

Planetary Health Report Card: University of Edinburgh



2020-2021 Contributing Team:

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Summary of Findings

Curriculum	С
The medical school offer opportunities to engage in planetary health and sustainable healthcar education through SSCs and intercalation degrees. Air pollution is addressed within the core but more aspects of planetary health and sustainable healthcare education could be included. be through problem-based learning sessions or in clinical teaching, such as how to take an environmental history. Though there is currently a dearth of planetary health topics in the cur there are clear indications this will be addressed through the redesign of the Year 2 curriculur improvement in this area would be to continue to integrate this teaching into clinical years.	are curriculum This could rriculum, n. Further
Interdisciplinary Research	В
The Global Health Academy (GHA) is a robust research department engaging in planetary h healthcare sustainability research, further enriched by the development of the Planetary Heal 2020. It is a member of the Planetary Health Alliance, and has hosted previous meetings, but want to consider joining the Global Consortium on Climate and Health Education. Its cross- nature allows for partnership with other departments and could make it a good source of sup staff with a primary research focus on planetary health. Institutional communication about pl health could be improved, either by better signposting information currently available, or am these separate sources of information (e.g. GHA and Department for Social Responsibility at Sustainability websites) into one central, detailed, and user-friendly source, with the option to regular communications on the topic.	ealth and th Lab in might disciplinary port for anetary algamating nd o receive
Community Outreach and Advocacy	С
The medical school promote and incentivise medical students participating with local common organisations within the year 1 curriculum to enhance their understanding of the social, econ environmental impacts of health. The medical school have offered community-facing events planetary health but often aimed at an academic, rather than a public, audience, and future ev address this. In hospitals, the public health education literature on environmental health expo the health impacts of climate change is limited and could be easily rectified.	unity omic and on vents could osures and
Support for Student-Led Initiatives	B-
The University has many opportunities (grants, awards, projects, volunteering, societies, courmedical students interested in sustainability to get involved, though these are not specific to a Given the recent push in the medical school to connect students to mentors in specific areas a medicine, including sustainability as one such area could be an easy improvement to make, a creating a sustainability officer role within the Medical School Council.	rses) for healthcare. of long with
Sustainability	B+
The medical school main campus has recently established a dedicated office of sustainability initiatives to make lab spaces more sustainable, and a sustainable procurement policy is in pl is infrastructure to support environmentally-friendly transportation but this could be further i by incentivising public and active transport over private vehicles e.g. offering bursaries for a transport or grants towards purchasing bicycles. The University of Edinburgh has fully dives fossil fuels and aims to be carbon neutral by 2040. At present little of the medical school ene from renewables and improvements are limited by building constraints. Sustainability at Litt could be improved by offering composting, lobbying the main cafeteria to adopt the universit Food Policy, and creating a policy for sustainable events.	There are ace. There mproved ctive ted from rgy comes le France ty Good

Statement of Purpose

Planetary health is human health.

The Planetary Health Alliance defines planetary health as "a field focused on characterizing the human health impacts of human-caused disruptions of Earth's natural systems." This definition is intentionally broad, intended to encompass the multitude of ways that the environment can affect health, including water scarcity, changing food systems, urbanization, 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 medical school's 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 medical training. It is imperative that we hold our institutions accountable for: educating medical 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 color, 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 medical schools, we have created a Planetary Health Report Card that medical students internationally can use to grade and compare their home institutions on an annual basis. This medical-student-driven initiative aims to compare medical schools 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, and 4) community outreach centred on environmental health impacts 5) medical school campus sustainability.

Planetary Health Curriculum

<u>Section Overview:</u> This section evaluates the integration of relevant planetary health topics into the medical school curriculum. Today's medical students will be on the frontlines of tackling the health effects of climate change. Therefore, it is critical that medical students are trained to understand the health effects of climate change, as well as planetary health 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. Did your medical school offer elective courses to engage students in Education for Sustainable Healthcare or Planetary Health in the last year?	
3*	Yes, the medical school has offered more than one elective whose primary focus is ESH/planetary health in the past year.
2	Yes, the medical school has offered one elective whose primary focus is ESH/planetary health in the past year.
1	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.
0	No, the medical school has not offered any electives on planetary health or electives that include ESH/planetary health topics in the past year.
At U third that o <u>Medi</u> Lowe and S stude With proje the susta staff meet susta	niversity of Edinburgh, all students are now required to choose an intercalation option for their year. One option available for the BMedSci is Global Health Policy, which offers some modules could cover sustainable healthcare and planetary health content. These include 'Controversies in icine. Technology and the Environment' delivered by Dr Miguel García-Sancho and Dr James e, and 'Communicable Disease Control & Environmental Health' delivered by Dr Niall Anderson Stuart Mallen. These are not mandatory modules within the BSc (hons) and at the discretion of the ent to choose them. in the medical school curriculum there are elective modules known as Student Selected Component tects (SSC). These are mandatory parts of the curriculum, but the content of the SSC is voluntary, as tudent chooses the projects that interest them. Part of the nature of SSCs is that they are driven by interest and are not always offered each year and may not run if there are not enough students to demand. Currently, the SSC for years 1 and 2 offered projects covering a range of planetary and tinable healthcare topics include: CSI anaesthesia: Presence of blood contamination in reusable anaesthetic breathing equipment, run by Dr. Zoey Dempsey The Nuclear Weapons Crisis – An Extinction Level Event, run by Dr. Michael Orgel Can we reduce or offset use of plastic in hospitals, run by Dr. Alasdair FitzGerald Health professionals and students' role in the climate emergency, run by Dr. Lesley Morrison Developing climate change policy for GP practices, run by Dr. Hilary Young How green is my surgery, run by Dr. Charles Wallis

Curriculum: Health Effects of Climate Change

2. Does your medical school curriculum address the relationship between extreme temperature health risks and climate change, as well as the socioeconomic/racial disparities in extreme heat exposure?

- 3 This topic was explored in depth by the core curriculum.
- 2 This topic was briefly covered in the core curriculum.
- 1 This topic was covered in elective coursework.
- 0 This topic was not covered.

Students in Year 1 complete a 'Health, Ethics and Society' module, within which there is a unit on 'Global health'. The learning objectives for this unit include areas such as 'climate change', 'sustainable development goals', and 'global health equity' however, from written texts available (e.g. PowerPoint presentations), it was hard to ascertain if these LOs were covered. We have concluded this is not covered in the core pre-clinical curriculum, and we cannot see that is addressed in any other subsequent years currently. As explained in Q.1, it is possible to intercalate in Global Health Policy or to choose to carry out an SSC that theoretically could focus on this in more detail. These are also topics that are likely to be included in the revised version of the Year 2 curriculum, which includes a three-week block on 'Health, medicine and the environment'. This has been developed by Dr Gwenetta Curry and Dr Jeni Harden.

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

As explained in Q.2, this is not covered in the core curriculum, but it is possible to intercalate in Global Health Policy or to choose to carry out an SSC that could focus on this in more detail. These are topics that are likely to be included in the revised version of the Year 2 curriculum, which includes a three-week block on 'Health, medicine and the environment'. This has been developed by Dr Gwenetta Curry and Dr Jeni Harden. This could be integrated into the clinical curriculum in the Year 6 A&E block.

4. Does your medical school curriculum address the impact of climate change on the changing patterns of infectious diseases?

3 This topic was explored in depth by the core curriculum.
2 This topic was briefly covered in the core curriculum.
1 This topic was covered in elective coursework.
0 This topic was not covered.
As explained in Q2., this is not covered in the core curriculum, but it is possible to intercalate in Global Health Policy or to choose to carry out an SSC that could focus on this in more detail. These are topics

Health Policy or to choose to carry out an SSC that could focus on this in more detail. These are topics that are likely to be included in the revised version of the Year 2 curriculum, which includes a three-week block on 'Health, medicine and the environment'. This has been developed by Dr Gwenetta Curry and Dr Jeni Harden.

5. Does your medical school curriculum address the cardiorespiratory health effects of climate change, including air pollution?

3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	This topic was not covered.
The curriculum covers the impact of air pollution on respiratory disease briefly as part of a broader	

The curriculum covers the impact of air pollution on respiratory disease briefly as part of a broader lecture on respiratory disease. In the Knowledge to Clinical Practice module in year 1, there is a lecture on 'Breathlessness', its clinical presentation and related risk factors, which includes the effects of environmental pollution as a risk factor (in the 20-21 academic year, lecture was delivered on Oct 9th). These are topics that are likely to be included in the revised version of the Year 2 curriculum, which includes a three-week block on 'Health, medicine and the environment'. This has been developed by Dr Gwenetta Curry and Dr Jeni Harden. 6. Does your medical school curriculum address the mental health and neuropsychological effects of environmental degradation and climate change?

- 3 This topic was explored in depth by the core curriculum.
 2 This topic was briefly covered in the core curriculum.
 - 1 This topic was covered in elective coursework.

0 This topic was not covered.

As explained in Q2., this could be covered when intercalating in global health or psychology, or as research for an SSC, but is not part of the core curriculum. It could be integrated into the Yr 5 Psychiatry block in future years, as well as being addressed in the Yr 2 redesigned curriculum.

7. Does your medical school curriculum address the relationships between health, individual patient food and water security, ecosystem health, and climate change?

- 3 This topic was explored in depth by the core curriculum.
- 2 This topic was briefly covered in the core curriculum.
- 1 This topic was covered in elective coursework.
- 0 This topic was not covered.

As explained in Q2., 'climate change' is currently one of the LOs for the Year 1 Global Health module, but we could not verify this is taught from the available written documents. These topics could be covered when intercalating in global health, or as research for an SSC but is not part of the core curriculum. They are topics that are likely to be included in the revised version of the Year 2 curriculum, which includes a three-week block on 'Health, medicine and the environment'. This has been developed by Dr Gwenetta Curry and Dr Jeni Harden.

8. Does your medical school curriculum address the outsized impact of climate change on marginalized populations such as those with low SES, women, communities of colour, children, homeless populations, and older adults?	
3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	This topic was not covered.

As explained in Q2., this could be covered when intercalating in global health, or as research for an SSC but is not part of the core curriculum.

These topics features in the draft of the new Year 2 curriculum, shared by Dr Jeni Harden, under the week labelled 'Climate Change and Health', which is set to cover:

- How is climate change affecting human health now?
- Who is at greatest risk?

This is planned to be covered through online learning (lectures, reading and small group discussion) and an interactive tutorial, with a total of 7 hours of allocated time each week.

9. Does your medical school curriculum address the unequal health impacts of climate change globally?

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

Students within the 2016/2017 cohort had a lecture on health and climate change that discussed the inequalities of its effects globally, as part of the module 'Health, Ethics and Society', but we are not sure if subsequent years have continued to have this lecture, as this was a student-delivered lecture no longer at the medical school. Furthermore, as explained in Q2., this topic could be covered in elective coursework.

This subject is planned to feature in the new curriculum for year 2 medical students shared by Dr Jeni Harden under the topic of 'Climate Change and Health':

- How is climate change affecting human health now?
- Who is at greatest risk?

This is planned to be covered through online learning (lectures, reading and small group discussion) and an interactive tutorial, with a total of 7 hours of allocated time.

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

10. Does your medical school curriculum address the reproductive health effects of industry-related environmental toxins (e.g. air pollution, pesticides)?	
3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.

0 This topic was not covered.

Although industry-related environmental toxins are mentioned as risk factors in lectures discussing male and female fertility, they are not covered in enough depth to be considered sufficient to score 3 or a 2. Elective course work, such as SSC project or intercalated degrees could have included this topic at the student's discretion.

This topic may feature in the new curriculum for year 2 medical students shared by Dr Jeni Harden under the topic of 'The age of the Anthropocene':

- How is the health of humans shaped by their environment?
- *How has human consumption and development contributed to this?*

This is planned to be covered through online learning (lectures, reading and small group discussion) and an interactive tutorial, with a total of 7 hours of allocated time.

11. Does your medical school curriculum address important human-caused environmental	
threats that are relevant to the university's surrounding community?	

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

This is not covered in the core curriculum. Students can engage with this topic in SSC projects. There are currently none that address this area directly. Some SSC projects could include exploration of the impact on the surrounding community, e.g. "Can we reduce or offset use of plastic in hospitals?" run by Dr. Alasdair FitzGerald, "Health professionals and students' role in the climate emergency" run by Dr. Lesley Morrison, "Developing climate change policy for GP practices" run by Dr. Hilary Young, and "How green is my surgery?" run by Dr. Charles Wallis. Intercalated degrees in Anthropology and Sociology of Medicine, Bioethics, Law and Society or Global Health Policy could also provide self-directed opportunity for this.

This subject features in the new curriculum for year 2 medical students shared by Dr Jeni Harden under the topic of 'The age of the Anthropocene':

- *How is the health of humans shaped by their environment?*
- *How has human consumption and development contributed to this?*

This is planned to be covered through online learning (lectures, reading and small group discussion) and an interactive tutorial, with a total of 7 hours of allocated time.

12. Does your medical school curriculum address the unique climate and environmental health challenges that have impacted and are impacting Indigenous communities?

3 This topic was explored in depth by the core curriculum.

2 This topic was briefly covered in the core curriculum.

1 This topic was covered in elective coursework.

0 This topic was not covered.

This is not covered in the core curriculum. Students can engage with this topic in SSC projects (there are currently none directly addressing this) or intercalated degrees (Anthropology and Sociology of Medicine, Bioethics, Law and Society or Global Health Policy).

This subject is planned to feature in the new curriculum for year 2 medical students shared by Dr Jeni Harden under the topic of 'Climate Change and Health':

- How is climate change affecting human health now?
- Who is at greatest risk?

This is planned to be covered through online learning (lectures, reading and small group discussion) and an interactive tutorial, with a total of 7 hours of allocated time.

13. Does your medical school curriculum address the outsized impact of anthropogenic environmental toxins on marginalized populations such as those with low SES, women, communities of color, children, homeless populations, and older adults?

- 2 This topic was briefly covered in the core curriculum.
- 1 This topic was covered in elective coursework.
- 0 This topic was not covered.

The topic was mentioned in the year 1 module 'Social Determinants and Experiences of Illness' (lecture title: 'Social Position and Experiences of Health'), given by Dr Aoife McKenna, but this was brief (i.e. one slide within the presentation discussed the topic given in the example and no other presentations were found discussing anthropogenic environmental toxins) and was not the focus of the lecture: it did not specifically focus on anthropogenic environmental toxins and centred more on general social determinants of health such as gender and ethnicity. There may also be opportunities to cover this topic in elective coursework during the intercalation programme if Global Health Policy was chosen.

Curriculum: Sustainability

14. Does your medical school curriculum address the environmental and health co-benefits of a plant-based diet?

3 This topic was explored in depth by the core curriculum.

Whilst nutrition lectures/tutorials are provided in year 2 within the gastrointestinal module, they do not	
0	This topic was not covered.
1	This topic was covered in elective coursework.
2	This topic was briefly covered in the core curriculum.

Whilst nutrition lectures/tutorials are provided in year 2 within the gastrointestinal module, they do not discuss plant-based diets. Instead, they cover the benefits of avoiding suggested carcinogenic foods such as red meat and pickled fish, and any reference to a more vegetarian diet was more to avoid the negative impacts of a meat-based diet rather than any positive impacts of a plant-based diet. It also does not appear to be covered in elective coursework, but has been the subject of previous SSCs in the past.

15. Does your medical school curriculum highlight the waste generated by the healthcare system and identify ways to advocate for and implement sustainable best practices in health care?

- 3 This topic was explored in depth by the core curriculum.
 2 This topic was briefly covered in the core curriculum.
- 1 This topic was covered in elective coursework.
- 0 This topic was not covered.

The module 'Medicine and Society' is a Y2 module running over both semesters and has the unit 'Biomedicine and Society', which encourages students to explore current or near future challenges. The redesigned course will have students undertake a student-selected project on this topic, considering medical challenges in relation to medicine, society, ethics and sustainability. As this is a new module beginning in the 20-21 academic year, the exact contents of the sessions, and what aspects of sustainability in healthcare that will be covered, are unknown. However, we were advised (through email communications on 23rd Nov 2020) by the curriculum's module lead, Dr Jeni Harden, who sits on the Centre for Sustainable Healthcare education steering group, that these modules would have a strong focus on sustainability. This topic may also be covered in the Global Health Policy intercalation degree if chosen, and relevant elective SSCs.

Curriculum: Clinical Applications

16. In training for patient encounters, does your medical school's curriculum introduce strategies to have conversations with patients about the health effects of climate change?

2 Yes, there are strategies introduced for having conversations with patients about climate change in the core curriculum.

1 Yes, there are strategies introduced for having conversations with patients about climate change in elective coursework.

0 No, there are not strategies introduced for having conversations with patients about climate change

As mentioned in Q5, in the Knowledge to Clinical Practice module in year 1, there is a lecture on 'Breathlessness'. This lecture is used as basis of an interactive tutorial where students then learn how to communicate with patients, including explaining the risk factors contributing to their presentation. An important caveat to bear in mind for is that teaching on clinical communication skills is done in small groups with numerous different tutors across the year, and the emphasis placed on different aspects, such as the effects of climate change and pollution on health, are tutor dependent, which is why we have scored this 1 as its inclusion cannot be guaranteed.

17. In training for patient encounters, does your medical school's curriculum introduce strategies for taking an environmental history or exposure history? 2 Yes, the core curriculum includes strategies for taking an environmental history. 1 Only elective coursework includes strategies for taking an environmental history. 0 No, the curriculum does not include strategies for taking an environmental history. *All students are taught in their pre-clinical years to include social factors, such as occupation, as part of their history taking, though this is rarely explored in detail. Some exceptions to this include*

of their history taking, though this is rarely explored in detail. Some exceptions to this include respiratory teaching, where exposure to specific pollutants (e.g. asbestos) is addressed. Though history taking is part of the core curriculum, there is room to expand this area of history taking to include heavy metals, lead, air pollution etc.

Curriculum: Administrative Support for Planetary Health

18. Is your medical school currently in the process of improving Education for Sustainable Healthcare (ESH)/planetary health education?	
4	Yes, the medical school is currently in the process of making major improvements to ESH/planetary health education.
2	Yes, the medical school is currently in the process of making minor improvements to ESH/planetary health education.
0	No, there are no improvements to planetary health education in progress.

Teaching relating to health, ethics and society, which is delivered in the 2 years of pre-clinical teaching, is in the process of being rewritten to include more planetary and sustainable healthcare education. A draft of the year 2 curriculum currently has three weeks on 'Health, medicine and the environment', within which the following areas are covered:

- *How is the health of humans shaped by their environment?*
- How has human consumption and development contributed to this?
- How is climate change affecting human health now?
- Who is at greatest risk?
- What do we mean by sustainable healthcare?
- How will changes in demographics, technology, climate and resource availability affect our ability to provide healthcare into the future?

This has been designed by Dr Ingrid Young, Dr Ellen Stewart and Dr Gwenetta Curry, with oversight from Dr Jeni Harden. We have awarded 2 points as there appears to be no current plans to integrate this teaching into clinical years and across the curriculum, which we regarded as a major improvement.

19. How well are the aforementioned planetary health/Education for Sustainable Healthcare topics integrated longitudinally into the core curriculum?	
6	Planetary health/ESH topics are well integrated into the core medical school curriculum.
4	Some planetary health/ESH topics are appropriately integrated into the core medical student curriculum.
2	Planetary health/ESH is not integrated and is primarily addressed in (a) standalone lecture(s).
0	There is minimal/no education for sustainable healthcare.
Currently, planetary health and sustainable healthcare education are addressed in a standalone lecture, so we have scored it as 2. Planetary health and sustainable healthcare principles, though not the concepts themselves, were included in one lecture within the Global Health unit, delivered by a	

fifth-year student to Year 1 students in 2016-17. As mentioned earlier, the current 2020-21 learning objectives for this unit include aspects of these subjects, but it is hard to verify in written documents that they are addressed. They do not reappear as an integrated part of teaching later in the curriculum. Based on the draft version of the new year 2 curriculum, we anticipate there will be better cover on these subjects in 2021-22.

20. Bonus: Does your medical school have a program that offers incentives for faculty/departments to develop new planetary health/ESH courses and/or incorporate planetary health/ESH into existing courses?

1* Yes, the medical school has an incentive program.

0 No, the medical school does not have an incentive program.

There is no incentivisation programme within the medical school that we were aware, or could find, to encourage staff to integrate planetary health into their courses, so scoring 0.

Section Total (27 out of 58)

27

Are there additional curriculum resources offered at your medical school or institution not yet asked about that you would like to describe? If so, please do so below.

Interdisciplinary Research

<u>Section Overview:</u> This section evaluates the quality and quantity of interdisciplinary planetary health research at the medical school and 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, medical schools 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 emphasized.

1.	Are there researchers engaged in planetary health research and healthcare sustainability research at your medical school?
4	Yes, there are faculty members at the School of Medicine who have a primary research focus in planetary health and healthcare sustainability.
3	Yes, there are faculty members at the School of Medicine who have a primary research focus in planetary health or healthcare sustainability.
2	Yes, there are individual faculty members at the School of Medicine who are conducting research related to planetary health or healthcare sustainability, but it is not their primary research focus.
1	There are planetary health and/or healthcare sustainability researchers at the institution, but none associated with the medical school.
0	No, there are no planetary health and/or healthcare sustainability researchers at the institution or medical school at this time.
We have awarded this area a score of 2 for two reasons. Firstly, there are staff who are interested in carrying out research in these areas, as suggested by the list of SSC tutors, but this is not their primary research focus. Secondly, it is difficult to draw a distinct line between staff as the medical school collaborates with other faculties and parts of the wider institution to deliver its teaching. Within the school there is the 'Molecular, Genetic and Population Health' sciences, which operates through the MRC Institute of Genetics and Molecular Medicine, and the Usher Institute. Within the latter, staff from the Centre for Population Health Sciences, the Centre for Global Health, and the Centre for Biomedicine, Self and Society are involved in aspects of the medical school curriculum, so may or may not be classed as medical school faculty. For example, Dr Liz Grant is the Director of the Global Health Academy, and the "lead for the Planetary Health strategy", but is listed as staff within the College of Medicine and Veterinary Medicine but also has other research interests, such as palliative care.	

2. Is there a dedicated department or institute for interdisciplinary planetary health research at

your institution?	
3	There is at least one dedicated department or institute for interdisciplinary planetary health research.
2	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.
1	There is an Occupational and Environmental Health department, but no interdisciplinary department or institute for planetary health research.
0	There is no dedicated department or institute.
There is the <u>Global Health Academy</u> , which has a cross-disciplinary structure and enables global health research. One of the research <u>themes</u> at the Academy is "Planetary health, One health and the Determinants of health". Some previous research projects related to planetary health include: <u>Sydney-Edinburgh –UC Davis Planetary Health Platform Strategic Alliance on Global Food Security</u> and Planetary Health', The 'Planetary Health Lab' headed by Dr. Liz Count was established in 2020	

with its primary focus "on integrating knowledge about how to reorient human systems themselves in a more socially, economically and environmentally empathetic manner".

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 medical school?

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

As discussed in Q1, the blurred lines between the medical school and institutional faculties complicates some of the scoring. We awarded this a 2 because although we could not find evidence the medical school itself has such a protocol, the <u>Global Health Academy does partner</u> with universities in areas that would be disproportionately impacted by climate change, as well as global health agencies and advocates and civil society organisations. These organisations have input into the academy's research agenda. Additionally, for large research programmes such as <u>RESPIRE</u>, the <u>UKRI GCRF South Asian</u> <u>Nitrogen Hub</u> and <u>TIBA</u>, there are large-scale community participation programmes that allow people to put forward questions. However, it is unclear whether communities have a direct input on research agenda, which limits the score we could give it. We have reached out to Prof. Liz Grant, the Director of the Global Health Academy department for further enquiry but did not hear back before the publication.

4. Do reso	4. Does your institution have a planetary health website, or a website centralizing various campus resources related to health and the environment?	
3	There is an easy-to-use, adequately comprehensive website that centralizes 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.	
2	There is a website that attempts to centralize various campus resources related to health and the environment, but it is hard-to-use, not updated, or not adequately comprehensive.	
1	The institution has an Office of Sustainability website that includes some resources related to health and the environment.	
0	There is no website.	
There is a subsection of the Global Health Academy's <u>website</u> that has information about planetary health but the lay out could be improved and include more detail. There is a separate page within the		

health but the lay out could be improved and include more detail. There is a separate page within the Global Health Academy's website that includes <u>resources</u>, some of which is related to health and the environment, but it could be better centralised. The Department for Social Responsibility and Sustainability also has a <u>website</u> with some similar information on sustainability but it has less relevant information about its impacts on health. For these reasons, we have scored this a 2 we did not consider it a "comprehensive" website on the subjects.

5. Has your institution recently hosted a conference or symposium on topics related to planetary health?

4	Yes, the institution has hosted more than one conference or symposium on topics related to planetary health in the past year, including at least one on climate change.
3	Yes, the institution has hosted one conference or symposium on topics related to planetary health in the past year.
2	Yes, the institution has hosted a conference on topics related to planetary health in the past three years.
1	The institution has not hosted any conferences directly, but they have provided financial support for a local planetary health event.
0	No, the institution has not hosted a conference on topics related to planetary health in the past three years.

In 2020, Dr Lisa Boden was joint chair organising the <u>6th World One Health Congress event</u>, which includes topics related to planetary health. Despite the Global Health Academy, led by Dr Liz Grant, hosting the inaugural <u>Planetary Health Annual Meeting</u> - the signature conference of the Planetary Health Alliance – we cannot award full marks for this section as it was in 2018.

6. Has your institution or medical school joined the Planetary Health Alliance and/or the Global Consortium on Climate and Health Education?

- 2 Yes, the medical school has joined the Planetary Health Alliance and/or the Global Consortium on Climate and Health Education.
- 1 Yes, the institution has joined the Planetary Health Alliance and/or the Global Consortium on Climate and Health Education, but the medical school specifically has not.
- 0 No, the institution has not joined the Planetary Health Alliance or the Global Consortium on Climate and Health Education.

The University of Edinburgh's Global Health Academy is a member of the Planetary Health Alliance but not the Global Consortium on Climate and Health Education. The medical school does not seem to be a part of either, but as mentioned previously, the Global Health Academy is headed by Dr Liz Grant who is affiliated with the medical school.

Section Total (13 out of 19)

Community Outreach and Advocacy

<u>Section Overview:</u> This section evaluates medical school 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.

1. Does your medical school partner with community organizations to promote planetary and environmental health?	
3	Yes, the medical school meaningfully partners with multiple community organizations to promote planetary and environmental health.
2	Yes, the medical school meaningfully partners with one community organization to promote planetary and environmental health.
1	The institution partners with community organizations, but the medical school is not part of that partnership.
0	No, there is no such meaningful community partnership.
As ou and I pract and d but t Loth orga awan The u envin prog Octo susta oppo Digin Socie	Authined in email communication from Hellen Eboral, the lead on this unit, the Year 1 Society, Ethics Medicine module includes a unit entitled 'Health in Communities. This is a 5-session community tical through which students (in groups of 11-12) connect with a GP, a Community Link Worker at least two people from local third sector organisations. The list of organisations is wide ranging wo particularly relevant organisations for planetary health include the RSPB and Edinburgh & ian Green Space. One of the aims of this unit is to recognise how community-based initiatives and nisations (which are not health specific) can impact on health, and for students to demonstrate an reness of the social, economic and environmental determinants of health. university has many examples of where it has partnered and promoted planetary and ronmental health. To date, <u>Edinburgh Local</u> , which is the University's community engagement ramme, has awarded £180,000 to more than 40 projects across the city since its inception in ber 2017. Grants of up to £5,000 are available to help develop community activities and tinable initiatives. Successful projects must seek to make a positive social impact, create learning rtunities and increase engagement between the University and local communities. The University's tal Ambassadors project, which supports digital literacy, was nominated in the "Benefiting ety" category in the prestigious <u>Green Gown Awards</u> .

2. Does your medical school offer community-facing courses or events regarding planetary health?

3	The medical school offers community-facing courses or events at least once every year.
-	

2 The medical school offers courses or events open to the community at least once per year, but they are not primarily created for a community audience.

1 The institution has offered community-facing courses or events, but the medical school was not involved in planning those courses or events.

0 The medical school has not offered such community-facing courses or events.

The Global Health Academy in the College of Medicine at the University of Edinburgh hosted the <u>second annual meeting of the Planetary Health Alliance</u>, a consortium of universities, NGOs and other partners in May 2018. Those invited included "anyone who is concerned and wants to actively be involved in safeguarding our planet and health for future generations: researchers, scientists, practitioners, policy makers, artists, planners, educators, students and **local communities."** The biomedical sciences department of the medical school has been running a public lecture series since 2010 called "our changing world". This lecture series examines the global challenges facing society, and the role of academia in meeting these challenges. Some of these lectures relate to planetary health. These lectures are available on <u>YouTube</u>. The College of Medicine and Veterinary Medicine inaugural lecture series 2019/2020 was due to include a lecture entitled, 'All of our futures: where palliative care and planetary health come together'. The Global Health Governance Programme also put on the 'Healthy and Sustainable Futures' <u>event</u> for public engagement with health, sustainability and planetary health ideas.

Though most of these examples are from the wider institution, the medical school has offered planetary health-related events, but the intended audiences at inaugural lectures are often academic, making 2 our suggested score.

3. Does your medical school have regular coverage of issues related to planetary health and/or sustainable healthcare in university update communications?

- 2 Yes, all students regularly receive communication updates dedicated to planetary health and/or sustainable healthcare.
- 1 Yes, planetary health and/or sustainable healthcare topics are sometimes included in communication updates.

0 Students do not regularly receive communications about planetary health or sustainable healthcare.

As students do not regularly receive communications about planetary health or sustainable healthcare from the medical school, we have awarded this 0. All students can receive regular updates/posts from University Office of Sustainability but these are not aimed at health professional audience and do not include information regarding healthcare. The medical school has promoted One Health on social media. 4. Do hospitals affiliated with your medical school have accessible educational materials for patients about environmental health exposures?

Yes, all affiliated hospitals have accessible educational materials for patients.
 Some affiliated hospitals have accessible educational materials for patients.
 No affiliated medical centres have accessible educational materials for patients.

Though we were able to easily find information leaflets on healthy eating, exercising, weight loss and smoking cessation within <u>NHS Lothian</u> and <u>NHS Fife</u> trusts, we could not find anything related to environmental health exposures. However, there was some information accessible to patients regarding environmental hazards on the <u>NHS Borders</u> website, meaning we have awarded this a score of 1.

5. Do hospitals affiliated with your medical school have accessible educational materials for patients about climate change and health impacts?

- 2 Yes, all affiliated hospitals have accessible educational materials for patients.
- 1 Some affiliated hospitals have accessible educational materials for patients.
- 0 No affiliated hospitals have accessible educational materials for patients.

The medical school uses a range of hospitals based in Scotland, but the hospitals predominantly used are covered by NHS Lothian, NHS Fife, and NHS Borders trusts. Within these trusts, we found no information available for patients on climate change and health impacts at these hospitals, meaning we had to score this 0.

Section Total (6 out of 12)

6

Support for Student-Led Planetary Health Initiatives

<u>Section Overview:</u> 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.

Does your institution offer support for medical students interested in enacting a sustainability initiative?
 Yes, the institution offers grants available to medical students for students to enact sustainability initiatives.
 The medical school encourages sustainability QI projects (to fulfill clerkship or longitudinal requirements) and offers resources to help students succeed in these projects, but there is no student funding available.
 No, the institution does not offer opportunities or support for sustainability initiatives.
 There are many institution-wide opportunities for students to get involved with sustainability initiatives and projects. There are a range of Sustainability Awards for both staff and students who contribute towards improving the university. Students can volunteer to become a Sustainability Champion for the

towards improving the university. Students can volunteer to become a <u>Sustainability Champion</u> for the university. There is also a <u>Sustainable Campus fund</u> available for anyone at the university to apply to, and separate to this is <u>Student Project Grant</u> on offer from the Department for Social Responsibility and Sustainability, which is available for any student-led project focusing on sustainability and social responsibility. As these are available to medical students, we have awarded this a score of 2.

2. Does your institution offer opportunities for medical students to do research related to planetary health and/or sustainable healthcare? 3* The institution offers an explicit paid fellowship for medical students to do research related to planetary health and/or sustainable healthcare. 2* The institution offers paid research opportunities for students and planetary health/sustainable healthcare projects would be considered eligible. 1 There are unfunded research opportunities for students to planetary health/sustainable healthcare. 0 There are no opportunities for students to receive funding for planetary health/sustainable

There were <u>paid intern positions</u> within the Department for Social Responsibility and Sustainability, which looked at integrating the SDGs within the university. These were open to all students, including medical students. Students with an interest in these topics can get involved with research opportunities, but there isn't a specific application route and mostly relies on their own motivation and interest in seeking out these opportunities and finding academics or clinicians to partner with, and not all these opportunities will be paid.

3. Does the medical school have a webpage where medical students can find specific information related to planetary health and/or sustainable healthcare activities and mentors within the medical school? For example, projects achieved, current initiatives underway at the medical school and/or contact of information of potential mentors.

The medical school has a webpage with specific information related to planetary health or sustainable healthcare that includes up-to-date information on relevant initiatives and contact information of potential mentors.

- There is a medical school webpage that features some information on projects and mentors within planetary health and sustainable healthcare within the medical school, but it lacks key information.
- 0 There is no medical-school specific webpage for locating planetary health and/or sustainable healthcare projects or mentors.

As mentioned in earlier sections of this report, there are multiple departments within the university that relate to planetary health and sustainable healthcare (the Global Health Academy, the Usher Institute), but there is no college-specific webpage discussing planetary health. As a general rule, the information on college-specific webpages is quite sparse and might not be the best location for this type of information. The Department for Social Responsibility and Sustainability have more information relating to these topics that is accessible but it does not come from a medical perspective. There has been a recent move to connect students with mentors by research/subject interests, but sadly sustainable healthcare is not a field by which mentors can be sorted by, the closest being public and global health. For these reasons, we have awarded this 0.

4. Does your medical school have funded, registered student groups dedicated towards fostering a culture of planetary health engagement, scholarship, and advocacy on campus, supported by faculty advisors?
 2 Yes, there is a funded student organization with faculty support at my medical school dedicated to planetary health or sustainability in healthcare.
 1 Yes, there is a student organization at my medical school dedicated to planetary health or sustainability in healthcare but it lacks faculty support and/or funding.

0 No, there is not a student organization at my institution dedicated to planetary health or sustainability in healthcare.

There is the One Health society, which a registered EUSA (Edinburgh University Student Association) society. It is a free society and does not receive support directly from the medical faculty but will have access to the benefits and support offered to all EUSA societies. Though it is not common for UK medical schools to support university societies, because the One Health Society is not faculty-supported or funded, we cannot award full points.

5. Is there a student liaison representing sustainability interests who serves on a medical school or institutional decision-making council to advocate for sustainability best practices?

Yes, there is a student representative that serves on a medical school or institutional decision-making council.

0 No, there is no such student representative.

1

The Edinburgh Medical Student Council represent student views to the medical school, but they do not have a specific committee position for sustainability. The university has a <u>Social Responsibility and</u> <u>Sustainability Committee</u>, but does not include a student liaison in the committee list. There are plans for this to be rectified but this has been delayed by the pandemic.

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)	
1	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 organize hiking, backpacking, kayaking, or other outings for students) that follow Leave No Trace principles.

There is an optional 5-week long online course on <u>Sustainable Global Food systems</u>. There are various events on hosted by the different sustainability-related schools (<u>SRS</u>, <u>GHA</u>, Usher Institute) mentioned previously in this report, where students can engage with vital topics relating to planetary health.

EUSA has a volunteer hub which advertises volunteering opportunities for students, of which include a range of sustainability-focused enterprises such as Changeworks, Lothian Conservation Volunteers, and Dig-In Bruntsfield Community Greengrocers.

There is the Wilderness Medicine Society, a society for medical students with an interest in both the outdoors and medicine.

Section Total (9 out of 14)

Campus Sustainability

<u>Section Overview:</u> This section evaluates the support and engagement in sustainability initiatives by the medical school and/or 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 scrutinizing 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 medical schools, clinics, and hospitals must set the standard for sustainable practices, and show other sectors what is possible when it comes to minimizing environmental impact.

1. Does your medical school and/or institution have an Office of Sustainability?	
3	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 and/or medical school.
2	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 medical school and/or hospital sustainability.
1	There are no salaried sustainability staff, but there is a sustainability task force or committee
0	There are no staff members or task force responsible for overseeing campus sustainability
At Edinburgh University there is the 'Department for Social Responsibility and Sustainability' and there is also an Edinburgh Medical School specific sustainability committee – the CMVM BioQuarter OMRI & Chancellor's Building Sustainability Committee, established in October 2019.	

2. Does your medical school and/or institution have a stated goal of carbon neutrality by 2050?	
4*	The medical school is already carbon neutral.
3	Yes, there is a stated carbon neutrality goal and the medical school has a well-defined and adequate plan in place to achieve this goal.
2	Yes, there is a stated carbon neutrality goal, but the medical school has not created a plan to reach that goal or the plan is inadequate.
1	There is a CO2 emission reduction goal, but it is not one of carbon neutrality.
0	There is no stated goal for reduction of CO2 emissions.
The College of Medicine and Veterinary Medicine (CMVM) is encompassed within the University of Edinburgh, which has stated their goal to be carbon neutral by 2040. There is a detailed Climate	

Change Strategy published on the university <u>website</u>, outlining the steps that will be taken to achieve this goal, and they seem adequate to achieve the goal.

3. Do buildings/infrastructure used by the medical school for teaching (not including the hospital) utilize renewable energy?	
3*	Yes medical school buildings are 100% powered by renewable energy
2	Medical school buildings source >80% of energy needs from off-site and/or on-site renewable energy.
1	Medical school buildings source >20% of energy needs from off-site and/or on-site renewable energy.
0	Medical school buildings source <20% of energy needs from off-site and/or on-site renewable energy.
The medical school buildings are not distinct from the wider university campus, so our findings are campus-wide. Dean Drobot, Head of Energy and Utilities Management at the university, informed us in an email on 24/11/2020 that 30% of the University's power is provided by a combined heat and power system which uses 'waste' heat to generate electricity, however the initial source of power is still fossil-fuel based so would not be considered a renewable energy source. He also mentioned that the University has installed a 1.5MW solar farm at one of their campuses, however this only accounts for 1% of total University energy supply. For these reasons, we have scored this section 0. Please see the end of this section for more information on renewable energy at Edinburgh.	
4. Are sustainable building practices utilized for new and old buildings on the medical school campus, with design and construction of new buildings and remodelling of old buildings conforming to a published rating system or sustainable building code/guideline?	

3	Yes, sustainable building practices are utilized for new buildings on the medical school campus and the majority of old buildings have been retrofitted to be more sustainable.	
2	Sustainable building practices are utilized for new buildings on the medical school campus, but most old buildings have not been retrofitted.	
1	Sustainable building practices are inadequately or incompletely implemented for new buildings.	
0	Sustainability is not considered in the construction of new buildings.	
Andrew Arnott, Social Responsibility and Sustainability Project Coordinator at the University of Edinburgh, informed us in an email on 24/11/2020 that the University has previously used a sustainable building guideline (BREEAM) for the new-build and refurbishment of campus buildings,		

however it was recognised that this was not delivering sustainable buildings once the buildings were in use. The University is therefore in the process of drawing up tighter internal regulations for future implementation, although these have not yet been outlined. For these reasons we have awarded 1 point.

5. Has the medical school implemented strategies to encourage and provide environmentally-friendly transportation options for students and reduce the environmental impact of commuting?

2 Yes, the medical school 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-utilized by students. Alternatively, the campus location is not amenable to unsustainable forms of transportation by default.

- 1 The medical school has implemented some strategies to provide environmentally-friendly transportation options, but the options are unsatisfactorily accessible or advertised.
- 0 The medical school has not implemented strategies to encourage and provide environmentally-friendly transportation options.

The Little France campus is attached to the Royal Infirmary of Edinburgh, which has dedicated cycle lanes en-route and has also recently refurbished their bike storage area. They also routinely have a bike servicing facility visit the campus and offer repairs/advice. They have installed a pressured tyre pump for free use by staff/students. The campus is also regularly served by public transport. Other medical teaching occurs in the central George Square campus which is amenable to sustainable forms of transportation by default, with many students opting to walk from their nearby accommodations and numerous bike racks available. For these reasons, we have awarded full points.

6. Does your medical school have an organics recycling program (compost) and a conventional recycling program (aluminum/paper/plastic/glass)?

- 2 Yes, the medical school has both compost and recycling programs accessible to students and faculty.
- 1 The medical school has either recycling or compost programs accessible to students and faculty, but not both.
- 0 There is no compost or recycling program at the medical school.

The medical school has a conventional recycling programme in place although no organics recycling programme. There appear to be no further plans to expand the recycling programmes to include organics, despite buildings in other parts of the university offering this.

7. Does the medical school apply sustainability criteria when making decisions about the campus food and beverage selections?

3	Yes, the medical school has adequate sustainability requirements for food and beverages and is engaged in efforts to increase food and beverage sustainability.
2	There are sustainability guidelines for food and beverages, but they are insufficient or optional. The medical school is engaged in efforts to increase food and beverage sustainability.
1	There are sustainability guidelines for food and beverages, but they are insufficient or optional. The medical school is not engaged in efforts to increase food and beverage sustainability.
0	There are no sustainability guidelines for food and beverages.
The medical school, as part of the University of Edinburgh, applies the Scottish Government's	

The medical school, as part of the University of Edinburgh, applies the Scottish Government's Sustainable Public Procurement Prioritisation Tool (SPPPT) to catering. The University has a <u>Good</u> <u>Food Policy</u> which means university campus food and beverage selections abide by environmental, social and economic sustainability principles. The university highlights and achievements for 2016/2017 are available <u>online</u>, and include their coffee cup levy being shortlisted in the Reduce, Re-use, Recycle category of the Sustainable Restaurant Association's 2019 <u>Food Made Good Awards</u>. However, the matter is complicated by the fact that the main cafeteria within the Little France campus is provided by an external company (ENGIE) so there is less control over how the café operates. There have been discussions between the CMVM sustainability team and Engie at the start of 2020 about introducing more plant-based options, but this was specific to events hosted at the venue and not day-to-day running. We have awarded this 2 points because the options for healthy, sustainable food during clinical years, where access to alternative food outlets is drastically reduced compared to campus-based pre-clinical years, is limited. We do however recognise the university policy is robust and the sustainability officers at Little France are making a concerted effort to improve things.

8. Does the medical school or associated institution apply sustainability criteria when making decisions about supply procurement?

3	Yes, the medical school has adequate sustainability requirements for supply procurement and is engaged in efforts to increase sustainability of procurement.	
2	There are sustainability guidelines for supply procurement, but they are insufficient or optional. The medical school is engaged in efforts to increase sustainability of procurement.	
1	There are sustainability guidelines for supply procurement, but they are insufficient or optional. The medical school is not engaged in efforts to increase sustainability of procurement.	
0	There are no sustainability guidelines for supply procurement.	
The University complies with the Sustainable Procurement Duty ("public bodies must demonstrate that they have considered sustainability in all purchases of £50,000 and above for goods and services, and $\pounds 2,000,000$ and above for "works"") outlined in the Procurement Reform (Scotland) Act 2014. The University has in the last year increased its total amount of procurement spending with small and		

medium sized enterprises by over £15 million. The University of Edinburgh uses the <u>Sustainable Public</u> <u>Procurement Prioritisation tool</u> to review high-risk categories including estates, food and catering, information and communication technology, laboratories and travel. The process involves the Social Responsibility and Sustainability Department and Procurement team collaborating to score risks and find opportunities to change. These are then discussed in workshops with key stakeholders. These are published as guidelines for different areas, e.g. catering, laboratory equipment. This information was confirmed by Andy Kordiak, the Procurement Category Manager Laboratories & Medicine and Veterinary Medicine. We have awarded this full marks as we felt that the committee procurement protocol, and transparency around their processes, met the criteria of 'adequate'.

9. Are there sustainability requirements or guidelines for events hosted at the medical school?				
2	Every event hosted at the medical school must abide by sustainability criteria.			
1	The medical school strongly recommends or incentivizes sustainability measures, but they are not required.			
0	There are no sustainability guidelines for medical school events.			
Catering and estates have sustainability guidelines, but there are none specific to events. The university				

Catering and estates have sustainability guidelines, but there are none specific to events. The university has published "Top tips for running a sustainable event" (evidenced <u>here</u>), however this is not specific to the medical school and it does not strongly recommend or incentivise measures, so does not meet the criteria to be awarded a point.

10. Does your medical school have programs and initiatives to assist with making lab spaces more environmentally sustainable?				
2	Yes, the medical school has programs and initiatives to assist with making lab spaces more environmentally sustainable.			
1	There are guidelines on how to make lab spaces more environmentally sustainable, but not programs or initiatives.			
0	There are no efforts at the medical school to make lab spaces more sustainable.			
The sustainable procurement policy at the University of Edinburgh has a <u>guide</u> for laboratory equipment suppliers. The university <u>website</u> on Social Responsibility and Sustainability has initiatives				

equipment suppliers. The university <u>website</u> on Social Responsibility and Sustainability has initiatives for laboratories, including <u>Lab awards</u> and <u>Sustainable Laboratories Steering Group</u> that can provide expert guidance for laboratories, as well as instructions to staff and students about what they can do. For these reasons, we have awarded full points.

11. Does your institution's endowment portfolio investments include fossil-fuel companies?

4	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.		
3	No, the institution is entirely divested from fossil fuels.		
2	The institution has partially divested from fossil-fuel companies.		
1	The institution has not divested from fossil-fuel companies, but faculty and/or students are conducting organized advocacy for divestment.		
0	Yes, the institution has investments with fossil-fuel companies and there have been no efforts to change that.		
The University of Edinburgh has joined the Principles for Responsible Investment. In 2016, the University was assessed highly by the UNPRI (United Nations Principles of Responsible Investment) for Strategy and Governance (A+) and for general integration of ESG in listed Equity (A) and Property (B). The University of Edinburgh aimed for, and just achieved (25/02/2021), a complete transition from divestments in fossil fuel, as celebrated <u>here</u> . The University is also committing to green reinvestment, having recently invested £5 million in the HSBC's Green Deposits programme (<u>source</u>). Since 2010, the University has invested "more than £150 million in low carbon technology, climate-related research and businesses that directly benefit the environment" (quote from Dave Gorman, Director of Social Responsibility and Sustainability). In addition to this, the University has initiatives to build renewable			

Section Total (21 out of 29)

Are there additional sustainability resources offered at your medical school or institution not yet asked about that you would like to describe? If so, please do so below.

energy sources on campus, such as the <u>new solar farm</u> at the Easter Bush Campus.

Communication with Andrew Arnott, who works in the Social Responsibility and Sustainability department, helped answer our questions regarding renewable energy at the Little France (medical school) campus. He explained that there were no on-site renewable energy generation such as solar panels but this was something the university wants to may move towards, as has been done on the Easter Bush campus, however this is dependent on space becoming available at ground level. Roof space on existing buildings at Little France is largely taken up with ventilation plant, so mounting solar panels is not an option but new buildings still to be constructed may incorporate rooftop solar. Unfortunately, wind is not a good option for a built-up setting such as that where the medical school is, as the presence of buildings disrupts the flow of wind and makes the turbines very inefficient. The new Scottish Centre for Regenerative Medicine, part of the Little France campus, has a ground source heat pump which provides some, but not all, of its heat. The electricity at Little France comes from the national grid, which is gradually being de-carbonised, so it appears the university is partly relying on this process to achieve their carbon neutrality goal at Little France.

Regarding food, the university's Good Food Policy sets out targets in five key areas: sourcing, provision, practice, research, learning and teaching and leadership and culture. The policy was first approved in

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2016 and then updated in 2020 and every year the University introduces new improvements that are made publicly available. The Good Food policy is published transparently on the University website and means that the food abides by environmental, social and economic sustainability principles.

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 an average of the section grades. Letter grades for each section and the institution overall were then assigned according to the table below.

Letter Grade	Percentage	
А	80% - 100%	
В	60% - 79%	
С	40% - 59%	
D	20% - 39%	
F	0% - 19%	

Planetary Health Grades for the University of Edinburgh School of Medicine

The following table presents the individual section grades and overall institutional grade for the University of Edinburgh School of Medicine on this medical-school-specific Planetary Health Report Card. 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.

Section	Raw Score	Grade
Planetary Health Curriculum (30%)	27/58 = 47%	С
Interdisciplinary Research (17.5%)	13/19 = 68%	В
Community Outreach and Advocacy (17.5%)	6/ 12 = 50%	С
Support for Student-led Planetary Health Initiatives (17.5%)	9 / 15 = 60%	В-
Campus Sustainability (17.5%)	21/29 = 72%	В
Institutional Grade	57.85%	C+