GRADUATE SUSTAINABILITY GROUP

Emory Sustainability Leaders' Sustainability Goals 2016-2026

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Report prepared for the:

Emory Sustainability Visioning Committee

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INTRODUCTION

In October 2014, Emory University's Office of Sustainability Initiatives (OSI) selected Graduate Sustainability Group (GSG) to receive funding through the OSI Sustainability Incentives Fund for a project to map Emory's sustainability leadership community.

The mapping revealed a **network of over 700 individuals** who are striving to further sustainability at both Druid Hills and Oxford campuses[3]. The research team sent a social network analysis (SNA) survey to these sustainability leaders to understand how they engage with sustainability, both individually and in collaboration with each other[4].

While the project's main objective was to understand the relationships within the leadership community, it also aimed to **contribute to the sustainability visioning process** underway at Emory. It did this by including the following question in the survey:

> *"If you were on the Emory 2016-2026[5] Sustainability Visioning Committee, what ONE bold and courageous sustainability goal or action would you put forward for inclusion in the final Visioning Document?"*

In all, 381 respondents answered the question. Of those, **333 responses** were useful for analysis[6]. Ioulia Fenton, the study's principal investigator (PI) and member of the Visioning Committee, coded the survey answers for recurring themes and developed a codebook. To ensure the codebook's validity and reliability, a second team member then coded the data using Fenton's codebook. Coding discrepancies were discussed and resolved, and the survey results were compared to the four Strategic Action Arenas identified in the draft Emory 2016-2026 Sustainability Vision and Strategic Plan (p.2).

This report presents the most pertinent findings from this analysis. It is intended to supplement the visioning process by expanding the number of voices included in the final document. It is therefore an exercise in **community consultation**, the first of many that the Committee plans to carry out in its Community Conversation sessions.

Questions about the report should be directed to GSG president and study PI, Ioulia Fenton at ifenton@emory.edu. For more information on the original SNA project, please visit http://tinyurl.com/EmorySNA.

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[3] The research did not include Emory Healthcare or the University's alumni network.
[4] Network mapping took place January-May 2015; survey data was collected May-June 2015.
[5] The original survey question specified 2015-2025 as that was the date range of the vision at the time; since then, the vision's range has changed to 2016-2026 and is thus referred to as such throughout this report.
[6] The analysis excluded 48 responses (13%): 8 that answered the question with "I don't know" and thus did not provide a useful response; 31 that answered with "I was not on the committee," indicating confusion over the meaning of the question; and 9 that answered with vague, less useful suggestions.

SUMMARY OF FOUR STRATEGIC ARENAS

For reference, the four strategic arenas identified in the draft Emory 2016-2026 Sustainability Vision and Strategic Plan document are summarized below:

I. Support culture change among academic and operational units to carry forward courageous action on sustainability:

- **Incorporate sustainability into first impressions of Emory.**
- **Sustainability orientation for all incoming students, faculty, and staff.**
- **Sustainability commitments in every unit's strategic plan, including Healthcare.**
- **Full-cost accounting in all routine decision-making.**
- **Sustainability requirements in recruitment and performance evaluation.**

II. Expand network of sustainability champions to strengthen leadership at every level:

- **Organizational structures for champions:** *Faculty Fellows; Staff Reps and staff education, learning outcomes, and assessments; Student champion internships and mentoring; Student Government sustainability leadership positions; Sustainability Leadership Academy.*
- **Prepare Emory graduates for sustainability leadership:** *Sustainability in academic programs and degrees; Expand curriculum work; Link sustainability info needs to academic programs; Campus-based research/data hub; Support faculty sustainability interest groups and start-ups.*
- **Integrate sustainability into the life of the campus**: *Residential sustainability education; Sustainability literacy survey; Sustainability metrics for programs, residence halls, and Greek life; Community service for all students; Sustainability in summer programs and camps.*
- **Invest in Office of Sustainability Initiatives: financial, human, and support resources.**

III. Use Emory landscape, buildings, and operations to model sustainable choices:

- **Built environment:** *Carbon-neutral new construction; Best practices for building interiors; Reduce energy use (including Healthcare) 50% per sq.ft. and 25% total, and renovated buildings by 20%; Self-generate 10% energy; Reduce campus water use by 50% and eliminate drinking-water use for non-potable purposes; Make new Campus Life Center net zero and "living building;" Use iconic buildings for sustainability outreach; Revolving fund to incentivize operational units to conserve beyond goals; Make all roof renovations green or solar.*
- **Waste:** *All events zero-waste; All functions plastic bottle free, except Commencement; Divert 95% of non-construction waste, except medical and hazardous; Compost, re-use, recycle 95% of all food, non-hazardous, and construction waste; Divert 20% of non-hazardous medical waste; Achieve the 37% Healthcare waste reduction/re-use/recycling nation-leading targets.*
- **Transportation:** *Carbon-neutral Fleet; Targets and incentives to double alternative commuters; Bring bike share and Cliff Shuttle to neighborhoods and to Lindbergh MARTA station; Increase awareness of alternative transportation among Healthcare patients and University visitors.*
- **Campus ecosystem**: *Campus in a Forest vision; Net Positive Forest Policy; 200 trees by 200th birthday; Remove invasive species in 25% grounds and replace with native species; Reduce impervious surface by 15%; Reduce turf grass by 15% and replace with native species; Research herbicide and insecticide alternatives.*
- **Food:** *75% sustainable food purchases by 2030, Healthcare 25% by 2025; Oxford farm to produce 50% of Oxford needs and 5% Druid Hills needs by 2020; Second Emory organic farm.*
- **Climate action:** *Update Climate Action Plan (CAP); All CAPs to reduce GHGs 20% by 2020 and 50% by 2050; Create Carbon Neutral Degree.*

IV. Create strategic partnerships with local, national, and international institutions to build flourishing and resilient communities:

- **Partner with Atlanta government, NGOs, and corporations for expanding:** *MARTA to Clifton Corridor; Green energy through Georgia Power; Food security, resilience, and self-provision in metro Atlanta via Food Hub; Local food business incubator; Healthcare community outreach.*
- **Enhance sustainability decision-making in the national and Emory supply chain.**

KEY RECOMMENDATIONS

Overall, there is broad agreement between the categories of goals put forward by Emory's sustainability leaders and those sketched out by the Visioning Committee in the draft 2016-2026 Sustainability Vision and Strategic Plan. However, the community also proposed additional goals and actions, and for some areas suggested more bold targets than currently envisioned in the draft. To include the sustainability leaders' voices in the final visioning document, the authors of this report recommend the following:

1. Add a greater focus to **participation**, **inclusion, and collaboration** for sustainability, particularly goals to encourage participation in sustainability vision and action of all Emory communities, units, departments, and buildings, non-Emory businesses operating on or close to Emory campuses, and local communities.
2. Increase prominence of **social concerns** such as equity, poverty, and justice, with goals for both Emory's internal community and local and regional neighbors.
3. Include bold action on **institutional divestment** from activities that contribute to climate change, such as fossil fuel production and industrial agriculture, or that otherwise misalign with Emory's sustainability goals.
4. Add a goal to increase **visibility of current sustainability projects and initiatives**.
5. Incorporate more specific goals and action items for supporting collaborative and multi-disciplinary **research and intellectual work** on sustainability, as well as goals for better measurement, monitoring, and evaluation of sustainability progress.
6. Consider accepting the community's **bolder and more courageous goals**, particularly on public policy work, standards for existing buildings, and goals for energy production, transportation, campus water management, and bottled water.
7. Insert goals and actions on **new items** of concern raised by survey respondents on paper, single-use plastics, and air travel, and expand food goals to include novel suggestions that address food consumption and social concerns in the food system.
8. Incorporate the sustainability leaders' myriad suggested **concrete actions** for meeting visioning goals into unit and department plans for realizing the said goals. Alternatively, and to add clarity to the vision, consider **reorganizing the vision document into two parts**:

   Part 1: An overview of the four Strategic Action Arenas with broad goals, but not specific actions to achieve them, such as *"Divert 95% of non-construction waste"* and *"Expand curriculum work."*
   Part 2: A larger list of possible specific tactics and initiatives to achieve the goals set out in Part 1, such as *"Make 100% of events zero-landfill-waste"* and *"Commit 25% of faculty to integrating sustainability into their teaching areas."*

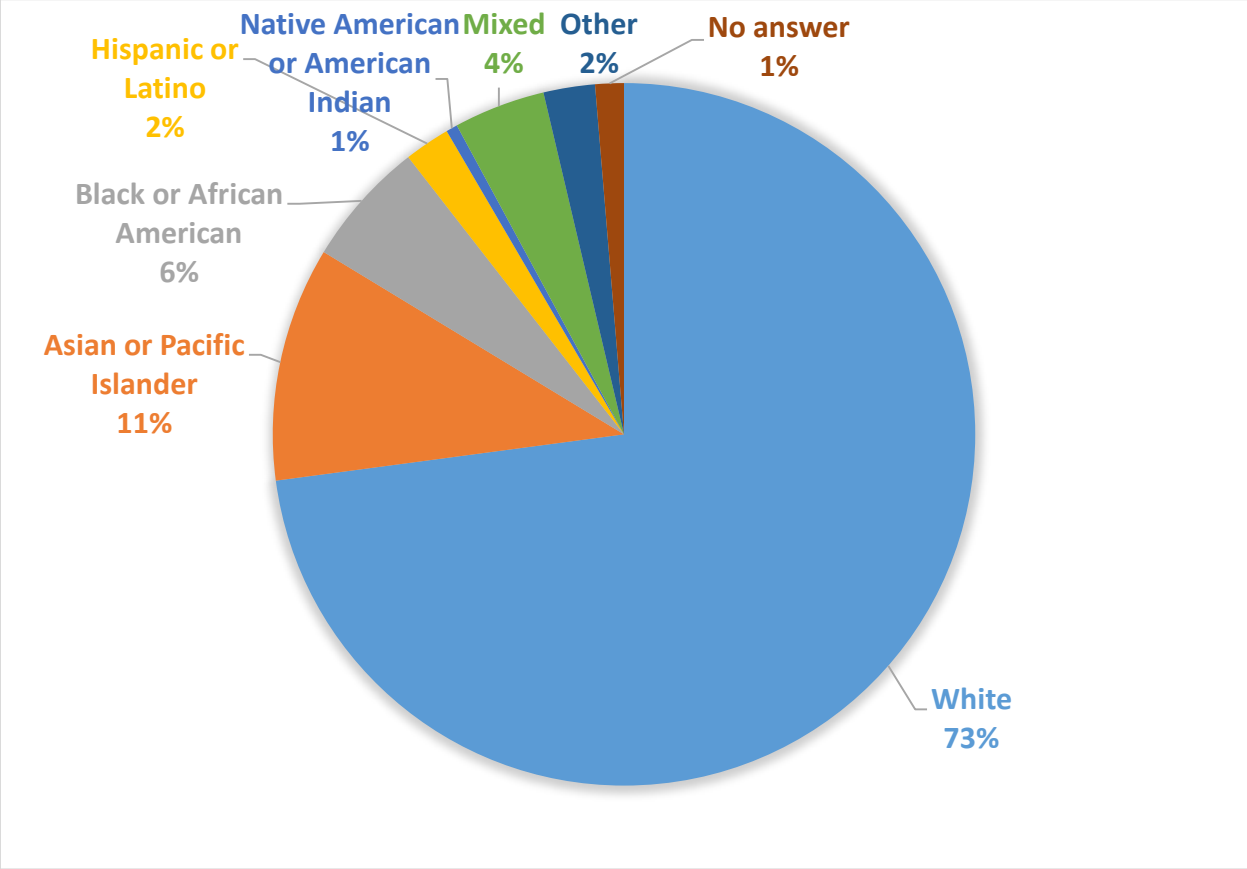
RESPONDENT DEMOGRAPHICS

In all, 333 members of the Emory Druid Hills and Oxford campuses' sustainability leadership communities[7] responded to the following question:

> *"If you were on the Emory 2016-2026 Sustainability Visioning Committee, what ONE bold and courageous sustainability goal or action would you put forward for inclusion in the final Visioning Document?"*

In terms of ethnicity, 73% of the respondents identified as white, 11% Asian or Pacific Islander, 6% Black or African American, 2% Latino or Hispanic American, 1% Native American or American Indian, and 4% as more than one ethnic background (see Chart 1). In terms of gender, 60% of respondents identified as female, 39% as male and 1% as other.

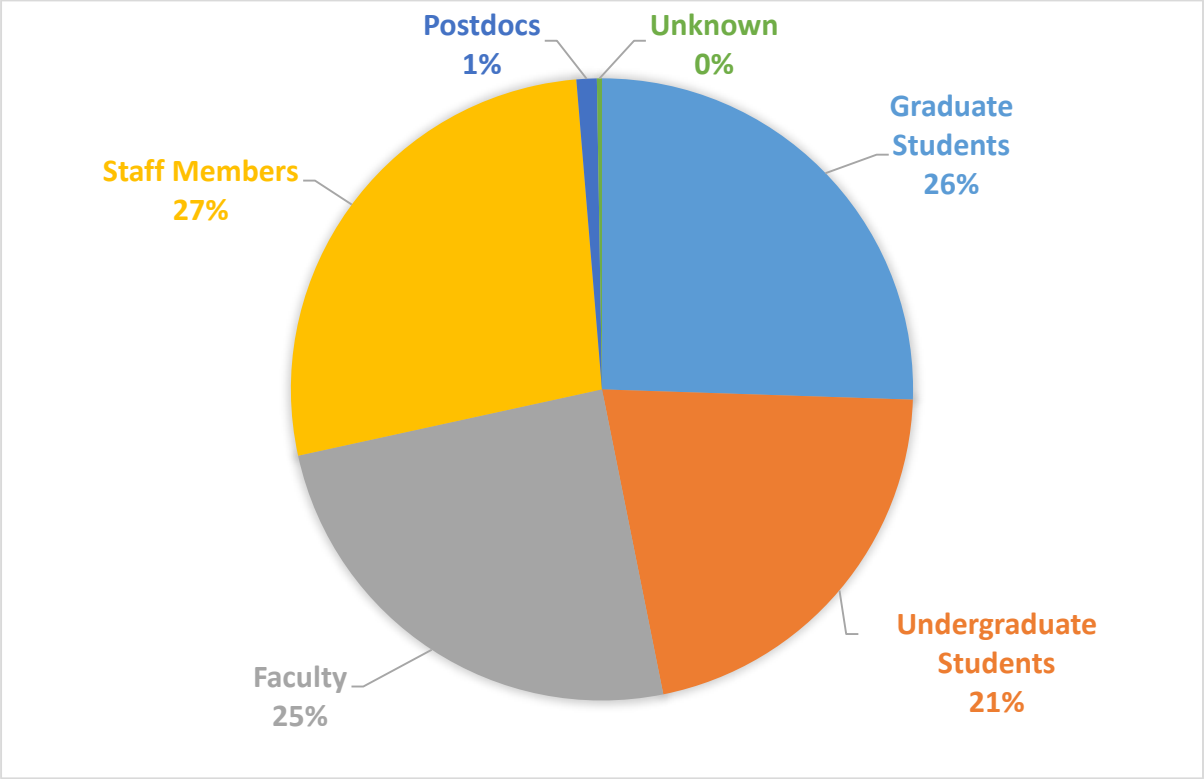
Chart 1: Ethnicity of Survey Respondents



[7] The research did not include Emory Healthcare or the University's alumni network.

Students represented roughly half the respondents (47%) and faculty and staff roughly a quarter each (25% and 27%, respectively). When undergraduate and graduate students are considered separately, the survey responses were fairly evenly spread out across the four groups (see Chart 2).

Chart 2: Respondent Status at Emory



RESULTS: COMMUNITY SUSTAINABILITY GOALS

i. Introduction

Two coders analyzed 333 survey responses for repeated themes, generating 20 major categories. Five of these contained two or three sub-categories each. Most of the community-generated categories and sub-categories corresponded to the themes and goals identified in the Visioning Committee's Strategic Action Arenas (see page 2). However, eight categories presented new or cross-cutting considerations that lay outside or across the areas considered in the current draft document (Table 1). The results section begins with these..

To make the rest of the results as easy to understand and as useful as possible, we use the Visioning Committee's report structure as its basic framework, presenting the four Strategic Action Arenas in order. Sub-sections are derived from the specific goals and goal areas identified within the arenas. Respondent categories and/or sub-categories that fit within each sub-section are presented in turn. Each section of the report is designed to stand alone, so some information is repeated to allow readers to skip between them.

Each category and sub-category includes a brief explanation of the theme it contains and an overview of how items in that category map onto the Committee goals. We also provide two statistics to give an indication of the prevalence of each factor. Firstly, we report the raw prevalence score, i.e. how many survey responses addressed the theme under consideration (see Chart 3 for details).

Secondly, we report a percentage occurrence rate. Many codes co-occurred with other codes (see Chart 4 for the most frequently co-occurring theme pairs), with some responses reaching five or six codes. This means that the total number of code applications (n=539) outnumbers the total number of responses (n=333). We present the theme occurrence rate as a percentage of the (more meaningful) total number of responses rather than as a proportion of the total number of code applications.

Each category section concludes with exemplar quotes from survey respondents' proposed goals and actions. While most responses are provided verbatim, some are paraphrased and/or shortened for brevity.

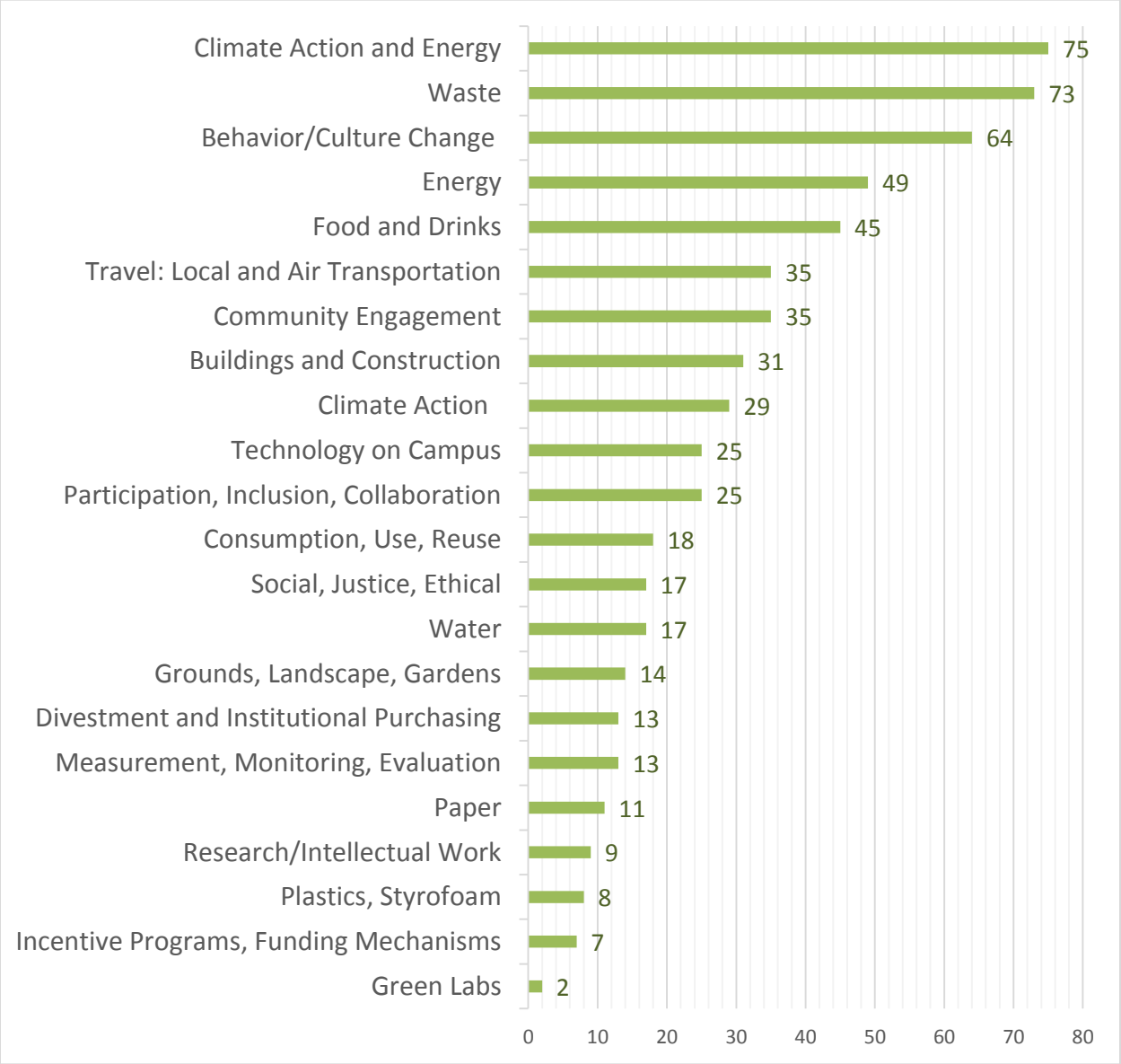
Some respondents did not observe the one goal restriction. In total, 333 respondents proposed 347 goals. Participants also varied in whether they proposed broad goals and/or highly specific actions. This document presents both and, where possible, separates them for clarity.

Table 1: Summary of Committee Strategic Arenas and Corresponding Respondent Categories

Committee Strategic Arena	Survey Category	Survey Sub-Category
I. Support culture change among academic and operational units to carry forward courageous action on sustainability.	Participation, Inclusion, Collaboration	
	Behavior and Culture Change	*Increasing Visibility of Current Programs and Achievements*
II. Expand network of sustainability champions to strengthen leadership.		*Education, Teaching, and Trainings*
III. Use Emory landscape, buildings, and operations to model sustainable choices: 1) built environment, 2) waste, 3) transportation, 4) campus ecosystem, 5) food, and 6) climate action.	Buildings and Construction	
	Climate Action: Emissions, Carbon, GHGs, Fossil Fuels	
	Energy	*Clean Energy Consumption*
		Energy Reduction/ Efficiency
		Energy Production/ Independence
	Food and Drinks	
	Grounds, Landscape, Gardens	
	Paper	
	Plastics, Styrofoam	
	Travel: Local and Air Transportation	
	Waste	*Waste Reduction*
		Waste Diversion: Recycling, Compost
	Water	
IV. Create strategic partnerships with local, national, and international institutions to build flourishing and resilient communities.	Engagement with communities outside of Emory	*Engaged Work and Learning*
		Public Policy
		Working with/Pressuring other businesses, orgs, groups, and communities
V. New and cross-cutting considerations	Incentive Programs and Funding Mechanisms	
	Institutional Divestment	
	Measurement, M&E	
	Research/ Intellectual Work	
	Social, Justice, Ethics	
	Technology on Campus	*Electronics/ Software*
		Hardware

Chart 3: Theme Prevalence

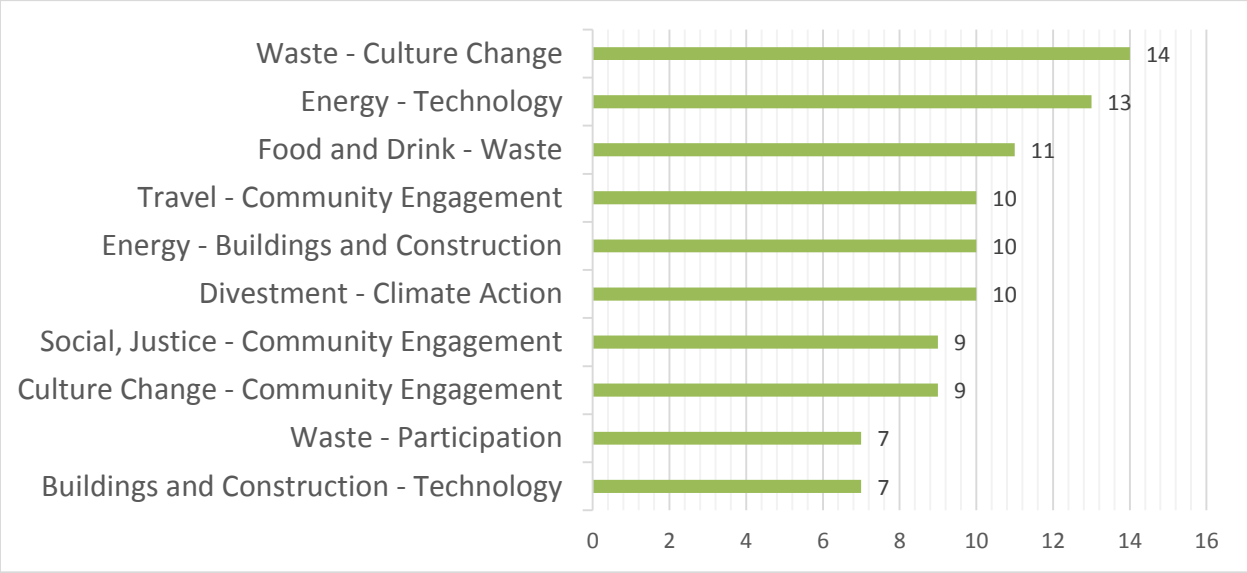
(Number of Responses per Category*)



***Special Note on Climate Action and Energy:** The analysis recorded 29 Climate Action and 49 Energy responses. However, these two categories are closely related and often require similar actions. For example, addressing GHG emissions (Climate Action goal) requires reducing reliance on fossil fuels, which often means investing in and producing alternative, renewable energy sources (Energy goal). Only in three cases was the Climate Action category co-coded with the Energy category, meaning that when considered together these issues occurred in almost a quarter of all responses (n=75, 23%), making the combined category of Climate Action and Energy our community's biggest concern (see Chart 3 above).*

Chart 4: Top 10 Co-Occurring Theme Pairs

(Number of Responses Containing Both Categories)



Each section and sub-section reviews the extent of community agreement with Committee's goals and actions. To avoid repetition, we provide examples that represent novel or expanded elements from the survey results rather than those that recap the current vision's information. Nevertheless, occasionally, action items that cross-cut strategic arenas or their sub-goals appear more than once in the relevant sections.

In what follows, **grey headings** and the *a, b, c, d* numbering format denote an existing action category under a Strategic Action Arena of the draft visioning document. **Green headings** and the *1, 2, 3, 4* numbering format provide suggestions derived from the sustainability leaders' survey. All quotes from the survey are *italicized*.

The entire dataset and its analysis—a matrix of the survey responses and the codes applied to them—is found in the spreadsheet file provided separately. We encourage the Sustainability Visioning Committee and Emory's sustainability community members to explore the full dataset and suggestions found therein. To request the codebook used for the analysis please contact ifenton@emory.edu.

Finally, while we have worked hard to accurately match survey responses to the Committee's draft plan, much of what follows is open to interpretation and debate. We welcome corrections, critique, and suggestions for improvements.

ii. Cross-Cutting and New Considerations

Overview: Overall, results from the sustainability leaders' survey matched well with the broad categories identified by the Visioning Committee in the draft 2016-2026 Emory Sustainability Vision document. Even when respondents' suggestions added new ideas to the Vision, their stated goals generally fit into the Committee's established strategic arenas. However, the survey also generated a few cross-cutting categories that find place in multiple arenas, as well as several entirely new categories. This section introduces these goal categories and, where appropriate, the specific action-item suggestions that accompany them.

New Considerations: Analysis of sustainability leader goals and actions for Emory's next ten-year vision revealed four considerations that are currently un(der)represented in the visioning draft. These are: giving more attention to social, justice and ethical issues that concern both Emory's internal community and its neighbors; divesting the university's portfolio from fossil fuels, industrial agriculture, and other activities that do not support Emory's sustainability vision; engaging in more collaborative and multi-disciplinary intellectual work to define, implement, and evaluate sustainability; and ideas for incentives and funding mechanisms to realize the community's vision:

1. **Social, Justice, and Ethical:** An important goal for Emory's sustainability leaders is the incorporation of social, justice, and ethical concerns into sustainability at Emory. This category featured in 17 responses (5% of sample) and often co-occurred with other major goals, especially those on community engagement (9 co-occurrences). Such responses are included in relevant sections below. The following is a sample of the more concrete suggestions for expanding the 2016-2026 Emory Sustainability Vision into the realm of social concerns:
   - *Raise the minimum wage paid to hourly workers (including contract workers) and implement the recommendations of the Commission on Labor and Class.*
   - *Strive for economic sustainability for low-income students, many of whom go hungry or eat poorly for dearth of wealth.*
   - *Link sustainability to social justice work on campus.*
   - *Through public health and community engagement perspectives connect stakeholders at Emory who are interested in ending male intimate partner violence against women to more partnerships outside of the University.*

2. **Institutional Divestment:** With occurrences in 13 responses (4% of sample), institutional divestment represents a brand new element currently not covered by the Visioning Committee's draft. This category calls for Emory to a) divest from companies focused on production of fossil fuels, industrial crops and livestock, and other activities that contribute to climate change; b) re-invest into renewable energy

production and other sustainable ventures; and c) align all institutional purchasing with the University's sustainability goals. Suggested goals and actions include:

- *Complete institutional divestment from fossil fuels (graduated over 10 years until we finish the process in 2025).*
- *Cease all forms of support (by divesting any investments in and stopping the selling of products produced via) industrialized animal agriculture, the single biggest contributor to global climate change.*
- *Divest from fossil-fuel companies and diversify these funds into renewable investments. This would make a major statement to align with Emory's sustainability vision for a self-sustaining and renewable future.*
- *Better align Emory's institutional purchasing with its sustainability goals. This could include food and goods used by the university.*

3. **Intellectual/Research Work:** Nine answers (3%) called for more participatory input and intellectual effort from humanities, natural sciences, students, and other groups, on both broad and specific themes, such as the definition of sustainability itself and the disposal of biomedical waste, respectively. Action items include:
   - *Research how we should even begin to understand sustainability in the first place. For instance, often, the focus is on building new buildings that are 'greener' than old buildings. However, most literature on environmental impact, especially what it would truly mean to have a more rational conception of sustainability, suggests that the increase of industry and building new buildings is actually counterproductive to the goals of sustainability. That is, the type of industry and production involved in building new buildings creates far more environmental depletion and harm than is found when we continue to use old buildings, even if they are inefficient. Hence, the Sustainability Visioning Committee should seek a clearer understanding of what it means by sustainability in the first place, in order to avoid reducing it to a buzzword. For me, sustainability needs to focus on anti-consumerism and figuring out how to use and reuse what we already have.*
   - *Understand sustainability holistically, thinking outside the boxes in which the typical pursuit of science has trapped us. Science is a big part of the solution, but sustainability is a philosophy and requires philosophical examination.*
   - *Establish a connection between science and humanities without which no global solution can be found.*
   - *Better integrate the natural sciences in sustainability process and discussions.*
   - *Protect the natural environment and involve people with expertise in ecology.*
   - *Working with the Emory Environmental group, explore ideas and concepts for the disposal of biomedical waste.*
   - *Invite a member of the Environment Committee to be part of the Sustainability Visioning Committee.*

4. **Incentives and Funding Mechanisms:** Seven responses in the survey (2%) proposed certain mechanisms for incentivizing sustainable practices and/or for generating funds for programs and incentives. While these could fit under existing

Action Arenas, this category is highlighted here as the following suggestions represent creative ideas for some of our biggest challenges: raising funds and incentivizing behavioral change. Community ideas include:

- *Invest more in optimizing the campus and building utility and energy systems. This funding would come from a source solely obligated for such use, such as a revolving fund that would regenerate and grow in value.*
- *Provide an option for all Emory-related international travel—by faculty, students, and staff—to donate a sum comparable to their carbon footprint (based on distance traveled and means of transportation) to an in-house carbon-reduction fund. Use this pool of funds for all direct Emory efforts to reduce its carbon emissions, as well as for climate change research.*
- *Incentivize department chairs to agree to use technology such as GoTOMeeting to permit meetings from home with students, faculty, and departments as this will: a) cut down on emissions driving into campus and driving to find parking; and b) mean more time for research and write-up, thus improving discipline rankings as the scholarly productivity of faculty increases due to more time spent on real work than on driving to and from and parking at Emory.*
- *Show that we are all partners by setting a financial savings goal for sustainable practices and if that goal is achieved share the savings with each staff member.*
- *Give money to students who practice sustainable actions.*
- *More budgets for sustainable groups on campus (a rewards system).*

Cross-Cutting Considerations: Most responses in this section were co-coded with other themes found throughout this document; that is, sustainability leaders proposed concrete actions for the following four categories that map onto specific Visioning Committee strategic arenas. We provide the following explanations of these cross-cutting themes for reference (in order of prevalence):

5. **Education, Teaching, and Training:** Many respondents suggested that educating students, faculty, and staff on sustainable practices both on and off campus is integral to creating culture change (Action Arena I) and strengthening sustainability leadership (Action Arena II). The Education, Teaching, and Training category appeared in 35 responses (11%), focusing on Academic Education, Integrating Campus Life in Sustainability Education, and Employee and Community Education. These themes are teased out in the relevant sub-sections of Action Arena II, but also echo across the document.

6. **Technology on Campus:** The use of technology to solve sustainability dilemmas or to help in meeting sustainability goals featured in 25 responses (8%) and included both software and hardware ideas, like developing an app for community waste tracking and installing solar panels on campus, respectively. A true cross-cutting topic, the Technology on Campus category always co-occurred with another main category, as the proposed technological solutions were aimed at meeting other

goals like behavior change or energy use reduction. As a result, we do not report the responses in this category here, but they can be found throughout the report. Interested readers can consult the accompanying data spreadsheet containing all the responses and complete analysis of the themes they address.

7. **Consumption, Use, and Reuse:** This cross-cutting category came up in 18 responses (5%). It refers to a better utilization and reuse of existing spaces, materials, and resources, as well as a focus on a reduction of consumption in general. As one respondent put it: “I would like to see Emory continue to use resources as efficiently and sensibly as possible.”

8. **Measurement, Monitoring, and Evaluation:** Related to the above goals of making Emory sustainability efforts more visible and of engaging in more research and intellectual work, 13 responses (4%) proposed systems or areas of monitoring, measuring, and evaluating sustainability progress, as well as utilizing this information for behavior and institutional change. Suggestions in this category often aimed at solving other issues such as reducing paper use or managing waste; these are presented in the relevant sections below.

iii. Strategic Action Arena I: Culture Change among Academic and Operational Units

a. **Incorporate sustainability into first impressions of Emory.**

b. **Sustainability orientation for all incoming students, faculty, and staff.**

c. **Sustainability commitments in every unit's strategic plan, including Healthcare.**

d. **Full-cost accounting in all routine decision-making.**

e. **Sustainability requirements in recruitment and performance evaluation.**

Overview: Calls for behavior and culture change across the Emory community featured in roughly one out of every five survey responses (n=64, 19%), making it the third most important category after Climate Action and Energy and Waste. The surveyed sustainability leaders echoed a majority of the points in the Visioning Committee's Action Arena I, such as pre-orientation and orientation activities for all new incoming campus community members, sustainability requirements in performance and recruitment, and incorporation of sustainability into first impressions. Holding all units and departments, including Healthcare, to the same sustainability standards and goals is another important goal. Full cost accounting did not feature in survey responses and thus represents a unique point in the current draft vision.

The community's responses did not neatly map onto the five objectives in this section. Rather, the ideas were best represented by two categories of Participation, Inclusion, and Collaboration; and Increasing the Visibility of Current Programs and Achievements.

The Committee's objectives for this section are broader than for the other three and do not include as many specific action items. The following examples thus have the potential not only to expand the aims of Strategic Action Arena I, but also may provide ideas for specific projects and initiatives that are designed to meet the set goals, such as improving the visibility of Emory's existing sustainability success stories.

1. **Participation, Inclusion, and Collaboration***:* Expanding the reach of sustainability to include marginalized groups, increasing the participation of all Emory and Oxford units in the University's sustainability vision and goals, and collaborating with neighboring communities and businesses was important in 25 cases (8%). Many of these correspond to the Visioning Committee's goals in the first two Action Arenas, while some contribute new ideas. The following six quotes summarize these suggestions:
   - *Ensure that all academic areas—physical sciences, natural sciences, social sciences, humanities, and more—contribute to the intellectual work required*

to further sustainability at Emory and beyond, and that none dominate the discussion and action.

- *Commit all Emory schools and units—specifically Emory Healthcare and hospital system, all of Emory and Oxford Dining, Emory Clinic (especially Building A), and the School of Medicine—to the same high sustainability standards and practices with the goal of becoming national leaders in sustainability education and said standards and practices.*
- *Include "off" campus areas such as Eagle Row housing, Emory Village businesses, and "non-Emory" campus-based franchises in Emory's sustainability goals and initiatives.*
- *Make sustainability a part of every incoming faculty and staff's job description and every incoming student's commitment to Emory.*
- *Ensure student participation in defining sustainability at Emory and engaging them, especially low-income and otherwise marginalized students, in relevant decision-making processes.*
- *Better involve Emory staff—especially custodian staff and department Administrators and Chairpersons—in program design, decision-making, and implementation in order for them to feel full ownership of programs.*

2. **Increase Visibility of Current Programs and Achievements:** Fourteen responses (4%) called for a goal to increase the visibility of established sustainability programs and achievements by means of technology, the curriculum, and simple tools such a signage, maps, and published guides. By pursuing this goal, sustainability leaders aim to affect culture change among the Emory community and, as one respondent mentioned, "to aggressively market Emory's current and developing sustainability projects to further establish itself as a leader in sustainability among higher ed institutions." Action items include:
   - *Facilitate even more programs/courses that encourage students to become aware of Emory's impact on the local environment and thus see how an institution can be key to restoring the local and global ecosystem.*
   - *Produce a comprehensive map that expresses the sustainability changes that have occurred, current state of the work, and areas of future improvement.*
   - *Make clearer the sustainability efforts Emory is making (e.g. food sources, how much the school saves by recycling and composting, what kind of sustainable materials are used for events such as Dooley's week, etc.).*
   - *Increase visibility and pervasiveness of composting and recycling bins on campus, in dorms, in dining halls, etc…Follow Cox Hall's signage.*
   - *Produce a free app that daily informs everyone at Emory about waste.*
   - *Publish natural products guide for new students, faculty, and staff so that they can buy more environmentally friendly housing stuffs, such as natural materials made mattresses, desks, chairs, and so on.*

iv. Strategic Action Arena II: Expand Network and Strengthen Leadership

Overview: The Committee's vision for Action Arena II contains a number of unique elements that did not surface in the survey responses. These are mainly the specific program ideas for expanding organizational structures for champions (sub-section a), such as faculty fellows and student champion mentorship programs. However, the community did reinforce the need for staff and broader community education, specifically regarding on-campus sustainability behaviors.

Ten percent of all responses called for more sustainability education. The survey respondents agreed with the Committee's goal for expanding sustainability curriculum work, and added concrete suggestions such as building a Sustainability Center, creating an agricultural certificate program, and incorporating sustainability service, projects, and research into mandatory student education. Broad agreement was also found for the use of campus life in sustainability education, again with very specific suggestions for how to achieve it such as exposing all freshmen to a yearlong Integrated Community Living Program.

While respondents did not mention the need for better support for OSI, they did suggest a number of initiatives for better measuring, monitoring, and evaluating sustainability efforts of leaders and other community members. These include an annual sustainability reporting requirement for all academic units, business units, and departments, more widespread use of technology to track and share real-time building performance with communities, and a Carbon Footprint Program to track and offset environmental effects of international travel.

a. **Organizational structures for champions:** *Faculty Fellows; Staff Reps and staff education, learning outcomes, and assessments; Student champion internships and mentoring; Student Government sustainability leadership positions; Establishing a Sustainability Leadership Academy.*

1. **Employee and Community Education:** Some leaders explicitly call for employees specifically or the community at large—staff, faculty, and students—to be trained on correct sustainability behaviors on campus, such as on how to compost and recycle properly, and sustainable living in general:
   - *Educate all Emory students, staff, faculty, and visitors on correct recycling and composting. This could be in the form of a short message before and/or after events, or shadowboxes at each recycling/composting station.*
   - *Provide clear and effective training for custodial participation in the recycling program to ensure they do not dispose of recyclables into regular landfill-destined trash receptacles.*

- *Make all Emory community members take a class, elective, or seminar on what it means to live sustainably and how to achieve that in the everyday.*

b. **Prepare Emory graduates for sustainability leadership:** *Sustainability in academic programs and degrees; Expand curriculum work; Link sustainability info needs to academic programs; Campus-based research/data hub; Support faculty sustainability interest groups and start-ups.*

2. **Academic Education:** Given that 73% of the respondents are students, faculty, and postdocs, it is unsurprising that many answers proposed innovative academic paths to sustainable practice (33 responses, 10%). These include: strong green labs programs; mandatory sustainability classes or project requirements for sustainability engagement on personal, campus, or regional levels; greater sustainability teaching commitments from faculty; and establishing a Sustainability Center. Suggestions on academic/curriculum changes include:
   - *Fund a Sustainability Center equivalent to the Women's Center and place it under the office of the Provost, so that sustainability could be incorporated into Emory's intellectual life in more fulsome ways.*
   - *Commit a quarter of Emory faculty to teaching sustainability alongside or integrated with their teaching areas.*
   - *Mandate <u>compulsory</u> sustainability education such as:*
     - *Undergraduate essay or course on how sustainability issues influence their major and/or future professional aims.*
     - *Freshman seminar on sustainability or as part of PACE or as a separate, one-credit course.*
     - *Atlanta community service requirement on sustainability.*
     - *Sustainability project requirement for all students.*
     - *Freshman class on food waste and reduction strategies.*
     - *Environmental justice class for all students.*
     - *Social rather than "classroom" oriented sustainability education requirements, including use of social media, involvement in campus student organizations, and working with visible initiatives like the Emory educational gardens.*
   - *Teach about distribution of resources—food, parks access, and more—within the Atlanta, Georgia, and U.S. community and inspire students to push policymakers for more equitable distribution of those resources.*
   - *Instruct sustainability classes in other languages as part of language studies.*
   - *Build an agricultural sustainability certificate program.*

c. **Integrate sustainability into the life of the campus**: *Residential sustainability education; Sustainability literacy survey; Sustainability metrics for programs, residence halls, and Greek life; Community service for all students; Sustainability in summer programs and camps.*

3. **Campus Life in Sustainability Education:** Ten responses (3%) suggested using the grounds, residential living, campus organizations, and campus events as opportunities to enhance sustainability understanding and practice, especially among students. Suggestions focus on students' education, campus infrastructure and projects, like woodland areas, water projects, and a green dorm, as well as reorienting student events and living experiences towards more reflective sustainable living. These include:
   - *Insert existing and future infrastructures and resources into coursework and non-academic activities for continuous sustainability education, such as:*
     - *Lullwater Preserve, Wesley Woods, Baker Woodlands, and other campus Piedmont forest areas.*
     - *(Build and staff) a "green" or "eco-friendly" dorm.*
     - *Productive food gardens.*
     - *Existing toilet-to-tap initiative, so that students come to understand toilet-to-tap as a healthy, sustainable, normal practice.*
     - *Green Lab Program at Emory and Emory at Oxford.*
   - *Integrate every freshman into a yearlong holistic and extensive Integrated Community Living program that engages them in what it means to be a global citizen in the 21st century: environmental stewardship, social justice, sustainable living, cross-cultural competence, etc.*
   - *Make all student events about discussions and valuing and reusing what one has, rather than wasteful consumption and giveaways.*

4. **Measurement, Monitoring, and Evaluation:** This sub-category focused on ways that measurement and evaluation could be used to further sustainability goals and allow the community to understand its own impact. These concrete ideas could add specific project items to the visioning document that can help in meeting sustainability goals, including:
   - *Require all academic units, business units, and departments to report on sustainability metrics each year as part of the annual reporting process and annual performance measurements.*
   - *Evaluate the university as part of a resilient system.*
   - *Implement technology in dorms and buildings to better monitor sustainability goals, such as energy reduction and water usage, and thus provide the community with up-to-date information on their performance.*
   - *A Carbon Footprint Program for Emory faculty, staff, and students to track their air miles and thus understand the impact they have when they travel.*
   - *An electronic reporting system by which Emory students or staff can easily report problems that need to be fixed (lone recycling bin or trash can, leaky faucets, etc.) or suggest new ideas.*

d. Invest in Office of Sustainability Initiatives: financial, human, and support resources.

v. Strategic Action Arena III: Use Emory landscape, buildings, and operations to model sustainable choices:

Overview: Mirroring the Committee's report, Strategic Action Arena III received the bulk of community's goals and actions, with many of the Committee's objectives supported by the survey results. Notably, the two most prevalent themes of Climate Action and Energy (n=75) and Waste (n=73) are both found in this section.

The community differed from the draft vision in four ways. Firstly, it pushed for more ambitious goals in some sub-sections than is currently planned for. Respondents called for expanding zero-net energy and LEED gold standard to all campus buildings (old and new). Some also set more ambitious transportation goals, such as creating a car free campus. Meanwhile, the Committee's GHG reduction goals fall in the middle of the range of community suggestions; its energy reduction and production targets are in line with the array of options suggested by the community, albeit on the lower end of the range; but its food and waste aims are on the upper end of the suggested targets.

Secondly, respondents suggested new and expanded goals in a number of areas. Paper usage and waste is not currently specifically addressed in the draft vision, but it is an area for which many would like to see specific goals and actions. For water, the respondents propose objectives for best managing the campus water systems and for eliminating bottled water from campus. Those who addressed single-use plastics pushed for their elimination from Emory. A number of respondents want to see less landscaping and more gardening, with produced food being used on campus for eating, educating, and community outreach purposes. Others want to address food consumption by eliminating junk food, promoting meatless days, and working against CAFO operations. Divestment from fossil fuels and industrial agriculture was important for climate action, while focusing on social issues of access and equity was key to better local and regional transportation and to addressing unsustainability of food systems.

Thirdly, a portion of the community pushed for a focus on reduction of different areas of campus consumption and attention to better using and sharing of existing resources. These included better use of spaces and buildings, unused campus food, and available technologies.

As is the case throughout the report, the respondents offered a myriad of specific actionable items for projects to help meet the proposed goals, which are overviewed in each sub-section below.

a. **Built environment:** *Carbon-neutral new construction; Best practices for building interiors; Reduce energy use (including Healthcare) 50% per sq.ft. and 25% total, and renovated buildings by 20%; Self-generate 10% energy; Reduce campus water use by 50% and eliminate drinking-water use for non-potable purposes; Make new Campus Life Center net zero and "living building;" Use iconic buildings*

for sustainability outreach; Revolving fund to incentivize operational units to conserve beyond goals; Green or solar on all roof renovations.

1. **Buildings and Construction:** While the 31 responses about buildings (9% of sample) broadly agreed with the current vision, respondents tended to provide more ambitious goals for cross-campus building design principles than those in the Committee's draft document – namely by suggesting University-wide goals rather than those focused only on new construction or specific buildings. The sustainability leadership community also had a number of suggestions for specific, smaller-scale initiatives and projects for Emory's built environment that can enrich the final visioning document and help the University meet its goals:
   - Cross-campus building standards:
     - *Ensure all future buildings on campus meet all of the petals of the Living Building Challenge.*
     - *Certify all campus buildings to LEED Gold standard.*
     - *Achieve campus carbon neutrality by 2025.*
   - Specific Plans for Built Environment:
     - *Move toward LED lighting exclusively on all new construction and renovations, including exterior lighting.*
     - *Eliminate gas-powered equipment in buildings and grounds.*
     - *Install one open-source, 100% self-reliant, building controls system from instruments, hardware to software, and network that is modular and sustainable.*
     - *Use technology in dorms and buildings to better monitor sustainability goals such as energy reduction and water usage.*
     - *Build and staff a green dorm.*
     - *Heating and AC in all buildings to be checked daily or computerized to save waste.*
     - *Install more automatic light sensors in classrooms or make sure fewer lights are on overnight.*
     - *Better utilize space on campus for sustainable re-use of buildings and space in lieu of destruction.*
     - *Reduce the most $costly utilities used to condition our environment.*

2. **Energy**: Energy emerged as a significant sub-category in this section, featuring directly in 49 responses (15% of sample). It is of note that renewable energy production goals varied greatly from focus on very small individual projects to targets for an energy independent campus. This makes the Committee's 10% energy self-generation target ambitious compared to some community members' goals, but wildly inadequate compared to others'. Meanwhile, the Committee's overall and per sq. ft. energy reduction goals are perfectly in line with, and even a little more ambitious than, the survey respondents' range of suggestions:
   - Renewable energy production goals ranged from making Emory run on 100% renewable energy, becoming completely energy independent from the energy grid of Atlanta—using geothermal, solar, and wind—to Emory becoming a net

zero energy school; and from achieving 50% renewable energy by 2020 to 30% by 2025.

- Smaller renewable energy project ideas included:
  - *Install a distributed generation solar PV project on campus.*
  - *Convert one dorm to run completely off of solar energy.*
  - *Make Emory's athletic facilities completely self-sustaining using the energy produced by workout equipment to power the machines themselves and to power the lights in the gym buildings.*
  - *Install solar panels to power phone charging stations.*
  - *Make better use of solar power in either electricity generating panels or by claiming warmth.*
  - *Create nuclear energy programs.*
- Energy reduction goals ranged from 60% or 50% per sq. ft. reduction by 2025; to 25% by 2017; to no increase in overall energy usage by 2025.
- Energy efficiency and reduction program suggestions included:
  - *Conduct efficiency audits which objectively determine potential for increased efficiency based on energy consumption reduction.*
  - *Encourage drying clothes under sunlight instead of using dyers.*
  - *Allow people to open windows to have outside fresh air instead of using air conditioners when the weather allows.*

3. **Water:** While water emerged as a cross-cutting theme under Action Arena III, we include it under Built Environment since the section contains the Committee's goals to reduce campus water use by 50% and eliminate drinking-water use for non-potable purposes. Action on water was important for 17 respondents (5%), several of whom agreed on the draft document's actions. As with many other sections, however, the community spoke to bolder targets, additional goals, and specific actions that are currently absent from the vision. One of the most popular goals was to eliminate bottled water from campus (n=5) with other responses making suggestions for more water bottle filling stations and drinking fountains to compensate. Reclaiming and capturing water and minimizing water waste and wasteful practices also received strong support. Suggestions include:
   - *Eliminate bottled water from campus.*
   - *Install 50+ drinking fountains throughout campus, inside and outside buildings, on the track and trails.*
   - *Install more water bottle filling fountain stations.*
   - *Develop a campus landscape management plan focused on improving water management.*
   - *Eliminate water waste on campus.*
   - *Recover and recycle rain water.*
   - *Expand the water reclamation project to other parts of campus.*
   - *Take the lead on true toilet-to-tap water reuse.*
   - *Ban the washing of parking deck surfaces and installation of new decorative fountains.*

b. **Waste:** *All events zero-waste; All functions plastic bottle free, except Commencement; Divert 95% of non-construction waste, except medical and hazardous; Compost, re-use, or recycle 95% of all food, non-hazardous, and construction waste; Divert 20% of non-hazardous medical waste; Achieve the 37% Healthcare waste reduction/reuse/recycling nation-leading target.*

4. **Waste:** With 73 responses mentioning the topic (23% of total responses), waste was the second most important category for the sustainability leadership community, second only to the combined category of Climate Action and Energy (n=75, 23%). Respondents' food and other waste diversion targets—through recycling, composting, and reuse—varied from 20% to 100%, with several calls for a zero waste campus, including dining halls, dorms, and academic buildings. The Committee's current plans fit in the more ambitious end of that range. All respondents who focused on single-use plastics called for eliminating them from campus and nearby communities, a much more far-reaching and ambitious goal than the Committee's objective of making almost all functions plastic bottle free. Several respondents focused their single goal on addressing paper use and waste, a category that is currently missing from the visioning document. While a new goal on paper should probably be added to the Vision to reflect community feedback, many of the ideas highlighted below can also be included as specific action items for reaching some of Emory's other waste goals:
   - Waste Diversion: Recycling and Composting: A total of 55 responses (17%) addressed some aspect of waste diversion. Almost half of those (n=25, 46%) asked for specific waste diversion goals, ranging from 20% landfill diversion to an almost or totally zero waste campus, with majority respondents asking for the latter. The multiple calls for campus-wide consistent, systematic, and holistic recycling and composting policy and services are particularly notable as current practices, which are ad hoc and inconsistent from school to school and building to building, stand in the way of widespread correct waste diversion behaviors:
      - *Aim for Zero-Waste@Emory by increasing awareness through events and promotion; building a sense of community on campus around the goal; ramping up recycling/composting opportunities around campus; collaborating with campus vendors, local organizations, and Dekalb County to sponsor and support the effort; potentially making the initiative part of each student's commitment upon attending Emory. This is an important issue and realistically reachable goal for a sustainability leader such as Emory in the next ten years.*
      - *Ensure consistency of services. There are multiple different recycling/ waste management programs or systems across campus. It is confusing. Why is one service offered in one part of campus and not in another? Some places compost while some don't. Some places are single stream while others you need to separate. At some Emory sponsored meals people get to the end of the meal and stand confused at the containers. People want to do the right thing but can't figure the system out. So instead, everything goes into the landfill.*

  - *Make recycling mandatory and not optional; enforce recycling.*
  - *Provide composting services to all campus buildings, especially residence halls.*
  - *Provide glass recycling services in all buildings.*
  - *Provide recycling bins for every single lab, desk, and office and ensure staff actually use them.*
  - *Remove all trash containers from offices and office buildings.*
  - *Do away with trash cans and any items that are not recyclable.*
  - *Require all campus dining locations to use plant-based serving utensils, plates, drink ware, etc. that can be composted.*
  - *Install an anaerobic digester for the compost and then use the biogas to fuel Emory vehicles.*
  - *Increase visibility and pervasiveness of composting and recycling bins on campus, in dorms, in dining halls, etc.*
- Reduction of Consumption and Waste: Focusing on waste reduction was important for 14 respondents (4%). Many outlined the need for better sharing and use of resources, as well as reducing campus-wide practices that encourage conspicuous consumption and waste generation:
  - *More sharing of resources to reduce waste.*
  - *Ensure that events and student engagement are no longer about giving out wasteful items in excess, but that events become about discussions and valuing and reusing what you have. Currently, the campus encourages too much unnecessary consumption just to try to get students interested. We can move beyond that.*
  - *Cut food waste by half by 2025, e.g. by donating unused campus food to needy communities.*
- Medical Supplies and Waste: As with the visioning draft, medical supplies and associated waste were singled out as a specific target, albeit with more specific action items aiming to address the issue:
  - *Develop a regulatory-compliant pharmaceutical management program in the Emory hospital system that targets the problem of drug waste.*
  - *Go green for procurement of single-use medical supplies*
  - *Find an alternative use for single-use latex and nitrile gloves to reduce the immense waste they generate.*
- Plastic and Styrofoam: Eight respondents (2%) focused on addressing the issue of single-use plastics and Styrofoam on and around campus. All of these responses favored complete elimination of plastics:
  - *Ensure a plastic-free Emory campus by 2025.*
  - *Remove single-use plastic bottles from vending machines.*
  - *Make all containers offered at Emory compostable and Styrofoam-free.*
  - *Eliminate all plastic bags on campus, mandate use of reusable bags.*
  - *Ban/restrict use of plastic bags in local businesses around the campus, including Emory Village.*
- Paper: 11 responses were particularly concerned with reducing paper waste and paper usage, a specific objective not currently outlined in the visioning document. Paper goals ranged from making Emory a paperless institution to

reducing paper use by 33% by 2025 across the University. Specific project suggestions included:

- *Evaluate the ways in which tradition dictates that the University utilizes paper, and eliminate the obsolete or unnecessary.*
- *Institute an online degree application process (with no print-required components, and OPUS-verified degree audits).*
- *Make better use of Blackboard for sharing articles with classes, online evaluation processes, etc.*
- *Mandate every department at Emory and Oxford to use available technology and tools such as scanners, dual monitors, the Box, Blackboard, and laptops and tablets. Needless copying and paper files should not be allowed. This will decrease our budgets and Emory's environmental footprint.*
- *Mandate all course evaluations to be done online at Emory – it would save Emory money, time, and effort in the long term. In our department we have cut way back on printing color brochures to hand out to visitors, and instead we opt to put information online on our website and we give visitors instructions on how to find that information. And we have cut down the number of large copy jobs. Most of our faculty now scan documents for their class, and all of our faculty and staff use the scanner function more than the copy function whenever possible.*
- *Institute paperless healthcare correspondence.*
- *Move all marketing online, banning paper flyers.*

- Educational Efforts: As outlined in the Education, Teaching, and Trainings section, education of the whole community on correct waste diversion behaviors on campus was seen as important for reaching waste goals, but it is not currently an explicit objective of the Committee's draft vision:
  - *Include student pre-orientation and orientation education on how to recycle properly on campus, bringing a water bottle and reusable cutlery, avoiding the use of plastic bags and Styrofoam, etc.*
  - *Have a mandatory class for all freshmen to learn how much food is wasted along with personal goals to try to alleviate some of the waste.*
  - *Get staff attending to garbage and recycling genuinely invested - don't just give them more work to do re: sorting, providing bins, et cetera. Getting staff invested is just as crucial as faculty or students.*

c. **Transportation:** *Carbon-neutral Fleet; Targets and incentives to double alternative commuters; Bring bike share and Cliff Shuttle to neighborhoods and to Lindbergh MARTA station; Increase awareness of alternative transportation among Healthcare patients and University visitors.*

5. **Travel: Local and Air Transportation.** Transportation and travel represented a major category for survey respondents, appearing in 35 responses (11%). All of the Committee's transportation considerations were reflected in the goals of the sustainability leadership community, and most of them more than once each. However, it is of note that often the respondents preferred more ambitious goals

than currently reflected in the visioning document. In addition, the responses showed a strong focus on engaging with communities, stakeholders, and policymakers outside of Emory: travel co-occurred with community engagement and/or social concerns in 13 cases (37% of transport related responses):

- Campus fleet, vehicles, and parking:
    - *Make Emory a car-free campus (smoke free was a good start).*
    - *Eliminate parking lots or shuttles. Everyone rides a bike.*
    - *Prohibit on-campus parking for all residential students.*
    - *Power all campus vehicles entirely by sustainable energy sources.*
    - *Install an anaerobic digester for composting and use the gas byproduct to power campus vehicles.*
    - *Power more university vehicles by biofuel made from cooking oil.*
    - *Eliminate wasted fuels that result from leaving unattended University vehicles running, lights on in an unoccupied spaces, etc.*
    - *Introduce White Buses on campus like in the Netherlands.*
    - *Introduce hydrogen cell powered cars.*
- Mass Transit and Expanding Transportation Options to Nearby Communities (expanded in Strategic Action Arena IV below):
    - *Merge MARTA with Emory Shuttles and give out free MARTA passes to all students, faculty, and staff; provide free public transportation.*
    - *Push for the extension of light rail to Emory campus.*
- Air Travel: While the Committee's goals focused on ground transportation initiatives within Emory and their expansion to nearby communities, the survey revealed an additional focus on air travel:
    - *Construct an in-house carbon-reduction fund that all air travelers can contribute to in order to off-set each journey and thus fund sustainability and climate change work and research on campus.*
- Biking and Walking:
    - *Fully integrate Emory into - and make a hub - of any emerging city-wide (Decatur and Atlanta) bicycle sharing/rental scheme.*
    - *Work with the county to establish bike lanes all through the campus and routes to school (Clairmont, N Decatur, all of Clifton, Briarcliff).*
    - *Go beyond increasing bike lanes on unimproved roads that will cause commuting gridlock for people with little commuting option other than to use automobiles, even if in carpools and vanpools.*
- Technology and Incentives:
    - *Incentivize department chairs to implement technology such as GoTOMeeting to permit meetings from home with students, faculty and departments to cut down on emissions from driving to campus.*
- Social, Justice, and Ethics (included in Strategic Action Arena IV): Access and equity transportation considerations featured strongly in the responses:
    - *Create a subsidized, integrative transit system that enhances social sustainability by making transportation to the Emory University campus available to communities that traditionally face a lack of stable employment that is accessible via low-cost transit.*

- *Support the Urban Health Initiative's transportation Ministry (both the Labor Limo and the Community Supplemental Transportation Initiative) so low-resourced community members can get to medical, dental, behavioral/mental health services, grocery stores and Laundromats at a reasonable cost. This will facilitate better healthcare and supports, leading to healthier births and lives.*

d. **Campus ecosystem**: *Campus in a Forest vision; Net Positive Forest Policy; 200 trees by 200th birthday; Remove invasive species in 25% grounds and replace with native species; Reduce impervious surface by 15%; Reduce turf grass by 15% and replace with native species; Research herbicide and insecticide alternatives.*

6. **Grounds, Landscape, and Gardens**: For 14 respondents (4%), the campus ecosystem was in need of sustainability goals and actions. Sustainability leaders shared Committee's concerns for removing invasive species and increasing forest and otherwise green spaces. There was no mention of impervious surface reduction or a search for alternatives to herbicides and insecticides. Six survey respondents did, however, emphasize the need to "quit landscaping, garden instead" to increase food production within the campus ecosystem, including:
   - *Add major green space to all the apartment and restaurant developments going up on the edge of campus.*
   - *Develop a campus landscape management plan that insures the health and vitality of the green spaces on campus primarily focused on improving water management and forest management.*
   - *Fund more projects like tree inventories and canopy surveys.*
   - *Aim for 25 food gardens covering a certain percentage of the landscaped areas at Emory.*
   - *Make every project involving buildings and grounds have a food component. There are rooftops that could be used for greenhouses and beekeeping, planting areas that could be filled with fruit trees, herbs, vegetables, and fruiting bushes instead of ornamentals. Our change in food service facilitates this transformation of the landscape because they would allow that food to be used in dining, which our previous food service would not allow.*

e. **Food:** *75% sustainable food purchases by 2030, Healthcare 25% by 2025; Oxford farm to produce 50% of Oxford needs and 5% Druid Hills needs by 2020; Second Emory Organic Farm.*

7. **Food and Drink**: Food and drink featured in the proposed goals and actions of 45 respondents (14%). Many responses (n=19) mirrored the Visioning Committee's focus on sustainable food purchasing and production goals. Respondents asked for a range of 20-100% local and organic food, with the majority at the upper end, and more focus on campus food production. Included below are more specific actionable ideas for meeting these food objectives. Respondents also added several new dimensions to this category, including

addressing junk food on campus, CAFO meat purchases, social concerns such as fair wages in food, and reducing meat consumption. Addressing food waste was important to 11 respondents and expanding productive gardens to 6, but these are addressed in the above Waste and Grounds, Landscape, and Gardens sections, respectively. Finally, while some call for expanding food goals to other providers, such as the on-campus franchise presence, others think Emory should address food access issues of neighboring communities:

- *Require all Emory Dining to adopt a consistent definition of locally sourced food products (such as purchased in Georgia or within 150 miles of Atlanta) and allocate an increasing portion of the dining purchasing budget toward local food for all Emory Dining facilities--including the franchise presence.*
- *Supply 100% of eggs from a sustainable source.*
- *Incorporate in the DUC food from the gardens around campus.*
- *No junk food.*
- *Eliminate vending machines on campus that dispense bottled sweet drinks and hyper-processed snacks.*
- *Have a day where Emory dining does not serve any meat, campus-wide.*
- *Reduce meat consumption by 50% across campus.*
- *Source all campus food from local places that pay workers fair wages and provide good working conditions*
- *Purchase only fairly-traded coffee (with terms of trade clearly documented).*
- *Conduct a thorough investigation of the ethical production of cafeteria food.*
- *Repurpose and provide over 75% of the food not used at the DUC and Cox to members of the Atlanta community who need it.*
- *Increase access to local foods in improvised communities and surrounding Atlanta communities.*

f. **Climate action:** *Update Climate Action Plan (CAP); All CAPs to reduce GHGs 20% by 2020 and 50% by 2050; Create Carbon Neutral Degree.*

8. **Climate Action: Emissions/ Carbon/ GHGs/ Fossil Fuels:** 29 responses (9%) made direct mention of issues relating to climate action, such as working on emissions, carbon, GHGs, or fossil fuels. Many of these were cross-coded with other areas due to specific actions they recommended. Where these add new dimensions to the visioning document they are included in relevant sections. Aspects that speak directly to the Committee's Climate action goals include:
   - Climate goals that ranged from zero emissions to no net CO_2 increases going forward, and from 30% GHG reduction to carbon neutrality by 2025.
   - Tracking and Incentives: (also in Incentives and Funding Mechanisms).
     - *A Carbon Footprint Program to track air miles at Emory.*
     - *An in-house carbon-reduction fund from monetary offsets paid by community members on international travel.*
     - *Incentives to implement e-meeting technologies to reduce travel.*
   - Divestment from climate change-causing fossil fuels and industrial agriculture received strong support (see Institutional Divestment section).

vi. Strategic Action Arena IV: Create strategic partnerships with local, national, and international institutions to build flourishing and resilient communities

Overview: Ten percent of the sample explicitly mentioned creating strategic partnerships. Respondents argued for the extension of MARTA to the Clifton Corridor and beyond, as well as for light rail, more bike lanes, and pedestrian space initiatives, all of which would require engaging with local and regional policymakers. The other Committee goals were also reflected and extended in the survey data. Novel suggestions include extending sustainability standards to businesses that operate on and close to campus, ensuring unused campus food is donated to needy communities, and focusing strongly on local, community-based education and practice for deeper and more direct engagement of the Emory community with sustainability issues. Some respondents specifically focused on Healthcare community outreach, but rather than putting forward broad goals they made specific suggestions of how to achieve it, such as supporting community transportation initiatives to allow low-resource communities to better access healthcare services. There was no mention of the Committee's goal of increasing decision-making in the national and Emory supply chains.

a. **Partner with Atlanta government, NGOs, and corporations for expanding:** *MARTA to Clifton Corridor; Green energy through Georgia Power; Food security, resilience, and self-provision in metro Atlanta via Food Hub; Local food business incubator; Healthcare community outreach.*

b. **Enhance sustainability decision-making in the national and Emory supply chain.**

1. **Community Engagement**: The Community Engagement category appeared in 35 responses (11%). Largely mirroring the Committee's foci, suggestions fell into three sub-categories of: a) engaged work and learning to help nearby communities become more sustainable, especially those experiencing poverty (n=12): b) affecting public policy on the city, regional, and national levels (n=6); and c) working with or pressuring other organizations, businesses, groups, and communities to alter regional sustainability practices, as well as the practices of non-Emory entities that operate on or around campus (n=9)[8]. Reflecting the draft vision, the vast majority of responses on the theme of Community Engagement (n=30) were paired with other codes, meaning that when respondents push for greater community engagement, it is usually to achieve some other sustainability goal like better transportation:

[8] NB: Some responses integrated ideas for more than one sub-category, which is why the total number of code applications of the three sub-categories listed here (n=37) is slightly larger than the total number of applications of the larger Community Engagement category (n=35).

- Public Policy and Regional Practices Work:
  - *Use Emory's institutional muscle to collaborate with other institutions in Georgia and around the United States to press for changes on the policy level locally, regionally, and nationally, such as regulating environmental and social effects of agriculture, removing subsidies for unsustainable practices in agriculture towards more sustainable forms of farming, removing obstacles for green energy production and distribution, and so on.*
  - *For Emory to become a more effective thought leader in the state of Georgia—large companies like Coca-Cola, Georgia Power, etc.; state, county, and local governments—in significantly moving the needle for large companies and the state toward more sustainable practices.*
  - *Turn Emory toward insistent, emphatic sustainability leadership in the city, region, and country. For instance, force a change in regional practices regarding paying a living wage, or at least make it a visible issue, using the university's weight and presence. Demand a sustainability scorecard for all major contractors on campus, etc.*
- Engaging Local Businesses and Organizations:
  - *Ban/Restrict use of plastic bags on campus and local businesses around the campus, including Emory Village.*
  - *Aim for Zero-Waste@Emory, partially by collaborating with campus vendors, local organizations, and Dekalb County to sponsor and support the effort.*
- Driving Change in Nearby Communities:
  - *For Emory to serve as a model in the community and drive horizontal spread of sustainability best practices throughout Atlanta via its place-based initiative. Achieve this by fostering community partnerships that empower local communities to identify, adopt, and sustain sustainability strategies that most meet their community needs and build on their current strengths.*
  - *Contribute towards increased sustainability (and the social determinants that are involved) and improved awareness of sustainability in the wider Metro Atlanta communities.*
- Community Engaged Learning:
  - *One large-scale school-wide "sustainability day of service" similar to Volunteer Emory's Emory Cares Day. Moving students forward on the "active citizen spectrum" in this manner may really help build a stronger foundation for sustainability goals and actions later on.*
  - *Create community-engaged learning courses that address sustainability issues in the greater Atlanta area, such a freshman seminar, to actively engage the student body and move beyond green infrastructure projects.*
  - *Emphasize community engaged work, perhaps with food deserts.*

- Food Access Work:
    - *Increase access to local foods in improvised communities and surrounding Atlanta communities.*
    - *Divert 100% of Emory's food waste from landfills, either through composting or donation.*
- Local and Regional Transport (see also Transport sub-section of Strategic Action Arena III above):
    - *Create a subsidized, integrative transit system that enhances environmental sustainability by reducing (by a bold %) reliance on private transportation; while simultaneously enhancing social sustainability by making transportation to the Emory University campus available to communities that traditionally face a lack of stable employment that is accessible via low-cost transit.*
    - *Support the Urban Health Initiative's transportation Ministry (both the Labor Limo and the Community Supplemental Transportation Initiative) so low resourced community members can get to medical, dental, behavioral/mental health services, grocery stores and Laundromats at a reasonable cost.*
    - *Fully integrate Emory into - and make a hub - of any emerging city-wide (Decatur and Atlanta) bicycle sharing/rental scheme.*
    - *Lead the initiative to bring more efficient mass transit options to the Clifton corridor.*
    - *Work to extend MARTA/light rail to Emory campus.*

CONCLUSION

The SNA Project survey found broad agreement with the Sustainability Visioning Committee's draft Emory 2016-2026 Sustainability Vision document. In particular, the community supported all of the Strategic Action Arenas and most of the specific objectives they encompass. However, in some areas, the community's (range of) targets were more ambitious. Survey respondents also made a number of suggestions for new goal areas that are currently absent from the draft and put forward ideas for specific initiatives that can be implemented in order to meet all the set aims.

The implementation of this report's key recommendations can enhance the visioning process by incorporating the voices of Emory's sustainability leaders in the final Emory 2016-2026 Sustainability Vision document, thereby expanding community input and buy-in into the Vision. We hope that this report greatly benefits the sustainability community, including the Visioning Committee, and welcome feedback and suggestions for improvements.

END