



**Sustainability  
at Tufts**  
FY 2021-2022

**Tufts**  
UNIVERSITY



# focused on solving the issues of the future

## TABLE OF CONTENTS

<b>Introduction</b>	<b>01</b>
<b>Building Knowledge</b>	<b>02</b>
<b>Cultivating Leaders</b>	<b>04</b>
<b>Creating Resiliency</b>	<b>06</b>
<b>Expanding Influence</b>	<b>10</b>

The past several years have been a time of enormous progress for sustainability at Tufts. We recently welcomed the university's first chief sustainability officer, Dano Weisbord, who is leading the effort to make Tufts an institution that equips students to become climate leaders.

Our faculty continue to research the impacts of climate change and develop cutting-edge solutions to mitigate and adapt to our changing environment. Throughout the pandemic, we contributed to the resiliency of our community by reducing waste through single-use mask recycling, reusable to-go containers, and remote programming; subsidizing a local bike-sharing program; and providing support to our host communities so they can better manage the impacts of COVID-19.

Tufts completed construction of Joyce Cummings Center, which has the lowest energy intensity use for a building of its kind in Tufts' history. We have also recently completed decarbonization plans for two campuses to achieve our goal of carbon neutrality no later than 2050. In 2020, we were pleased to announce restrictions to direct investments in 120 coal and tar sands companies and a commitment to invest \$10-\$25 million in positive impact funds over the next five years to fight climate change.

As an institution focused on solving the issues of the future, the university created a new iteration of the Tufts Sustainability Council in 2021 that consists of faculty and students with expertise in climate solutions who are developing an overarching sustainability vision and framework to guide our work. As we commit to new and more ambitious goals, it is important to reflect upon our accomplishments and identify ways we can continue to make Tufts a more sustainable institution.

Anthony P. Monaco, President

# our sustainable community

Every member of our community can play a role in making Tufts a model for sustainability in higher education. **As you read this report, we encourage you to think about how sustainability is related to your work and passions.**

Tufts University publishes annual progress reports as it pursues a just transition to a sustainable future on our campuses and beyond. The information in this report represents a sampling of data and accomplishments in fiscal years 2021 and 2022 (July 1, 2020, to June 30, 2022), unless otherwise noted. There were many more sustainability initiatives led by students, faculty, and staff during this time period that are not highlighted in this report, but are nonetheless critical to sustainability at Tufts.

Much of the information is sourced from a comprehensive sustainability rating system for colleges and universities, hosted by the Association for the Advancement of Sustainability in Higher Education, that Tufts University participates in every three years. After receiving three silver ratings since 2011, **Tufts achieved a gold rating in November 2022.** Read Tufts' full assessment at [go.tufts.edu/stars](https://go.tufts.edu/stars).



*“The most exciting aspect of sustainability in higher education is when academic work—be it policy, economics, art, or science—feeds and informs our efforts to make Tufts better and our operational challenges help form questions and lines of inquiry for academic work.”*

— Dano Weisbord, Executive Director and Chief Sustainability Officer

Tufts achieves GOLD sustainability rating



# BUILDING KNOWLEDGE

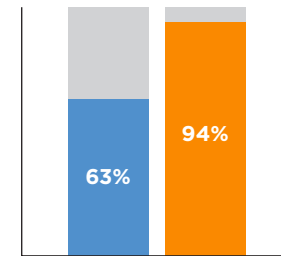
460+

sustainability courses a year

28

sustainability degree programs

The percentage of students who can define sustainability jumped from 63% to 94% (2018 vs. 2021)



*“The Master of Science in Sustainability program gave me not only the technical tools I needed to work on emissions reduction projects with the Denver International Airport, but also a better understanding of effective communication, project management, and the importance of long-term systems thinking and change.”*

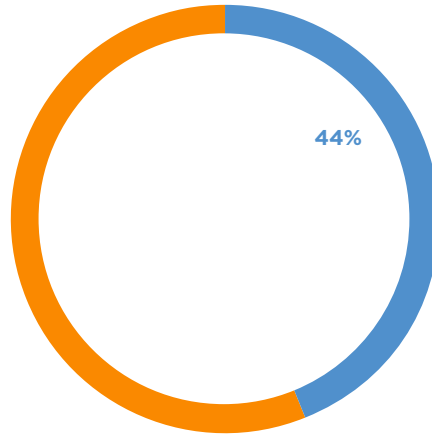
— Chelsea Spaman, AG23, M.S. in Sustainability candidate





**“Silk could revolutionize global health and food safety, and, importantly, generate sustainable approaches... for manufacturing and industry.”**

— *Fiorenzo G. Omenetto, Silklab Director and the Frank C. Doble Professor in the Department of Biomedical Engineering*



*44% of faculty research includes sustainability*

*David Kaplan, principal investigator, with a postdoc student in the Cellular Agriculture lab*



**\$10M**

**RESEARCH INNOVATION**

The Silklab is on the cutting edge of material science and sustainability, inventing “living materials” made from silk that have recently been able to preserve food, identify pathogens, mimic leather, create underwater glue, and much more.



*Silk bundles used by Tufts researchers to advance materials science and sustainability*

**ANALYZING SYSTEMS**

A 2020 student project investigated zoning, highway, and other government policies that have historically affected the environment in Massachusetts and deepened racial disparities in food access and opportunities for physical activity. The Department of Urban and Environmental Policy and Planning (UEP) research team then made recommendations for policy frameworks that can combat these disparities.

**AGRICULTURAL FRONTIERS**

A \$10 million U.S. Department of Agriculture grant was received by the Kaplan Lab in 2021 to research cellular agriculture, commonly known as “lab-grown” meat. Tufts is a leader in the emerging field of cultivated-meat production as a sustainable protein source.

# CULTIVATING LEADERS



10

*master of science in  
sustainability graduates since  
the degree's 2019 launch*

## HONING SKILLS

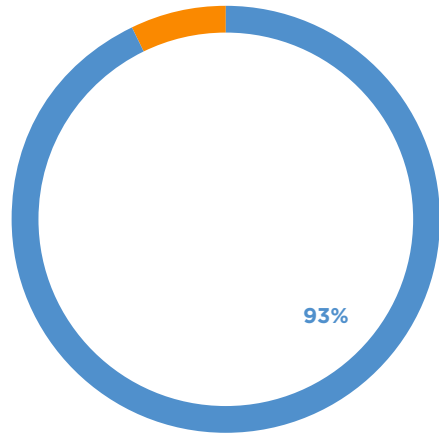
A new Certificate in Impact and Sustainable Investing will be offered in fall 2023 to train students in environmental, social, and governance (ESG) investing.



### GLOBAL PARTNERSHIPS

10+ countries represented at the first Climate Policy Summer Academy. Hosted by the Climate Policy Lab in 2022, the academy helps climate professionals cultivate global partnerships and share policy knowledge.

.....



93% of students can define environmental justice

17

sustainability campus clubs

10+

### JUST SUSTAINABILITIES

Kailani Day draws from her studies, volunteering, internships, and personal experience to deepen environmental justice work at Tufts. As a student Eco Rep, she and other reps formed a working group to foster learning opportunities and community partnerships that center justice.

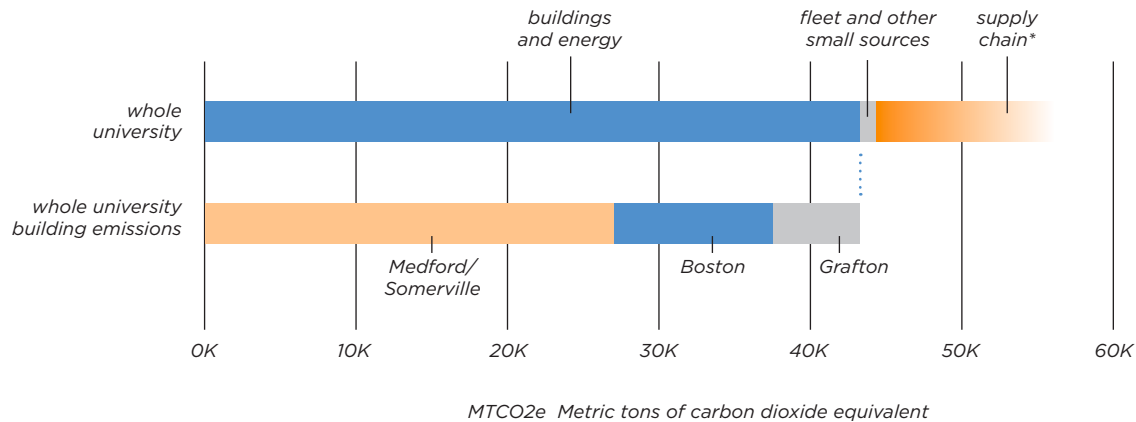
**“As a person living in a community impacted by environmental injustice, I see the effect pollution has on making people feel hopeless about attaining a better future. For me, it is important to learn as much as possible and give back to my community by educating others on environmental topics and making environmental justice activism more accessible.”**

— Kailani Day, A25, Environmental Studies and Anthropology major



# CREATING RESILIENCY

ANNUAL GREENHOUSE GAS EMISSIONS BY TYPE



## REDUCING EMISSIONS

Tufts is striving to reach carbon neutrality no later than 2050. In the past two years, Tufts outlined strategies to reduce the carbon emissions of buildings and energy systems on the Medford/Somerville and Grafton campuses.

*\*Supply chain emissions are produced off campus and are difficult to quantify. The fading represents those emissions that exist, but we have not yet calculated.*



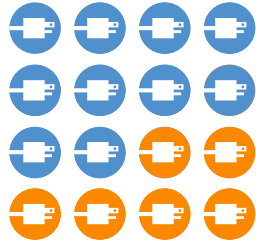
# 18%

*reduction in total energy consumption since 2005, even with an increase in building square footage*

## BUILDING FOR EFFICIENCY

Joyce Cummings Center opened in 2021 as the most energy efficient large academic building on the Medford/Somerville campus. Efficient features include heat recovery wheels, rooftop solar, triple-glazed windows, and efficient lighting. Tufts received two prestigious awards for excellence in sustainable infrastructure design in 2021 and 2022.





+ 6

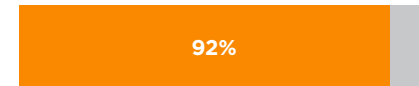
*six new EV chargers added to the Grafton campus in 2021, bringing the total to 16 free chargers across our campuses*



< 500  
FT

### LOW-IMPACT TRANSPORT

Seven Bluebikes stations are located within 500 feet of our Medford/Somerville, Boston Health Sciences, and SMFA campuses. In 2021, Tufts became a corporate partner of Bluebikes to offer Tufts community members a discounted annual membership and make sustainable transportation more accessible.



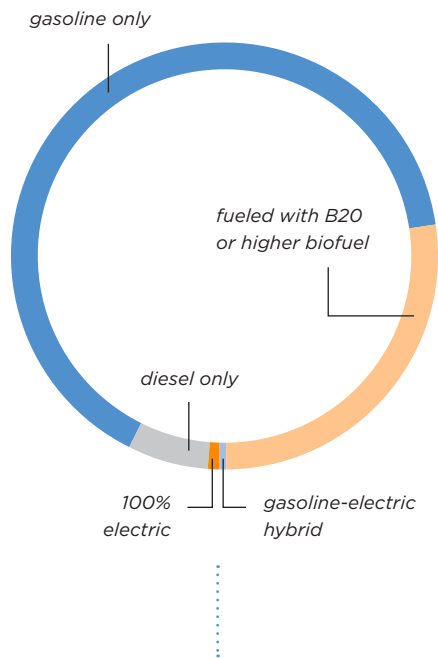
*of students used sustainable methods to commute to campus in 2019*



*of staff and faculty used sustainable methods to commute to campus in 2019*

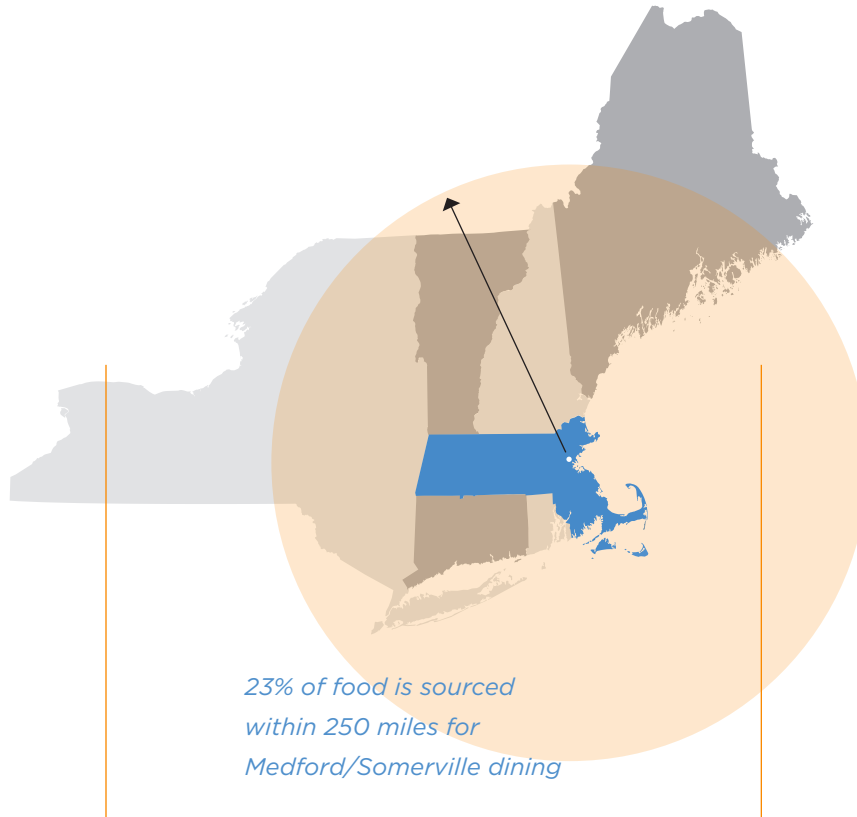


## TUFTS VEHICLE FLEET



### ROAD TO RENEWABLE

Students in civil and environmental engineering analyzed the lifespan of Tufts-owned vehicles in fall 2022 and suggested a timeline for Transportation Services to transition to hybrid or electric vehicles.



23% of food is sourced within 250 miles for Medford/Somerville dining

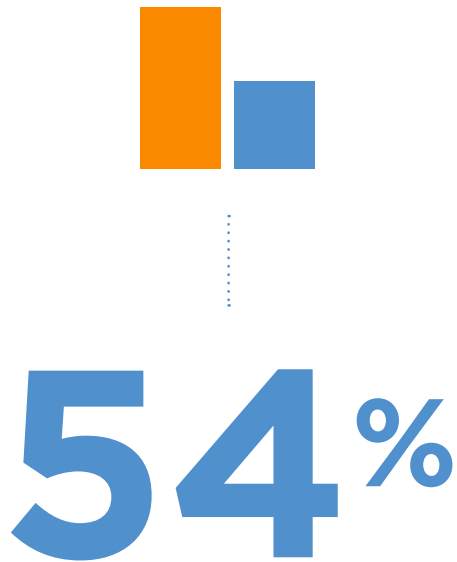


# 16<sup>M</sup>

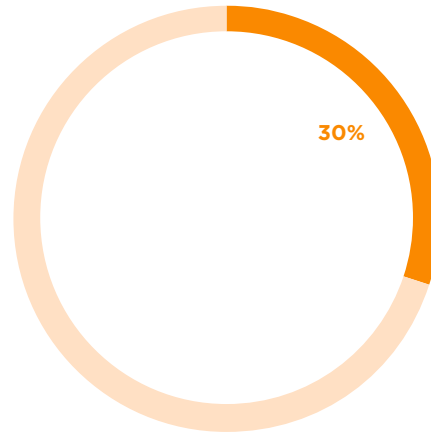
16 million fewer gallons of water used in FY22 vs. FY18

### WATER CONSERVATION

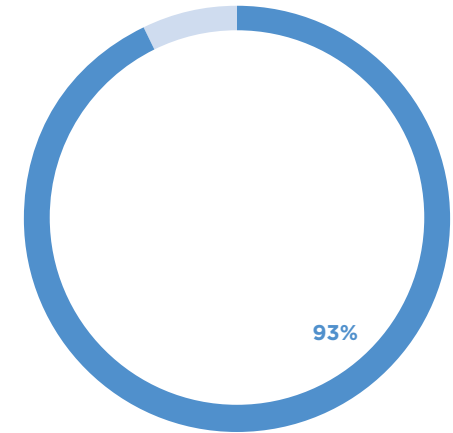
The SciTech Green Team reduced water and energy use in their lab by installing a more efficient device for lab sterilization with funding from the Tufts Green Fund.



*drop in the average amount of waste generated by a single Tufts community member from FY05 to FY21*



*30% of campus waste was recycled, composted, or donated for reuse in FY21*



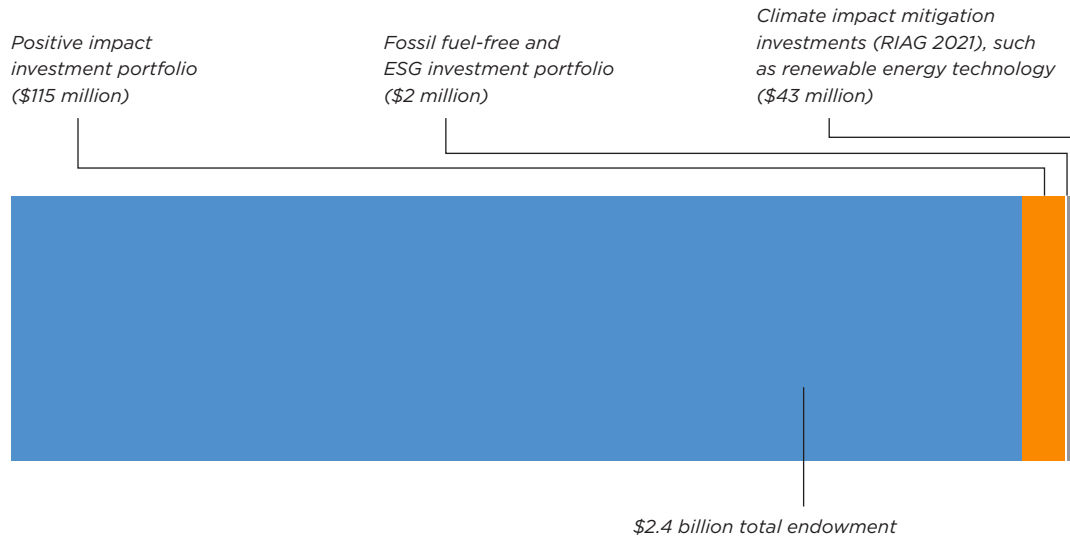
*93% of campus recycling is clean enough to be recycled, thanks to students and employees following recycling rules*

**REDUCING WASTE**

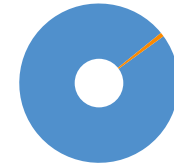
Tufts University was recognized for its sustainability initiatives—including specialty recycling, move-out waste reduction, and Eco Rep dorm composting—at the 2022 Sustainability Leadership Award Ceremony hosted by Casella Waste Systems.



# EXPANDING INFLUENCE



In 2022, 1.1% of the endowment was exposed indirectly to these companies through comingled funds



120

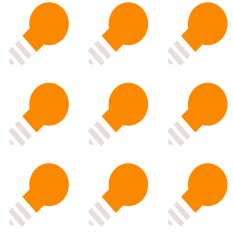
coal and tar sands companies restricted from direct holdings



## INVESTING WITH PURPOSE

With one of the largest pools of impact investments of any higher education institution in the country, Tufts is deploying multiple strategies to mitigate climate change through its \$2.4 billion endowment. In 2021, the board of trustees approved several actions for the endowment related to the climate change crisis (“RIAG 2021”). These actions were recommended by an advisory committee of students, employees, and trustees. See Tufts’ progress on these actions at [investments.tufts.edu](https://investments.tufts.edu).





9

*projects funded in FY21 and  
FY22 by the Tufts Green Fund,  
an annual \$40,000 sustainability  
fund for students and employees*

#### **FUNDING SUSTAINABLE IDEAS**

The Green Fund allowed faculty from the Friedman School of Nutrition Science and Policy and staff from New Entry Sustainable Farming Project to install four hydroponic gardening systems at a local high school for students to model food access solutions and sustainable tech.





**“In 1969, Dr. Jean Mayer—the founder of the Friedman School— [brought] together diverse stakeholders from around the nation and created a consensus report of recommendations to address hunger....Now, 53 years later, we face renewed, and different, sets of challenges...to identify and elevate the best ideas around the nation to end hunger, improve nutrition, and advance health and health equity.”**

### NATIONAL CONVERSATIONS

U.S. Senator Ed Markey, H19, and Gina McCarthy, AG81, joined other climate leaders to discuss technological advancements, political efforts, the importance of equity, and the need for student climate leaders at a Climate Summit held on April 29, 2022, hosted by Tufts’ Office of Government & Community Relations, the Jonathan M. Tisch College of Civic Life, and The Fletcher School.

### POLICY ADVOCACY

Above, Dariush Mozaffarian, M.D., dean and Jean Mayer Professor of Nutrition at the Friedman School of Nutrition Science and Policy, speaks of his work on the Task Force on Hunger, Nutrition, and Health in preparation for the White House Conference on Hunger, Nutrition, and Health in fall 2022. The conference, attended by faculty from the Friedman School, focused on combating hunger, promoting healthier eating, and reducing diet-related disease in the United States.

### STAY CONNECTED

 @greentufts

 @greentufts

 @greentufts

 greentufts

 [go.tufts.edu/oosnewsletter](https://go.tufts.edu/oosnewsletter)

 [sustainability.tufts.edu](https://sustainability.tufts.edu)



*This book is printed on Astrolite PC 100, which is Forest Stewardship Council certified and manufactured carbon neutral (VERs) using 100 percent renewable Green-e certified wind-powered electricity (RECs). Both the paper mill that produced the stock and the printing facility are located less than 60 miles from Tufts' Medford/Somerville campus.*

## DEPARTMENTS & PROGRAMS

The following departments, programs, and groups were responsible for the initiatives and projects included in this report. Many more are involved with sustainability at Tufts.

Board of Trustees  
Campus Planning  
Capital Projects  
Center for International Environment  
& Resource Policy  
Civil and Environmental Engineering  
Cummings School of Veterinary Medicine  
Department of Urban and Environmental  
Policy and Planning  
Dining Services  
Facilities Services  
The Fletcher School of Law and Diplomacy  
Friedman School of Agriculture & Nutrition  
Graduate School of Biomedical Sciences  
Investment Office  
Office of the Chief Diversity Officer  
Office of Sustainability  
Office of the President  
Office of the Vice Provost  
Operations Division  
Public Health and Professional  
Degrees Program  
Responsible Investment Advisory Group  
SciTech Green Team  
School of Arts and Sciences  
School of Dental Medicine  
School of Engineering  
School of Medicine  
SMFA Sustainability Committee  
Sustainability Council  
Transportation Services  
Tufts Eco Reps  
Tufts Green Fund  
Tufts Institute of the Environment

## DATA & FEEDBACK

The following individuals contributed to this report.

Ruth Bennett  
Shoshana Dodge  
Jason Erbach  
Sara Gomez  
Mike Howard  
Allison Larmann  
Cory Pouliot  
Henry Puza  
Kaitlyn Reed  
Jennifer Reilly  
Saheba Sahni  
John Savino  
Kelly Shaw  
Craig Smith  
William Thistle  
Tina Woolston

## PHOTO CREDITS

Anna Miller, Tufts University  
Office of the President  
Office of Sustainability  
Association for the Advancement of  
Sustainability in Higher Education  
Department of Urban and Environmental  
Policy and Planning  
Alonso Nichols, Tufts University  
Climate Policy Lab  
Kelvin Ma, Tufts University

## DESIGN

Marc Harpin, Rhumba Design



## Office of Sustainability

Barnum Hall, Rooms 233-238  
163 Packard Avenue  
Medford, MA 02155

617.627.3191  
[sustainabilityoffice@tufts.edu](mailto:sustainabilityoffice@tufts.edu)



**Tufts is reimagining its future as a sustainable campus!  
The Sustainability Council is creating a new path for  
Tufts to become a model of sustainability in higher  
education and better equip students to become climate  
leaders. Connect with our sustainability planning at  
[go.tufts.edu/sustcouncil](https://go.tufts.edu/sustcouncil).**