Planetary Health Report Card (Medicine) 2026:

Emory University School of Medicine

2025-2026 Contributing Team:

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Land acknowledgment: Emory University acknowledges the Muscogee (Creek) people who lived, worked, produced knowledge on, and nurtured the land where Emory's Oxford and Atlanta campuses are now located. In 1821, fifteen years before Emory's founding, the Muscogee were forced to relinquish this land. We recognize the sustained oppression, land dispossession, and involuntary removals of the Muscogee and Cherokee peoples from Georgia and the Southeast. Emory seeks to honor the Muscogee Nation and other Indigenous caretakers of this land by humbly seeking knowledge of their histories and committing to respectful stewardship of the land.

Summary of Findings

Overall Grade	A

Curriculum	A+

- Emory University School of Medicine is in its sixth year of implementing a faculty and student co-created climate change & environmental health pre-clinical curriculum, with learning points disseminated across lectures and small group sessions. This will be the fourth year of a longitudinal Climate Change and Environmental Health (CCEH) "Thread" (or longitudinal portion of the curriculum) spanning all 4 years, with the last 1.5 years seeing significant focus on content and immersive activities integrated into the clerkship or clinical phase of the required curriculum as well as interprofessional learning opportunities. Some of this work was published in a special collection in July in *Intersections: The Education Journal of the Woodruff Health Sciences Center*. As Emory envisions transforming to a symptom-based pre-clinical curriculum, the curriculum team is re-imagining planetary health content as authentic context for patient pathophysiology and narratives.
- **Recommendations**: While Emory students and faculty continue to co-create content and implement assessments and evaluations for its curriculum, we hope to add additional content into the remaining clinical clerkships this next academic year (e.g. Neurology, Surgery).

Interdisciplinary Research	A+

- Interdisciplinary collaboration remains central to Emory University's vision. Initiatives such as the Emory Climate & Health Actionable Research and Translation Center (CHART) advance climate change research and teaching to support Emory's interdisciplinary response to the global crisis.
- **Recommendations:** The School of Medicine is re-imagining the "Discovery," or research, phase of the curriculum. The CCEH team could leverage this process to tap into and centralize platforms for those interested in engaging in sustainability and planetary health research.

Community Outreach and Advocacy	A+

- Emory continues to offer community-focused courses, such as the long-standing *Climate Talks* series and the *AmpliFIRE: Raising Voices Against Rising Temperatures* podcast. The university also remains actively engaged with the community through various initiatives, including Ride for Their Lives, local farmers' markets on campus, and Grand Rounds and other continuing medical education (CME) events.
- **Recommendations:** Students and faculty should work to better integrate and automate inclusion of some of the existing locally relevant patient education materials on planetary health (e.g. heat illness) across the numerous Emory-affiliated hospitals and clinics and/or ensure students have access to these materials on their course websites (e.g. Canvas) for on-demand access. Additionally, expanding partnerships with community organizations—e.g. through the School of Medicine's Community Learning and Social Medicine course—could provide students with additional valuable opportunities for community engagement.

Support for Student-Led Initiatives	A+

- Students interested in promoting and engaging in planetary health initiatives are well-supported at Emory. A number of mechanisms are in place to support funding for student-led projects, access to mentors and research opportunities, involvement in co-curricular student organizations and planetary health programs, and participation in campus advocacy and curricular development.
- **Recommendations:** Renewed focus on student engagement in the broader (local, state, global) community (e.g. through volunteer opportunities, networking with local leaders, and community engagement) as well as hospital and healthcare sustainability initiatives will maximize the reach and impact of student efforts.

Campus Sustainability	B

- Emory's legacy of widespread acceptance of sustainability on campus, including at the medical school, persists. This past year, Emory ranked #5 in the United States in the Food and Dining category in Association for the Advancement of Sustainability in Higher Education (AASHE)'s 2025 Sustainable Campus Index, Emory launched its Break Free from Plastics Task Force, and Emory Healthcare joined Practice Greenhealth.
- **Recommendations:** Emory University and Emory Healthcare should ensure sufficient dedicated resources to bolster sustainability and resilience across its immense healthcare operations, elevate sustainability and resilience as leadership priorities, and consider a more ambitious timeline towards campus carbon neutrality.

Statement of Purpose

Planetary health is human health.

The Planetary Health Alliance describes planetary health as "a solutions-oriented, transdisciplinary field and social movement focused on analysing and addressing the impacts of human disruptions to Earth's natural systems on human health and all life on Earth." This definition is intentionally broad, intended to encompass the multitude of ways that the environment can affect health, including water scarcity, changing food systems, urbanisation, biodiversity shifts, natural disasters, climate change, changing land use and land cover, global pollution, and changing biogeochemical flows. The health of humanity is dependent on our environment, and our environment is changing rapidly and in disastrous ways. Although the World Health Organization has called climate change "the greatest threat to global health in the 21st century," many health professional schools' institutional priorities do not reflect the urgency of this danger to human health.

As future health professionals, we must be prepared to address the impacts of human-caused environmental changes on our patients' health. This preparation is in the hands of the institutions providing our health professional training. It is imperative that we hold our institutions accountable for educating health professional students about the health impacts of climate change and other anthropogenic environmental changes, generating research to better understand health impacts and solutions, supporting related student initiatives, embracing sustainable practices as much as possible, and engaging with surrounding communities that are most affected by environmental threats. Because climate change and environmental threats disproportionately affect vulnerable populations (for example, communities of colour, older adults sensitive to health threats, and individuals in low-resource settings), these issues are inherently ones of equity and justice.

With the purpose of increasing planetary health awareness and accountability among health professional schools, we have created a Planetary Health Report Card that students internationally can use to grade and compare their institutions on an annual basis. This student-driven initiative aims to compare health professional schools nationally and internationally on the basis of discrete metrics in five main category areas: 1) planetary health curriculum, 2) interdisciplinary research in health and environment, 3) university support for student planetary health initiatives, 4) community outreach centred on environmental health impacts, and 5) school campus sustainability.

Definitions & Other Considerations

Definitions:

- **Planetary Health:** is described by the Planetary Health Alliance as "the health of human civilisation and the state of the natural systems on which it depends." For example, topics such as climate change, declining biodiversity, shortages of arable land and freshwater, and pollution would all fall under the realm of planetary health. Both planetary health and traditional 'environmental health' examine the relationship between human health and the external environment, including extreme temperatures, chemicals, vector-borne diseases, etc. Planetary health explicitly concerns itself with the potential health harms associated with human-caused perturbations of natural systems. Therefore, the human health focus of planetary health makes the field well-adapted for the context of health professional education. Throughout this report card, we use the term planetary health to refer to this broad swath of topics, but resources do not need to explicitly include the term "planetary health" to satisfy the metric.

- **Sustainable Healthcare:** As defined by the Academy of Royal Colleges, sustainable healthcare involves ensuring the ability to provide good quality care for future generations by balancing the economic, environmental, and social constraints and demands within health care settings. A sustainable healthcare system maintains population health, reduces disease burden and minimises use of healthcare services.

- **Education for Sustainable Healthcare (ESH):** defined as the process of equipping current and future health professionals with the knowledge, attitudes, skills, and capacity to provide environmentally sustainable services through health professional education, thus working to decrease the enormous environmental impact of the healthcare industry. Planetary Health Education is an integral part of this education rather than an end in itself. This is because knowledge on Planetary Health is required to be able to fully understand the necessity of sustainable healthcare as well as being part of the broader knowledge needed to fully protect and promote health. In summary, ESH is covered by the three Priority Learning Outcomes of the Centre of Sustainable Healthcare below, and Planetary Health Education is embraced in the first learning objective and is a fundamental requirement to achieve learning outcomes 2 and 3:

    1. Describe how the environment and human health interact at different levels.
    2. Demonstrate the knowledge and skills needed to improve the environmental sustainability of health systems.
    3. Discuss how the duty of a doctor to protect and promote health is shaped by the dependence of human health on the local and global environment.

- **Medical School/Department vs. Institution:** When "Medical school" is specified in the report card, this only refers to curriculum and resources offered by the School/department of Medicine and does not include offerings from other parts of the university (e.g. undergraduate departments (USA), other related departments (e.g. Public Health, Population Health departments). In contrast, when "institution" is specified in the report card, we are referring to the university more broadly including all of its campuses. Any resource reasonably accessible by medical students, no matter where in the institution the resource comes from or if it is

specifically targeted for medical students, can meet this metric.

- **Environmental history (Curriculum Section):** This is a series of questions students are taught to ask during medical encounters that elicits patients' exposures and environmental risk factors. Historically, this has included consideration of exposures like pesticides, asbestos, and lead, though in the modern era shaped by climate change, it can be expanded to include things like wildfire smoke exposure, air pollution and mold after flooding. Key components include place of residence over the lifecourse, occupational history, food and water sources (e.g. meat from industrial feeding operations, regular fishing in contaminated water, access to clean drinking water), and exposure to air pollution. Please be as specific as possible when providing evidence for this metric.

- **Elective:** The word "elective" refers to an optional course or lecture series that a student can opt to take part in but is not a requirement in the core curriculum. Generally, these elective courses take place in the preclinical curriculum but vary by school.

- **Core Curriculum:** This refers to the taught material that is delivered to the entire cohort of students in one year.

- **Clerkship / Outreach:** This is a term used in the USA to refer to placements that medical students go on e.g. Pediatrics, General medicine, Psychiatry. In the UK these are referred to as rotations, outreach or placements. This is a relatively short (approximately4–8 weeks) period of study and patient-centred clinical experience that takes place as part of the undergraduate programme.

- **Clinical rotation:** This is a term used to refer to placements that students go on (e.g., ophthalmology, surgery, cardiology).

- **Physiotherapy vs Physical Therapy:** For the purposes of this report card these terms are considered interchangeable. However, physiotherapy will be used primarily.

- **Community organisations:** For most institutions, there are existing groups that are not directly affiliated with the university and exist as a product of what the community the institution exists in cares about or needs. These specific community organisations relevant to this report include those that are focused around some aspect of climate and health preservation. These community organisations can include but are not limited to local mutual aid initiatives, underserved-resource distribution groups, clean-up and nature conservation groups, community gardeners, and other environmental-related organisations. If your institution does not have access to local volunteerships with community groups, please report any community organisations your institution or school has collaborated with.

- **Climate justice:** The idea that certain population groups and geographical locations which are disproportionately more impacted by climate change are already economically and socially disadvantaged. This double vulnerability sits alongside pre-existing social justice concerns and should therefore shift policy and practice to mitigate the inequitable effects of the climate crisis.

- **Extractivism:** The removal of natural resources typically in large quantities. Within anthropology this term is often used in the context of colonialism to refer to the

historic seizing of natural resources, a practice which has developed business models tied to ecological degradation and loss of biodiversity.

- **Global South:** Nations that often have less economic and industrial development and are typically in the southern hemisphere. These nations have been found to be disproportionately impacted by the climate crisis.

- **Low socioeconomic status (SES):** An individual or geographical area that across a variety of socioeconomic factors (e.g., income, education, race/ethnicity) is considered vulnerable. This vulnerability has been correlated to more adverse health outcomes often as a consequence of encountering more barriers in accessing and receiving healthcare.

- **Low and Middle-Income Countries (LMIC):** Countries that have lower degrees of economic affluence.

- **Anthropogenic:** Created through human activity

- **Marginalized communities:** Groups excluded from mainstream economic, educational, social, and/or cultural experiences due to race, gender identity, sexual orientation, age, physical ability, language, and/or immigration status (Sevelius et al., 2020).

Scoring Matrix

- Elective coursework (1 point): This score applies to material that is actively selected by the students such as a module choice, or additional lecture series. By implication, only a given proportion of the cohort will receive this taught material.
- Brief coverage in the core curriculum (2 points): This score applies where a topic is covered only briefly in a core curriculum session. This implies that the entire cohort receives the same material. At minimum brief inclusion would qualify as inclusion in a single lecture slide in a single year.
- In depth coverage in the core curriculum (3 points): This score applies where a topic is taught in significant detail or where a topic is repeatedly brought up in different years. This might look like several dedicated lecture slides, or inclusion of the same topic in different lectures and teaching formats.

Other considerations:

- If there are more than one "track" at your institution with two different curricula (for example, Harvard Medical School has a Pathways and HST curriculum track), you can choose to fill out a report card for each track, or fill out just one report card and average the scores received by each track in cases where the scores are different (see the 2021 Harvard or Oxford report cards as examples). Where possible please indicate the proportion of students that are on each track.

Updated in 2025, a complete literature review by metric is available for the 2024/25 Medicine Report Card Template. This largely translates across disciplines although we are hoping to expand this process across all of our covered disciplines. A link to the 2025 literature review by metric is available here.

Planetary Health Curriculum

Section Overview: ***This section evaluates the integration of relevant planetary health topics into the medical school curriculum.*** *Today's health professional students will be on the frontlines of tackling the health effects of climate and other environmental changes. Therefore, it is critical that students are trained to understand the health effects of these changes, as well as planetary health issues and principles more broadly. Topics like the changing geography of vector-borne diseases, the health consequences of air pollution, environmental health inequities, and disaster response principles must be part of every medical school's core curriculum.*

Curriculum: General

1.1. Did your medical school offer elective courses (student selected modules) to engage students in Education for Sustainable Healthcare or Planetary Health in the last year?	
Yes, the medical school has offered **more than one** elective whose primary focus is ESH/planetary health in the past year. (3 points)	
Yes, the medical school has offered **one** elective whose primary focus is ESH/planetary health in the past year. (2 points)	
The medical school does **not** have any electives whose primary focus is ESH/planetary health, but there are one or more electives that include a **lecture** on planetary health. (1 point)	
No, the medical school has **not** offered any electives on planetary health or electives that include ESH/planetary health topics in the past year. (0 points)	
Score Assigned:	3
Score explanation: An elective on planetary health continues to be offered to M2s. The Climate Crisis and Clinical Medicine Elective remains an offering for M4s, though recordings are now stored internally rather than online and available to the public. Several electives related to planetary health and climate change are also offered through Rollins School of Public Health. Finally, other electives at the medical school include ESH/planetary health topics.	

Curriculum: Health Effects of Climate Change

1.2. Does your medical school curriculum address the relationship between extreme heat, health risks, and climate change?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	3

Score explanation: Except as otherwise noted, all topics referenced throughout the PHRC are addressed in Emory's disseminated climate change & environmental health thread, with content co-produced by faculty in the thread, faculty who teach other threads and courses, and students in the core curriculum. The thread is interwoven into courses throughout the pre-clinical and clinical years, emphasizing patient-centered care and relevance to clinical care. Sessions including the following in-depth lectures/activities addressed these topics:

- *Current lecture: In a nephrology lecture on urinalysis, the lecturer discusses how expanding zones of heat exposure coupled with social conditions are related to geographically-linked increases in kidney stone formation.*
- *Current lecture: In the nephrology course, there is a lecture dedicated to heat and kidney disease. They discuss both kidney stone prevalence and disparities in incidence as functions of increasing average temperature. There are two in-depth case study examples: one concerning acute kidney injury (AKI) in Atlanta, GA and one about increasing renal failure rates in Nepal.*
- *Current lectures on exercise physiology discuss heat-related illness, differentiate heat exhaustion and heat stroke, and discuss the need for prompt recognition while highlighting the role of exercise in cardiovascular disease prevention and health maintenance. Discussion of heat illness in athletes is given context with Atlanta's Peachtree Road Race.*
- *Current lecture: "Epidemiology and Pathophysiology" of Cerebrovascular Disease is integrated into the Neurology Course. The lecturer discusses temperature extremes as risk factors for acute cerebrovascular accidents with emphasis on health disparities and neighborhood level risk factors like heat.*
- *Current lecture: "Environmental Health: Assessing Exposures Across the Lifespan" serves as an introduction to the CCEH Thread and includes extreme heat as a case study.*
- *Current activities: The workshop "Taking an Environmental and Exposure History" in the Pediatric Clerkship as well as multi-disciplinary sessions integrated into an Environmental Justice workshop in Emory's longitudinal Community Learning and Social Medicine Curriculum (CLSM) course address populations with relatively greater risk of exposure to climate change.*
- *More discussion-based case studies and experiential learning exercises have been added to the current M1 cardiology course. A case study focuses on heart failure risk factors, symptoms, and treatment options and includes a robust discussion of social determinants of health with a focus on the cardiovascular impacts of urban heat islands and heat waves.*
- *Current lecture: "Environmental Emergencies" is presented in the M4 Emergency Medicine (EM) clerkship and includes management of hypothermia, frostbite, and heat stroke with attention to specific vulnerable communities in Atlanta, co-created with former Emory students.*
- *Current didactic: The Dyspnea didactic in the Internal Medicine clerkship includes CCEH-related content, including extreme heat.*
- *Current Objected Structured Clinical Examination (OSCE): An OSCE exercise in the EM clerkship emphasis content covered in the CCEH Thread, including extreme heat.*

1.3. Does your <u>medical school</u> curriculum address the impacts of extreme weather events on individual health and/or on healthcare systems?
This topic was explored **in depth** by the **core** curriculum. (3 points)
This topic was **briefly** covered in the **core** curriculum. (2 points)
This topic was covered in **elective** coursework. (1 point)
This topic was **not** covered. (0 points)

Score Assigned:	3

Score explanation: The impacts of extreme weather events on individual health and the healthcare system are addressed in disseminated climate change & health curriculum for pre-clinical students as well as in the M3 Pediatrics clerkship and the M4 Emergency Medicine Clerkship (as described above).

● Current preclinical lecture: "Environmental Health: Assessing Exposures Across the Lifespan" reviews personal and structural factors that make individuals more susceptible to extreme weather and the role of physicians in supporting patients.
● Current M3 Pediatrics lecture: "Environmental Determinants of Health" discusses disaster scenarios, including risk of carbon monoxide poisoning after disasters.
● Current EM clerkship lecture and simulation: "Environmental Emergencies" covers extreme weather, and EM simulations address extreme weather in patient-centered scenarios.
● Current preclinical lecture: A new case study added to "Inside Out: Climate Change and Lung Health" covers risks of disasters to patients with existing chronic disease, using examples of Hurricane Helene and the LA Wildfires in early 2025. These two cases introduce the disaster preparedness cycle and multiple choice questions from ScholarRx's Planetary Health Bricks to emphasize the risk of disasters to healthcare delivery.

1.4. Does your <u>medical school</u> curriculum address the impact of climate change on the changing patterns of infectious diseases?

This topic was explored **in depth** by the **core** curriculum. (3 points)
This topic was **briefly** covered in the **core** curriculum. (2 points)
This topic was covered in **elective** coursework. (1 point)
This topic was **not** covered. (0 points)

Score Assigned:	3

Score explanation: The impact of climate change on the changing patterns of infectious diseases is addressed in the climate change & environmental health thread at several different points:

● Current preclinical lecture: In "Pneumonia," climate content includes descriptions of the clinical features of pneumonia and ways to identify elements of a patient's syndrome that provide clues to the microbial etiology. The lecture reviews the relationship between environmental factors, pathogen, and host, as well as the effect of extreme heat, air pollution, and extreme weather on pneumonia incidence.
● Current preclinical lecture: "Malaria" includes discussion of the impact of climate change on malaria distribution and how to identify the most likely Plasmodium species causing an infection based on epidemiology.
● Current preclinical lecture (preclinical): In "Tick-borne Illness," the lecturer describes the geographic distributions of tick-borne diseases and includes discussion of Lyme disease range and predictions for expanded vector distribution with climate change.
● Current preclinical lecture: "Soft Tissue Infections" describes the increasing geographic distribution of Vibrio vulnificus leading to more cases of soft tissue infections during the Skin, Muscle, Joints, and Bones course.

1.5. Does your medical school curriculum address the respiratory health effects of climate change and air pollution?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	3

Score explanation: The respiratory health effects of climate change and air pollution are addressed and assessed in the climate change & environmental health thread, particularly in the Pulmonology Course, and in the clinical clerkships, including Adult Primary Care (APC) and Internal Medicine.

● Current lecture: "Inside Out: Climate Change and Lung Health" by current students, faculty, as well as former students reviews the interlinks between climate change and pollution and aeroallergens and how these affect patient health.
● Current team-based learning: In "Pulmonary Function Test Interpretations," students interpret pulmonary function tests with consideration of disparities in lung health and health outcomes related to zoning, transportation, and other policies that result in disproportionate air pollution levels and burden of asthma in communities of color.
● Current lecture: "COPD" lecturer reviews sources of particulate matter pollution and differentiates between coarse (PM10) and fine (PM2.5) particulate matter.
● Current lecture: "Asthma" discusses how particulate matter air pollution affects respiratory health in children and adults and contribution of environmental factors to asthma disparities.
● Current lecture: "Common Pediatric Respiratory Disorders" describes how environmental pollution compromises pulmonary function and lung development.
● Current lecture: "Environmental Health: Assessing Exposures Across the Lifespan" reviews intersectionality in the environmental health vulnerability framework with the example case of a child with asthma triggered by environmental exposures.
● Current activities: The COPD workshop in the APC Clerkship, the Shortness of Breath didactic in the internal medicine (IM) Clerkship, and the EM simulation exercise emphasize the role of pollution in chronic disease exacerbation and incorporating patient-centered guidance in clinical encounters, including providing guidance on the air quality index as related to chronic disease management plans.
● Students are assessed on this content at multiple points in the curriculum, including the Pulmonary Course (MCQs and Short Essay) and EM Simulation exercise.

1.6. Does your medical school curriculum address the cardiovascular health effects of climate change, including increased heat?
This topic was explored **in depth** by the **core** curriculum. (3 points)
This topic was **briefly** covered in the **core** curriculum. (2 points)
This topic was covered in **elective** coursework. (1 point)
This topic was **not** covered. (0 points)

Score Assigned:	3

Score explanation: The cardiovascular health effects of climate health are addressed in the climate change & environmental health thread.

● Current lecture: "Exercise and the Healthy Human" discusses the effect of air pollution and wildfires on risk of cardiovascular disease and stroke. This talk also defines urban heat islands and the impact of zip code on health as well as the role of exercise in prevention of cardiovascular disease.
● Current lecture: "Pathology of Atherosclerosis and Ischemic Heart Disease" includes discussion of major risk factors in the development of atherosclerosis as well as how air pollution exposure contributes to vascular remodeling and atherosclerosis through oxidative stress and inflammation and relates environmental stressors to the burden of CV disease.
● Current didactics: The Dyspnea didactic in the IM clerkship includes consideration of air pollution and heat for chronic disease exacerbation, including in congestive heart failure.

1.7. Does your <u>medical school</u> curriculum address the mental health and neuropsychological effects of environmental degradation and climate change?

This topic was explored **in depth** by the **core** curriculum. (3 points)
This topic was **briefly** covered in the **core** curriculum. (2 points)
This topic was covered in **elective** coursework. (1 point)
This topic was **not** covered. (0 points)

Score Assigned:	3

Score explanation: The mental health and neuropsychological effects of environmental degradation and climate change are addressed in the climate change and environmental health thread.

● Current lecture: "Somatic Symptom & Related Disorders" discusses disordered stress response and potential environmental triggers and contributions to trauma history (including Adverse Childhood Experiences or ACEs), building off of a Climate Psychiatry Alliance framework. This lecture also discusses Green Space and Stress Management as considerations for treatment plans.
●Case based-learning: In the pre-clinical curriculum, Behavioral Sciences, climate anxiety has been added to a case for the Behavioral Sciences Course.
●Patient interview: In the pre-clinical curriculum, Behavioral Sciences, faculty explored climate and environment-related contributions to stress in a 50-minute patient-interview on early-life stress.
● Current lecture: "Environmental Determinants of Health" in the Pediatric Clerkship discusses environmental determinants of mental health from a growth and development perspective.
●Psychiatry didactics: In the Psychiatry Clerkship, a case-based didactic session includes environmental details and teaches students to apply the bio-psycho-social ecological framework to approaching patients with mental illness. Climate and environmental-health related headlines are featured in a "Psychiatry in the News" activity as topics are prevalent in the news. Faculty present an interactive case created by colleagues at University of Washington /Stanford's Medicine for a Changing Planet series to the student Canvas page for all psychiatry students, creating a "Climate Corner" to integrate these resources into the course.

1.8. Does your medical school curriculum address the relationships between health, individual patient food and water security, ecosystem health, and climate change?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	3

Score explanation: Addressed in the climate change & environmental health thread as well as the community learning and social medicine course.

● *Current lecture: "Nutritional Deficiencies" discusses climate change as a driver of food insecurity and malnutrition, as well as climate-sensitive diarrheal diseases.*
● *Current lecture: A lecture is given that existed prior to the climate and environmental health curriculum and supplements its content. This lecture discusses the use and development of botanical treatments, traditional medicines, and how climate change, habitat loss, and overharvesting threaten the survival of medicinal plants.*
● *Current workshop: The environmental justice workshop within the CLSM Course-CCEH Integration includes a role-play with students and faculty on patient-centered counseling for plant-forward diets as well as a nutritionist with expertise on planetary health diets and food delivery in healthcare.*
● *Current immersive activity: In the Adult Primary Care clerkships, all students participate in a "Live like your patient" activity, and this activity has been updated so that each option includes foundations of a planetary health diet and human and planetary health benefits of health diets for this clerkship alongside the CCEH Thread. The immersive activity is now supplemented by didactics content on this same topic of planetary health diets.*

1.9. Does your medical school curriculum address the outsized impact of climate change on marginalised populations such as those with low SES, women, communities of colour, Indigenous communities, children, homeless populations, and older adults?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	3

Score explanation: The outsized impact of climate change on marginalized populations is addressed in the climate change & environmental health thread across several lectures and small groups, as well as in elective content and interprofessional activities.

● *Current lecture: "Environmental Health: Assessing Exposures Across the Lifespan" introduces climate change as a social justice issue and health equity multiplier, outlines the intersection of*

environmental exposures related to redlining and structural discrimination, and includes the exposure-vulnerability-adaptive capacity framework for approaching risk.
● Current lecture: "Epidemiology and Pathophysiology of Cerebrovascular Disease" includes in-depth discussion of neighborhood as a risk factor, with a learning point on temperature extremes and risk for acute cerebrovascular accident.
● Current team based learning (built from prior Small Group): In "Case-Based Learning: Lung Disease," Pulmonary Function Test (PFT) interpretation includes a case of a child and discusses the effect of pollution on asthma and PFTs in children in the context of disparities in lung health and health outcomes related to zoning, transportation, and other policies that result in disproportionate air pollution levels and burden of asthma in communities of color.
● Current activity: CLSM workshop features a panel of colleagues from other health professions posing interdisciplinary solutions to support patient care.
● Current activity: Climate Justice in Healthcare Delivery is one option for a required interprofessional education activity, and about 1/10 of medical students participated in this immersive challenge to generate workable advances towards climate justice in healthcare.
●Current didactics: A talk in the IM clerkship on dyspnea builds upon structural determinant factors taught in the pre-clinical phase related to climate and environment.

1.10. Does your <u>medical school</u> curriculum address the unequal regional health impacts of climate change globally?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	3
Score explanation: The unequal regional health impacts of climate change globally are addressed in the climate change & environmental health thread. In particular, faculty address the unequal health impacts of climate change in an introductory lecture by presenting climate change as a human rights issue and social and intergenerational justice concern, and the Nephrology course includes additional content on global perspectives related to climate change. The EJ Workshop emphasizes the inequitable distribution of climate change impacts and the human rights concerns of the climate crisis. These activities are included in the core curriculum for all students. For a subset of students, the climate justice challenge for Interprofessional Education - Advancing Collaborative Team Solutions also emphasizes the global health and human rights implications of healthcare's outsized contribution to climate change. The curriculum framework considers the risks of individuals who have migrated because of climate change and potential vulnerabilities in the local health care system as well.	

Curriculum: Environmental Health & the Effects of Anthropogenic Toxins on Human Health

1.11. Does your <u>medical school</u> curriculum address the reproductive health effects of industry-related environmental toxins (e.g. air pollution, pesticides, microplastics)?
This topic was explored **in depth** by the **core** curriculum. (3 points)

This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	3
Score explanation: The reproductive health effects of industry-related environmental toxins are addressed in the climate change & environmental health thread. Pregnancy is reviewed in the environmental vulnerability framework introduced in the aforementioned lecture on exposures across the lifespan. The Reproductive Course includes content in the Pharmacology lecture on maternal adaptations in pregnancy as related to environmental exposures and vulnerability as well as Zika implications during pregnancy. Faculty, students, and former students have co-created content for the OB Clerkship, including integrating the implications of particulate matter pollution into course activities that include gamification/jeopardy questions. The Environmental Determinants of Health workshop in the Pediatrics clerkship also includes discussion of lead toxicity and routes of exposure, including transplacental exposure, and its effect on maternal and child health.	

1.12. Does your <u>medical school</u> curriculum address important human-caused environmental threats that are relevant to the university's surrounding community?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	3
Score explanation: Important human-caused environmental threats are addressed in the climate change & environmental health thread. In particular, the Pulmonary lecture "Inside Out" reviews lengthening pollen seasons, hurricane risks in Georgia, and air pollution in Atlanta. The introductory lecture on exposures through the lifespan discusses environmental injustice implications for the local community. Additionally, another lecture delves into a case study on AKI in Atlanta. Further, structural discrimination and policy-health implications for local communities within and surrounding Atlanta and as related to heat, pollution, toxic exposures, and heavy metals are discussed in several didactics, workshops, and activities in the climate change & environmental health thread throughout the curriculum. This topic is included within the "Epidemiology and Pathophysiology of Cerebrovascular Disease" lecture, during the CLSM EJ Workshop (including in conjunction with an introduction to the EJ Greenbook to empower local communities to leverage the law to address EJ), and on multiple occasions in the pulmonology, nephrology, and neurology courses as well in the Adult Primary Care, Pediatrics, and IM Clerkships.	

1.13. To what extent does your <u>medical school</u> emphasise the importance of Indigenous knowledge and value systems as essential components of planetary health solutions?

This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	2

Score explanation: Indigenous knowledge and value systems are currently emphasized as essential components of planetary health solutions in a lecture that discusses the use and development of botanical treatments, traditional medicines, and how climate change, habitat loss, and overharvesting threaten the survival of medicinal plants. While this topic is explored in depth, we would like to continue to infuse relevant content and emphasize this topic even more.

Collaboration with CLSM and the CLSM course includes content on indigenous perspectives and concepts related to structural violence. In addition, the Healthcare Excellence through Applied Advocacy and Leadership(HEALL) thread includes examples in medicine of guidelines that have resulted in detrimental health effects for Black or American Indigenous communities. This year, new planetary health elective work included a visit to an art exhibit, Continuum, at Emory's Carlos Museum, featuring the work of indigenous artists Johnnie Diacon and Hotvlkuce Harjo, followed by discussion on perspectives on health and medicine. A new narrative medicine activity (both didactic time and student reflection) has been added to the IM clerkship to include local and indigenous perspectives, starting March 2026.

1.14. Does your <u>medical school</u> curriculum address the outsized impact of anthropogenic environmental toxins on marginalised populations such as those with low SES, women, communities of colour, children, homeless populations, Indigenous populations, and older adults?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	3

Score explanation: Emory covers the outsized impact of anthropogenic environmental toxins on marginalized populations in multiple activities discussed above, in the Climate Change and Environmental Health Thread, the CLSM Course, and in the Healthcare Excellence through Applied Advocacy and Leadership (HEALL) Thread, including via discussion of air pollution and chemical mobilization in extreme weather events in our preclinical "Pulmonary Function Test Interpretations" small group. In this discussion, small groups discuss disparities in lung health related to zoning, transportation, and other policies that result in disproportionate air pollution levels in communities of color.

This topic is further discussed in the context of redlining in the "Environmental determinants of health across the lifespan" lecture, and "Taking an Environmental and Exposure History" for both

M1s and during the Pediatric Clerkship. A lecture given to M1s during their Nutrition, Physiology, and Metabolism course covers the negative effects lead poisoning has on heme synthesis. These topics are considered across the clinical clerkships as noted above. Lastly, there are relevant didactic sessions within Emory's CLSM core requirements and co-hosted EJ workshop.

Curriculum: Sustainability

1.15. Does your <u>medical school</u> curriculum address the environmental and health co-benefits of a plant-based diet?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 point)	
Score Assigned:	3
Score explanation: The environmental and health co-benefits of a plant-based diet are addressed in the climate change & environmental health thread. In particular, environmental and health co-benefits of a plant-based diet are addressed during the Cardiology course, during Human Development in the preventive cardiology lecture, the EJ workshop (all during the pre-clinical curriculum), and during the immersive "Live like your patient" activity in the APC clerkship as well as a preventive medicine workshop case-based learning on dietary guidance during the clinical years.	

1.16. Does your <u>medical school</u> curriculum address the carbon footprint of healthcare systems?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	3
Score explanation: The carbon footprint of healthcare systems is addressed in the climate change & environmental health curriculum. Content in the pre-clinical EJ workshop emphasizes the contribution of the US Healthcare sector to US greenhouse gas (GHG) emissions from an ethical lens and compares US GHG and Healthcare waste as well as health outcomes to those of other nations. In addition,"Inside Out: Climate Change and Lung Health" by faculty, students, and with input from additional faculty and prior students, discusses the GHG implications of anesthetic gases, actions Emory has taken to reduce these as a case study, as well as the propellants in metered-dose inhalers. The APC clerkship also includes the implications of prescribing practices on GHG emissions in a COPD workshop. Finally, for the subset of medical students participating in the Climate Justice in Healthcare Delivery interprofessional education challenge (Interprofessional Education - Achieving Collaborative Team Solutions), this topic is deeply	

explored immersively from a solutions-oriented interprofessional lens and students have the option of following up on their Climate Solutions with Emory's Health Care Sustainability Council to bring them to life.

1.17. Does your medical school curriculum cover these components of sustainable clinical practice in the core curriculum? (points for each)	**Score**
The health **and** environmental **co-benefits** of **avoiding** over-medicalisation, over-investigation and/or over-treatment (2 points)	2
The environmental impact of **pharmaceuticals** and over-prescribing as a cause of climate health harm. Alternatively teaching on **deprescribing** where possible and its environmental and health co-benefits would fulfil this metric. (2 points) .	2
The health **and** environmental **co-benefits** of **non-pharmaceutical management** of conditions where appropriate such as exercise or yoga classes for type 2 diabetes; social group activities such as gardening for mental health conditions; active transport such as bicycle schemes. This is commonly known as social prescribing in the UK. (1 point)	1
Environmental impact of **surgical** healthcare on planetary health and the climate crisis, and how can it be mitigated. (1 point)	1
The impact of **anaesthetic** gases on the healthcare carbon footprint and ways to reduce anaesthesia's environmental impacts, such as total intravenous anaesthesia or choosing less environmentally harmful anaesthetic gas options with reduced greenhouse gas emissions. (1 point)	1
The impact of **inhalers** on the healthcare carbon footprint and the environmental benefit of dry powdered inhalers over metered dose inhalers. (1 point)	1
Waste production within healthcare **clinics** and strategies for reducing waste in clinical activities (e.g. single use items in the inpatient or outpatient setting) (1 point)	1

Score explanation: The Endoscopy 101 covers targets for greening endoscopy, including analyzing/addressing the drivers of unnecessary procedures/overtreatment as well as areas of surgical waste such as single use items, water use, decontamination, travel and detergents. Additionally, throughout the radiology thread during M3 year, mandatory American College of Radiology "Choosing Wisely" modules go over the appropriate indications for different imaging modalities. Often, there are explanations for choosing imaging, including discussion about waste production and resource utilization. The CLSM EJ workshop includes coverage of waste production in healthcare and compares/contrasts surgical waste from different settings. An infectious disease case-based presentation and accompanying stewardship topic in the pediatric clerkship covers decreasing waste of antimicrobials. Several lectures/activities highlight the need to assess and address environmental exposure history in children and adults with respiratory and cardiovascular disease in addition to prescribing medical therapies and the benefits of active transportation, exercise, and diets. The impact of anesthetic gases and pharmaceuticals are covered in the preclinical "Inside Out" pulmonology lecture. The impact of inhalers is covered in the pulmonology module and APC Clerkship.

1.18. In training for patient encounters, does your <u>medical school's</u> curriculum introduce strategies to have conversations with patients about the health effects of climate change?	
Yes, there are strategies introduced for having conversations with patients about climate change in the **core** curriculum. (2 points)	
Yes, there are strategies introduced for having conversations with patients about climate change in **elective** coursework. (1 point)	
No, there are **not** strategies introduced for having conversations with patients about climate change. (0 points)	
Score Assigned:	2
Score explanation: In the Rheumatology course in the pre-clinical phase, students co-teach how to offer anticipatory guidance to patients with gout, systemic lupus erythematosus (SLE), and dermatomyositis related to climate change. Examples include counseling patients with gout to prioritize hydration during hot days; counseling patients with photosensitivity related to SLE and diabetes to avoid prolonged sun exposure; and counseling patients with pulmonary flares to avoid polluted air. In the Exposures Across the Lifespan lecture, students are given a framework for integrating climate-related discussions into clinical care. This framework is further applied across the pre-clinical curriculum, including in the Pulmonology Course and CLSM workshop regarding diet-related talking points. In addition, students are taught strategies for incorporating talking points from the pre-clinical phase and assessed on their ability to implement these patient-centered communications around environmental health in the clerkship phase, especially in Pediatrics, IM, EM, and APC.	

1.19. In training for patient encounters, does your <u>medical school's</u> curriculum introduce strategies for taking an environmental history or exposure history?	
Yes, the **core** curriculum includes strategies for taking an environmental history. (2 points)	
Only **elective** coursework includes strategies for taking an environmental history. (1 point)	
No, the curriculum does **not** include strategies for taking an environmental history. (0 points)	
Score Assigned:	2
Score explanation: In the pre-clinical phase, Essentials of Patient Care (the course that teaches history-taking) includes environmental and social determinants of health as foundational knowledge. The lecture Environmental Exposures Across the Lifespan provides a framework for taking environmental histories.In the pre-clinical phase, students continue to see how this framework applies to patient risks across topics and across exposures relevant for several different courses, including Pulmonary, Nephrology, Skin, Bones, Muscles, and Joints, etc. Students also receive talking points for how to counsel patients about potential health harms. This information is delivered during small group sessions to allow students to discuss and actively engage with the material. The Pediatric clerkship covers taking an environmental exposure history with a focus on patient-centered environmental vulnerability as well as a child with altered mental status case on toxic exposures. M4s have a talk that discusses environmental exposures in "Environmental	

Emergencies" in the EM Clerkship and assess and address environmental exposures in an EM OSCE case.

Curriculum: Administrative Support for Planetary Health

1.20. Is your <u>medical school</u> currently in the process of implementing or improving Education for Sustainable Healthcare (ESH)/planetary health education?	
Yes, the medical school is currently in the process of making **major** improvements to ESH/planetary health education. (4 points)	
Yes, the medical school is currently in the process of making **minor** improvements to ESH/planetary health education. (2 points)	
No, there are **no** improvements to planetary health education in progress. (0 points)	
Score Assigned:	4
Score explanation: As of January 2022, the CCEH curriculum was accepted as a "thread" by the Emory School of Medicine curriculum committee, meaning that it will be integrated throughout all components of the medical education curriculum, from pre-clinical throughout clinical years. The Emory curriculum is undergoing transformation in the pre-clinical phase, and we aim to retain environmental determinants as authentic context across patient-centered cases and the curriculum that emerges from this transformation. While much of the focus this year has been studying and improving implementation and assessment of our content in the clerkships where content is integrated, we plan to add further content in the clerkships in coming years, with some new activities coming online March 2026.	

1.21. How well are the aforementioned planetary health/Education for Sustainable Healthcare topics integrated longitudinally into the <u>core</u> curriculum?	
Planetary health/ESH topics are **well integrated** into the core medical school curriculum. (6 points)	
Some planetary health/ESH topics are appropriately integrated into the core medical student curriculum. (4 points)	
Planetary health/ESH is not integrated and is primarily addressed in **(a) standalone lecture(s).** (2 points)	
There is **minimal/no** education for sustainable healthcare. (0 points)	
Score Assigned:	6
Score explanation: The CCEH curriculum and now thread, first introduced for the class of 2024, spans the pre-clinical and now clinical phases of medical school. The climate & environmental health curriculum team engaged faculty members (including lecturers, course directors, and clerkship directors) and incorporated climate learning points into existing didactics and activities as well as new dedicated climate lectures and clerkship activities. The curriculum also adds environmental health discussion points to small group activities and team-based learning as the	

curriculum is transformed, and we plan to continue to diversify our teaching modalities and assessment strategies in coming years.

1.22. Does your <u>medical school</u> employ a member of faculty to specifically oversee and take responsibility for the incorporation of planetary health and sustainable healthcare as a theme throughout the course?	
Yes, the **medical school** has a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare. (1 point)	
No, the **medical school** does **not** have a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare. (0 points)	
Score Assigned:	1
Score explanation: Dr. Rebecca Philipsborn is the Thread Director for the Climate Change & Environmental Health Thread at Emory School of Medicine. In this role, Dr. Philipsborn coordinates climate learning points with students and participating faculty members, supports student partners in co-creating the curriculum, works with course faculty, and delivers some of the educational content included in the curriculum.	

1.23. Does your health professional curriculum include teaching on civic engagement/advocacy to address the environmental and structural determinants of health?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	3
Score explanation: The Emory School of Medicine curriculum addresses civic engagement and advocacy at multiple points throughout the pre-clinical and clinical phases, aligned with Liaison Committee on Medical Education Standards and Elements 7.6 and 7.7 in particular. The introduction to the Community Learning and Social Medicine curriculum outlines ways that physicians can move upstream through Advocacy, Service, Policy, Research, and Education (ASPIRE). The CCEH thread conceptual model includes "Adaptive Capacity" as a core feature, with the intersection with law and policy and physicians as advocates as a lever on health emphasized at multiple points in the curriculum, for example, in a discussion about the evolutions of laws and standards around lead exposures and "acceptable" blood lead levels in children. Other sessions in CLSM address structural determinants on numerous topics following the OCAM Model (Overview of the problem, Clinical relevance and ways to ask about it, Actions at the bedside, Moving upstream to address through advocacy). The introduction to the clinical years curriculum (called Integrations) includes an Introduction to Advocacy class. The HEALL Thread also emphasizes changemaking and areas for medically-related change interventions at multiple points.	

Section Total (74 out of 75)	98.67%

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Interdisciplinary Research

Section Overview: ***This section evaluates the quality and quantity of interdisciplinary planetary health research at the broader institution.*** *Interactions between health and the environment are complex and multifactorial. While climate change has been extensively studied from an environmental science perspective, planetary health is an emerging field. As leading health institutions with talented researchers and research resources, institutions should fund research studying the health effects of climate change and anthropogenic environmental toxins. This obligation is particularly strong because the public and policymakers are more attentive to climate change when its implications for human health are emphasised.*

2.1. Are there researchers engaged in planetary health research and healthcare sustainability research at your institution?	
Yes, there are faculty members at the **institution** who have a **primary** research focus in planetary health **or** sustainable healthcare/vetcare. (3 points)	
Yes, there are individual faculty members at the **institution** who are conducting research **related** to planetary health or healthcare sustainability, OR are part of a national/international sustainability working group, but it is not their primary research focus. (2 points)	
There are sustainability researchers at the **institution**, but not specifically associated with healthcare/vetcare. (1 point)	
No, there are **no** planetary health and/or sustainability researchers at the **institution** at this time. (0 points)	
Score Assigned:	3
Score explanation: The Emory Climate Research Initiative (ECRI) was created in October 2022 to strengthen Emory's academic response to the global climate crisis. The core faculty leadership team is composed of representatives from each school within Emory (Public Health, Theology, Law, Medicine, College of Arts and Sciences, Oxford College, Nursing, and Business). The Climate and Health Actionable Research and Translation Center continues to advance and translate research on climate and health risks, with research activities based in the Atlanta area (including the area's hospitals) and beyond.	

2.2. Is there a dedicated department or institute for interdisciplinary planetary health research at your institution?
There is **at least one** dedicated department or institute for interdisciplinary planetary health research. (3 points)
There is **not currently** a department or institute for interdisciplinary planetary health research, but there are **plans** to open one in the next 3 years. (2 points)
There is an **Occupational and Environmental Health department**, but no interdisciplinary department or institute for planetary health research. (1 point)

There is **no** dedicated department or institute. (0 points)

Score Assigned:	3

Score explanation: The Emory Climate and Health Research Incubator (ECHRI) is an initiative of Rollins School of Public Health and a university-wide effort at Emory University to advance climate change scholarship, teaching, and partnership with local Atlanta communities and across the globe. Currently, the co-directors of the ECHRI include faculty from the Rollins School of Public Health at Emory University. Additionally, faculty from the Rollins School of Public Health, School of Medicine, School of Nursing, and departments of Environmental Science and Mathematics within the College of Arts and Sciences are involved in the ECHRI.

Further, the Emory Climate & Health Actionable Research and Translation Center (CHART), associated with the Rollins School of Public Health, is another interdisciplinary team with involvements in climate change and environmental health research, community engagement and research translation, and research capability building.

Additionally, the Office of Sustainability Initiative is a hub for coordinating interdisciplinary activities.

2.3. Is there a process by which communities disproportionately impacted by climate change and environmental injustice give input or make decisions about the research agenda at your institution?

Yes, there is a process in which community members impacted by climate and environmental injustice have **decision-making power** in the climate + environmental research agenda. (3 points)
Yes, there is a process in which community members impacted by climate and environmental injustice **advise** the climate + environmental research agenda. (2 points)
No, but there are **current efforts** to establish a process for community members to advise or make decisions on the research agenda. (1 point)
There is **no** process, and **no** efforts to create such a process. (0 points)

Score Assigned:	3

Score explanation: Emory provides various avenues through which communities that are disproportionately impacted by climate change within and around Atlanta can provide input and become decision-makers pertaining to the direction of our medical school's research agenda. For example, Emory's Urban Health Initiative, the Health and Exposome Research Center: Understanding Lifetime Exposures(HERCULES) community engagement core, and The Pediatric Environmental Health Specialty Unit (PEHSU) prioritize the voices of and partner with local communities on research questions and outreach that, in turn, feeds back into the research efforts at Emory's Schools of Medicine, Nursing, and Public Health.

2.4. Does your institution have a planetary health website that centralises ongoing and past research related to health and the environment?

There is an **easy-to-use, adequately comprehensive** website that **centralises** various campus resources related to health and the environment including all of the following: upcoming events, leaders in planetary health at your institution, and relevant funding opportunities. (3 points)
There is a website that **attempts to centralise** various campus resources related to health and the environment, but it is hard-to-use, not updated, or not adequately comprehensive. (2 points)
The **institution** has an **Office of Sustainability website** that includes **some** resources related to health and the environment. (1 point)
There is **no** website. (0 points)

Score Assigned:	3

Score explanation: Emory's accessible, central website devoted to the environment and sustainability on campus and within the Atlanta community provides an easy-to-use guide to sustainability initiatives, metrics such as maps and data regarding Emory's sustainability efforts, ways to get involved in Emory's sustainability efforts, and other resources. This website includes a calendar of upcoming events, information on the Emory Sustainability Initiatives team, and relevant funding opportunities. Further, the ECRI and Emory Climate and Health Research Incubator websites also provide information about research related to health and the environment at Emory.

2.5. Has your institution recently hosted a conference or symposium on topics related to planetary health?
Yes, the **institution** has hosted at least one conference or symposium on topics related to planetary health in the past year. (4 points)
Yes, the **institution** has hosted at least one conference or symposium on topics related to sustainable healthcare/vetcare in the past year. (3 points)
Yes, the **institution** has hosted a conference on topics related to planetary health / sustainable healthcare/vetcare in the past three years. (2 points)
The **institution** has not hosted any conferences directly, but they have provided financial support for a local planetary health event. (1 point)
No, the **institution** has not hosted a conference on topics related to planetary health in the past three years. (0 points)

Score Assigned:	4

Score explanation: Emory has hosted numerous Climate Talks over the past two years, with topics including intersectional and interfaith focuses. Additionally, Emory's Climate and Health Actionable Research and Translation Center (CHART) hosts webinars on topics related to planetary health, including many over the past year, such as the recent "Integrating Extreme Weather Preparedness for Families into a Clinical and Public Health Setting" webinar.

Further, the Break the Cycle of Environmental Health Disparities conference was again held in spring 2025. A presentation on "Social and Climate Injustice: Examining the effects on the health

of farmworkers" was also included as part of Emory College of Arts and Sciences' Living Health Week Spring 2025.

2.6. Is your institution a member of a national or international planetary health or ESH/ESV organisation?	
Yes, the institution is a member of a national or international planetary health **or** ESH/ESV organisation. (1 point)	
No, the institution is **not** a member of such an organisation. (0 points)	
Score Assigned:	1
Score explanation: Emory University School of Medicine is a member of the Planetary Health Alliance (via Emory University as a whole) and the Global Consortium on Climate and Health Education. Additionally, Emory is one of the partners of Climate Resources for Health Education. In addition, Emory Healthcare is a member of Practice Greenhealth.	

Section Total (17 out of 17)	**100.00%**

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Community Outreach and Advocacy

Section Overview: ***This section evaluates a school's engagement in community outreach and advocacy efforts associated with planetary health.*** *Researching and teaching planetary health is necessary but not sufficient. It is critical that institutions also directly engage with communities most affected by environmental health harms. Although climate change is a problem largely created by those with power and resources, its impacts fall disproportionately on under-resourced populations and communities of colour. Institutions should partner with local communities affected by climate change and pollution to share information about environmental health threats, advocate together for change, and provide opportunities for students to be a part of this work.*

3.1. Does your institution partner with community organisations to promote planetary and environmental health?	
Yes, the **institution** meaningfully partners with **multiple** community organisations to promote planetary and environmental health. (3 points)	
Yes, the **institution** meaningfully partners with **one** community organisation to promote planetary and environmental health. (2 points)	
The **institution** does not partner with community organisations, but participates in community focused events relating to planetary health. (1 point)	
No, there is **no** such meaningful community partnership. (0 points)	
Score Assigned:	3

Score explanation: Emory hosts a farmers market where Georgia farmers and entrepreneurs sell goods and perishables grown and made in Georgia. The market motivates everyone to connect with Georgia's farmers and small business owners, learn more about healthy eating and sustainable practices, and build relationships with those who produce our food—an important part of a thriving local food system. The farmers market is held every Tuesday at various campus locations, including in front of the medical school. Emory was honored with Second Nature's Climate Luminaries Award for exceptional commitment to Justice in early 2025.

Emory is a member of The Regional Center for Expertise on Education for Sustainable Development. Through their membership, Emory continues to advance and teach the United Nations Sustainability goals in the greater Atlanta area.

Emory's Climate & Health Actionable Research Translation Center (CHART) continues to focus on researching the impacts of climate change on health and developing action-oriented strategies to protect the health of individuals and communities. The Community Engagement Core (CEC) of the CHART Center actively engages local community partners to provide opportunities for bidirectional learning and equitable partnership for the Center's current and future research. There are applications that provide one year of funding for local groups to address climate concerns that can impact their community's health. Guidance and/or assistance may be provided to awardees based on project and organizational needs. The link to the CHART's application can be found here. Emory University Hospital partners with MedShare to divert high-quality, unused medical equipment and supplies away from landfills to be used by under-resourced communities.

3.2. Does your institution offer community-facing courses or events regarding planetary health?	
The **institution** offers community-facing courses or events at least once every year. (3 points)	
The **institution** offers courses or events open to the community at least once per year, but they are not primarily created for a community audience. (2 points)	
The **institution** has promoted community-facing courses or events, but was not involved in planning those courses or events. (1 point)	
The **institution** has not offered such community-facing courses or events. (0 points)	
Score Assigned:	3
Score explanation: Emory hosts Climate Talks, an ongoing webinar series that is community-facing in that it is open to the public and recordings are available on Youtube. Climate Talks has been expanded this year into a Climate Hub or gathering places for Climate-focused news and events across campus. There are also three seasons of the Emory hosted podcast, "AmpliFIRE: Raising Voices Against Rising Temperatures" available on Soundcloud. In October 2025, Emory medical students hosted the 3rd annual Ride for Their Lives Atlanta, a free ten mile bike ride that brought together Emory medical students, residents, and attendings to promote climate action. Ride for Their Lives is an international collaboration of healthcare providers that hosts annual cycling events to raise awareness about the urgent health threat that climate change poses for patients. *Emory hosts a networking event for students who are interested in environmental health. The Annual Green Networking Night connects students from diverse majors and fields with alumni, professionals, and community partners dedicated to promoting environmental sustainability and stewardship.* *Emory now provides a Sustainability Event certification program to give students guidance on planning sustainability events. This was launched in May 2024 under Emory's 2024 Sustainability guide and continues into 2026. Trained personnel will equip students, faculty, and staff with the tools and knowledge needed to help achieve the Sustainability Vision goals related to waste reduction and diversion. Participants will develop leadership skills, educate others, and provide valuable feedback to enhance Emory's systems, communication, and culture in support of these goals.*	

3.3. Does your institution have regular coverage of issues related to planetary health and/or sustainable healthcare in university update communications?
Yes, all students **regularly** receive communication updates dedicated to planetary health and/or sustainable healthcare. (2 points)
Yes, planetary health and/or sustainable healthcare topics are regularly included in communication updates to **some courses**. (1 point)
Students **do not** receive communications about planetary health or sustainable healthcare. (0 points)

Score Assigned:	2
Score explanation: Emory has weekly email updates regarding coverage of issues related to sustainability and planetary health from their Office of Sustainability. Moreover, these topics are covered in Emory's on-campus magazine, "Emory Magazine."	

3.4. Does the institution or main affiliated hospital trust engage in professional education activities targeting individuals post-graduation with the aim of ensuring their knowledge and skills in planetary health and sustainable healthcare remain up to date during their professional career?	
Yes, the **institution** or **main affiliated hospital trust** offers multiple in-person or online courses relating to planetary health and/or sustainable healthcare for post-graduate providers, including at least one with a primary focus of planetary health. (2 points)	
Yes, the **institution** or **main affiliated hospital trust** offers one course relating to planetary health and/or sustainable healthcare for post-graduate providers. (1 point)	
There are **no** such accessible courses for post-graduate providers. (0 points)	
Score Assigned:	2
Score explanation: Grand Rounds and other CME events have been offered in several departments, including the Departments of Radiology, Surgery, Internal Medicine, OB/Gyn, Pediatrics, and others on Climate Change and/or Environmental Health. There have been MedTalk sessions dedicated to educating faculty to teach about climate and health. The CHART center is hosting an ongoing community-facing webinar series on heat implications for health in the ATL-area, aiming to increase communication and collaboration between community members, clinicians, and researchers, and that it is accredited for CNE. Emory continues to host online, on-demand content on the Health Effects of Climate Change on Children created by a group of pediatricians from across the country. As another example, Children's Healthcare of Atlanta hosted the Grand Rounds session, "Addressing the Climate Crisis Through Healthcare Sustainability and Antimicrobial Stewardship" on June 11, 2025.	

3.5. Does your institution or its affiliated teaching hospitals have accessible educational materials for patients about environmental health exposures?	
Yes, the **institution** or **all affiliated hospitals** have accessible educational materials for patients. (2 points)	
Some affiliated hospitals have accessible educational materials for patients. (1 point)	
No affiliated medical centres have accessible educational materials for patients. (0 points)	
Score Assigned:	2
Score explanation: Emory's CHART center has accessible educational materials on Atlanta-specific exposures, like heat and health. These are available institutionally and are in use	

as a part of ongoing activities at Grady Memorial Hospital and Emory Midtown Hospitals. Emory School of Medicine has a large network of affiliated hospitals: the Emory Healthcare Network, Children's Healthcare of Atlanta, Grady Memorial Hospital, and the Atlanta VA Hospital. Residents at Children's Healthcare of Atlanta have created a pack of patient-facing materials and QR codes for integration in the electronic medical record. The VA website includes information about exposure to hazardous environmental exposures or hazardous materials, such as Agent Orange, asbestos, and illnesses related to those exposures.

Several Emory School of Medicine Faculty Members are members of the HERCULES Exposome Research Center, which has curated a number of resource guides on different environmental health topics for patients in the Atlanta community. These resources can be found here. Additionally, Emory, in partnership with Grady Memorial Hospital, runs the Georgia Occupational and Toxicology Clinic, which houses physicians who work with patients to diagnose and treat a variety of occupational and environmental diseases, poisonings, and exposures to hazardous substances.

Education materials from the PEHSU are used throughout Emory's Pediatric Departments. PEHSU created a social media campaign using #ProtectKidsHealth to disseminate information on the impact of various environmental health exposures including but not limited to air pollution, lead, arsenic, and phthalates.

3.6. Does your institution or its affiliated teaching hospitals have accessible educational materials for patients about the health impacts of climate change?

Yes, the **institution** or **all affiliated hospitals** have accessible educational materials for patients. (2 points)	
Some affiliated hospitals have accessible educational materials for patients. (1 point)	
No affiliated hospitals have accessible educational materials for patients. (0 points)	
Score Assigned:	2

Score explanation: As above, Emory as an institution has publicly available patient materials on the health impacts of climate change. Emory School of Medicine has a large network of affiliated hospitals: the Emory Healthcare Network, Children's Healthcare of Atlanta, Grady Memorial Hospital, and the Atlanta VA Hospital. Almost all of these hospitals have patient-facing materials that clinicians can access, but integration and utilization vary.

Education materials from the PEHSU are used throughout Emory's Pediatric Departments. PEHSU created a hurricane preparedness guide to support planning, response and recovery efforts for families in hurricane-prone regions.

A trifold pamphlet has been distributed to K-12 school nurses through school-based health center networks and to local pediatricians. Children Hospital of Atlanta (CHOA) also provides teaching sheets to parents to assist in learning about and managing their child's asthma diagnosis. These sheets include information on environmental and climate related triggers for the condition.

In 2022, Emory University and the University of Georgia launched the Center for Children's Health Assessment, Research Translation and Combating Racism (CHARTER). The organization's mission is to translate research findings regarding the impact of climate change and environmental health on pediatric populations into communication products to be disseminated throughout

Georgia communities. The CHART Center is also increasing access to patient-facing materials at Emory-affiliated sites.

There are also pages on Emory's sustainability website dedicated to information for hospital visitors and healthcare staff members on how Emory is conducting sustainability initiatives, events that take place and how to get involved. They also provide means of contacting healthcare staff in search of mentorship or answers on planetary and sustainability questions relating to the school and hospitals.

Section Total (14 out of 14)	**100.00%**

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Support for Student-Led Planetary Health Initiatives

Section Overview: ***This section evaluates institutional support for student-led planetary health initiatives, such as funding, fellowships, programming, and student groups.*** *Planetary health is a young field and, as young people facing a future deeply shaped by climate change, students are often some of the first at an institution to engage with it. Institutions should provide support for students to engage in sustainability quality improvement (QI) initiatives, discover mentors in their area of interest, and receive funding for planetary health projects.*

4.1. Does your institution offer support for students interested in enacting a sustainability initiative/QI project?	
Yes, the **institution** *either* offers grants for students to enact sustainability initiatives/QI projects *or* sustainability QI projects are part of the core curriculum. (2 points)	
The **institution** encourages sustainability QI projects (to fulfil clerkship or longitudinal requirements) and offers resources to help students succeed in these projects, **but** there is no student funding available and there is no requirement to participate. (1 point)	
No, the institution does not offer opportunities or support for sustainability initiatives or QI projects. (0 points)	
Score Assigned:	2

Score explanation: Student-led sustainability initiatives are well-supported by Emory. The University offers a General Sustainability and Social Justice Incentives Fund through the Office of Sustainability Initiatives. This fund allows all Emory and Emory Healthcare students, faculty, and staff to request up to $3,000 for any project or research related to sustainability at Emory and the intersections of sustainability and social justice via application every fall. Students have successfully received funds through this mechanism to assist with medical student focus groups addressing the sustainability curriculum changes and holding an at-home composting workshop for students as well as conducting lunch-time talks and community initiatives, such as hosting booths at Earth Day fairs and the Ride for Their Lives event.

In addition, The Green Labs at Emory and Green Offices at Emory offer all students, faculty and staff to apply for funding to implement new actions and innovations at their certified Green Lab or Office. The grant awards up to $5,000 for proposals that promote sustainable management of supplies, waste, and more via application every fall. In November 2021, Emory Medical Students for Climate Action applied to certify the School of Medicine Anatomy Lab and received recognition as a Bronze Level Green Lab.

The institution provides a Sustainability Event Certification program where guidance is provided to students interested in doing sustainability projects and events. Students are recognized for their efforts and a gift card is provided for catering food at an event. The institution also has trained Zero Waste Ambassadors who can provide guidance to those doing projects on sustainability and waste disposal on campus.

Further, students are able to participate in a Climate Justice Health Challenge during IPE-ACTS (Interprofessional Education - Achieving Collaborative Team Solutions), a course for first-year health professions students. Students in the Climate Justice Health Challenge presented their projects to the Emory Healthcare Sustainability Council, who is then helping to move forward their proposed sustainability solutions.

4.2. Does your institution offer opportunities for students to do research related to planetary health and/or sustainable healthcare/vetcare?	
The **institution** has a **specific** research program or fellowship for students interested in doing planetary health/sustainable healthcare/vetcare research. (2 points)	
There are research opportunities for students to perform research related to planetary health/sustainable healthcare, but these **require student initiative** to seek them out and carry them out in their spare time. (1 point)	
There are **no opportunities** for students to engage in planetary health/sustainable healthcare research. (0 points)	
Score Assigned:	2

Score explanation: Emory School of Medicine has an MD/MPH program in partnership with the Rollins School of Global Health with well-established programs at Gangarosa Department of Environmental Health, including a Climate and Health Certificate program, which is an opportunity available to all medical students who choose to do an MPH. Additionally, all 4th year medical students who do not pursue an additional degree have a 5-month protected research block called "Discovery" and can pursue any academic research interest of their choosing with an Emory faculty advisor or an advisor at an outside institution. While this program is not specific to climate research, it is part of the curriculum and students have pursued projects related to planetary health and sustainable healthcare in recent years, including projects on climate change and migration, availability of drinking water as an environmental justice issue, and operating room waste production.

The General Sustainability and Social Justice Incentives Fund offered by Emory's Sustainability Office, as noted in the first question of this section, will also fund planetary health and/or sustainable healthcare research initiatives. This funding is explicitly meant for research pertaining to planetary health and/or sustainable healthcare.

Moreover, Emory medical students can obtain funding for planetary health and/or sustainable healthcare research through the Emory Primary Care Consortium Grants. These grants provide $12,000 each fiscal year in grants of up to $3,000 to support any Emory-affiliated project that involves research, quality improvement, advocacy, development of clinical decision support tools, or educational activities in support of advancements in primary care. In the application criteria, it is stated, "Project topics may center around patient safety, innovations in healthcare delivery, addressing disparities in healthcare, etc." Upon review, research pertaining to sustainability and planetary health would fall under healthcare disparities and/or patient safety. Moreover, it has been acknowledged that projects pertaining to public and environmental health have been conducted in the past. Any Emory student, resident, or faculty member (including VA faculty with an Emory appointment) may apply.

Additionally, Emory offers an MPH in Environmental Health and a Certificate in Climate and Health.

4.3. Does the institution have a webpage where students can find specific information related

to planetary health and/or sustainable healthcare/vetcare activities and mentors within the institution? For example, projects achieved, current initiatives underway at the medical school and/or contact of information of potential mentors.
The institution has a webpage with specific information related to planetary health or sustainable healthcare/vetcare that includes up-to-date information on relevant initiatives and contact information of potential mentors. (2 points)
There is an institution webpage that features some information on projects and mentors within planetary health and sustainable healthcare within the institution, but it lacks key information. (1 point)
There is **no institution** specific webpage for locating planetary health and/or sustainable healthcare projects or mentors. (0 points)

Score Assigned:	2

Score explanation: While these webpages are not specific to Emory School of Medicine (and are for Emory as a whole, underscoring the needed interdisciplinary collaboration for climate and health), the Emory Climate Research Initiative webpage features specific information on faculty members involved in climate change research. This website offers details about faculty in each school that are involved in planetary health research, including their research interests and links to their profiles, where contact information can be found. Additional information can be found under the "Research" tab. Further, the Rollins School of Public Health has a webpage dedicated to climate change, and this webpage features a section on primary and jointly appointed faculty involved in climate change and their research interests.

There are also pages on Emory's sustainability website dedicated to information for hospital visitors and healthcare staff members on how Emory is conducting sustainability initiatives, events that take place, and how to get involved. They also provide means of contacting healthcare staff in search of mentorship or answers on planetary and sustainability questions relating to the school and hospitals.

4.4. Does your institution have registered student groups dedicated towards fostering a culture of planetary health engagement, scholarship, and advocacy on campus, supported by faculty advisors?
Yes, there is a student organisation **with faculty support** at my institution dedicated to planetary health or sustainability in healthcare. (2 points)
Yes, there is a student organisation at my institution dedicated to planetary health or sustainability in healthcare but it **lacks faculty support.** (1 point)
No, there is **not** a student organisation at my institution dedicated to planetary health or sustainability in healthcare. (0 points)

Score Assigned:	2

Score explanation: Emory Medical Students for Climate Action (MSCA) is an established student group working towards climate solutions and environmental justice at Emory University School of

Medicine. This group is supported by a faculty advisor, Dr. Rebecca Philipsborn, and is an affiliate of Medical Students for a Sustainable Future (MS4SF).

4.5. Is there a student liaison representing sustainability interests who serves on a department or institutional decision-making council to advocate for curriculum reform and/or sustainability best practices?	
Yes, there is a student representative who serves on a department or institutional decision-making council/committee. (1 point)	
No, there is no such student representative. (0 points)	
Score Assigned:	1
Score explanation: Emory medical students have represented medical students in Emory's University-wide Climate Action Task Force and Climate Action Plan as well as the University's Break Free from Plastics Task Force. The curriculum has official representatives for each class year. These students and others represent student interests on Emory Health Care's Sustainability Council.	

4.6. In the past year, has the institution had one or more co-curricular planetary health programs or initiatives in the following categories? (1 point each)	**Score**
Projects where students are able to gain experience in organic agriculture and sustainable food systems, such as gardens, farms, community supported agriculture (CSA), fishery programs, or urban agriculture projects.	1
Panels, speaker series, or similar events related to planetary health that have students as an intended audience.	1
Events in which students learn directly from members of a local environmental justice community about the climate and environmental challenges they face, and how health professionals can partner with their community to address these exposures and impacts.	1
Cultural arts events, installations or performances related to planetary health that have students as an intended audience.	1
Local volunteer opportunities related to building community resilience to anthropogenic environmental impacts.	1
Wilderness or outdoors programs (e.g., that organise hiking, backpacking, kayaking, or other outings for students)	1
Score explanation: There are many opportunities to gain experience in organic agriculture and sustainable food systems at Emory. The medical school has a community garden that helps cultivate food and community on Emory's campus. The Educational Gardens on campus are maintained by teams of Emory community members and are located all over campus, and the Emory Office of Sustainability Initiatives hosts open garden workdays.	

Emory holds numerous panels and speaker events related to planetary health. Emory students also receive support to attend global events, such as COP28. Emory has continued to host "Climate Talks," an ongoing webinar and seminar series covering a range of issues pertaining to climate and planetary health.

During Earth Week activities in the spring of 2024, Emory MSCA and Emory School of Medicine hosted a Climate Justice and Health Equity Panel.

From September 2024 to April 2025, the "Resilient Earth" exhibit was held at Science Gallery Atlanta, which is a part of Emory University. This exhibit is fundamentally about planetary health and sustainability. From August 21-December 7, 2025, Continuum, an art exhibit at Emory's Carlos Museum explored "the concept of Indigenous futurisms through the lens of traditional lifeways as a continuous and evolving practice that informs and shapes contemporary and future Indigenous realities."

Emory offers numerous opportunities to engage with developing community resilience to anthropogenic environmental impacts. In October 2025, MSCA held the annual Ride for their Lives event. In Earth Week 2025, Emory's Medical Students for Climate Action held a gardening event, providing students with planting materials (such as pots and seeds). Emory's MSCA also participated in a hard-to-recycle waste collection that was delivered to CHaRM.

Outdoor Emory is a student organization that offers opportunities for graduate and undergraduate students to participate in group wilderness and outdoor activities, including hiking, ziplining, caving, rafting, and more.

Section Total (15 out of 15)	**100.00%**

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Campus Sustainability

Section Overview: ***This section evaluates the support and engagement in sustainability initiatives by the institution.*** *The healthcare industry is a major contributor to greenhouse gas emissions as well as pollution that harms local, regional, and global ecosystems. While healthcare is, by nature, a resource-intensive endeavour, the healthcare sector is well poised to lead the world to a more sustainable future. This will involve scrutinising every aspect of how our systems operate, from where we source our energy, to how we build our infrastructure, to what companies we invest in. Our institutions, clinics, and hospitals must set the standard for sustainable practices, and show other sectors what is possible when it comes to minimising environmental impact.*

5.1. Does your institution have an Office of Sustainability?	
Yes, there is an Office of Sustainability with multiple full-time staff dedicated to campus sustainability. If the Office of Sustainability serves the entire campus, there is **at least one designated staff member** for sustainability at the hospital. (3 points)	
There is an Office of Sustainability with one or more full-time staff dedicated to campus sustainability, but **no specific staff member** in charge of hospital sustainability. (2 points)	
There are **no salaried sustainability staff,** but there is a sustainability task force or committee. (1 point)	
There are **no** staff members **or** task force responsible for overseeing campus sustainability. (0 points)	
Score Assigned:	2
Score explanation: Emory University has an Office of Sustainability Initiatives (OSI) (established 2006) responsible for institution-wide endeavors for sustainability. The School of Medicine has staff sustainability liaisons to OSI to facilitate the medical school's respective initiatives including those run through the department of Continuing Medical Education. The executive leader at Emory Healthcare who was tasked with sustainability left in 2025 and this role has not been replaced. While OSI still supports sustainability at Emory University and Emory Healthcare, and there is a designated staff member at OSI for sustainability in healthcare, there is not a full-time staff member dedicated to sustainability in healthcare.	

5.2. How ambitious is your institution's plan to reduce its own carbon footprint?
The institution has a **written and approved plan** to achieve carbon neutrality by **2030** (5 points)
The institution has a **written and approved plan** to achieve carbon neutrality by **2040** (3 points)
The institution has a stated goal of carbon neutrality by **2040** but has **not created a plan** to reach that goal or the **plan is inadequate** (1 point)
The institution does **not** meet any of the requirements listed above (0 points)

Score Assigned:	0

Score explanation: Emory University has clearly stated goals regarding reduction of emissions:

- *Commit (in alignment with the Intergovernmental Panel on Climate Change) to reducing greenhouse gas emissions 50% by 2030 and reaching net zero emissions by 2050, using a 2010 baseline.*
- *Achieve carbon neutral construction by 2025 for all new construction and to reduce emissions from purchased electricity.*
- *Support the City of Atlanta's plan to transition to 100% clean energy by 2035.*
- *Continue to reduce emissions from purchased electricity through continuing measures such as renewable onsite electricity generation, behavior change for energy use reduction, and advocating for changes in Georgia's energy grid to include more renewable energy.*
- *Develop a carbon offset program, with preference for local projects with social benefits, to allow students, faculty, and staff to offset university travel, commuting, and other activities that produce greenhouse gas emissions.*
- *Enhance purchasing incentives and restrictions to increase sustainable refrigerant use and disposal.*

The Second Nature Greenhouse Gas emissions inventory tracker follows Emory's actual reductions as the institution works toward these stated goals.

5.3. Do buildings/infrastructure used by the institution for teaching (not including the hospital) utilize renewable energy?
Yes, institution buildings are **100%** powered by renewable energy. (3 points)
Institution buildings source **>80%** of energy needs from off-site and/or on-site renewable energy. (2 points)
Institution buildings source **>20%** of energy needs from off-site and/or on-site renewable energy. (1 point)
Institution buildings source **<20%** of energy needs from off-site and/or on-site renewable energy. (0 points)

Score Assigned:	1

Score explanation: Emory University has committed to self-generating 10% of energy needed on campus, but it currently does not meet over 20% of its energy needs with renewable energy sources. Progress towards Emory's Energy and Natural Resources goals can be found in the most recent Annual Campus Services report. Compared to a 2015 baseline, as of 2023, Emory University has achieved an energy use per square foot (EUI) reduction of 14.8% and a total energy use reduction of 10.8%.

The ability to do this is very dependent on state and regional barriers that are largely beyond a medical school's and even institution's control, such as regulatory constraints and utility management. Notwithstanding these limitations, Emory has instituted sustainable technologies for producing renewable energy across its campus, including solar photovoltaic power, co-generation

from Emory's steam plant, biofuel used in Emory's Cliff shuttles, and geothermal heat pumps in the Leadership in Energy and Environmental Design (LEED) Platinum Emory Student Center. Additionally, with the enactment of House Bill 57, The Solar Power Free-Market Financing Act of 2015, Georgia became the first state in the Southeastern U.S. to legislatively approve private, third party sales of electricity from onsite solar systems as a means of financing solar energy for Georgia businesses, institutions, schools, and homes. With third-party financing through Solar Energy Procurement Agreements (SEPA) now legal in Georgia, Emory has been able to install more cost effective solar energy systems on Emory property.

In 2020, Emory University entered into a SEPA with Cherry Street Energy to install 5.5 megawatts of solar on the Atlanta campus. So far, Emory University has installed about 8,000 solar panels across Emory University's rooftops and parking decks (see report above for locations). In addition, Emory has purchased solar energy off-site through Renewable Energy Certificates (RECs) from its utility that offset 100% of the current electricity consumption of Emory Healthcare's operation on its main campus. These RECs do not offset our natural gas use; we only claim them as renewable electricity use.

5.4. Are sustainable building practices utilised for new and old buildings on the institution's campus, with design and construction of new buildings and remodelling of old buildings conforming to a published sustainability rating system or building code/guideline?	
Yes, sustainable building practices are utilised for new buildings on the institution's campus and the **majority** of old buildings **have been retrofitted** to be more sustainable. (3 points)	
Sustainable building practices are utilised for new buildings on the institution's campus, but most old buildings have **not been retrofitted.** (2 points)	
Sustainable building practices are **inadequately or incompletely** implemented for new buildings. (1 point)	
Sustainability is **not considered** in the construction of new buildings. (0 points)	
Score Assigned:	2

Score explanation: Energy efficiency is a priority for both new construction and in the renovations of older buildings on campus. The University and Healthcare system have over 4.25 million gross square feet of space in 40 LEED-certified buildings. In 2017, Emory University Hospital Tower was the first Emory Healthcare building to become LEED-certified. In August 2024, Emory's Health Sciences Research Building (HSRB-II), Georgia's largest health sciences research building, achieved LEED Gold. Furthermore, all new construction on campus will be carbon neutral and major building renovations will be held to a minimum of LEED Silver standards by 2025. There are also plans to ensure that major building renovations will be held to a minimum of LEED Silver standards, and roof replacement projects will be cool, green, and/or solar. These metrics and further plans for sustainable change are documented accordingly here. Emory University also maintains a list of all LEED-certified buildings and those pending certification. That said, Emory has not retrofitted all of its old buildings; but, as buildings are renovated, they must meet LEED Silver minimum certification standards.

5.5. Has the institution implemented strategies to encourage and provide environmentally-friendly transportation options for students and reduce the environmental impact of commuting?	
Yes, the institution has implemented strategies to encourage and provide **environmentally-friendly transportation options** such as safe active transport, public transport, or carpooling and these options are well-utilised by students. Alternatively, the campus location is not amenable to unsustainable forms of transportation by default. (2 points)	
The institution has implemented **some** strategies to provide environmentally-friendly transportation options, but the options are **unsatisfactorily** accessible or advertised. (1 point)	
The institution has **not** implemented strategies to encourage and provide environmentally-friendly transportation options. (0 points)	
Score Assigned:	2

Score explanation: Emory University has committed to reducing emissions through investment in and implementation of sustainable transportation solutions that all include the medical school.

- *In 2005, Emory University created the Emory Shuttle system, which transports around 3 million riders annually to and from Emory facilities for free. The shuttles run on a B5 biofuel blend made from campus- and hospital-used cooking oils. The shuttle hub is directly in front of the medical school and one route provides transportation to Grady campus. Currently, 13% of the Emory shuttle fleet and 25% of the entire fleet are electric vehicles.*
- *Emory University developed a robust commute options program that offers resources and incentives to employees who commute by walking, biking, carpooling, vanpooling, and public transit. Graduate students who participate in this program also receive free 20-ride MARTA (Atlanta's public transit system) passes. Additionally, the Graduate Student Government Association has developed a novel MARTA program, providing graduate students with subsidized unlimited monthly MARTA passes.*
- *Electric vehicle charging stations and an Emory Fleet Service rental program for Emory University students, faculty, and staff encourage sustainable travel options.*
- *Emory University supports a bicycling culture for those who cycle to work and around campus, offering a bike rental program, staff and student bicycling social groups, expansion of the PATH multi-use pathways network to and on campus, and a free bike repair shop on campus. The Bike Friendly University program of the League of American Bicyclists has given Emory a Silver rating for supporting bicyclists.*

Emory University's 2025 Sustainability Vision commits to:

- *Support flexible work days so that all non-essential personnel are expected to telecommute at least one day per week.*
- *Improve air quality through enforcement of Emory's No Idling Policy and other pollution prevention actions.*
- *Shift Emory University and Emory Healthcare vehicle fleets to meet national sustainable fleet certification standards.*
- *Extend incentives for sustainable commuting to students and expand bike shares and the Cliff Shuttle.*
- *Establish a carbon-reduction program that allows carbon emissions from Emory-purchased air travel to be offset by investments in a sustainability revolving fund or similar mechanism.*

Emory University is in the process of developing its 2025-2036 sustainability vision and strategic plan. To see more information pertaining to Emory's sustainable transportation initiatives, please see this website. The complete Emory Sustainability Vision and Strategic Plan can be found here.

5.6. Does your institution have an organics recycling program (compost) and a conventional recycling program (aluminium/paper/plastic/glass)?

Yes, the institution has **both** compost **and** recycling programs accessible to students and faculty. (2 points)	
The institution has **either** recycling **or** compost programs accessible to students and faculty, but not both. (1 point)	
There is **no** compost or recycling program at the institution. (0 points)	
Score Assigned:	2

Score explanation: Emory University's campus, including the medical school, has a robust, standardized set of composting and recycling bins that are readily available for student use. Additionally, Emory University no longer offers landfill waste containers in exterior spaces of campus. The Emory Recycles department also accepts waste and recyclables for any disposable stream at the Recycling Drop Off site (open 24/7). Emory University has also partnered with other departments to collect hard-to-recycle materials such as light bulbs, batteries, aerosol cans, clean Styrofoam, and electronic waste. Additionally, Emory Healthcare reduces and recycles waste generated in clinics by washing and reusing linens, reusing sharps containers, and donating materials/equipment for use in other countries. A complete report of Emory University's waste initiatives and policy can be found here.

Emory is in the process of transitioning waste vendors to return to pre-pandemic practices of pre- and post-consumer composting. Emory is currently able to compost pre-consumer organic materials (namely kitchen scraps and animal bedding from labs).

Moving forward, Emory's Sustainability Vision & Strategic Plan includes the following action items:

- *All university events will be zero municipal landfill waste by 2025.*
- *Divert 95% of non-construction waste from municipal waste landfills (except regulated lab and medical waste) by 2025.*
- *Compost, recycle, or reuse at least 95% of food waste, non-hazardous animal bedding, and construction materials by 2025. To learn more about how Emory aims to do this, visit the Emory Zero Landfill Waste page.*
- *Meet or exceed leading healthcare industry rates of waste reduction/reuse/recycling to 37% by 2025.*
- *Emory University is in the process of developing its 2025-2036 sustainability vision and strategic plan.*

5.7. Does the institution apply sustainability criteria when making decisions about the campus food and beverage selections (e.g. local sourcing, reduced meat, decreased plastic packaging)?

Yes, the institution has a**dequate s**ustainability requirements for food and beverages, including meat-free days or no red-meat, and **is engaged** in efforts to increase food and beverage sustainability. (3 points)	
There are sustainability guidelines for food and beverages, but they are **insufficient or optional**. The institution **is engaged** in efforts to increase food and beverage sustainability. (2 points)	
There are sustainability guidelines for food and beverages, but they are **insufficient or optional.** The institution is **not** engaged in efforts to increase food and beverage sustainability. (1 point)	
There are **no** sustainability guidelines for food and beverages. (0 points)	
Score Assigned:	3

Score explanation: While Emory University's medical school has limited food offerings, Emory University has several dining halls/cafeterias that are accessible to medical students. In regards to these dining halls, Emory University has a Sustainable Food Committee that has a well-defined tracking system for purchasing foods. This system, outlined here, analyzes the sustainability of their food purchasing based on four factors: locality, sustainability, scale, and independent ownership (vs. corporate purchases). Notably, almost 40% of the food served in Emory and Oxford Dining locations is sourced locally and/or sustainably.

Additionally, The Oxford Organic Farm at Emory University cultivates produce for Oxford Dining, Emory Dining, the Emory Farmers Market, and a community-supported agriculture produce subscription program while providing a hands-on educational experience for students across disciplines.

Emory University also signed a memorandum of understanding with The Conservation Fund's Farms Fund to break down barriers and support next-generation farmers across metro Atlanta while boosting the supply of fresh, local, sustainably grown food for Emory University's campus and hospital communities. Dining currently purchases from over 20 local farmers; this number should increase to at least 70 by 2040 thanks to the Farms Funds partnership. Emory recently received a Climate Luminary Award from Second Nature for this achievement. In 2025, Emory ranked #5 in the United States in the Food and Dining category in AASHE's 2025 Sustainable Campus Index.

See more current sustainable dining initiatives here and more about Emory Healthcare Dining featured here.

Moving forward, Emory's Sustainability Vision & Strategic Plan commits to:

- *Expand sustainable food purchases in Emory Dining to 75% by 2025.*
- *Expand sustainable and local food purchases in catered events.*
- *Expand sustainable and local food purchases in Emory Healthcare to 25% and establish a tracking system to document future gains.*

In addition, Emory has convened a Break Free from Plastics Task Force as of the fall of 2025 to pursue implementation of the University's Break Free From Plastics Pledge. Emory University is in the process of developing its 2025-2036 sustainability vision and strategic plan. Emory introduced meatless Mondays in 2013 and continues to offer meatless Mondays programming, i.e. at the 605 Grill Station.

5.8. Does the institution apply sustainability criteria when making decisions about supply procurement?	
Yes, the institution has **adequate** sustainability requirements for supply procurement **and** is **engaged** in efforts to increase sustainability of procurement. (3 points)	
There are sustainability guidelines for supply procurement, but they are **insufficient or optional.** The institution is **engaged** in efforts to increase sustainability of procurement. (2 points)	
There are sustainability guidelines for supply procurement, but they are **insufficient or optional.** The institution is **not engaged** in efforts to increase sustainability of procurement. (1 point)	
There are **no** sustainability guidelines for supply procurement. (0 points)	
Score Assigned:	3

Score explanation: Emory University provides comprehensive sustainability criteria for supply procurement provided on campus.

In addition to the purchasing standards mentioned in Section 7 regarding food, a few of the pertinent points to date from the website above are listed below:

- *In 2013, Emory University became a founding member of the Sustainable Purchasing Leadership Council, a non-profit organization whose mission is to support and recognize purchasing leadership that accelerates the transition to a prosperous and sustainable future.*
- *Emory contracts require minimum standards governing employee wages, benefits, and working conditions and provide increased access to minority, disadvantaged, and women-owned vendors.*
- *The purchase of polystyrene products is banned using Emory funds.*
- *Emory's Sustainable Food Guidelines inform food and beverage purchasing by Emory Dining and Emory Healthcare.*
- *Emory uses Life Cycle Cost Analyses to evaluate all energy and water-using products, systems, and building components.*
- *Suppliers of Emory's clothing and garment purchases are all certified by the Fair Labor Association.*
- *All new information technology equipment purchased by Emory is Electronic Product Environmental Assessment Tool (EPEAT) or Energy Star Certified.*
- *In 2021, Emory signed the "Break Free From Plastic" pledge, which commits the University to take drastic steps to reduce its consumption of single-use plastics. This historic moment resulted from the efforts of the Plastic Free Emory Project, a student organization.*

See Emory's plans for initiatives by 2025 here.

5.9. Are there sustainability requirements or guidelines for events hosted at the institution?
Every event hosted at the institution **must** abide by sustainability criteria. (2 points)
The institution **strongly recommends or incentivizes** sustainability measures, but they are **not required.** (1 point)

There are **no** sustainability guidelines for institution events. (0 points)	
Score Assigned:	1

Score explanation: Emory University has a Sustainable Events Certification program that guides event planners on sustainable event planning and recognizes planners for their efforts. The certification process is thorough and offers two levels of certification depending on how many criteria are met. However, this is currently on temporary hold. Additionally, Emory Catering, the choice vendor for event and meeting catering on campus, complies with Sustainable Event Zero Landfill Waste certification requirements by supplying and utilizing catering materials that can all be composted or recycled in Emory's waste streams. Further, America to Go is a collection of Emory's preferred caterers who comply with Emory's zero landfill waste requirements; they are labeled with an icon so that event planners can make informed choices.

The Office of Sustainability Initiatives administers the Zero-Waste Ambassador program,which educates and trains students, faculty, and staff to properly sort waste in accordance with Emory's Waste Policy and sorting systems. Interested community members can register for the program and are trained and deployed to large campus events to assist visitors and other event attendees properly sort their waste to maximize landfill diversion.

5.10. Does your institution have programs and initiatives to assist with making lab spaces more environmentally sustainable?	
Yes, the institution has **programs** and **initiatives** to assist with making lab spaces more environmentally sustainable. (2 points)	
There are **guidelines** on how to make lab spaces more environmentally sustainable, but not programs or initiatives. (1 point)	
There are **no** efforts at the institution to make lab spaces more sustainable. (0 points)	
Score Assigned:	2

Score explanation: Emory University has a program called Green Labs at Emory, which is a voluntary program that assists Emory University, healthcare research, and teaching laboratories to outfit their labs with sustainable practice patterns. The main criteria used by the program to measure sustainability are:

1. *Energy and water efficiency and conservation*
2. *Recycling and waste reduction*
3. *Chemicals*
4. *Procurement*
5. *Engagement*
6. *Safe, healthy, and just environment*
7. *Innovation*

An example of a future goal of Green Labs at Emory is to have at least 95% of non-hazardous animal bedding be composted.

One initiative supported by Green Labs at Emory, in partnership with My Green Lab and International Institute for Sustainable Laboratories, is the Lab Freezer Challenge. This is a global

competition that empowers scientists to improve lab cold storage efficiency to enhance lab sustainability. *Labs fill out the Green Labs at Emory Checklist and the companion Green Labs at Emory Guidance Document. This data is reported to the Green Labs at Emory Team, which grants them a certification level. Labs can then apply for funding to implement action items or come up with innovative ways to improve the sustainable practices of their lab. At the time of submission, the School of Medicine has seven certified Green Labs including: Williams Lab, Porter Lab, Bou-Nader Lab, Melikian Lab, Tirouvanziam Lab, Kissick Lab, and Hanson Lab.*

5.11. Does your institution's endowment portfolio investments include fossil-fuel companies?	
The institution is **entirely divested** from fossil fuels **and** has made a **commitment to reinvest divested funds** into renewable energy companies or renewable energy campus initiatives. (4 points)	
The institution is **entirely divested** from fossil fuels. (3 points)	
The institution has **partially divested** from fossil fuel companies **or** has made a **commitment to fully divest**, but **currently** still has fossil fuel investments. (2 points)	
The institution has **not divested** from fossil-fuel companies, but faculty and/or students are **conducting organised advocacy** for divestment. (1 point)	
Yes, the institution has investments with fossil-fuel companies and there have been **no efforts** to change that. (0 points)	
Score Assigned:	3
Score explanation: According to Emory University's 2025 Sustainability Vision Document, "Emory University does not currently hold direct stock or bonds in public companies producing fossil fuels. Emory performs quarterly negative screening of its investment portfolio. Emory holds many investments in sustainable businesses and businesses with exemplary sustainability performance." Emory Investment Management reports that positive sustainability investments include "investments in green tech, conservation, renewable power, energy optimization, energy efficiency, alternative and renewable energy companies as well as sustainable forestry and waste management." That said, while there is a commitment to reinvest as noted, all funds are not reinvested in renewable energy companies or campus sustainability initiatives at this time.	

Section Total (21 out of 32)	**65.63%**

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Grading

Section Overview
This section focuses on the grading of the report card. The institution received a grade for each of the individual sections as well as an overall institutional grade. Section point totals were tallied, divided by the total points available for the section, and converted to a percentage. The overall institutional grade is a weighted average of the section grades, with curriculum receiving a higher weight owing to its larger number of metrics. Letter grades for each section and the institution overall were then assigned according to the table below.

Letter Grade	Percentage
A	80% - 100%
B	60% - 79%
C	40% - 59%
D	20% - 39%
F	0% - 19%

Planetary Health Grades for Emory University School of Medicine.
The following table presents the individual section grades and overall institutional grade for Emory University School of Medicine on this Planetary Health Report Card.

Section	Raw Score %	Letter Grade
Planetary Health Curriculum (30%)	(74/75) x 100 = 98.67%	A+
Interdisciplinary Research (17.5%)	(17/17) x 100 = 100.00%	A+
Community Outreach and Advocacy (17.5%)	(14/14) x 100 = 100.00%	A+
Support for Student-led Planetary Health Initiatives (17.5%)	(15/15) x 100= 100.00%	A+
Campus Sustainability (17.5%)	(21/32) x 100 = 65.63%	B
Institutional Grade	**(0.987x0.3 + 1x0.175 + 1x0.175 + 1x0.175 + 0.6563x0.175) = 93.58%**	**A**

Report Card Trends

Section Overview
This graph demonstrates trends in overall and section grades for the years in which Emory University School of Medicine has participated in the Planetary Health Report Card initiative.