research, College of Design
- Marta Hatzell: Associate Professor, George W. Woodruff School of Mechanical Engineering, College of Engineering
- Devesh Ranjan: Eugene C. Gwaltney, Jr. School Chair and Professor, George W. Woodruff School of Mechanical Engineering, College of Engineering
- Kasey Helton: Associate Vice President, Campus Services
- Keona Lewis: Associate Director, Institute Diversity, Equity, and Inclusion
- Sarah Neville: Former Project Manager, Office of Campus Sustainability, Infrastructure and Sustainability
- Anne Rogers: Former Director of Sustainability Engagement, Office of Sustainability, Infrastructure and Sustainability; Former Sustainability Next Co-Chair
- Rebecca Watts Hull: Assistant Director, Faculty Development for Sustainability Education Initiatives, Center for Teaching and Learning; Sustainability Next Education Group Co-Lead
- Malte Weiland: Senior Sustainability Project Manager, Auxiliary Services Operations, Campus Services
- Marc Weissburg: Professor, Biological Sciences, College of Sciences

Climate Solutions Advisory Group

Task Force Co-Chairs also convened an embedded Climate Solutions Advisory Group because of the critical importance of addressing climate change as part of a sustainable future.
- Carl DiSalvo: Associate Professor, School of Interactive Computing, College of Computing
- Alexa Harter: Director, CIPHER Lab, Georgia Tech Research Institute
- Tim Lieuwen: David S. Lewis, Jr. Chair, School of Aerospace Engineering, College of Engineering; Executive Director, Strategic Energy Institute
- Brian Stone: Professor, School of City & Regional Planning, College of Design
- Cassidy Sugimoto: Tom and Marie Patton Chair and School Chair, School of Public Policy, Ivan Allen College of Liberal Arts

Project Management Support
- Drew Cutright: Managing Strategy Consultant, Office of Strategic Consulting
- Emma Blandford: Program and Portfolio Manager for Sustainability Next, Brook Byers Institute for Sustainable Systems
Institute Strategic Plan Connections

Georgia Tech’s 2020-2030 Institute Strategic Plan serves as the foundation for a series of Implementation Plans, including Sustainability Next. Knowing we are stronger when we work together, the Sustainability Next team collaborated with several other ISP initiatives. The following sections provide an overview of plans considered during the Sustainability Next planning process and identify areas of overlapping work and alignment with Sustainability Next goals.

Our Foundation: The Georgia Tech Strategic Plan

In the Fall of 2019, President Cabrera initiated a university-wide planning effort to reimagine and redefine Georgia Tech’s future. The resulting 2020-2030 Strategic Plan presents Georgia Tech’s shared vision for the next decade: to continue developing leaders who advance technology and improve the human condition. The Sustainability Next plan grew out of this strategic planning vision and is therefore closely tied to many of its goals and objectives, as well as its ten-year planning horizon.

Georgia Tech vowed to become an example of inclusive innovation, relentlessly committed to serving the public good; breaking new ground in addressing the biggest local, national, and global challenges of our time; making technology broadly accessible; and developing exceptional leaders from all backgrounds ready to produce novel ideas and create solutions with real human impact. One of the most significant opportunities for advancing this vision is Georgia Tech’s impact on sustainability as outlined by the UN SDGs, and in particular, climate change, which is arguably today’s foremost challenge.

A Unifying Framework: United Nations Sustainable Development Goals

The 2030 Agenda for Sustainable Development provides a shared blueprint for peace and prosperity for people and the planet, now and into the future. At its heart are the 17 Sustainable Development Goals (SDGs), which are an urgent call for action by all countries — developed and developing — in a global partnership. The UN SDGs underpin our framework for catalyzing action and advancing the public good at a global scale.

Through Georgia Tech’s affiliation with the University Global Coalition, sustainability thought leaders collaborate with higher education leaders from across the globe to advance the SDGs through education, research, service, and campus operations. In 2020, we launched the 17 Rooms initiative at Georgia Tech to familiarize the campus community with the SDGs.

The inaugural event convened local leaders and identified partnerships and practical steps to accelerate progress on each UN SDG. Several of the resulting recommendations from this collaboration were integrated into the Sustainability Next Plan.
Georgia Tech also co-founded and currently co-leads Regional Centres of Expertise (RCE) Greater Atlanta, officially acknowledged by the United Nations University. RCEs support the multi-stakeholder implementation of the SDGs at the regional level through education and training. RCE Greater Atlanta brings together universities and colleges from across the Atlanta region with nonprofit, community, government, and business partners. It approaches all SDGs through an equity and justice lens, building on the city’s rich history as the home of the Civil Rights Movement.

**Anchor Institution Plan**

As an anchor institution, Georgia Tech has an opportunity and responsibility to be responsive to the economic, social, and civic needs of its backyard communities. The Anchor Institution Plan commits Georgia Tech to strengthening relationships and initiatives that reduce disparities and advance the public interest of its surrounding communities, along with institutional interests such as research and education. The Sustainability Next Plan envisions contributing to Georgia Tech’s anchor institution initiatives with our focus on sustainable communities education, research, and engagement, and through the strategic management of our operations and physical space.

**Diversity, Equity, and Inclusion (DEI) Plan**

The DEI Plan is a framework that guides Institute, college, and unit leadership in the work needed to become a more equitable and inclusive campus community for all students, faculty, and staff. The Plan highlights our renewed commitment to inclusive teaching, leadership, scholarship and research, innovation, and entrepreneurship. It also reaffirms the importance of diversity, equity, and inclusion as essential to learning, discovery, and creation as well as the just, sustainable world we seek to bring about. The Sustainability Next Plan finds inspiration in the DEI Plan and supports it by centering justice and equity in the work of Georgia Tech’s sustainability ecosystem.

**THE DEI - SUSTAINABILITY NEXT CONNECTION**

The DEI Plan and the Sustainability Next Plan support each other in making equity central to how we:

- Cultivate an inclusive community of internal and external stakeholders
- Recruit, retain, and support students, faculty, and staff
- Prioritize inclusive scholarship and teaching across all disciplines
- Advance evidence-based policies for environmental justice
- Nurture community-led climate action initiatives
Research Next Plan

Research Next envisions the research enterprise at Georgia Tech over the next decade and beyond and strives to position Georgia Tech to respond to future challenges with innovation, expertise, creativity, and a dedication to improving human lives and the world at large. Some of its priorities are strengthening pathways for interdisciplinary research and expansion of strategic partnerships with HBCUs and Minority-Serving Institutions. Sustainability Next advances these priorities with its focus on transdisciplinary research and on strengthening regional partnerships focused on just sustainability.

Transformative Teaching and Learning Plan

The Transformative Teaching and Learning Initiative (TTL) Plan promotes innovation in teaching and learning practices by providing faculty support to innovate and scale transformative teaching practices, and creating conditions for all students to engage in meaningful experiential learning. The TTL and Sustainability Next initiatives intersect in that both aim to advance experiential learning that transforms students’ understanding, perspectives, and actions.

Comprehensive Campus Plan

The Comprehensive Campus Plan (CCP) informs how Georgia Tech can leverage its spaces and facilities over the next decade to support the changing campus community and serves as a roadmap for the sustainable development and management of the campus. Suggested investments include highly efficient facilities, active transportation design, climate-smart resource consumption, and the addition of new green spaces. Such changes will promote community health and well-being by improving air quality and encouraging physical activity. The plans will also work together to ensure that the Institute’s development and capital investment decisions integrate the Institute’s vision of becoming a regional and global sustainability hub.

Sustainability Next also sees opportunities for contributing to achieving other ISP teams’ goals: Commercialization by accelerating climate tech, sustainability, and social impact entrepreneurship; Global Student Experience by cultivating sustainability-focused global experiences; Lifelong Learning by developing continuing and executive education classes for sustainability professionals; and Expand Access for Limited Income Students through equity in the built environment, transportation access, and high-impact practices shown to improve outcomes, such as sustainability-themed experiential learning.

TRANSFORMING TOMORROW:
THE CAMPAIGN FOR GEORGIA TECH

Transforming Tomorrow: The Campaign for Georgia Tech, a more than $2 billion comprehensive campaign, seeks to advance the Institute and its impact — on people’s lives, on the way we work together to create innovative solutions, and on our world — for decades to come.

The campaign has attracted major investments that have spurred the Institute’s recent global expansion, its rise in higher education rankings, the growth in sponsored research funding. The Institute’s success rests on its ability to recruit top talent, produce cutting-edge research and technology, and create innovative solutions to the biggest problems of the moment. With the Sustainability Next Plan, Georgia Tech is outlining its ambitions to continue tackling the most pressing issue of our time, sustainability and climate change.

The Sustainability Next Plan closely coheres with the themes of the Institute’s Transforming Tomorrow Campaign:

- **Transforming Lives**
  The Sustainability Next Plan lays out our vision for a net-zero campus designed to promote health, well-being, and community. We seek to build a campus and culture that unlocks each student, faculty, and staff’s full potential to make a positive impact.

- **Transforming Ideas**
  The Sustainability Next Plan expresses the Institute’s bold ambitions to innovate and pioneer new sustainability and climate-smart technologies, policies, programs, and ideas that will redefine what is possible.

- **Transforming Learning**
  Critical to achieving our vision of a sustainable campus is the integration of research, operations, and education. We strive to ensure each student and faculty participate in innovative, hands-on sustainability and climate-related learning experiences.

- **Transforming Our Community and Our World**
  Our ambitions to improve lives and communities stretch beyond our campus boundaries into the greater Atlanta metropolitan area, the state, and worldwide. The Institute is proud to work on groundbreaking sustainability research that we know will impact the world.