

Sustainability Showcase

March 4th & 6th - 8th, 2024

https://sustainable.gatech.edu/showcase organized as part of Georgia Tech SDG Action and Awareness Week

Sponsored by:

Brook Byers Institute for Sustainable Systems

in partnership with:

Georgia Tech Office of Sustainability; Center for Sustainable Communities Research and Education Institute for People and Technology; Ray C. Anderson Center for Sustainable Business; Renewable Bioproducts Institute; Strategic Energy Institute; The Exchange at Georgia Tech; and other campus partners

Monday, March 4 - Clary Theater, Bill Moore Student Success Center, 225 North Avenue

(closest parking: Area 1 Visitor Lot, 176 North Avenue Northwest, Atlanta, GA, 30313)

1:15 - 1:30 PM | Welcome and Sustainability Next Strategic Plan Vision

Jennifer Chirico, Associate Vice President, Sustainability and Co-Chair, Sustainability Next Beril Toktay, Regents' Professor, Brady Family Chairholder, and Co-Chair, Sustainability Next

1:30 – 2:30 PM | Conversations with Cabrera – panel discussion on partnerships for climate mitigation based on Drawdown Georgia, as described by panelists in <u>Higher Education and SDG17: Partnerships for the Goals</u>, Cabrera and Cutright (Eds), Emerald Publishing Ltd (2023).

- o Ángel Cabrera, President, Georgia Tech (moderator)
- o John Lanier, Executive Director, Ray C. Anderson Foundation
- o Marilyn Brown, Regents' and Brook Byers Professor of Sustainable Systems, School of Public Policy
- o Michael Oxman, Managing Director, Ray C. Anderson Center for Sustainable Business
- Beril Toktay, Regents' Professor and Professor of Operations Management, Scheller College of Business

2:45 - 3:45 PM | The Georgia Tech Climate Action Plan (CAP) – panel discussion. The CAP will be launched and begin implementation during Spring, 2024. This panel will discuss the components of the plan, including Georgia Tech's current Greenhouse Gas inventory, the CAP implementation plan, and how students, faculty, and staff can get involved.

- Jennifer Chirico, Associate Vice President, Sustainability (moderator)
- o Allison Bridges, Program Manager, Ray C. Anderson Center for Sustainable Business
- Michael Chang, Deputy Director, Brook Byers Institute for Sustainable Systems
- o Jermaine Clonts, Associate Director of Utilities Management, Office of Sustainability
- o Greg Spiro, Interim Associate Vice President, Infrastructure
- o Jim Stephens, Senior Associate Vice President, Infrastructure

4 - 4:30 PM | Tech Talks Business – This Sustainability Showcase edition is part of a series of conversations between Dean Anuj Mehrotra and leaders at the forefront of business, technology, entrepreneurship, public policy, and civic innovation.

- o Anuj Mehrotra, Dean and Stephen P. Zelnak Jr. Chair, Scheller College of Business (host)
- Laurel Hurd, President and Chief Executive Officer of Interface, Inc., a pioneering company in sustainable business practices, will be his guest.

4:30 - 5:30 PM | Networking and refreshments

Wednesday, March 6 - Atlantic Theater, John Lewis Student Center, 351 Ferst Dr. NW

(closest parking: Visitor Area 3: Student Center Deck (W02) near 353 Ferst Dr. NW, Atlanta, GA 30332)

9 - 10 AM | The Role of Philanthropy in Climate Action and Sustainable Development

- o Kaye Husbands Fealing, Dean, Ivan Allen College of Liberal Arts (moderator)
- o Blair Beasley, Managing Director, Environment, Arthur M. Blank Family Foundation
- o John Lanier; Executive Director, Ray C. Anderson Foundation
- o Carlos Pagoaga, Senior Director, Circular Economy, The Coca Cola Foundation
- o Suzanna Stribling, Executive Director, Glenn Family Foundation

10 AM - 1:30 PM | Lightning Talks Session I

These are 7-minute "lightning" talks by Georgia Tech researchers, staff, and partners on their sustainability research and projects. Please join us for as much of the session as possible and enjoy getting to know colleagues with like interests.

- Julian James-Burke and Valerie Thomas— The South Got Something to Say
- Neslihan Ozlu— How Social and Environmental Initiatives Behind the Scenes Shape Buying Behavior: Evidence from a Field Experiment
- Arthi Rao An Integrated Approach to Creating Healthy Communities
- Caleb Bugg— Implementing Federal Food Service Guidelines in the US Could Improve Human and Planetary Health
- Garry Harris Energy For ALL
- Danielle Ismirle Dunigan and Ryan Greene Tech Dining Connecting the Dots of Diversion
- Abby Bower— Georgia Tech Climate Action Plan Implementation
- Ashutosh Dhekne- Tiny Data: Doing More with Less
- Allen Hyde— Youth Advocacy for Resilience to Disasters
- Gulsah Akar Developing Global Leaders in Sustainable, Resilient and Just Places!
- Maribeth Coleman—Inclusive Sustainability: A Research Roadmap for Climate Justice and People with Disabilities
- Dylan Brewer— Monitoring Air Pollution in Underserved South Atlanta (MAP-USA)
- Shatakshee Dhongde

 End Poverty in All Its Forms Everywhere
- Yuhang Wang- Fire, Climate, And Air Quality
- Lyuba Novi Supporting Coral Reefs Sustainability and Biodiversity Through Complex Networks Science
- Greg Spiro Electrification of Campus Heating Systems
- Iris Tien— Prioritizing Green and Grey Infrastructure Solutions to Support Equity, Sustainability, and Resilience in Coastal Communities
- Sourabh Saha— Additive Manufacturing for Economically Viable Nuclear Fusion Energy
- Patrick Kastner- From Insight to Action: Decision-Making for Sustainable Cities
- Dan Nemec Tech Square Phase 3 Sustainable Strategies
- Tamsin Leavy— GT Community Garden and Its Benefits
- Julene Tong- Circular Chemicals and Functional Biomaterials from Renewable Resources
- Christos Athanasiou
 — Aligning Advanced Construction Techniques with UN SDGs
- Malte Weiland Innovative Strategies to Boost the Circular Economy
- Ilan Stern— All-Solid-State Batteries: Fabrication of High-Performance Cells and Parametric Modeling for Manufacturing and Recycling
- Patritsia Stathatou— A Sustainable, Circular Solution for Removing Trace Lead from Drinking Water

Thursday, March 7 - Atlantic Theater, John Lewis Student Center, 351 Ferst Dr. NW

(closest parking: Visitor Area 3: Student Center Deck near 353 Ferst Dr. NW, Atlanta, GA 30332)

9 - 10:45 AM | Lightning Talks Session II

These are 7-minute "lightning" talks by Georgia Tech researchers, staff, and partners on their sustainability research and projects. Please join us for as much of the session as possible and enjoy getting to know colleagues with like interests.

- Juan Carlos Rodriguez— "Sustainabilities" in A Planet of Diverse Knowledges and Persistent Inequalities
- Yuanzhi Tang— Critical Minerals: From Resources to Solutions
- Jairo Garcia Georgia Tech Climate Vulnerability Assessment
- Natalie Khazaal Redesigning A Foreign Language Course on SDGs with the Help of Al: Benefits and Challenges
- Seumalu Elora Raymond Preventing Evictions After Disasters: The Role of Landlord-Tenant Law
- Shan Arora— Our Living Building Is Now a Preschooler: Where's the Rest of The Class?
- Perry Yang- Urban Tech
- Jason Gregory— Intersection of Equity and the Environment......Connectivity
- Paula Gomez Sustainable and Resilient Buildings
- Alberto Fuentes Post-Disaster Recovery in Puerto Rico
- Katundu Imasiku— The Role of Hydrogen in the Decarbonization of the Transport Sector in USA by 2050
- Jade Sainz- Climate-Informed Spatial Planning of Marine Aquaculture in Southern California
- Yanni Loukissas Pigeon Glass
- Xing Zhou— Modeling the Larval Dispersal and Connectivity of Red Snapper (Lutjanus Campechanus) In the Northern Gulf of Mexico

11 AM – 12:15 PM | Innovative Teaching with the U.N. SDGs: Examples from Georgia Tech Faculty - Rebecca Watts Hull, Assistant Director, Faculty Development for Sustainable Education Initiatives (facilitator). Join us to learn how faculty across diverse disciplines are enhancing teaching and learning with U.N. Sustainable Development Goals (SDGs). This dynamic panel presentation will provide exciting examples for aligning your teaching with Tech's strategic commitment to advance the SDGs.

- **1 2 PM | Connecting for Sustainability: Collaborative Paths to Environmental Justice** This panel will feature three researcher-community partner pairs speaking about their collaborative projects.
 - o Eric Greenlee, BBISS Graduate Fellow and PhD Student, College of Computing (moderator)
 - o Jung-Ho (John) Lewe, GT Aerospace Systems Design Lab, and Erica Holloman-Hill, Ayika Solutions: Household energy efficiency issues in historically marginalized communities in the Southeast
 - Russell Clark, The Coastal Equity and Resilience Hub, Georgia Tech Savannah, and Ofun Maja Egunjobi, Harambee House: The co-development of climate mitigation strategies and tools with community members and public officials in the Savannah area
 - Elora Raymond, School of City and Regional Planning, Georgia Tech and Alison Johnson, Housing Justice League:
 The creation of data-driven trackers and tools to prevent eviction in the city of Atlanta
- 2 3 PM | Young Alumni Keynote: Exploring Pathways to and Partnerships in Advancing Energy Equity Andrew White will speak about his interdisciplinary experience that bridges engineering and social science. He'll also discuss his energy equity work at PNNL, where he supports communities in realizing a just clean energy transition. Andrew is Energy Equity & Environmental Justice Systems Researcher at the Pacific Northwest National Lab he holds a BS in Civil Engineering from Georgia Tech, where he held a Stamps President's Scholarship and a Strategic Energy Institute Fellowship, and an MA in Political Ecology from Lancaster University as a Fulbright Scholar.

Friday, March 8 - Atlantic Theater, John Lewis Student Center, 351 Ferst Dr. NW

(closest parking: Visitor Area 3: Student Center Deck (W02) near 353 Ferst Dr. NW, Atlanta, GA 30332)

8:45 - 10:30 AM | Lightning Talks Session III

These are 6-minute "lightning" talks by Georgia Tech student researchers and partners on their sustainability research and projects. Please join us for as much of the session as possible and enjoy getting to know colleagues with like interests.

- Eric Greenlee Community-Driven Sensing for Manoomin (Wild Rice) Conservation
- Perrin Brady— The Connection Between Redlining and Air Quality in Atlanta
- Noemi Carillo Building for Equity and Sustainable: WAWA Outdoor Classroom
- Josh Ayers Electricity Access, Service Quality, And Energy Resilience in Condado, Puerto Rico
- Yujia Xu— Electric Vehicle Charging Stations Planning in Hyperconnected Hub Networks
- Prashant Limaye—Funding and Financing Sustainable Transportation Infrastructure
- Jingze Li— Hyperconnected Vehicle Delivery: Advancing A Multi-Modal Relay Ecosystem Across the US
- Minjae Kim- Compound Flood Analysis for Coastal Urban Areas
- Jun Wang
 — Retrofitting Urban Design Strategies for US Suburbs with Shared Autonomous Vehicles
- Rohan Datta— Electrify GT: Students Spark Change
- Lakshya Sharma— RCE Greater Atlanta Student Leadership in Sustainability
- Ashwini Tulpule How Students Organizing for Sustainability Addresses the UN SDGs
- Miguel Granier— Green Bank of Georgia: Could A Green Bank Accelerate Drawdown Georgia's Goal Of 57% GHG Reduction By 2030
- Skylar Lama Multitool Coral Reef Monitoring Through Modeling, Acoustics, and Machine Learning
- Allannah Duffy

 From Waste to Resource: Putting Heat to Work, Cool, Clean, Conserve, and Preserve
- Anubha Mahajan— Surrogate Models for Urban Regeneration

10:30 - 11:30 AM | Innovation, R&D, and Sustainability

- o Chaouki Abdallah, Executive Vice President for Research, Georgia Tech (moderator)
- Michael Chanin, CEO, Cherry Street Energy
- o Larissa Fenn, Director New Products R&D, Rayonier Advanced Materials
- o Josh Raglin, Chief Sustainability Officer, Norfolk Southern Corporation
- o Suzanne Lindsay-Walker, Vice President, Sustainability, Novelis

Posters and Art on Display Outside of Atlantic Theater, March 7 - 8, John Lewis Student Center, 351 Ferst Dr. NW

- Locally Enhanced Electric Field Treatment (LEEFT) for Next-Generation Water Disinfection (Xing Xie)
- Energy Sharing Boundaries for Buildings and Vehicles (Daniel Castro and Soowon Chang)
- Indoor Air Quality in the Kendeda Building (Jennifer Kaiser)
- Environmental Influences on Sleep Quality in African Americans with Mild Cognitive Impairment (Eunhwa Yang and Ibrahim Bilau)
- Freshman Engineering Students See Value in Sustainability-themed Project-based Learning (Raghu Pucha)
- Sustainability Programming and Curricular Resources in K-12 Education (Sabrina Grossman)
- Expanding Climate Data and Flood Risk Through Embroidered Bike Paths Down the Mississippi (Heidi Biggs)
- Creative Reuse of Discarded Plastic Bags (HyunJoo Oh)
- Altera (Elizabeth Marmo, Madeleine Tran, Kavya Jade, and Angie Bai)