

Planetary Health Report Card (Medicine):

The University of Tasmania



UNIVERSITY of TASMANIA

2023-2024 Contributing Team:

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Summary of Findings

Overall	C
<u>Curriculum</u>	C
 The University of Tasmania includes planetary health in the curriculum, but it lacks integration longitudinally. In the first 3 years, while it is primarily taught through high quality, engaging state lectures, aspects of planetary health are discussed in other domain content to a small degree. Recommendations: Increase opportunities for exposure to planetary health and sustainable hear introduce conversations about planetary health into conversations with patients; review planetary 	and-alone althcare;

teaching based on scoring and whether a staff member should oversee planetary health content.

Interdisciplinary Research

C-

- The University of Tasmania and School of Medicine have a number of environmental and planetary health relevant research groups, with projects and relevant scholarship and funding opportunities available for those who wish to pursue research qualifications.
- **Recommendations**: The School of Medicine should have a webpage directly related to planetary/ESH research, relevant mentors and research output available for interested students. Creating a specific research department for Planetary Health/ESH would be beneficial, and the community should have an accessible avenue to give input on the direction and goals of relevant research at the university. The University of Tasmania should seek membership with national or international planetary health and ESH organisations.

Community Outreach and Advocacy

C -

- The University of Tasmania has a number of partnerships with sustainability organisations and often hosts community-facing events relevant to planetary health and sustainability. Communication regarding planetary health is limited. Post-graduate opportunities are limited. Limited materials for patients.
- Recommendations: The School of Medicine should partner with community organisations, provide community facing planetary health events or content to engage the public, and have regular communication of planetary health and sustainable healthcare to medical students. Create opportunities for graduates to ensure their knowledge of planetary health is up to date. Educational materials for patients around climate change and environmental exposures should be available on campus and in associated teaching hospitals.

Support for Student-Led Initiatives

D-

- The University of Tasmania supports student groups through SSAF funding via TUSA, including those interested in planetary/environmental health, however these are independent of faculty. There is little encouragement of student engagement or opportunities for sustainability projects in the School of Medicine.
- **Recommendations**: Medical school support and encouragement for student-led initiatives and engagement with planetary health. Create a website with mentors/opportunities for students relating to Planetary Health or Sustainable Healthcare and prioritise opportunities. Provide sustainability representative role description.

Campus Sustainability

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- The University of Tasmania has a commendable sustainability profile. Tasmania produces a large amount of renewable energy and the University of Tasmania has further guidelines. Sustainability is considered in procurement and construction. The University is carbon neutral, with plans to reach net zero underway.
- **Recommendations**: A staff member should oversee sustainability at the medical school. Stricter guidelines for events held at the School of Medicine. Create a sustainability policy or guideline for laboratory spaces.

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 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 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 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 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, and 4) community outreach centred on environmental health impacts 5) medical 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 medical school 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): is 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 vs. Institution: When "medical school" is specified in the report card, this
 only refers to curriculum and resources offered by the School 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. 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 (Metric #19 in Curriculum Section): This is a series of questions providers 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 mould 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.
- **Elective:** The word "elective" refers to an optional course or lecture series that a medical 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.
- Clerkship: 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 or placements.

Other considerations:

• If there are more than one "tracks" at your medical school 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).

Added to our resources in 2022, the Planetary Health Report Card <u>Literature Review</u> by <u>Metric</u> collates the evidence behind each of the metrics in the Planetary Health Report Card. It serves as a collection of references for further learning and a resource for those advocating for increased planetary health engagement at their institutions.

Planetary Health Curriculum

Section Overview: 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 and other environmental changes. Therefore, it is critical that medical 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 <u>medical school</u> offer elective courses (student selected modules) to engage studen 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.

Score explanation

At the University of Tasmania (UTAS), there are no electives offered in the course of Bachelor of Medicine and Bachelor of Surgery (M3N). There is however a student-organised elective placement lasting 3-6 weeks at the end of the fourth year (units CAM418 and CAM419) in which students may choose a non-clinical placement in fields such as public health or research which may have some relevant planetary health content. Additionally, students in the third year of the Bachelor of Medicine and Bachelor of Surgery (CAM304 and CAM305) are offered the option of taking an additional qualification, in the form of a one year research degree, the Bachelor of Medical Science with Honours (M4N) between the third and fourth years of the degree, with environmental health projects often available. There is, however, no lecture content in these pathways.

M4N Bachelor of Medical Science with Honours - Courses & Units - University of Tasmania, Australia

Medicine Year 4 - 4A CAM418 | University of Tasmania

Medicine Year 4 - 4B CAM419 | University of Tasmania

Medicine Year 5 - 5A CAM524 | University of Tasmania

Medicine Year 5 - 5B CAM525 | University of Tasmania

Curriculum: Health Effects of Climate Change

- 1.2. Does your <u>medical school</u> curriculum address the relationship between extreme heat, health risks, 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.

Score explanation:

Teaching at the University of Tasmania is separated into four domains: Domain 1 being science/scholarship, domain 2 being professionalism, domain 3 being health and society and domain 4 being ethics. Planetary/environmental health, along with other public health topics, are covered in domain 3 teaching in the preclinical years, often through a multidisciplinary lens in the way that it may compound with other public health issues.

Year 3 CAM305 module 2.4, "Planetary health", includes a 20 minute talk on planetary health which discusses the effects of climate change on health through direct effects (heat, extreme weather events), ecosystem mediated and indirect effects over time on food, economy and mental health etc.

7th RRHSS: Anthony Capon – Planetary health: shaping the future of rural and remote health

1.3. Does your <u>medical school</u> 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.

Score explanation:

Domain 3 Module 2 of CAM305 (second semester of Year 3) is titled "Global and sustainable health" and includes brief mention of the effect of climate change on deaths related to weather effects from rising incidences of events such as floods.

Functional Clinical Practice CAM305 | University of Tasmania

7th RRHSS: Anthony Capon – Planetary health: shaping the future of rural and remote health

1.4. 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. O This topic was not covered.

Score explanation:

UTAS Medical School listed climate change as a determinant for emerging infectious diseases in the core Year 2 CAM202 curriculum, Health in Society Domain 3 module 6 "Emerging & Re-Emerging

CDs". The lecture has also attached A. Madhav et.al, 2020's "Vaccines for neglected, emerging and re-emerging diseases" as a key reading which elaborates on the effects of climate change on infectious diseases.

Fundamentals of Clinical Science 2 CAM202 | University of Tasmania Vaccines for neglected, emerging and re-emerging diseases, Madhav et. al

The Year 3 CAM305 Domain 3 module 2.4 "Planetary Health" discusses the effect of climate change on increasing infectious diseases including rising rates of vector borne diseases, and the effect of forest conservation on reducing rates of some diseases. Module 2.5 "Sustainable Healthcare Systems" mentions the effect of deforestation increasing the range of mosquitos which transmit malaria.

Functional Clinical Practice CAM305 | University of Tasmania

7th RRHSS: Anthony Capon – Planetary health: shaping the future of rural and remote health

1.5. Does your <u>medical school</u> curriculum address the respiratory health effects of climate change and 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.

Score explanation:

This topic was **not** covered.

In the Year 1 CAM102 Domain 3 module 5.2, 'Physical environment & Planetary health', it was briefly mentioned that deaths from lower respiratory infections could be prevented by improving air quality and eliminating the use of solid fuel stoves indoors. D3-Module 3.2 Chronic Respiratory Diseases also discussed how chronic respiratory diseases are largely due to the ubiquity of noxious environments and occupational and behavioural inhalation, it also mentioned the role bushfires, thunderstorms and air pollutants play in triggering and exacerbating asthma.

Foundations of Medicine 2 CAM102 | University of Tasmania

1.6. Does your <u>medical school</u> curriculum address the cardiovascular health effects of climate change, including increased heat?	
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.

Score explanation:

There was no discussion of the effect of climate change and increasing heat on cardiovascular health.

1.7. 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.

Score explanation:

In the Year 1 CAM102 Domain 3 module 5.2, 'Physical environment & Planetary Health' briefly mentioned how climate-induced economic dislocation and environmental decline results in displaced populations and demoralisation leading to diverse health consequences including psychological. However, the psychological impacts were not further elaborated upon.

Foundations of Medicine 2 CAM102 | University of Tasmania

1.8. Does your <u>medical school</u> 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.

This topic was briefly covered in the core curriculum.

This topic was covered in elective coursework.

This topic was not covered.

Score explanation:

The Year 1 CAM101, module 4.1 'What is Public Health' outlined the "knock-on effect" of environmental sustainability and climate change on food security, air and water quality and human health, the effects of which can be seen in non-communicable diseases such as asthma, cancers, obesity, infectious diseases, and viral pandemics.

Foundations of Medicine 1 CAM101 | University of Tasmania

The Year 3 CAM305 Domain 3 module 2.4 "Planetary Health" contains a talk which discusses the relationships between environmental degradation and climate change and health effects: direct, ecosystem mediated and indirect. The indirect effects of drought in agricultural communities, soil degradation and loss of pollinators on food instability are mentioned.

Functional Clinical Practice CAM305 | University of Tasmania

7th RRHSS: Anthony Capon – Planetary health: shaping the future of rural and remote health

- 1.9. Does your <u>medical school</u> 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.
- 2 This topic was **briefly** covered in the **core** curriculum.
- 1 This topic was covered in **elective** coursework.

This topic was **not** covered.

Score explanation:

This topic was extensively covered in the core Year 1 CAM102 curriculum, Health in Society D3 module 5 "Physical Environment & Planetary Health". The module discussed how mortality and morbidity of many diseases could be greatly reduced by improving environmental factors, for example 40% of malaria related deaths and 94% of deaths from diarrhoeal illness. However, people who are isolated and/or impoverished (which includes people in lower or middle income countries, and also socially disadvantaged groups in higher income countries for example, Indigenous Australian communities) are less likely to be able to make changes to improve their environment, resulting in the negative environmental determinants of health affecting these people disproportionately. Then again in Year 2 CAM201, D3 module 3.1, "NCD Determinants & inequity" where the relationship between non-communicable and inequity were explored in depth both in the module and by the recommended talk from Sir Michael Marmot 'Confronting The Health Gap'

Foundations of Medicine 2 CAM102 | University of Tasmania CONFRONTING THE HEALTH GAP: Sir Michael Marmot.

1.10. Does your <u>medical school</u> curriculum address the unequal regional health impacts of climate change globally?		. Does your <u>medical school</u> curriculum address the unequal regional health impacts of ate change globally?
I	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.
I		

Score explanation:

This topic was **not** covered.

This was emphasised through multiple lectures throughout the pre-clinical years.

In Year 2 CAM201, D3 module 3.1, "NCD Determinants & inequity" where the relationship between non-communicable and inequity were explored in depth both in the module and by the recommended talk from Sir Michael Marmot 'Confronting The Health Gap'

Fundamentals of Clinical Science 1 CAM201 | University Tasmania

CONFRONTING THE HEALTH GAP: Sir Michael Marmot

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)?	
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.
Score explanation:	

Unable to find evidence of content addressing the reproductive health effects of industry-related environmental toxins.

1.12. 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. O This topic was not covered.

Score explanation:

There are no specific teachings or mention of environmental threats in Tasmania, although there are a number of issues that are worth covering in future - such as deforestation and salmon farming.

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?	
3	Indigenous knowledge and value systems are integrated throughout the medical school's planetary health education
2	Indigenous knowledge and value systems as essential components of planetary health solutions are included briefly in the core curriculum.
1	Indigenous knowledge and value systems as essential components of planetary health solutions are included in elective coursework.
0	This topic was not covered.

Score explanation:

The university of Tasmania has placed great importance on Aboriginal and and Torres Strait Islander peoples' culture, knowledge and their connection to health. There has been extensive teaching surrounding cultural awareness and Aboriginal health and perspectives.

In the Year 3 CAM305 Domain 3 module 2.4 "Planetary Health" contains a talk which briefly mentions the connection of indigenous communities to environment and planetary health and suggests that indigenous and local knowledge (ILK) should be considered in the healthcare systems response to climate change/planetary health.

Functional Clinical Practice CAM305 | University of Tasmania

7th RRHSS: Anthony Capon – Planetary health: shaping the future of rural and remote health

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?

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.

Score explanation:

The CAM102 Domain 3 Module 5.1: "Physical Environment" covers the disproportionate effect that environmental hazards have on vulnerable populations, however this module focuses on the effects in developing countries and only briefly mentions "socially disadvantaged groups" in higher income countries (with the example being indigenous Australians). The CAM102 Domain 3 module 5.3: "Case study: Karla" discusses ground water contamination of heavy metals and pesticides in a rural mining town, and the effect of being unable to drink the water on the health of an infant. Foundations of Medicine 2 CAM102 | University of Tasmania

Curriculum: Sustainability

1.15. Does your <u>medical school</u> curriculum address the environmental and health co-benefits of a plant-based diet?	
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.
Scor	e explanation:

Unfortunately there was no mention of the environmental and health co-benefits of a plant-based diet.

1.16	1.16. Does your <u>medical school</u> curriculum address the carbon footprint of 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.	This topic was covered in elective coursework.	
0 This topic was not covered.		

Score explanation:

The CAM102 module "D4-Bioethics in Context: An Introduction to Environmental Ethics" discussed the ethical responsibilities we have as doctors to advocate for sustainability and the environment. The healthcare's environmental impact was discussed by one of the featured articles in the modules "Should Physicians Consider the Environmental Effects of Prescribing Antibiotics?" (Blach et.al, 2017), Blach et.al (2017) discussed how whilst antibiotics are beneficial for the patients, physicians rarely considered the detrimental aquatic impact antibiotics have, from production to disposal (the potential impacts of which were elaborated upon in the article).

The CAM102 Domain 3 module 2.5: "Sustainable Healthcare Systems" discusses a paper on the carbon footprint and various other measures of environmental degradation attributed to the healthcare system globally and a further report on the carbon footprint of healthcare in Australia.

The environmental footprint of health care: a global assessment

The carbon footprint of Australian health care - The Lancet Planetary Health

1.17. Does your <u>medical school</u> curriculum cover these components of sustainable clinical practice in the <u>core</u> curriculum? (points for each)		
2	The health and environmental co-benefits of avoiding over-medicalisation, over-investigation and/or over-treatment	
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.	
1	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	Environmental impact of surgical healthcare on planetary health and the climate crisis, and how can it be mitigated	
1	The impact of anaesthetic gases on the healthcare carbon footprint and ways to reduce anaestheisa's environmental impacts, such as total intravenous anaesthesia or choosing less environmentally harmful anaesthetic gas options with reduced greenhouse gas emissions	
1	The impact of inhalers on the healthcare carbon footprint and the environmental benefit of dry powdered inhalers over metered dose inhalers.	
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)	
	Score explanation: The CAM102 Domain 3 module 2.5: "Sustainable Healthcare Systems" discusses the concept of "co-benefits", programs that both improve health and reduce the carbon footprint of the health system, such as encouraging active transport like walking and cycling, identifying that preventing patients from requiring admission in the first place has a major effect on the carbon footprint of healthcare.	
	The CAM102 Domain 3 module 2.5: "Sustainable Healthcare Systems" mentions the high rates of disposal of PVC plastic in the medical industry, a recyclable material the production of which is highly toxic and the efforts of the Royal Hobart Hospital in recycling the material to reduce further production. Foundations of Medicine 2 CAM102 University of Tasmania	

Curriculum: Clinical Applications

1.18. 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? Yes, there are strategies introduced for having conversations with patients about climate change in the core curriculum. Yes, there are strategies introduced for having conversations with patients about climate change in elective coursework. No, there are not strategies introduced for having conversations with patients about climate change change

Score explanation:

The University of Tasmania's curriculum does not introduce any strategies to converse with patients about the health effects of climate change, there is little coverage of climate anxiety beyond brief mention.

	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?	
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.	

Score explanation:

While exposure histories are generally taught in the curriculum, the concept of an environmental history is only given brief mention. Particular focus in respiratory teaching is given to the importance of discussing occupational exposures such as asbestos and use of protective equipment in high-risk occupations, however however the only teaching given on taking an environmental health history is through picture and brief mention of an example history questionnaire used at the Public Health departments at Harvard and Yale universities in the CAM102 D3 Module 5.0: Environmental determinants of health, this is not assessable or emphasised however.

Environmental Determinants of Health, Jacqueline MacDonald Gibson Foundations of Medicine 2 CAM102 | University of Tasmania

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?	
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	0 No, there are no improvements to planetary health education in progress.	
Score explanation:		

There are currently no efforts being undertaken to improve Education for Sustainable Healthcare (ESH)/Planetary Education.

1.21. How well are the aforementioned planetary health/Education for Sustainable Healthcare topics integrated longitudinally into the <u>core</u> curriculum?

- 6 Planetary health/ESH topics are **well integrated** into the core medical school curriculum.
- 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).
- There is **minimal/no** education for sustainable healthcare.

Score explanation:

In the Bachelor of Medicine and Surgery at the University of Tasmania, planetary health and sustainable healthcare has well made stand-alone lectures as part of Domain 3 during the preclinical years: 1 (CAM101, CAM102), 2 (CAM201, CAM202) and 3 (CAM304, CAM305). Some content relative to medical science (conditions, diagnosis etc.) is covered in Domain 1.

Foundations of Medicine 1 CAM101 | University of Tasmania

Foundations of Medicine 2 CAM102 | University of Tasmania

Fundamentals of Clinical Science 1 CAM201 | University Tasmania

Fundamentals of Clinical Science 2 CAM202 | University of Tasmania

Fundamentals of Clinical Science 3 CAM304 | University of Tasmania

Functional Clinical Practice CAM305 | University of Tasmania

There is no further discussion of planetary/environmental health during the clinical (final) two years - 4 (CAM418, CAM419) and 5 (CAM524, CAM525), as these are predominantly placement based and contain minimal public health content.

Medicine Year 4 - 4A CAM418 | University of Tasmania

Medicine Year 4 - 4B CAM419 | University of Tasmania

Medicine Year 5 - 5A CAM524 | University of Tasmania

Medicine Year 5 - 5B CAM525 | University of Tasmania

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
- No, the medical school does not have a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare.

Score explanation:

There is no faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare in particular. Domain 3 is the subject which predominantly integrates planetary health content as part of public health, and is coordinated by <u>Jennifer Ayton</u> during the first 3 (preclinical) years of the course, and <u>Kate Macintyre</u> for years 4 and 5.

Section Total (34 out of 72)	47.22%

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Interdisciplinary Research

Section Overview: 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 emphasised.

	2.1. Are there researchers engaged in planetary health research and healthcare sustainability research at your <u>medical school</u> ?	
3	Yes, there are faculty members at the medical school who have a primary r esearch focus in planetary health or healthcare sustainability.	
2	Yes, there are individual faculty members at the medical school who are conducting research related to planetary health or healthcare sustainability, but it is not their primary research focus.	
There are planetary health and/or healthcare sustainability researchers at the instituti 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.	

Score explanation:

The University of Tasmania employs staff who undertake research in varying fields relevant to healthcare sustainability, environmental and planetary health.

The University of Tasmania College of Health and Medicine is home to the "Sustainable Healthcare and Dental Public Health Research Group" whose focus is both on healthcare efficiency and sustainability, and on oral health service delivery and sustainability, led by Dr. Silvana Bettiol, faculty member of the Tasmanian School of Medicine.

Sustainable Healthcare and Dental Public Health Research Group - Research | University of Tasmania

2.2. 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.	
Score explanation:		

The University of Tasmania Menzies Institute for Medical Research has a page for the Public Health, Primary care and Health Services team which lists the "Environmental Health Group" under their research groups. The specific page has been archived however and is unavailable for public view. Public Health, Primary Care and Health Services - Themes | Menzies Institute for Medical research

The College of Health and Medicine contains the "Sustainable Healthcare and Dental Public Health Research Group", dedicated to improving the sustainability of healthcare systems with a focus on often overlooked services such as dentistry.

Sustainable Healthcare and Dental Public Health Research Group - Research | University of Tasmania

The University of Tasmania employs the "Healthy Landscapes Research Group" whose focus is on examining the interactions between human health and biodiversity. The team contains researchers from a variety of fields such as biology, environmental management and rural health, and has produced a variety of publications reflective of this.

The Healthy Landscapes Research Group - Centre for Rural Health | University of Tasmania

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 <u>medical school</u>?

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

Score explanation:

The University of Tasmania is committed to producing research contributing to the needs of the Tasmanian, national and global communities as stated in their research policy.

However, there currently is no evidence of processes for community members or communities impacted by climate change and environmental injustice to give input or make decisions about the research agenda, nor evidence of efforts to create such a process.

4.1 Research Policy | University of Tasmania

2.4. Does your <u>institution</u> 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.
- 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.

The institution has an Office of Sustainability website that includes some resources related to health and the environment.

0 There is **no** website.

Score explanation:

There is no evidence of a website centralising leaders in planetary health at UTAS and relevant funding opportunities. Various resources exist throughout UTAS's online webpages showcasing published research relevant to planetary health, however these are scattered into areas such as research output on the profiles of individual researchers.

2.5. Has your <u>institution</u> recently hosted a conference or symposium on topics related to planetary health?	
4	Yes, the medical school has hosted at least one conference or symposium on topics related to planetary health in the past year.
3	Yes, the institution has hosted at least 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.
The institution has not hosted any conferences directly, but they have provided financial 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.

Score explanation:

The University of Tasmania hosted Australasian Campuses Towards Sustainability (ACTS) "The Future of Sustainability Conference" online from 2/11/2023-17/11/2023, providing free tickets for UTAS students. There is no evidence of events hosted by the medical school, however. The Future of Sustainability Conference - Events | University of Tasmania

2.6. Is your <u>medical school</u> a member of a national or international planetary health or ESH organisation?

- Yes, the medical school is a member of a national or international planetary health **or** ESH organisation
- 0 No, the medical school is **not** a member of such an organisation

Score explanation:

The University of Tasmania has partnership a number of sustainability-focused organisations, however there is no evidence of involvement with planetary health or education for sustainable healthcare-specific organisations.

Sustainability Education and Research Partnerships - Sustainability | University of Tasmania

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Community Outreach and Advocacy

Section Overview: 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.

3.1. Does your <u>medical school</u> partner with community organisations to promote planetary and environmental health?		
3	Yes, the medical school meaningfully partners with multiple community organisations to promote planetary and environmental health.	
2	Yes, the medical school meaningfully partners with one community organisation to promote planetary and environmental health.	
The institution partners with community organisations, but the medical school is not partnership.		
0	No, there is no such meaningful community partnership.	

Score explanation:

While the University of Tasmania partners with a number of local and national sustainability organisations, there is no accessible evidence of meaningful partnerships between the medical school with local/community organisations that promote planetary and environmental health.

Sustainability Education and Research Partnerships - Sustainability | University of Tasmania

	3.2. Does your <u>medical school</u> offer community-facing courses or events regarding planetary health?	
3	The medical school offers community-facing courses or events at least once every year.	
The medical school offers courses or events open to the community at least once per y they are not primarily created for a community audience. The institution has offered community-facing courses or events, but the medical school involved in planning those courses or events.		
		0

Score explanation:

The University of Tasmania does not provide any community-facing courses regarding planetary or environmental health.

The University of Tasmania offers free talks open to the public through their Island of Ideas public talks series. These are not consistently repeated talks, but they have included talks around climate,

environment and planetary such as "Connecting for Climate Action in Tasmania", "Eating Well for Ourselves and the Planet" and perhaps most relevant, "Climate Emergency = Health Emergency!". These are, however, largely independent of the medical school.

Island of Ideas Public Talks Series - Events | University of Tasmania

Climate Emergency = Health Emergency! - Events | University of Tasmania

Eating Well for Ourselves and the Planet with Dr Rosemary Stanton - Events | University of Tasmania

Connecting for Climate Action in Tasmania - Events | University of Tasmania

3.3. Does your medical school 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 2 sustainable healthcare.
- Yes, planetary health and/or sustainable healthcare topics are **sometimes** included in communication updates.
- 0 Students **do not** receive communications about planetary health or sustainable healthcare.

Score explanation:

The University of Tasmania offers an opt-in subscription to a sustainability bulletin which communicates updates and opportunities around all campuses. There is no medical-school specific communication pathway.

The Royal Hobart Hospital has a Health Sustainability Taskforce which is open to students and meets regularly to discuss sustainability and planetary health topics - students may be added to a mailing list to receive emails in advance of meetings. There is, however, no recorded evidence of this.

University of Tasmania | About | Sustainability Bulletin

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.
- Yes, the **institution** or **main affiliated hospital trust** offers one course relating to planetary health and/or sustainable healthcare for post-graduate providers
- 0 There are **no** such accessible courses for post-graduate providers

Score explanation:

Post graduate courses such as the Masters of Public Health (MPH) are particularly targeted to medical graduates and includes the environmental health unit (CAM617) as core content in the second year of the course.

Environmental Health (CAM617) - College of Health and Medicine | University of Tasmania

3.5. Does your <u>medical school</u> or its <u>affiliated teaching hospitals</u> have accessible educational materials for patients about environmental health exposures?

- Yes, the **medical school** or <u>all</u> **affiliated hospitals** have accessible educational materials for patients.
- 1 **Some** affiliated hospitals have accessible educational materials for patients.
- **No** affiliated medical centres have accessible educational materials for patients.

Score explanation:

The Tasmanian Department of Health web page has an environmental health page with some information on related exposures such as PFAS.

Whilst there is no further evidence of accessible resources such as flyers etc., it is not uncommon for medical professionals in Tasmania to refer concerned patients to online resources such as websites, in which case this webpage may be used.

Environmental Health - Health Topics | Tasmanian Government Department of Health

3.6. Does your <u>medical school</u> or its <u>affiliated teaching hospitals</u> have accessible educational materials for patients about the health impacts of climate change?

- Yes, the **medical school** or **all affiliated hospitals** have accessible educational materials for patients.
- 1 **Some** affiliated hospitals have accessible educational materials for patients.
- **No** affiliated hospitals have accessible educational materials for patients.

Score explanation:

The Tasmanian Department of Health website contains a web page titled "Climate change and Health", which is accessible to the public and summarises the health impacts of climate change. No evidence of other materials accessible to the public provided by the University of Tasmania Medical School or within affiliated hospitals.

Whilst there is no further evidence of resources such as flyers etc., it is not uncommon for medical professionals in Tasmania to refer concerned patients to online resources such as websites, in which case this webpage may be used.

Climate change and health | Tasmanian Department of Health

Section Total (6 out of 14)

42.86%

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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.

4.1. Does your medical school or your institution offer support for medical students interested in enacting a sustainability initiative/QI project? Yes, the medical school or institution either offers grants for students to enact sustainability initiatives/QI projects or sustainability QI projects are part of the core curriculum. The medical school or 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. No, neither the medical school or the institution offer opportunities or support for sustainability initiatives or QI projects.

Score explanation:

The University of Tasmania medical school encourages volunteering initiatives in order to fulfil the AMC graduate outcomes, which are assessed in the form of a portfolio in the final year of the degree. There are often planetary health related projects on offer as part of additional Honours or PHD projects, with relevant scholarships and funding available. Research projects are being incorporated as part of the MD program replacing the MBBS, undertaken during the third year of the degree, which could have a focus on sustainable healthcare. Sustainability QI projects are not directly encouraged by the university, however, and funding in regards to these would be limited to research grants (if relevant) and SSAF funding given through TUSA for projects conducted by student-run clubs and societies. SSAF at TUSA - Home | Tasmanian University Students Association

4.2. Does your institution offer opportunities for medical students to do research related to planetary health and/or sustainable healthcare? The institution has a specific research program or fellowship for students interested in doing planetary health/sustainable healthcare research. There are research opportunities for students to perform research related to planetary health/sustainable healthcare, but these require student initiative to seek these out and carry them out in their spare time. There are no opportunities for students to engage in planetary health/sustainable healthcare research.

Score explanation:

There is typically a range of planetary health related research projects on offer through the Bachelor of Medical Science with Honours (M4N) program. UTAS has a number of environmental health/sustainability focused teams such as those under the "Sustainable Healthcare and Dental Public

Health Research Group" under the School of Medicine and "Environmental Health Group" under the Menzies Institute for Medical Research which students may contact for research opportunities.

Bachelor of Medical Science with Honours (M4N) - Courses and Units | University of Tasmania Sustainable Healthcare and Dental Public Health Research Group - Research | University of Tasmania Public Health, Primary Care and Health Services - Themes | Menzies Institute for Medical Research

- 4.3. Does the <u>medical school</u> 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.
- There is **no medical-school** specific webpage for locating planetary health and/or sustainable healthcare projects or mentors.

Score explanation:

The University of Tasmania Medical School does not have a specific webpage which includes information on planetary health or sustainable healthcare activities and mentors.

- 4.4. Does your <u>medical school</u> 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 medical school dedicated to planetary health or sustainability in healthcare.
- Yes, there is a student organisation at my medical school dedicated to planetary health or sustainability in healthcare but it **lacks faculty support.**
- No, there is **not** a student organisation at my institution dedicated to planetary health or sustainability in healthcare.

Score explanation:

IMPACT is a volunteer medical student Global Health Group at the university of Tasmania, which covers a range of interests/global health topics. The organisation includes a local university representative of AMSA Code Green - the environmental/planetary health branch of AMSA Global Health, whose role is primarily on local events and education around sustainability and environmental/planetary health. Whilst there is no regular contact between the Code Green representative and faculty, collaboration is possible.

IMPACT Society - Home | Tasmanian University Student Association
AMSA Code Green - AMSA Global Health | Australian Medical Students Association

4.5. Is there a student liaison representing sustainability interests who serves on a <u>medical school</u> or <u>institutional</u> decision-making council to advocate for curriculum reform and/or sustainability best practices?

- Yes, there is a student representative that serves on a medical school or institutional decision-making council/committee.
- 0 No, there is no such student representative.

Score explanation:

In the Bachelor of Medicine and Bachelor of surgery, there is a "sustainability representative" role open for students in the clinical years of the degree at the Hobart Clinical School. However, there is no recorded evidence of this role and whether it also exists at the Launceston or Rural clinical schools, nor were staff able to locate a role description and as such we are unable to determine the responsibilities of this role

There is a Health Sustainability Taskforce at the Royal Hobart Hospital run by staff, which is open for students to join. However, there is no written evidence of this.

4.6. In the past year, has the <u>institution</u> had one or more co-curricular planetary health programs or initiatives in the following categories? (1 point each)

- 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.
- Panels, speaker series, or similar events related to planetary health that have students as an intended audience.
- 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.
- Cultural arts events, installations or performances related to planetary health that have students as an intended audience.
- Local volunteer opportunities related to building community resilience to anthropogenic environmental impacts.
- Wilderness or outdoors programs (e.g., that organise hiking, backpacking, kayaking, or other outings for students)

Score explanation:

No evidence of projects where students are able to gain experience in organic agriculture and sustainable food systems.

No evidence of panels, speaker series or similar events related to planetary health targeted at students. The University of Tasmania occasionally has related events targeted towards the public however: A talk titled "Eating Well for Ourselves and the Planet" was hosted by the University of Tasmania on the 20th of February 2023, with a focus on discussion of climate change and health as part of its "Island of Ideas" public talks program.

Eating Well for Ourselves and the Planet with Dr Rosemary Stanton - Events | University of Tasmania

While not within the last year, a talk titled "Climate Emergency = Health Emergency" was hosted by the University of Tasmania on the 12th of October 2022 with a focus on discussion of climate change and health as part of its "Island of Ideas" public talks program.

<u>Climate Emergency = Health Emergency! - Events | University of Tasmania</u>

No evidence of events in which students can 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. However, it is worth noting that the University of Tasmania is home to the Climate Justice Network, a resource that could potentially assist with this in the future.

Climate Justice Network - School of Law | University of Tasmania

No evidence of cultural arts events, installations or performances related to planetary health with students as an intended audience within the last year.

Of note however is the 2018 art installation "The Derwent Project", created by visual artists from the University of Tasmania, which showcases the changes to the Derwent river over time including effects of human impact. This installation was hosted at the Tasmanian Museum and Art Gallery and targeted towards the public however.

No evidence of local volunteer opportunities related to building community resilience to anthropogenic environmental impacts in the last year. However, the university website has a page specifically for those interested in being involved with sustainability, including volunteering and a bulletin with regular updates about opportunities. These pages may have included relevant opportunities in the past, or may in the future.

Get Involved With Sustainability | University of Tasmania

No evidence of wilderness or outdoors programs run by the University of Tasmania targeted towards students.

Section Total (3 out of 15)	20.00%

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Campus Sustainability

Section Overview: 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 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 medical schools, 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 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	0 There are no staff members or task force responsible for overseeing campus sustainability		

Score explanation:

The University of Tasmania employs a sustainability team including multiple full time staff members which acts as a stand-alone functional unit within the Student Services and Operations Division, with a broad remit of furthering a holistic sustainability agenda as laid out in the strategic framework for sustainability.

There is however no specific staff member overseeing sustainability at the medical school and/or Hospital.

Contact Us About Sustainability - Sustainability | University of Tasmania
University of Tasmania Strategic Framework for Sustainability | University of Tasmania

5.2. How ambitious is your <u>institution/medical school</u> plan to reduce its own carbon footprint?			
5	The institution/medical school has a written and approved plan to achieve carbon neutrality by 2030		
3	The institution/medical school has a written and approved plan to achieve carbon neutrality by 2040		
1	The institution/medical school has a stated goal of carbon neutrality by 2040 but has not created a plan to reach that goal or the plan is inadequate		
0	The institution/medical school does not meet any of the requirements listed above		

Score explanation:

The University of Tasmania has already been certified as a carbon neutral organisation as of 2016 by the Australian Government's Climate Active Carbon Neutral Standard in accordance with their criteria

We're a Certified Carbon Neutral Uni - News & Stories | University of Tasmania

5.3. Do buildings/infrastructure used by the <u>medical school</u> 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.		

Score explanation:

As of 2024, Tasmanian electrical generation is 100 percent renewable. The University of Tasmania Energy Strategic Plan 2018-2022 details further plans, such as reduction of unnecessary energy usage 200% Target (TRET) - Renewables | Tasmanian Government Department of State Growth Energy - Facilities and Operations | University of Tasmania

5.4. Are sustainable building practices utilised for new and old buildings on the <u>medical school</u> 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 medical school campus and the majority of old buildings have been retrofitted to be more sustainable.

Sustainable building practices are utilised for new buildings on the medical school campus, but most old buildings have not been retrofitted.

Sustainable building practices are inadequately or incompletely implemented for new buildings.

Sustainability is not considered in the construction of new buildings.

Score explanation:

Sustainable building practices are utilised for new and old buildings in accordance with the University of Tasmania's own published green bond

Green Bond - Sustainability | University of Tasmania

5.5. Has the <u>medical school</u> or <u>institution</u> implemented strategies to encourage and provide environmentally-friendly transportation options for students and reduce the environmental impact of commuting?

Yes, the medical school or institution has implemented strategies to encourage and provide environmentally-friendly transportation options such as safe active transport, public to or carpooling and these options are well-utilised by students. Alternatively, the campus loss not amenable to unsustainable forms of transportation by default.	
The medical school or institution has implemented some strategies to provide environmentally-friendly transportation options, but the options are unsatisfactorily ac or advertised.	
0	The medical school or institution has not implemented strategies to encourage and provide environmentally-friendly transportation options.

Score explanation:

The University of Tasmania gives priority to pedestrians and encourages staff and students to take advantages of walking paths around campus. There are also bike tracks available, with electric scooters allowed, along with chargers for electric bikes and scooter on campus. Carpooling is encouraged, and there are electric vehicle charging stations installed on multiple campuses, however this does not include the medical school (as parking is highly limited). The University also provides "Virtual transport" to reduce unnecessary travel - digital learning resources, telecommunication options for staff remote working and a range of videoconferencing options.

Transport - Facilities and Operations | University of Tasmania

5.6. Does your <u>medical school</u> have an organics recycling program (compost) and a conventional recycling program (aluminium/paper/plastic/glass)?

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

Score explanation:

Compost and recycling bins are available both at the Menzies campus and Hobart clinical school Resource and Waste Management - Facilities and Operations | University of Tasmania

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

- Yes, the medical school 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.
- 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.
- 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.

There are **no** sustainability guidelines for food and beverages.

Score explanation:

The University of Tasmania Sustainable Procurement Guide and principle 1.5 of the University of Tasmania Procurement Policy apply to all branches of the university and require the consideration of sustainable principles through all procurement decisions. The procurement guide is also listed under the financial services guide to assist staff and inform suppliers of the criteria published by the university. Page 3 of the Sustainable Sustainable Procurement Guide includes sustainable principles for on-campus food service providers. While there are no on-campus food service providers at the medical school campus, catering adheres to these standards and typically has minimal animal products and compostable packaging (unable to find any documented evidence of the process).

<u>University of Tasmania Sustainable Procurement Guide | University of Tasmania</u>
6.9 <u>Procurement Policy - Governance, Leadership and Strategy | University of Tasmania</u>
Procurement - Financial Services | University of Tasmania

5.8. Does the <u>medical school</u> or <u>institution</u> apply sustainability criteria when making decisions about supply procurement?

- Yes, the medical school has **adequate** sustainability requirements for supply procurement **and** is **engaged** in efforts to increase sustainability of procurement.
- 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.
- 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.
- There are **no** sustainability guidelines for supply procurement.

Score explanation:

The University of Tasmania Sustainable Procurement Guide (), section 1.1 and 1.5 of the University of Tasmania Procurement Policy apply to all branches of the university and require the use of existing resources whenever possible and consideration of sustainable principles through all procurement decisions. The procurement guide is also listed under the financial services guide to assist staff and inform suppliers of the criteria published by the university.

The medical school also makes use of expired or unusable equipment such as syringes and suture for practical teaching sessions, which would otherwise be disposed of by the hospital. However this is largely supplied by staff who incidentally notice the items rather than an agreement between the Royal Hobart Hospital and the Menzies centre, and as such we were unable to locate any documented evidence of this.

<u>University of Tasmania Sustainable Procurement Guide | University of Tasmania</u>
6.9 Procurement Policy - Governance, Leadership and Strategy | University of Tasmania
Procurement - Financial Services | University of Tasmania

5.9. 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.

- The medical school **strongly recommends or incentivizes** sustainability measures, but they are **not required.**
- There are **no** sustainability guidelines for medical school events.

Score explanation:

The university of Tasmania encourages all events using their facilities to adhere to the Tasmanian Government Sustainable Event Guidelines published by Events Tasmania for events across all campuses and provides relevant downloadable signage for waste disposal including recycling and compost. However, these serve as a guide and there is no evidence of strictly enforced guidelines on events hosted at the School of Medicine.

Resource and waste management - facilities and Operations | University of Tasmania Sustainable Event Guidelines | University of Tasmania

5.10. Does your <u>medical school</u> have programs and initiatives to assist with making lab spaces more environmentally sustainable?

- Yes, the medical school has **programs** and **initiatives** to assist with making lab spaces more environmentally sustainable.
- There are **guidelines** on how to make lab spaces more environmentally sustainable, but not programs or initiatives.
- There are **no** efforts at the medical school to make lab spaces more sustainable.

Score explanation:

The University of Tasmania Sustainable Procurement Guide encourages the reuse or repurposing of existing assets, recommending buyers of assets including lab equipment visit the UTAS Re-Use Program webpage which catalogues unneeded items within the University of Tasmania available for reuse or repurposing, a recommendation which is also enforced by section 1.1 of the University of Tasmania Procurement Policy, along with encouragement of adhering to ethical principles such as sustainability. Apart from this, there is no additional information regarding programs, initiatives or guidelines regarding lab sustainability.

UTAS Re-Use Program - Resource and Waste Management | University of Tasmania 6.9 Procurement Policy - Governance, Leadership and Strategy | University of Tasmania University of Tasmania Sustainable Procurement Guide | University of Tasmania

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.
- 3 The institution is **entirely divested** from fossil fuels.
- The institution has **partially divested** from fossil fuel companies **or** has made a **commitment to fully divest**, but **currently** still has fossil fuel investments.
- The institution has **not divested** from fossil-fuel companies, but faculty and/or students are **conducting organised advocacy** for divestment.

Yes, the institution has investments with fossil-fuel companies and there have been **no efforts** to change that.

Score explanation:

The University of Tasmania is entirely divested from fossil fuels as of the end of 2021, with \$49 million of investments being re-positioned and re-invested into funds with investment strategies aligned with the United Nations Sustainable Development goals, supporting the creation of a zero-carbon economy

Fossil fuel divestment - Sustainability | University of Tasmania

Section Total (29 out of 32)	90.63%
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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%	
В	60% - 79%	
С	40% - 59%	
D	20% - 39%	
F	0% - 19%	

Planetary Health Grades for the University of Tasmania School of Medicine

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

Section	Raw Score %	Letter Grade
Planetary Health Curriculum (30%)	$(34/72) \times 100 = 47.22\%$	С
Interdisciplinary Research (17.5%)	(7/17) x 100 = 41.18%	C-
Community Outreach and Advocacy (17.5%)	(6/14) x 100 = 42.86%	C-
Support for Student-led Planetary Health Initiatives (17.5%)	(3/15) x 100= 20.00%	D-
Campus Sustainability (17.5%)	(29/32) x 100 = 90.63%	A
Institutional Grade	(Ax0.3 + Bx0.175 + Cx0.175 + Dx0.175 + Ex0.175) = 48.23%	C