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# Planetary Health Report Card (Veterinary Medicine): *Royal Veterinary College*



2024-2025 Contributing Team:

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## Summary of Findings

Overall Grade	C
Curriculum	C-
<ul style="list-style-type: none"> <li>• <b>Strengths:</b> <ul style="list-style-type: none"> <li>○ <b>Sustainability Within Clinical Practice:</b> The curriculum integrates sustainability in various clinical settings, including reducing hospital waste, using sustainable anaesthetic agents, and encouraging reusable materials in surgery.</li> <li>○ <b>Veterinary Public Health and Disease Management:</b> There is a strong emphasis on climate change's impact on disease emergence, particularly vector-borne diseases, and the relationship between climate change and zoonoses. Students gain experience with disease control, surveillance, and epidemiology, including through case studies and practical rotations.</li> <li>○ <b>Veterinary Practices' Environmental Impact:</b> Lectures like "<i>Environmental Sustainability in Companion Animal Vet Practice</i>" and discussions about reducing environmental impact at a practice level are well covered, with clear strategies for change.</li> </ul> </li> <li>• <b>Recommendations:</b> <ul style="list-style-type: none"> <li>○ <b>Integrate Climate Change into Access to Veterinary Care:</b> The RVC should include specific teaching on how climate change impacts access to veterinary care, particularly for marginalised communities. This could involve exploring the challenges faced by low-income groups or those in disaster-prone areas and linking this to broader planetary health goals.</li> <li>○ <b>Expand Training on Disaster Preparedness and Environmental Toxins:</b> The RVC should develop teaching on managing animals during natural crises, such as extreme weather events, smoke events, and floods. This could be incorporated into existing strands such as Population Medicine and Veterinary Public Health or as part of elective opportunities. Additionally, more in-depth coverage of human-caused environmental issues such as water and air pollution, and their impacts on animals, should be included in clinical communication training.</li> </ul> </li> </ul>	
Interdisciplinary Research	C
<ul style="list-style-type: none"> <li>• <b>Strengths:</b> <ul style="list-style-type: none"> <li>○ <b>Interdisciplinary Collaboration and One Health Approach:</b> The RVC has strong interdisciplinary research efforts through the Pathobiology and Populations Science Department, which integrates One Health and Veterinary Public Health. Research in vector-borne diseases, climate change, and human-animal interactions aligns well with planetary health principles.</li> <li>○ <b>Stakeholder Engagement and Early Initiatives:</b> The RVC demonstrates early-stage engagement with stakeholders, particularly in the Sustainable and Healthy Food System South Africa (SHEFS SA) project, which aligns with One Health principles.</li> </ul> </li> <li>• <b>Recommendations:</b> <ul style="list-style-type: none"> <li>○ <b>Establish a Planetary Health Research Hub:</b> The RVC should create a dedicated research hub focused specifically on planetary health, consolidating current One Health research and exploring new interdisciplinary collaborations. This could include a dedicated website and initiatives that highlight RVC's commitment to planetary health and sustainable healthcare.</li> <li>○ <b>Increase External Engagement and Host Events:</b> The RVC should increase its visibility in the planetary health field by hosting conferences or symposiums and pursuing membership in national</li> </ul> </li> </ul>	

and international planetary health organisations. Additionally, establishing formal structures to involve stakeholders in shaping the research agenda could help align the institution more closely with planetary health initiatives.

## Community Outreach and Advocacy

C

- **Strengths:**
  - **Engagement in Sustainability Campaigns and Local Partnerships:** The RVC is actively involved in sustainability initiatives such as Green Impact, contributing to sustainability campaigns and environmental awareness, including student competitions and partnerships with local schools and businesses.
- **Recommendations:**
  - **Improve Client Education on Environmental Health:** The RVC should improve and expand hospital-based resources and educational materials for clients, focusing on environmental health risks and exposures. This could include raising awareness about the effects of pollution, climate change, and extreme weather events on animal health, as well as practical advice for owners on mitigating these impacts.

## Support for Student-Led Initiatives

C-

- **Strengths:**
  - **Student Engagement in Sustainability:** The RVC supports students in engaging with sustainability-related initiatives through events like beekeeping classes, sustainability workshops, and outdoor activities that connect students to nature and environmental health.
- **Recommendations:**
  - **Develop Student-Led Planetary Health Initiatives:** The RVC should develop and support student-led groups focused specifically on planetary health to increase student engagement and create a stronger, student-driven sustainability movement.
  - **Offer More Sustainability-Focused Events and Activities:** The RVC should expand events and activities that focus on sustainability within the veterinary healthcare profession, offering students more opportunities to explore planetary health in the context of their future careers.

## Campus Sustainability

B

- **Strengths:**
  - **Renewable Energy & Infrastructure Improvements:** The RVC is successfully utilising 100% renewable energy for its campus buildings, with efforts to replace gas use and improve infrastructure with air source heat pumps, solar panels, and energy-efficient systems.
  - **Waste Management & Sustainable Procurement:** Effective waste management systems are in place, including the use of recycling and composting at the Hawkshead campus and plans to expand this to Camden. Additionally, the RVC encourages sustainable procurement practices and collaborates with suppliers to minimise environmental impact.
- **Recommendations**
  - **Develop Event Sustainability Guidelines:** The RVC should formulate and implement sustainability guidelines for hosting events on campus, ensuring all activities, including freebies and resources, align with sustainable practices.

# Statement of Purpose

*Planetary health is human health.*

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

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

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

# Definitions & Other Considerations

## Definitions:

- **Planetary Health:** is described by the Planetary Health Alliance as “the health of human civilisation and the state of the natural systems on which it depends.” For example, topics such as climate change, declining biodiversity, shortages of arable land and freshwater, and pollution would all fall under the realm of planetary health. Both planetary health and traditional ‘environmental health’ examine the relationship between human health and the external environment, including extreme temperatures, chemicals, vector-borne diseases, etc. Planetary health explicitly concerns itself with the potential health harms associated with human-caused perturbations of natural systems. Therefore, the human health focus of planetary health makes the field well-adapted for the context of health professional education. Throughout this report card, we use the term planetary health to refer to this broad swath of topics, but resources do not need to explicitly include the term “planetary health” to satisfy the metric.
- **Sustainable vetcare:** 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 minimizes use of healthcare services. For this veterinary specific assessment, we have modified this language to ‘sustainable vetcare’.
- **Education for Sustainable Vetcare (ESV):** is defined as the process of equipping current and future veterinary professionals with the knowledge, attitudes, skills and capacity to provide environmentally sustainable services through health professional education, thus working to decrease the enormous overall 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 vetcare as well as being part of the broader knowledge needed to fully protect and promote health. In summary, ESV 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. For veterinary medicine these have been expanded to include both domestic and wild animal species:
  1. Describe how the environment and 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 veterinarian to protect and promote health is shaped by the dependence of health on the local and global environment.
- **Veterinary School/Department vs. Institution:** When “Veterinary School” is specified in the report card, this only refers to curriculum and resources offered by the School/department of Veterinary Medicine and does not include offerings from other parts of the university (e.g.

undergraduate departments (USA), other related departments (e.g. Public Health, Population Health departments). In contrast, when “institution” is specified in the report card, we are referring to the university more broadly including all of its campuses. Any resource reasonably accessible by Veterinary Medicine students, no matter where in the institution the resource comes from or if it is specifically targeted for Veterinary Medicine students, can meet this metric.

- **Environmental history:** This is a series of questions students are taught to ask during medical encounters that elicits patients’ exposures and environmental risk factors. Historically, this has included consideration of exposures like pesticides, asbestos, and lead, though in the modern era shaped by climate change, it can be expanded to include things like wildfire smoke exposure, air pollution and 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. Please be as specific as possible when providing evidence for this metric.
- **Elective:** The word “elective” refers to an optional course or lecture series that a 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.
- **Core Curriculum:** This refers to taught material that is delivered to the entire cohort of students in one year.
- **Clerkship / Outreach:** This is a term used in the USA to refer to placements that medical students go on e.g. Pediatrics, General medicine, Psychiatry. In the UK these are referred to as rotations, outreach or placements. This is a relatively short (approximately 4-8 weeks) period of study and patient-centred clinical experience that takes place as part of the undergraduate programme.
- **Clinical rotation:** This is a term used to refer to placements that students go on (e.g., ophthalmology, surgery, cardiology).
- **Community organisations:** For most institutions, there are existing groups that are not directly affiliated with the university and exist as a product of what the community the institution exists in cares about or needs. These specific community organisations relevant to this report include those that are focused around some aspect of climate and health preservation. These community organisations can include but are not limited to local mutual aid initiatives, underserved-resource distribution groups, clean-up and nature conservation groups, community gardeners, and other environmental-related organisations. If your institution does not have access to local volunteerships with community groups, please report any community organisations your institution or school has collaborated with.
- **Climate justice:** The idea that certain population groups and geographical locations which are disproportionately more impacted by climate change are already economically and socially disadvantaged. This double vulnerability sits alongside pre-existing social justice concerns and should therefore shift policy and practice to mitigate the inequitable effects of the climate crisis.

- **Extractivism:** The removal of natural resources typically in large quantities. Within anthropology this term is often used in the context of colonialism to refer to the historic seizing of natural resources, a practice which has developed business models tied to ecological degradation and loss of biodiversity.
- **Global South:** Nations that often have less economic and industrial development and are typically in the southern hemisphere. These nations have been found to be disproportionately impacted by the climate crisis.
- **Low socioeconomic status (SES):** An individual or geographical area that across a variety of socioeconomic factors (e.g., income, education, race/ethnicity) is considered vulnerable. This vulnerability has been correlated to more adverse health outcomes often as a consequence of encountering more barriers in accessing and receiving healthcare.
- **Low and Middle-Income Countries (LMIC):** Countries that have lower degrees of economic affluence.
- **Anthropogenic:** Created through human activity
- **Marginalized communities:** Groups excluded from mainstream economic, educational, social, and/or cultural experiences due to race, gender identity, sexual orientation, age, physical ability, language, and/or immigration status (Sevelius et al., 2020).

#### **Other considerations:**

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

Completed in 2022 a [Literature Review by Metric](#) is available for the 2022 medicine report card metrics. We are in the process of updating this review and making it more applicable to all the disciplines. However, the review serves as a rough collection of references for further learning and a resource for those advocating for increased planetary health engagement at their institutions.

## **Abbreviations Used in Report:**

**RVC:** Royal Veterinary College

**BVM:** Bachelor of Veterinary Medicine- RVC's undergraduate entry 5-year Veterinary programme. BVM1 refers to the first year of the course, BVM2 to the second year, and so on.

**GAB:** Graduate Accelerated Bachelor of Veterinary Medicine- RVC postgraduate entry 4-year Veterinary programme. Students complete the GAB year and then integrate into BVM3 to complete the rest of their course. GAB specific teaching has been acknowledged where relevant.

**PAFF:** Principles of Animal Form and Function

**PMVPH:** Population Medicine and Veterinary Public Health

**POS:** Principles of Science

*Note:* the RVC also has a Bachelor of Veterinary Science (BVSc) pathway whereby students complete their first and second years at Aberystwyth University. Like the GAB cohort, they also then integrate into BVM3 to complete the rest of the course. Teaching specific to the first and second years of the BVSc pathway has not been considered as this is under the remit of Aberystwyth University and therefore does not feature in this report.



# Planetary Health Curriculum

***Section Overview:*** This section evaluates the integration of relevant planetary health topics into the veterinary school curriculum. Today's veterinary students will be on the frontlines of tackling the animal and public health effects of climate and other environmental changes. Therefore, it is critical that veterinary students are trained to understand the health effects of these changes, as well as planetary health issues and principles more broadly. Topics like the seven exposure pathways (i.e., air, temperature, extreme events/ disasters, food, water, vector-borne diseases, and animal welfare), environmental health inequities, and disaster response principles must be part of every veterinary school's core curriculum.

## Curriculum: General

<b>1.1. Did your <u>veterinary school</u> offer elective courses (student selected modules) to engage students in Education for Sustainable Vetcare or Planetary Health in the last year?</b>	
Yes, the veterinary school has offered <b>more than one</b> elective whose primary focus is ESV/planetary health in the past year. (3 points)	
Yes, the veterinary school has offered <b>one</b> elective whose primary focus is ESV/planetary health in the past year. (2 points)	
The veterinary school does <b>not</b> have any electives whose primary focus is ESV/planetary health, but there are one or more electives that include a <b>lecture</b> on planetary health. (1 point)	
No, the veterinary school has <b>not</b> offered any electives on planetary health or electives that include ESV/planetary health topics in the past year. (0 points)	
<b>Score Assigned:</b>	<b>2</b>
<b>Score Explanation:</b>  Students in clinical rotation year have the opportunity to select a two-week rotation in Veterinary Public Health at the Wales Veterinary Science Centre. This allows students to experience a range of roles that contribute to public health and that support the interface of humans, animals and government. The rotation incorporates a simulated disease outbreak case, which allows students to gain One Health experience as well.  Furthermore, although not an elective course, the core curriculum covers topics relevant to Sustainable Vetcare. For example, 'Environmental Sustainability in Companion Animal Vet Practice' and 'Reducing Environmental Impact in Production Animal Systems' are some relevant lectures given in BVM4. Throughout the 1 <sup>st</sup> to 3 <sup>rd</sup> years of the course, lectures dedicated to the responsible and sustainable use of antimicrobials and wormers are also given as part of the core curriculum.	

### *Curriculum: Health Effects of Climate Change*

<b>1.2. Does your veterinary school curriculum address the relationship between increasing temperatures and animal health?</b>	
This subject was addressed <b>in depth</b> by the <b>core</b> curriculum. (3 points)	
This subject was <b>moderately</b> addressed by the <b>core</b> curriculum. (2 points)	
This subject was addressed <b>briefly</b> in the <b>core</b> curriculum, <u>or</u> in any depth by other non-core learning experiences (e.g., elective coursework). (1 point)	
This topic was <b>not</b> covered. (0 points)	
<b>Score Assigned:</b>	<b>1</b>
<b>Score Explanation:</b>  There are various lectures in the core curriculum that address the impact of increasing temperatures on animal health, although they do not explicitly link them to global warming. The lectures on ‘ <i>Pig Production Systems</i> ’, ‘ <i>Poultry Production Systems</i> ’ and ‘ <i>Care and Housing</i> ’ (BVM1 Animal Husbandry PMVPH strand) cover how increased temperature can affect feed intake, growth rate and feed conversion efficiency, and the importance of housing design to mitigate overheating and heat stress.	

<b>1.3. Does your veterinary school curriculum address the impacts of extreme weather on animal health and veterinary systems?</b>	
This subject was addressed <b>in depth</b> by the <b>core</b> curriculum. (3 points)	
This subject was <b>moderately</b> addressed by the <b>core</b> curriculum. (2 points)	
This subject was addressed <b>briefly</b> in the <b>core</b> curriculum, <u>or</u> in any depth by other non-core learning experiences (e.g., elective coursework). (1 point)	
This topic was <b>not</b> covered. (0 points)	
<b>Score Assigned:</b>	<b>1</b>
<b>Score Explanation:</b>  Throughout the core curriculum of GAB and BVM1 to BVM3, various extreme weather events and their links to animal health are briefly mentioned in lectures. Examples include: 1) the lecture on ‘ <i>Sudden Death in Ruminants</i> ’ (BVM3 PMVPH strand) touches on leptospirosis as an infectious cause of sudden death in grazed animals that can be predisposed by flooding, 2) the lecture on ‘ <i>Role of the Veterinarian in VPH</i> ’ (GAB PMVPH strand) mentions climate change and natural disasters and their impact on animals and changes in distribution of vectors, 3) ‘ <i>Global Animal</i>	

*Production*’ lecture (GAB Animal Husbandry strand) mentions climate change such as floods and drought affecting feed, livestock and disease transmission.

**1.4. Does your veterinary school curriculum address the management of animals during climate associated disasters?**

This subject was addressed **in depth** by the **core** curriculum. (3 points)

This subject was **moderately** addressed by the **core** curriculum. (2 points)

This subject was addressed **briefly** in the **core** curriculum, or in any depth by other non-core learning experiences (e.g., elective coursework). (1 point)

This topic was **not** covered. (0 points)

**Score Assigned:**

**0**

**Score Explanation:**

The RVC does not cover management of animals during natural crises or climate-related disasters. Students are taught about the increased risks of zoonotic disease outbreaks as a result of increased anthropogenic activity combined with climate change in ‘*Wildlife and Zoonoses 1 & 2*’ lectures (BVM4 PMVPH strand). The learning objective for these lectures related to this metric is “*To discuss the anthropogenic ecological disruptions (‘drivers’) which aid in the emergence and reemergence of zoonotic diseases*”. However, this is an indirect management of animals, more related to disease epidemiology in a long-term timeframe rather than immediate management of animals amidst an environmental crisis. Therefore, the RVC does not cover this topic.

**1.5. Does your veterinary school curriculum address the impact of climate change on the changing patterns (e.g., distribution and prevalence) of vector-borne diseases?**

This subject was addressed **in depth** by the **core** curriculum. (3 points)

This subject was **moderately** addressed by the **core** curriculum. (2 points)

This subject was addressed **briefly** in the **core** curriculum, or in any depth by other non-core learning experiences (e.g., elective coursework). (1 point)

This topic was **not** covered. (0 points)

**Score Assigned:**

**3**

**Score Explanation:**

The ‘*Wildlife and Zoonoses 1 & 2*’ lectures (BVM4 PMVPH strand) discuss multiple vector-borne diseases and their change in infection patterns due to both climate change and anthropogenic

activity. Increased contact between wild and domestic species as well as wild animal populations and human populations are considered, and the effect this has on disease emergence and vector-borne diseases.

The '*Disease Outbreak*' case study (BVM4 PMVPH strand) is a case study of bovine tuberculosis in which students are expected to act as a chief veterinarian in a case of bovine tuberculosis within England, Scotland, Northern Ireland or Wales. Thus, students are expected to create a treatment and disease control plan within the varying legislature of the EU and the UK. The case study takes place over two scheduled sessions, the second being a discussion with the professor regarding the management of a vector-borne disease such as bovine tuberculosis and how this influences veterinary medicine and public health.

The '*Surveillance and Reporting*' lecture (BVM4 PMVPH strand) discusses how climate change is affecting disease emergence and disease spread in relation to vector borne diseases as well as how this influences surveillance and reporting of diseases amongst domestic and wild animal populations.

The '*Arthropod Borne Infections*' lecture (BVM4 PVMPPH strand) discusses the routes of transmission of vector-borne diseases and the increased emergence of arthropod vector borne diseases amidst climate change.

Additionally, throughout the curriculum through years 1-4, vector-borne diseases and their relationship to the changing climate are touched on, especially in regard to diseases such as leishmania and babesia, as well as angiostrongylus and dirofilaria.

#### 1.6. Does your veterinary school curriculum address the health effects of climate change and air pollution?

This subject was addressed **in depth** by the **core** curriculum. (3 points)

This subject was **moderately** addressed by the **core** curriculum. (2 points)

This subject was addressed **briefly** in the **core** curriculum, or in any depth by other non-core learning experiences (e.g., elective coursework). (1 point)

This topic was **not** covered. (0 points)

**Score Assigned:**

**1**

#### **Score Explanation:**

The '*Hematopoietic Neoplasia 2*' lecture (BVM3 Lymphoreticular strand) discusses the role of environmental pollutants such as tobacco smoke in the aetiology of feline lymphoma.

The '*Clinical Manifestations of Respiratory Disease*' lecture (BVM3 Respiratory strand) discusses the potential for environmental pollutants and smoke to cause bronchoconstriction and coughing.

The '*Cough in Dogs and Cats*' lecture (BVM3 Respiratory strand) lists the major differentials for acute cough, one of them being pharyngitis/laryngitis as a result of irritants such as smoke, dust or chemicals.

The '*Accumulations, Calcifications and Pigments*' lecture (BVM3 Pathology strand) discusses the effects on canine lungs when inhaling ambient cigarette smoke as well as the effects on canine lung appearance and tissue when living in urban environments with air pollution.

**1.7. Does your veterinary school curriculum address the relationship between animal welfare and the effects of environmental degradation and climate change?**

This subject was addressed **in depth** by the **core** curriculum. (3 points)

This subject was **moderately** addressed by the **core** curriculum. (2 points)

This subject was addressed **briefly** in the **core** curriculum, or in any depth by other non-core learning experiences (e.g., elective coursework). (1 point)

This topic was **not** covered. (0 points)

**Score Assigned:**

**2**

**Score Explanation:**

The '*Hematopoietic Neoplasia 2*' lecture (BVM3 Lymphoreticular strand) discusses the role of environmental pollutants such as tobacco smoke in the aetiology of feline lymphoma.

The '*General Pathology of the Respiratory Tract*' lecture (BVM3 Respiratory strand) discusses anthracosis in urban dogs and cats as a cause of the accumulation of carbon in alveolar macrophages.

The '*Clinical Manifestations of Respiratory Disease*' lecture (BVM3 Respiratory strand) discusses inhalation of smoke and other particles as one of the stimuli for coughing, resulting in the clinical manifestation of respiratory disease in animals. This lecture also discusses how excessive environmental heat causes tachypnoea and hyperpnoea.

The '*Cough in Dogs and Cats*' lecture (BVM3 Respiratory strand) lists the major differentials for acute cough, one of them being pharyngitis/laryngitis as a result of irritants such as smoke, dust or chemicals.

The '*Accumulations, Calcifications and Pigments*' lecture (BVM3 Pathology strand) discusses the effects on canine lungs when inhaling ambient cigarette smoke as well as the effects on canine lung appearance and tissue when living in urban environments with air pollution

This is also indirectly covered in the Respiratory strand as well as the Alimentary strand in BVM3. Throughout the lectures discussing lungworms as well as gastrointestinal parasites, climate and

temperature affecting egg counts on pasture is indirectly covered in relation to the welfare of the animals in terms of their milk yield and drop in body condition.

**1.8. Does your veterinary school curriculum address how animal health is impacted by climate-related changes in water availability and quality?**

This subject was addressed **in depth** by the **core** curriculum. (3 points)

This subject was **moderately** addressed by the **core** curriculum. (2 points)

This subject was addressed **briefly** in the **core** curriculum, or in any depth by other non-core learning experiences (e.g., elective coursework). (1 point)

This topic was **not** covered. (0 points)

**Score Assigned:**

**1**

**Score Explanation:**

The '*Pathology of the Liver and Pancreas*' lecture (BMV3 Alimentary strand) discusses the association of blue/green algae and toxic liver disease in animals as the algae blooms build up in the water due to increase in temperature in warm climates. It also discusses the association between toxic liver disease in animals and cresols that are released into the environment through various human methods such as industrial processing and manufacturing. These cresols run off into the water and affect the water quality by limiting the oxygen exchange within it.

This lecture also indirectly discusses the increase in leptospirosis spread or occurrence due to increased weather conditions occurring from climate change such as hurricanes, flooding and increased rainfall.

**1.9. Does your veterinary school curriculum address how climate change can threaten the production, quality, and access to food for animals?**

This subject was addressed **in depth** by the **core** curriculum. (3 points)

This subject was **moderately** addressed by the **core** curriculum. (2 points)

This subject was addressed **briefly** in the **core** curriculum, or in any depth by other non-core learning experiences (e.g., elective coursework). (1 point)

This topic was **not** covered. (0 points)

**Score Assigned:**

**1**

**Score Explanation:**

This topic is indirectly covered in the Respiratory and Alimentary strands in BVM3 during the lectures discussing lungworms and gastrointestinal parasites. The topic of climate and temperature affecting egg counts on pasture is indirectly covered in relation to the quality of food production consumed by animals. The warm climate and increased rainfall create a moist environment and increases the build-up of bacteria, mycotoxins and parasites in the stored feed and fresh pasture.

**1.10. Does your veterinary school curriculum address the outsized impact of *climate change* on marginalized populations (e.g., low SES, women, communities of color, Indigenous communities, children, unhoused populations, and older adults) and indirectly the animals in their care?**

This subject was addressed **in depth** by the **core** curriculum. (3 points)

This subject was **moderately** addressed by the **core** curriculum. (2 points)

This subject was addressed **briefly** in the **core** curriculum, or in any depth by other non-core learning experiences (e.g., elective coursework). (1 point)

This topic was **not** covered. (0 points)

**Score Assigned:**

**0**

**Score Explanation:**

There are very little to no references on how marginalised groups, and the animals in their care, will experience an outsized impact of climate change.

The BVM4 PMVPH strand includes some mentions of climate change affecting food security generally. This can be found in the '*Food Security and Food Production*' CALs (computer aided learning), where students use time out of lectures to complete online quizzes that will sometimes teach material not covered in lectures.

These CALs make it clear that climate change is a risk to food security, but do not specify how this is disproportionately affecting marginalised communities

There are mentions that small holdings utilising livestock, and agroecology, are important sources of nutrition security for disadvantaged groups; but there is no link back to the impacts of climate change on these groups.

**1.11. Does your veterinary school curriculum address the unequal regional health impacts of climate change globally?**

This subject was addressed **in depth** by the **core** curriculum. (3 points)

This subject was **moderately** addressed by the **core** curriculum. (2 points)

This subject was addressed **briefly** in the **core** curriculum, or in any depth by other non-core learning experiences (e.g., elective coursework). (1 point)

This topic was **not** covered. (0 points)

**Score Assigned:**

**1**

**Score Explanation:**

The '*Responsibility for Disease*' lecture (BVM4 PMVPH strand) mentions the risk of notifiable disease spreading internationally due to changing climates, with particular emphasis on the risk of endemic European livestock diseases entering UK farms. However, this lecture largely focuses on how disease status in livestock must be safeguarded to protect public health, rather than on the unequal effects of climate change in different regions.

The '*Thermoregulation*' lecture (GAB/BVM2 Endocrine unit), does show graphs on heat stress in dairy cows, and links heat stress to increased susceptibility to disease. However, there is no link to climate change and how regions experience this pressure unequally.

The BVM4 POS strand investigates vector-borne diseases and does specify that climate change allows for vectors to spread and increases the risk of disease emergence.

**1.12. Does your veterinary school curriculum address how climate change can affect inherently vulnerable animal populations (e.g., endangered species, immunocompromised species, fragmented wildlife populations)?**

This subject was addressed **in depth** by the **core** curriculum. (3 points)

This subject was **moderately** addressed by the **core** curriculum. (2 points)

This subject was addressed **briefly** in the **core** curriculum, or in any depth by other non-core learning experiences (e.g., elective coursework). (1 point)

This topic was **not** covered. (0 points)

**Score Assigned:**

**1**

**Score Explanation:**

'*The Global Vet*' lecture (BVM1 Animal Husbandry strand) goes into detail about how the industrialisation of arable and livestock production is a great threat to biodiversity.

The '*Food Production*' CAL (BVM4 PMVPH strand) successfully links livestock nitrogen emissions to climate change, and then to its negative effects on biodiversity. There are also links in the '*Food Safety in Evolving Animal Production Systems*' lecture (BVM3 PMVPH strand) to the loss of biodiversity in response to intensification of agriculture, though this doesn't mention climate change specifically.



There are no explicit references to endangered species or fragmented wildlife populations regarding how they will be impacted by the changing climate.

***Curriculum: Environmental Health & the Effects of Anthropogenic Toxins on Animal Health***

**1.13. Does your veterinary school curriculum address the health effects of anthropogenic toxins (e.g., pollution, pesticides) on animal health?**

This subject was addressed **in depth** by the **core** curriculum. (3 points)

This subject was **moderately** addressed by the **core** curriculum. (2 points)

This subject was addressed **briefly** in the **core** curriculum, or in any depth by other non-core learning experiences (e.g., elective coursework). (1 point)

This topic was **not** covered. (0 points)

**Score Assigned:**

**2**

**Score Explanation:**

The following PMVPH strand lectures don't go in depth but do mention briefly the indirect/direct effects of contaminated soils on animal health, that trace element toxicities can come from anthropogenic toxins in the soil, how the intensive livestock production systems impact the environment and directly affect the health of animals, the quality of their feed and water supply.

- 'Population Health in Extensively Farmed Livestock' (BVM3)
- 'Sudden Death in Ruminants' (BVM3)
- 'Trace Element Deficiencies in Grazing Livestock' (BVM3)
- 'Food Toxicology and VPH' (BVM4)
- 'Reducing Environmental Impact in Production Animal Systems' (BVM4)

The RVC doesn't offer any lectures solely dedicated to the anthropogenic toxic effects on animal health, but it is briefly mentioned as a possible cause for certain clinical signs.

The PMVPH strand also offers the 'AMR and Interventions in Aquaculture' lecture (BVM4) that goes into depth on the interconnectivity of Aquaculture systems, the environment and the consequences of this for animal health. It also explores systems thinking and the importance of antimicrobial considerations and implications on animal health and the environment.

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

This subject was addressed **in depth** by the **core** curriculum. (3 points)

This subject was <b>moderately</b> addressed by the <b>core</b> curriculum. (2 points)	
This subject was addressed <b>briefly</b> in the <b>core</b> curriculum, <u>or</u> in any depth by other non-core learning experiences (e.g., elective coursework). (1 point)	
This topic was <b>not</b> covered. (0 points)	
<b>Score Assigned:</b>	<b>1</b>
<b>Score Explanation:</b>  <p>The ‘<i>Wildlife and Zoonoses 1 &amp; 2</i>’ lectures (BVM4 PMVPH strand) consider the consequences of urbanisation, deforestation, increase in agricultural lands, increasing human contact with wildlife and increasing the chances of zoonosis emergence.</p> <p>The RVC also offers the opportunity for their students to participate in the Interdisciplinary Food Systems Teaching and Learning (IFSTAL) course that incorporates themes of systems thinking, One Health, tools for decision making by considering all the stakeholders involved, climate change, as well as, faults in global food systems and its effects on our communities. However, it is not part of the core curriculum therefore considered an elective option for those who might be interested.</p>	

<b>1.15. Does your <u>veterinary school</u> 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, Indigenous populations, and older adults and indirectly the animals in their care?</b>	
This subject was addressed <b>in depth</b> by the <b>core</b> curriculum. (3 points)	
This subject was <b>moderately</b> addressed by the <b>core</b> curriculum. (2 points)	
This subject was addressed <b>briefly</b> in the <b>core</b> curriculum, <u>or</u> in any depth by other non-core learning experiences (e.g., elective coursework). (1 point)	
This topic was <b>not</b> covered. (0 points)	
<b>Score Assigned:</b>	<b>0</b>
<b>Score Explanation:</b>  <p>The RVC does not currently offer lectures that address the outsized impact of anthropogenic environmental toxins on marginalised populations, such as those with low SES, women, communities of color, children, homeless populations, indigenous populations and older adults and indirectly the animals in their care.</p>	

*Curriculum: Sustainability*

<b>1.16. Does your <u>veterinary school</u> curriculum address educating clients on environmental and health co-benefits of a healthy animal's diet (e.g., seaweed in ruminant diets to reduce methane emissions, the difference between CO<sub>2</sub> emissions in production of dry vs. wet dog food)?</b>	
This subject was addressed <b>in depth</b> by the <b>core</b> curriculum. (3 points)	
This subject was <b>moderately</b> addressed by the <b>core</b> curriculum. (2 points)	
This subject was addressed <b>briefly</b> in the <b>core</b> curriculum, <u>or</u> in any depth by other non-core learning experiences (e.g., elective coursework). (1 point)	
This topic was <b>not</b> covered. (0 points)	
<b>Score Assigned:</b>	<b>1</b>
<b>Score Explanation:</b>  In BVM3, the impact of pet food on clinical nutrition is covered in the POS strand, but the impact on the environment is not. In BVM5, an elective module covers several lectures on the impact of veterinary environmental sustainability which may include some detail on the impact of pet food (the teaching content varies from year to year).	

<b>1.17. Does your <u>veterinary school</u> curriculum address the carbon footprint of vetcare systems?</b>	
This subject was addressed <b>in depth</b> by the <b>core</b> curriculum. (3 points)	
This subject was <b>moderately</b> addressed by the <b>core</b> curriculum. (2 points)	
This subject was addressed <b>briefly</b> in the <b>core</b> curriculum, <u>or</u> in any depth by other non-core learning experiences (e.g., elective coursework). (1 point)	
This topic was <b>not</b> covered. (0 points)	
<b>Score Assigned:</b>	<b>2</b>
<b>Score Explanation:</b>  Approached in the 'Environmental Sustainability in Companion Animal Vet Practice' lecture in the core curriculum (BVM4 PMVPH strand). It covers the key areas where healthcare has an environmental impact, where change can be made in healthcare, rational use of single use items for infection control, and application of sustainability in terms of the RCVS practice standards.	

1.18. Does your <u>veterinary school</u> curriculum cover these components of sustainable clinical practice in the <u>core</u> curriculum? (points for each)	Score
A. The health <b>and</b> environmental <b>co-benefits</b> of <b>avoiding</b> over-medicalization, over-investigation and/or over-treatment. (2 points)	2
B. The environmental impact of <b>pharmaceuticals</b> and over-prescribing as a cause of climate health harm. Alternatively teaching on <b>deprescribing</b> where possible and its environmental and health co-benefits would fulfill this metric. (2 points)	0
C. The health <b>and</b> environmental <b>co-benefits</b> of <b>non-pharmaceutical management</b> of conditions where appropriate such as exercise, physical therapy, mental stimulus, and enrichment. (1 point)	0
D. Environmental impact of <b>surgical</b> vetcare on planetary health and the climate crisis, and how can it be mitigated. (1 point)	1
E. The impact of <b>anesthetic</b> gasses on the vetcare carbon footprint and ways to reduce anesthesia environmental impacts, such as total intravenous anesthesia or choosing less environmentally harmful anesthetic gas options with reduced greenhouse gas emissions. (1 point)	1
F. The impact of <b>veterinary-medicine-produced toxins</b> on the environment (e.g., barbiturates from buried animals, drugs used in food animals). (1 point)	1
G. <b>Waste production</b> within vetcare <b>clinics</b> and strategies for reducing waste in clinical activities (e.g., single use items in the inpatient or outpatient setting). (1 point)	1
<b>Score Assigned:</b>	<b>6</b>
<p><b>Score Explanation:</b></p> <p>These topics are covered in BVM3, BVM4 and BVM5 teaching within the PMVPH and POS strands.</p> <p>A: This is covered extensively in relation to antimicrobial resistance caused by overuse of antibiotics. Anthelmintic resistance is also considered. These are approached across the following lectures:</p> <ul style="list-style-type: none"> <li>• <i>'Rational Use of Antibacterial Drugs in Small Animals 1 and 2', 'Rational Use of Antimicrobial Drugs in Farm and Equine' and 'Anthelmintic Resistance'</i> (BVM3 POS strand)</li> <li>• <i>'Antimicrobial Resistance in the Food Chain'</i> (BVM3 PMVPH strand)</li> <li>• <i>'Antimicrobial Resistance in Livestock' and 'Antimicrobial Resistance in Aquaculture'</i> (BVM4 PMVPH strand)</li> <li>• <i>'Antimicrobial Resistance Surveillance (Meat Residues)'</i> (BVM5 PMVPH strand)</li> </ul> <p>B and C: There is no evidence of these currently being considered in the curriculum.</p> <p>D: This is considered in the <i>'Environmental Sustainability in Companion Animal Vet Practice'</i> lecture (BVM4 PMVPH strand) covering areas such as the use and impact of reusable vs.</p>	

disposable surgical textiles, surgical consumables and sterilisation, and alcohol rub vs. surgical scrub.

E: The lectures '*Introduction to Anaesthesia and Analgesia*' (BVM3 POS strand) and '*Environmental Sustainability in Companion Animal Vet Practice*' (BVM4 PMVPH strand) cover the greenhouse gas emissions from different anaesthetic gases used in veterinary practice and their effect on the carbon footprint of a practice.

F: This is covered in the '*Reducing Environmental Impact in Production Animal Systems*' lecture (BVM4 PMVPH strand). It covers the potential for pesticides, fertilisers, antimicrobials and disinfectants in livestock farming to contaminate water supplies and affect ecosystems by leaving chemical residues in the environment, with considerations surrounding organic and regenerative livestock production from the perspective of reducing inputs. The responsible use of medicines is also briefly considered in the '*Environmental Sustainability in Companion Animal Vet Practice*' lecture (BVM4 PMVPH strand). The '*AMR and Interventions in Aquaculture*' lecture (BVM4 PMVPH strand) also considers that antimicrobial use in aquaculture systems can facilitate spread of antimicrobial resistance through ecosystems including to wildlife.

G: The '*Environmental Sustainability in Companion Animal Vet Practice*' lecture (BVM4 PMVPH strand) discusses the environmental impacts of waste produced in practice, as well as justification for single-use items in terms of disease control.

### 1.19. To what extent does your veterinary school emphasize the importance of Indigenous knowledge and value systems as essential components of planetary health solutions?

Indigenous knowledge and value systems are **integrated throughout** the veterinary school's planetary health education. (3 points)

Indigenous knowledge and value systems as essential components of planetary health solutions are included at **a moderate depth** in the core curriculum. (2 points)

Indigenous knowledge and value systems as essential components of planetary health solutions are included **briefly** in the core curriculum or in any depth in **elective** coursework. (1 point)

This topic was **not** covered. (0 points)

**Score Assigned:**

**1**

#### **Score Explanation:**

The topic is mentioned very briefly, and is often left only to the 'Additional Reading' section (for example in the '*Livestock Sustainability*' lecture (BVM4 PMVPH strand). Traditional farming styles are mentioned briefly in the '*Global Animal Production*' lecture (BVM2 PMVPH strand) but there is no mention of these techniques being an essential component of planetary health solutions. There is very limited availability of lecture material which covers Indigenous knowledge and value systems.

**1.20. Does your veterinary school curriculum address/demonstrate how to be environmentally sustainable in your hospital operations?**

This subject was addressed **in depth** by the **core** curriculum. (3 points)

This subject was **moderately** addressed by the **core** curriculum. (2 points)

This subject was addressed **briefly** in the **core** curriculum, or in any depth by other non-core learning experiences (e.g., elective coursework). (1 point)

This topic was **not** covered. (0 points)

**Score Assigned:**

**3**

**Score Explanation:**

Sustainability within the hospital environment is discussed often and in depth throughout various lectures and during practical sessions. Discussions over the use of different inhalation agents used for anaesthesia are mentioned in detail in the '*Maintenance of Anaesthesia*' and '*Introduction to Veterinary Anaesthesia*' lectures, (BVM3 POS strand), where there are multiple slides going into detail about the effect of ALL inhalation agents (but with particular focus on Nitrous Oxide) as well as strategies that can be used to mitigate these impacts (use of scavenging systems, MAC sparing mechanisms etc.). The '*Aseptic Technique*' lecture (BVM3 POS strand) discusses the benefits to the environment of using reusable gowns and drapes during surgery.

The '*Environmental Sustainability in Companion Animal Vet Practice*' lecture (BVM4 PMVPH strand) also goes into detail about changes that veterinary practices and hospitals can implement to have a positive effect on their environmental impact. This lecture focuses on reducing environmental impact at both an individual and practice/hospital-wide level and presents solutions in a clear and logical manner.

Within the hospital, there is a significant focus on reducing personal waste, but there is limited teaching about clinical waste as the focus is more on sterility and best clinical practice. In the Clinical Skills Centre (CSC), there is a larger focus on the need for sustainability and materials are often reused where possible in between sessions so as to ensure the minimum amount of plastic waste is created.

**1.21. Does your veterinary school curriculum address the impact of climate change on access to veterinary care?**

This subject was addressed **in depth** by the **core** curriculum. (3 points)

This subject was **moderately** addressed by the **core** curriculum. (2 points)

This subject was addressed <b>briefly</b> in the <b>core</b> curriculum, <u>or</u> in any depth by other non-core learning experiences (e.g., elective coursework). (1 point)	
This topic was <b>not</b> covered. (0 points)	
<b>Score Assigned:</b>	<b>0</b>
<b>Score Explanation:</b>  At the time of this assessment, RVC does not address the impact of climate change on access to veterinary care. There are brief mentions of the impact of climate change on disease prevalence and therefore the increased need for clinical interventions and treatments for new/emerging diseases. However, there is no discussion about the impact of the changing climate on a person's ability to access veterinary care. Likewise, there are multiple lectures and compulsory rotations which focus on accessible care and how to make veterinary care more accessible to people, but the cause of this inaccessibility is not attributed to climate change.	

*Curriculum: Client Communication Applications*

<b>1.22. Does your veterinary school's curriculum introduce strategies to have conversations with clients about the health effects of climate change?</b>	
Yes, a <b>comprehensive list of strategies</b> are introduced for having conversations with patients about climate change in the <b>core</b> curriculum. (2 points)	
Yes, some strategies are introduced for having conversations with patients about climate change in the core coursework, or at any depth in elective coursework. (1 point)	
No strategies introduced for having conversations with patients about climate change. (0 points)	
<b>Score Assigned:</b>	<b>1</b>
<b>Score Explanation:</b>  The RVC curriculum does not yet have teaching in place regarding communication with clients about specific health effects of climate change. The school does however teach students how to educate clients about conditions such as heat stroke and how it can be prevented during warm periods, as this is a condition that is likely to be increasing in prevalence with warming global temperatures. These topics are taught starting in the BVM3 PMVPH strand.	

<b>1.23. In training for client encounters, does your <u>veterinary school's</u> curriculum introduce strategies for taking an environmental history or exposure history?</b>	
Yes, the <b>core</b> curriculum includes a <b>comprehensive</b> exploration of strategies for taking an environmental history. (2 points)	

Yes, the **core** curriculum includes **some strategies** for taking an environmental history (or in any depth in the elective curriculum). (1 point)

No, the curriculum does **not** include strategies for taking an environmental history. (0 points)

**Score Assigned:**

**1**

**Score Explanation:**

The RVC provides training for students so that they can gather a detailed patient history, including an animal's environmental history and possible environmental exposures. Within clinical communication teaching, students are trained to ask relevant husbandry questions and gather details about the environment a patient lives in. These details include information about where a patient lives and what the climate is, what their exposure to different environmental toxins or dangers might be, if they have any travel history and if they encounter any other animals, domestic or wildlife. This training, however, does not explicitly focus on patients' exposure to human-caused environmental issues such as water pollution or air pollution.

**1.24. Does your veterinary school's curriculum introduce strategies to discuss protection of animals from environmental harms? (e.g., disaster planning preparedness, animal management during smoke events)**

Yes, the **core** curriculum includes a **comprehensive** exploration of strategies for discussing protection of animals from environmental harms. (2 points)

Yes, the **core** curriculum includes **some strategies** for discussing protection of animals from environmental harms. (1 point)

No, the curriculum does **not** include strategies for discussing protection of animals from environmental harms. (0 points)

**Score Assigned:**

**0**

**Score Explanation:**

The RVC does not currently have any teaching which includes strategies for discussing protection of animals from environmental harms, such as disaster preparedness management or management of animals during smoke events.

*Curriculum: Administrative Support for Planetary Health*

**1.25. Is your veterinary school currently in the process of implementing or improving Education for Sustainable Vetcare (ESV)/planetary health education?**



Yes, the veterinary school is currently in the process of making <b>major</b> improvements to ESV/planetary health education. (4 points)	
Yes, the veterinary school is currently in the process of making <b>minor</b> improvements to ESV/planetary health education. (2 points)	
No, there are <b>no</b> improvements to planetary health education in progress. (0 points)	
<b>Score Assigned:</b>	<b>2</b>
<p><b>Score Explanation:</b></p> <p>As part of the RVC's new curriculum, a new 'Sustainability Series' was introduced to the PMVPH strand for the 2024-25 academic year. The series encompasses two lectures on sustainability:</p> <ul style="list-style-type: none"> <li>• <i>'Environmental Sustainability in Companion Animal Vet Practice'</i> which aims to introduce students to concepts such as carbon literacy, reducing the environmental impact of clinical practice, sustainable quality improvement and business cases for sustainability.</li> <li>• <i>'Reducing Environmental Impact in Production Animal Systems'</i> which focuses on carbon and water footprints of production animal systems, implementing sustainable practices in production animal management and optimisation of infectious and production disease control.</li> </ul> <p>The third part to the series is a Directed Learning session which aims to draw on <a href="#">Vet Sustain's six goals for sustainability</a> and utilise sustainability parameters to inform evidence-based approaches to clinical practice.</p> <p>Another new addition for this academic year is the inclusion of a Sustainability Champion to the membership of the Undergraduate (Veterinary) Medicine Curriculum Management Committee. The Sustainability Champion's role is to advocate for RVC's commitment to environmental sustainability including the impact of delivering the Veterinary programme on the environment.</p> <p>The Sustainability Champion is carrying out an audit of compliance with inclusion of 'One Health and Sustainability Summary Slides' across all lectures on the Veterinary course.</p>	

<b>1.26. How well are the aforementioned planetary health/Education for Sustainable Vetcare topics integrated longitudinally into the <u>core</u> curriculum?</b>
Planetary health/ESV topics are <b>well integrated</b> into the core veterinary school curriculum. (6 points)
<b>Some</b> planetary health/ESV topics are appropriately integrated into the core veterinary student curriculum. (4 points)
Planetary health/ESV is not integrated and is primarily addressed in <b>(a) standalone lecture(s)</b> . (2 point)
There is <b>minimal/no</b> education for sustainable healthcare. (0 points)

<b>Score Assigned:</b>	<b>4</b>
<b>Score Explanation:</b>  <p>A number of topics (such as One Health, Antimicrobial Resistance, Environmental Sustainability etc.) are considered longitudinally across the core veterinary school curriculum, predominantly within the PMVPH strand, which runs across GAB, BVM2, BVM3, BVM4 and BVM5. This is supported by the RVC's spiral curriculum approach supporting students to revisit and build on knowledge gained earlier in the course.</p> <p>There is also a requirement for all lectures to include a 'One Health and Sustainability Summary Slide' at the end of the slide deck to contain a brief summary of the relevance of the lecture topics considered in relation to Animal Health and Welfare, Public Health, Environmental Health and Sustainability. This aims to foster a holistic approach by considering these issues consistently and from multiple different veterinary perspectives throughout the Veterinary course.</p>	

<b>1.27. Does your <u>veterinary school</u> employ a member of faculty to specifically oversee and take responsibility for the incorporation of planetary health and sustainable vetcare as a theme throughout the course?</b>	
<b>Yes, the <u>veterinary school</u> has a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare. (1 point)</b>	
<b>No, the <u>veterinary school</u> does <u>not</u> have a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare. (0 points)</b>	
<b>Score Assigned:</b>	<b>0</b>
<b>Score Explanation:</b>  <p>The RVC does not currently employ a specific staff member to oversee curricular integration of planetary health and sustainable healthcare.</p>	

<b>Section Total (38 out of 86)</b>	<b>44.19%</b>
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# Interdisciplinary Research

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

## 2.1. Are there researchers engaged in planetary health research and healthcare sustainability research at your institution?

Yes, there are faculty members at the **institution** who have a **primary** research focus in planetary health **or** sustainable healthcare/vetcare. (3 points)

Yes, there are individual faculty members at the **institution** who are conducting research **related** to planetary health or healthcare sustainability, OR are part of a national/international sustainability working group, but it is not their primary research focus. (2 points)

There are sustainability researchers at the **institution**, but not specifically associated with healthcare/vetcare. (1 point)

No, there are **no** planetary health and/or sustainability researchers at the **institution** at this time. (0 points)

**Score Assigned:**

**2**

### Score Explanation:

There are several researchers at the RVC whose primary focus is related to Planetary Health and Healthcare Sustainability. The Department for Pathobiology and Populations Science facilitates this through One Health and human-animal interaction-based research where issues such as habitat loss and climate change have been explored in relation to a researchers' primary focus. However, there is no evidence that any faculty members' primary focus is on Planetary Health or Sustainable Healthcare. It's worth noting the work of Rachel Ward and Professor David Connolly's efforts to improve its representation in the curriculum and in improving campus sustainability but this has not yet translated to the research that the RVC undertakes.

## 2.2. Is there a dedicated department or institute for interdisciplinary planetary health research at your institution?

There is **at least one** dedicated department or institute for interdisciplinary planetary health research. (3 points)

There is <b>not currently</b> a department or institute for interdisciplinary planetary health research, but there are <b>plans</b> to open one in the next 3 years. (2 points)	
There is an <b>Occupational and Environmental Health department</b> , but no interdisciplinary department or institute for planetary health research. (1 points)	
There is <b>no</b> dedicated department or institute. (0 points)	
<b>Score Assigned:</b>	<b>3</b>
<b>Score Explanation:</b>  The RVC has an interdisciplinary department, bringing together several different specialties called the Pathobiology and Populations Science Department. This encompasses the university's work in One Health and Veterinary Public Health. This is largely limited to vector-borne diseases and animal-human relations but broadly fits the definition for Planetary Health. The Department also covers related areas such as Habitat Loss and Climate Change.	

<b>2.3. Is there a process by which communities disproportionately impacted by climate change and environmental injustice give input or make decisions about the research agenda at your institution?</b>	
Yes, there is a process in which community members impacted by climate and environmental injustice have <b>decision-making power</b> in the climate + environmental research agenda. (3 points)	
Yes, there is a process in which community members impacted by climate and environmental injustice <b>advise</b> the climate + environmental research agenda. (2 points)	
<b>No</b> , but there are <b>current efforts</b> to establish a process for community members to advise or make decisions on the research agenda. (1 points)	
There is <b>no</b> process, and <b>no</b> efforts to create such a process. (0 points)	
<b>Score Assigned:</b>	<b>1</b>
<b>Score Explanation:</b>  Whilst the RVC has no formal policy or overarching focus groups which allow for community members to advise or make decisions on the research agenda, it must be noted that the university has been a leading researcher in One Health. A key principle of One Health is to consult stakeholders to advise and help make decisions in the research agenda. There is evidence of these consultations such as in the Sustainable and Healthy Food System South Africa Project ( <a href="#">SHEES SA</a> ). The RVC gives freedom to researchers in pursuing these policies so is on the right track for a higher score in the future.	

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

There is an **easy-to-use, adequately comprehensive** website that **centralises** various campus resources related to health and the environment including all of the following: upcoming events, leaders in planetary health at your institution, and relevant funding opportunities. (3 points)

There is a website that **attempts to centralise** various campus resources related to health and the environment, but it is hard-to-use, not updated, or not adequately comprehensive. (2 points)

The **institution** has an **Office of Sustainability website** that includes **some** resources related to health and the environment. (1 point)

There is **no** website. (0 points)

**Score Assigned:**

**2**

**Score Explanation:**

The RVC does not seem to have a dedicated planetary health website. However, the institution has an [Environmental Sustainability webpage](#) which outlines their Environmental Sustainability Strategy. The institution [website](#) also includes research news and events, but not all of them are specifically related to planetary health. Although the site attempts to centralise some relevant research and initiatives, it is not a dedicated planetary health platform, and the available resources on health and the environment are neither comprehensive nor clearly organised under a planetary health framework.

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

Yes, the **institution** has hosted at least one conference or symposium on topics related to planetary health in the past year. (4 points)

Yes, the **institution** has hosted at least one conference or symposium on topics related to sustainable healthcare/vetcare in the past year. (3 points)

Yes, the **institution** has hosted a conference on topics related to planetary health / sustainable healthcare/vetcare in the past three years. (2 points)

The **institution** has not hosted any conferences directly, but they have provided financial support for a local planetary health event. (1 point)

No, the **institution** has not hosted a conference on topics related to planetary health in the past three years. (0 points)

**Score Assigned:**

**0**

**Score Explanation:**

The RVC has not hosted any conferences or symposiums focused on planetary health in the past three years, nor has it provided support for local planetary health events.

**2.6. Is your institution a member of a national or international planetary health or ESH/ESV organisation?**

Yes, the institution is a member of a national or international planetary health or ESH/ESV organisation. (1 points)

No, the institution is **not** a member of such an organisation. (0 points)

**Score Assigned:**

**0**

**Score Explanation:**

Although the RVC follows a One Health approach, there is no evidence indicating that the institution is a member of any national or international planetary health or ESH/ESV organisation.

**Section Total (8 out of 17)**

**47.06%**

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## Community Outreach and Advocacy

***Section Overview:*** This section evaluates veterinary 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 **institution** partner with community organisations to promote planetary and health?

Yes, the **institution** meaningfully partners with **multiple** community organisations to promote planetary and environmental health. (3 points)

Yes, the **institution** meaningfully partners with **one** community organisation to promote planetary and environmental health. (2 points)

The **institution** does not partner with community organisations, but participates in community focused events relating to planetary health. (1 point)

No, there is **no** such meaningful community partnership. (0 points)

Score Assigned:

3

#### Score Explanation:

The RVC is actively involved in multiple programs and initiatives that promote planetary health. It participates in Green Impact, a programme promoting sustainable practices across various sectors. It includes initiatives such as communicating about recycling systems, supporting team health and wellbeing, and carbon neutrality efforts. It provided work experience for 11 students at the Institute of Environmental Management and Assessment. As part of this program, the RVC also takes part in the 'Student Switch Off/Green Campus Revolution' campaign, which encourages sustainability among students through a competition to determine which student hall is the most environmentally friendly.

Additionally, the RVC sponsors the Camden Primary Schools 'Green Dragons Den', an initiative that invites primary schools in Camden to pitch climate-related ideas and receive grants for their projects. The college also collaborates with building contractors to deliver community projects aimed at improving planetary health, such as building hedgehog houses, organizing pet food collections, and donating wildflower seeds. Furthermore, through Welwyn Hatfield's preferred volunteer partnership scheme, the RVC provides volunteering opportunities to local businesses, including tree-planting initiatives.

**3.2. Does your institution offer community-facing courses or events regarding planetary health?**

The **institution** offers community-facing courses or events at least once every year. (3 points)

The **institution** offers courses or events open to the community at least once per year, but they are not primarily created for a community audience. (2 points)

The **institution** has promoted community-facing courses or events, but was not involved in planning those courses or events. (1 point)

The **institution** has not offered such community-facing courses or events. (0 points)

**Score Assigned:**

**1**

**Score Explanation:**

The RVC promotes courses and events related to planetary health through the [Green Impact](#) initiative, which offers free training, online resources such as webinars, and regular competitions and events.

**3.3. Does your institution have regular coverage of issues related to planetary health and/or sustainable healthcare in university update communications?**

Yes, all students **regularly** receive communication updates dedicated to planetary health and/or sustainable healthcare. (2 points)

Yes, planetary health and/or sustainable healthcare topics are regularly included in communication updates to **some courses**. (1 point)

Students **do not** receive communications about planetary health or sustainable healthcare. (0 points)

**Score Assigned:**

**2**

**Score Explanation:**

The RVC provides monthly updates on environmental sustainability through the university's intranet, which is accessible to all members of the university. Additionally, students receive regular emails from the Environmental Sustainability Manager and the Students' Union Environmental Officer, keeping them informed about opportunities to get involved, relevant news, and updates on [Green Campus Revolution](#)'s current initiatives and events.

**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**



<b>skills in planetary health and sustainable healthcare remain up to date during their professional career?</b>	
Yes, the <b>institution</b> or <b>main affiliated hospital trust</b> offers multiple in-person or online courses relating to planetary health and/or sustainable healthcare for post-graduate providers, including at least one with a primary focus of planetary health. (2 points)	
Yes, the <b>institution</b> or <b>main affiliated hospital trust</b> offers one course relating to planetary health and/or sustainable healthcare for post-graduate provider. (1 point)	
There are <b>no</b> such accessible courses for post-graduate providers. (0 points)	
<b>Score Assigned:</b>	<b>0</b>
<b>Score Explanation:</b>  <p>The RVC does not currently offer any CPD (Continuing Professional Development) courses where the content is focused on planetary health/sustainable healthcare. This is for both Veterinary Surgeons and Veterinary Nurses.</p> <p>The RVC does offer postgraduate programmes (Wild Animal Health MSc, Wild Animal Biology MSc) that include teaching in some modules which explore themes of ecosystems and environments in a conservation context. RVC also offers a postgraduate programme One Health MSc which explores the interactions between humans, animals, and the environment from the perspective of disease control/prevention.</p>	

<b>3.5. Does your <u>institution</u> or its <u>affiliated teaching hospitals</u> have accessible educational materials for patients about environmental health exposures?</b>	
Yes, the <b>institution</b> or <b>all affiliated hospitals</b> have accessible educational materials for patients. (2 points)	
Some affiliated hospitals have accessible educational materials for patients. (1 point)	
No affiliated hospitals have accessible educational materials for patients. (0 points)	
<b>Score Assigned:</b>	<b>0</b>
<b>Score Explanation:</b>  <p>No individual hospital at the RVC (Beaumont Sainsbury Animal Hospital, Queen Mother Hospital for Animals or RVC Equine hospital) has information relating to environmental health exposures. However, the RVC website has information on research into <a href="#">heat related illnesses in dogs</a> which is easily accessible for the public. Resources are minimal regarding other examples of environmental health exposures.</p>	

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

Yes, the **institution** or **all affiliated hospitals** have accessible educational materials for patients. (2 points)

**Some** affiliated hospitals have accessible educational materials for patients. (1 point)

**No** affiliated hospitals have accessible educational materials for patients. (0 points)

**Score Assigned:**

**1**

**Score Explanation:**

The RVC's main website contains a section on research being conducted at the university which clients/owners can navigate to. Many of these projects explore the relationship between climate change (specifically global warming) and animal health such as "[Higher temperature extremes exacerbate negative disease effects in a social mammal](#)" and "[New research from the RVC suggests human heat-health alerts could help prevent heatstroke in dogs](#)".

VetCompass is an initiative set up by the RVC which aims to improve companion animal health by collecting patient data from small animal practices across the UK and making it available for researchers. Some of the projects linked from this page consider the impact of global temperature increase and heat-stroke in patients (see: [here](#) and [here](#) ). The RVC Equine hospital does not offer any resources.

**Section Total (7 out of 14)**

**50.00%**

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# Support for Student-Led Planetary Health Initiatives

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

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

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

The mandatory Final Year Research Project (RP), directed by Professor David Connolly, provides an opportunity for students to spend a minimum of 8 weeks (up to 14 weeks) researching a particular topic. There is the opportunity to pick a sustainability centred topic with David and Rachel Ward, RVC's Environmental Sustainability Manager, acting as potential supervisors. In 2024, there were 6 sustainability projects completed. However, there are no specific environmental research opportunities or courses for students to follow. This RP opportunity is only within BVM4/BVM5 and there is no sustainability focused research earlier on in the course.

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

The institution has a webpage with specific information related to planetary health or sustainable healthcare/vetcare that includes up-to-date information on relevant initiatives and contact information of potential mentors. (2 points)

There is an institution webpage that features some information on projects and mentors within planetary health and sustainable healthcare within the medical school, but it lacks key information. (1 point)

There is **no institution** specific webpage for locating planetary health and/or sustainable healthcare projects or mentors. (0 points)

**Score Assigned:**

**0**

**Score Explanation:**

On the RVC Intranet there is a page on Environmental Sustainability at the RVC. This contains information on what the RVC is currently doing to be more sustainable e.g. biodiversity plan, waste, energy etc. However, there is no webpage containing information on planetary health and/or sustainable healthcare projects or mentors. There is also no information on how to start projects or collaborate with ongoing research.

**4.4. Does your institution have registered student groups dedicated towards fostering a culture of planetary health engagement, scholarship, and advocacy on campus, supported by faculty advisors?**

Yes, there is a student organisation **with faculty support** at my institution dedicated to planetary health or sustainability in healthcare. (2 points)

Yes, there is a student organisation at my institution dedicated to planetary health or sustainability in healthcare but it **lacks faculty support**. (1 point)

No, there is **not** a student organisation at my institution dedicated to planetary health or sustainability in healthcare. (0 points)

<b>Score Assigned:</b>	<b>0</b>
<b>Score Explanation:</b>  <p>There is no dedicated student organisation for planetary health. There are current student groups for animal welfare and plant-based food who have a focus on sustainability, and previous groups for gardening and hedgehog protection, but these are no longer active as no students have taken ownership of these groups (<a href="https://www.rvcsu.org.uk/clubs-socs/find/">https://www.rvcsu.org.uk/clubs-socs/find/</a>). They are all linked to sustainability but are not dedicated to planetary health.</p> <p>There is room to create student-led groups under the guidance of faculty from the RVCSU, but they remain reliant on student engagement. Faculty at the RVC work closely with Students Organising for Sustainability (<a href="https://www.rvc.ac.uk/about/the-rvc/environmental-sustainability">https://www.rvc.ac.uk/about/the-rvc/environmental-sustainability</a>) and run initiatives for students, but this is not a student group either so will not contribute to this metric until there are RVC student leads for this.</p>	

<b>4.5. Is there a student liaison representing sustainability interests who serves on a <u>department or institutional</u> decision-making council to advocate for curriculum reform and/or sustainability best practices?</b>	
Yes, there is a student representative that serves on a department or institutional decision-making council/committee. (1 points)	
No, there is no such student representative. (0 points)	
<b>Score Assigned:</b>	<b>1</b>
<b>Score Explanation:</b>  <p>The RVCSU Environmental Officer sits on several councils run by the RVC including the Environmental Sustainability Committee and the Student Development Committee. This involves discussing both the curriculum and sustainability best practices at the RVC and advocating for greener choices throughout the institution.</p>	

<b>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)</b>	<b>Score</b>
A. 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
B. Panels, speaker series, or similar events related to planetary health that have students as an intended audience.	1

C. 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.	0
D. Cultural arts events, installations or performances related to planetary health that have students as an intended audience.	0
E. Local volunteer opportunities related to building community resilience to anthropogenic environmental impacts.	1
F. Wilderness or outdoors programs (e.g., that organise hiking, backpacking, kayaking, or other outings for students)	1
<b>Score Assigned</b>	<b>4</b>
<p><b>Score Explanation:</b></p> <p>A: There are several projects relating to sustainable farming and food production in RVC research projects such as ‘<i>Sustainable Beef &amp; Sheep Food Systems</i>’ and the ‘<i>Sustainable and Healthy Food Systems Programme</i>’ (<a href="https://www.rvc.ac.uk/research/projects">https://www.rvc.ac.uk/research/projects</a>) but it isn’t clear exactly how students can get involved. Students can contact a staff member to get involved with the Innovative Food Systems Teaching and Learning (<a href="#">IESTAL</a>). The BVM curriculum does include urban farm visits, and students are often involved with the RVC’s Boltons Park Farm who have some focus on sustainable food production.</p> <p>B: While the events run by the institution focus on CPD for graduated veterinary staff, there are events suitable for students, some of which are planetary health focused, for example, ‘<i>MSc Veterinary Epidemiology and Public Health</i>’ webinar Nov 2024.</p> <p>C: While several events have been run with sustainability charities such as ‘<i>Environmenstrual</i>’ workshops and Beekeeping classes, there have been no talks relating to sustainability in a healthcare profession.</p> <p>D: No cultural arts events or installations relevant to sustainability.</p> <p>E: Volunteer opportunities exist such as building hedgehog shelters, several litter picks, recycled clothing events to manage anthropogenic impacts throughout the year.</p> <p>F: There are several opportunities to get involved outdoors activities outside of the curriculum, for example Mountaineering Society trips across the UK, Sub-Aqua Society for water based outdoor activities, outdoor sporting activities like rugby, football, hockey, polo, etc. and <a href="#">RVCSU</a> activities like birdwatching and picnics for access friendly outdoors options.</p>	

<b>Section Total (6 out of 15)</b>	<b>40.00%</b>
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# Campus Sustainability

***Section Overview:*** This section evaluates the support and engagement in sustainability initiatives by the institution. The healthcare industry is a major contributor to greenhouse gas emissions as well as pollution that harms local, regional, and global ecosystems. While healthcare is, by nature, a resource-intensive endeavour, the healthcare sector is well poised to lead the world to a more sustainable future. This will involve scrutinising every aspect of how our systems operate, from where we source our energy, to how we build our infrastructure, to what companies we invest in. Our veterinary 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.

<b>5.1. Does your <u>institution</u> have an Office of Sustainability?</b>	
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 <b>at least one designated staff member</b> for sustainability at the hospital. (3 points)	
There is an Office of Sustainability with one or more full-time staff dedicated to campus sustainability, but <b>no specific staff member</b> in charge of hospital sustainability. (2 points)	
There are <b>no salaried sustainability staff</b> , but there is a sustainability task force or committee. (1 point)	
There are <b>no</b> staff members <b>or</b> task force responsible for overseeing campus sustainability. (0 points)	
<b>Score Assigned:</b>	<b>1</b>
<b>Score Explanation:</b>  The RVC has not yet established an official Office of Sustainability. However, the institution is supported by an Environmental Sustainability Manager based at the Hawkshead campus, along with an Environmental Sustainability Committee that meets quarterly. As of October 2024, a full-time assistant has been temporarily assisting the manager.	

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

<b>Score Assigned:</b>	<b>3</b>
<b>Score Explanation:</b>  The RVC is dedicated to achieving Net Zero by 2040, as outlined in the university's Environmental Sustainability Policy. The strategy, published in 2023, builds on efforts that have been underway prior to its release. The university provides a breakdown for a portion of the allocated funding to implement this initiative. The plan highlights seven key areas of focus, which are detailed <a href="#">here</a> .	

<b>5.3. Do buildings/infrastructure used by the institution for teaching (not including the hospital) utilize renewable energy?</b>	
Yes, institution buildings are <b>100%</b> powered by renewable energy. (3 points)	
Institution buildings source <b>&gt;80%</b> of energy needs from off-site and/or on-site renewable energy. (2 points)	
Institution buildings source <b>&gt;20%</b> of energy needs from off-site and/or on-site renewable energy. (1 point)	
Institution buildings source <b>&lt;20%</b> of energy needs from off-site and/or on-site renewable energy. (0 points)	
<b>Score Assigned:</b>	<b>3</b>
<b>Score Explanation:</b>  The RVC utilises 100% of its energy towards the institutional buildings from renewable energy sources. The institution's renewable energy is primarily sourced off-site and is certified through Renewable Energy Guarantees of Origin (REGO). On-site, air source heat pumps and solar thermal panels have been allocated to replace some of the gas use, while other resources are sourced off-site. Additionally, on both the Camden and Hawkshead campuses, there are ongoing improvements to infrastructure to further benefit this initiative.  The RVC has committed to be carbon net zero by 2040. It is a signatory of the <a href="#">United Nations Race to Zero</a> and is currently working on a strategy to set interim targets and to bring this target forward.	

<b>5.4. Are sustainable building practices utilised for new and old buildings on the <u>institution's</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?</b>	
Yes, sustainable building practices are utilised for new buildings on the institution's campus and the <b>majority</b> of old buildings <b>have been retrofitted</b> to be more sustainable. (3 points)	



Sustainable building practices are utilised for new buildings on the institution's campus, but most old buildings have <b>not been retrofitted</b> . (2 points)	
Sustainable building practices are <b>inadequately or incompletely</b> implemented for new buildings. (1 point)	
Sustainability is <b>not considered</b> in the construction of new buildings. (0 points)	
<b>Score Assigned:</b>	<b>3</b>
<b>Score Explanation:</b>  The RVC builds any new buildings to meet an Energy Rating Performance of D, which indicates average energy efficiency, and is developing its own sustainability assessment methodology for new buildings. The RVC uses a set of standard measures for implementation when retrofitting buildings including: <ul style="list-style-type: none"> <li>• Replace gas boilers with renewable energy as part of our decarbonisation plan</li> <li>• Improve thermal performance by upgrading insulation, windows etc</li> <li>• Replace equipment with energy efficient alternatives</li> <li>• Use FSC wood</li> <li>• Ensure products being purchased have recycled content and can be recycled at the end of their use. For example, carpets are made with 50% recycled content in a factory which has 100% renewable energy</li> </ul> All buildings with future use have plans to be retrofitted, and approximately 70% have been completely retrofitted.	

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

The RVC has two locations. The Camden location is in central London, where unsustainable forms of transportation are not generally used and students frequently walk, cycle, or take public transportation such as trains and buses. The Hawkshead location is in Hertfordshire, where most students can take public transport to a nearby station and then catch an RVC provided coach service to carpool to campus. Some students may drive.

Both campuses have biking infrastructure and offer electric vehicle charging. The RVC also offers several public transport discounts and season ticket loans for staff and students.

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

Yes, the institution has **both** compost **and** recycling programs accessible to students and faculty. (2 points)

The institution has **either** recycling **or** compost programs accessible to students and faculty, but not both. (1 point)

There is **no** compost or recycling program at the medical school. (0 points)

**Score Assigned:**

**1**

**Score Explanation:**

The RVC has waste bins located around campus for trash and recycling at the Camden campus, and bins for trash, recycling, and compost at the Hawkshead campus. These bins are placed in rooms and hallways throughout each campus and are accessible to students and faculty. The organic waste is taken to an anaerobic digestion plant to make energy and fertiliser, and there are plans to expand this program to the Camden campus. The recycling waste for both campuses is taken to [Bywaters Waste Management Centre](#) where it is segregated into waste types and recycled.

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

Yes, the institution has **adequate** sustainability requirements for food and beverages, including meat-free days or no red-meat, and **is engaged** in efforts to increase food and beverage sustainability. (3 points)

There are sustainability guidelines for food and beverages, but they are **insufficient or optional**. The institution **is engaged** in efforts to increase food and beverage sustainability. (2 points)

There are sustainability guidelines for food and beverages, but they are **insufficient or optional**. The institution is **not** engaged in efforts to increase food and beverage sustainability. (1 point)

There are <b>no</b> sustainability guidelines for food and beverages. (0 points)	
Score Assigned:	2
<b>Score Explanation:</b>  The RVC works with its caterer, <a href="#">Aramark</a> , to serve sustainable food on campus. This includes sourcing Marine Stewardship Council approved fish, Red Tractor certified meat, Red Lion eggs, and either Fairtrade or Rainforest Alliance certified coffee. They also support One Water by using bottles made from recycled plastic and donating 10p for each bottle sold. Additionally, oil is recycled into biodiesel and food waste is minimised and reused when possible. A vegan lunch option is also provided each day. Students and faculty pay a discounted price for lunch when they eat in, using reusable plates and cutlery instead of single use. These sustainability initiatives serve as guidelines, directing the school towards more sustainable alternatives, but are not mandatory.	

<b>5.8. Does the <u>institution</u> apply sustainability criteria when making decisions about supply procurement?</b>	
Yes, the institution has <b>adequate</b> sustainability requirements for supply procurement <b>and</b> is <b>engaged</b> in efforts to increase sustainability of procurement. (3 points)	
There are sustainability guidelines for supply procurement, but they are <b>insufficient or optional</b> . The institution is <b>engaged</b> in efforts to increase sustainability of procurement. (2 points)	
There are sustainability guidelines for supply procurement, but they are <b>insufficient or optional</b> . The institution is <b>not engaged</b> in efforts to increase sustainability of procurement. (1 point)	
There are <b>no</b> sustainability guidelines for supply procurement. (0 points)	
Score Assigned:	2
<b>Score Explanation:</b>  The RVC's <a href="#">Annual Report and Financial Statements 23-24</a> states that “Sustainable procurement is strongly encouraged at the Royal Veterinary College. Potential suppliers are required to contribute to RVC’s sustainability and reduce adverse environmental impacts. Suppliers are also required to address modern slavery requirements. Appropriate response to these demands is highly encouraged, but not mandatory.”	

<b>5.9. Are there sustainability requirements or guidelines for events hosted at the institution?</b>	
Every event hosted at the institution <b>must</b> abide by sustainability criteria. (2 points)	

The institution <b>strongly recommends or incentivizes</b> sustainability measures, but they are <b>not required</b> . (1 point)	
There are <b>no</b> sustainability guidelines for institution events. (0 points)	
Score Assigned:	0
<b>Score Explanation:</b>  There are currently no sustainability guidelines or requirements for hosting events at the RVC. However, a guide for the use of “freebies” at events is being developed. This aims to ensure that all items given away are useful or from a sustainable source.	

<b>5.10. Does your <u>institution</u> have programs and initiatives to assist with making lab spaces more environmentally sustainable?</b>	
Yes, the institution has <b>programs</b> and <b>initiatives</b> to assist with making lab spaces more environmentally sustainable. (2 points)	
There are <b>guidelines</b> on how to make lab spaces more environmentally sustainable, but not programs or initiatives. (1 point)	
There are <b>no</b> efforts at the institution to make lab spaces more sustainable. (0 points)	
Score Assigned:	2
<b>Score Explanation:</b>  The RVC uses <a href="#">LEAF</a> (Laboratory Efficiency Assessment Framework) and has developed a sustainable labs toolkit as part of its Green Impact programme. The RVC has also signed the <a href="#">Wellcome Trust Concordat</a> , which aims to ensure that research is carried out in a more environmentally responsible and sustainable way; one area highlighted in the Concordat is the importance of sustainable infrastructure, including that of laboratories.	

<b>5.11. Does your <u>institution's</u> endowment portfolio investments include fossil-fuel companies?</b>	
The institution is <b>entirely divested</b> from fossil fuels <b>and</b> has made a <b>commitment to reinvest divested funds</b> into renewable energy companies or renewable energy campus initiatives. (4 points)	
The institution is <b>entirely divested</b> from fossil fuels. (3 points)	
The institution has <b>partially divested</b> from fossil fuel companies <b>or</b> has made a <b>commitment to fully divest</b> , but <b>currently</b> still has fossil fuel investments. (2 points)	

The institution has <b>not divested</b> from fossil-fuel companies, but faculty and/or students are <b>conducting organised advocacy</b> for divestment. (1 point)	
Yes, the institution has investments with fossil-fuel companies and there have been <b>no efforts</b> to change that. (0 points)	
Score Assigned:	4
<p><b>Score Explanation:</b></p> <p>The RVC's <a href="#">Environmental Sustainability Strategy (2022-2024)</a> emphasises the importance of managing its investment portfolio with environmental impact in mind. It also highlights the need to explore opportunities for impact-driven investments, particularly in renewable energy initiatives.</p> <p>In January 2024, the RVC transitioned its investment management to Sarasin, a firm known for its long-term, thematic investment approach with climate change at the core of its policies. As a result, the RVC's investment portfolio currently has no exposure to integrated oil and gas companies.</p> <p>Key documents, including Sarasin's Net Zero Action Plan and Stewardship Report, are available on their <a href="#">website</a>.</p>	

Section Total (23 out of 32)	71.88%
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# Grading

## Section Overview

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

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

*\*Within each grade bracket, a score in the top 5% (\_5 to \_9%), receives a “+”, and a score in the bottom 5% (\_0- \_4%) receives a “--”. For example, a percentage score of 78% would be a B+.*

## Planetary Health Grades for the Royal Veterinary College

The following table presents the individual section grades and overall institutional grade for the Royal Veterinary College on this Veterinary medicine-school-specific Planetary Health Report Card.

Section	Raw Score %	Letter Grade
Planetary Health Curriculum (30%)	44.19%	C-
Interdisciplinary Research (17.5%)	47.06%	C
Community Outreach and Advocacy (17.5%)	50.00%	C
Support for Student-led Planetary Health Initiatives (17.5%)	40.00%	C-
Campus Sustainability (17.5%)	71.88%	B
Institutional Grade	49.82%	C