

2022-2027 CCIMATE ACTION PLAN

Acknowledgment of Traditional Lands

We are grateful to the Xwsepsum (Esquimalt) and Lekwungen (Songhees) families and ancestors, on whose lands we work, live, play, and learn.

The history of the Royal Roads lands begins with stories from the Xwsepsum (Esquimalt) and Lekwungen (Songhees) families. Traditionally, and today, guests are treated with respect, kindness, and generosity, knowing they will not take more than they need. The region offers abundant wildlife, fertile land, and a sheltered lagoon that protects and provides sustenance.

Protecting this campus' ecological and historical integrity and contributing to the health and well-being of all lands and peoples is essential to the university's stewardship responsibilities today and for future generations. It allows us to recognize and honour our interconnected relationships and respect the different ways of knowing, being and doing—with the land, water and each other. It is part of the Indigenous engagement work to build a strong relationship between the local First Nations and Royal Roads University with trust, humility, kindness and respect.

We acknowledge and recognize the rich history of these lands and waterways. More importantly, we recognize that we live, work, and learn where the past, present, and future of Indigenous and non-Indigenous people will come together and walk the Xwsepsum (Esquimalt) and Lekwungen (Songhees) families and ancestral lands and waterways respectfully.







This present moment that lives on to become long ago.

- Gary Snyder, This Present Moment

This present moment used to be the unimaginable future.

- Stewart Brand (in response), The Clock of the Long Now



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Executive Summary

Climate leadership: Solving for change

There is no more sand in the hourglass. The time has come to confront the devastating risks and impacts of climate change the biggest social, environmental, health and economic threat in human history. Bold action is not only an urgent necessity, but a moral imperative. Society can no longer look away from the global suffering and great loss caused by rising tides and temperatures.

Extraordinary times demand transformational leaders—creative, collaborative and critical thinkers who do not retreat from complex challenges. At Royal Roads University, we aspire to shape such leaders—people with the courage to transform the world. That vision is central to the university's new Climate Action Plan (CAP) and has guided its priorities and goals.

This ambitious five-year plan positions RRU as a leader in addressing the climate emergency, amplifying the university's influence and impact to ignite a groundswell of climate actions on our campus and in communities across the province and around the world. The CAP frames a way forward that is grounded in the principles of social justice, and delivers strategies for increasing the resilience of our extended community, along with the natural and built systems for which we are responsible. The plan also aligns with RRU's commitment to integrate sustainability across academic programs and operations, with a focus on the United Nations Sustainable Development Goals (UN SDGs).

Collaboration and cooperation: A community-networked action plan

Higher education can lead by example to shift mindsets and influence decision-making that accelerates climate action across all sectors and helps build a climate-ready society. With courage, creativity and caring at its core, along with deep community connections, RRU is uniquely positioned to lead and catalyze climate action alongside necessary social change. In every program, at every level, our students are empowered to develop the collaborative skills, deep knowledge and leadership competencies that can help drive transformative climate action and achieve a more equitable, sustainable and just future.

Given the disproportionate impact of climate change on marginalized communities, and in keeping with RRU's commitment to reconciliation, the CAP recognizes that our relationship with the planet — and its people—must change. In particular, we must continue to learn from Indigenous ways of knowing, being and doing, and to that end, the CAP embeds consultation, co-creation and reciprocal knowledge sharing with Indigenous rights holders in processes and plans.

This is a **moment of truth** for people and planet alike.

- António Guterres, UN Secretary-General (2020)

Five priorities, three goals – and all hands

Just as the climate emergency is a whole-of-society concern, it is likewise a whole-of-university priority. The CAP offers a role for every member of the extended RRU community to participate in climate action. The plan is organized around five priority areas with associated outcomes and actions that are described in detail within:

- → Leadership and governance
- \rightarrow Administration
- → Operations
- → Education, knowledge and research
- → Collaboration, engagement and outreach

In addition, the overall plan is guided by three strategic goals:

- Lead and enable: Make urgent climate action core to the university's purpose and business by establishing climatedriven governance, policies and competencies. Be a leading example of mitigation and resilience.
- 2. **Build knowledge and capacity:** Increase climate change awareness and action through education, research and engagement. Advance learning that is responsive to place, people and nature.
- 3. **Collaborate for solutions:** Co-create climate action solutions, leverage resources and amplify positive impact through relationships, partnerships and dialogue.

From ideas to impact: Resources required

The following pages—the year-long work of a committed RRU cross-disciplinary task force—detail the significant commitment that will be required to make the systemic changes necessary for a climate-prepared future.

This plan sets out bold actions and targets to address the climate emergency and strengthen the abilities of our students, faculty, staff and extended community to be the changemakers that the world so urgently needs. It brims with passion and hope. But make no mistake: its promise will not be achieved by accident. It will take immediate and ongoing resourcing and investments to activate and sustain this plan. The longer we wait though, the costlier the solution.

Across the planet, we are facing what the Intergovernmental Panel on Climate Change (IPCC) calls a "code red for humanity." Now is the time to embrace RRU's admirable values with confidence and courage. A better future is possible, and the hourglass is empty.

Message from Leadership

Extraordinary times call for transformational leaders who can step up and tackle significant challenges. Royal Roads University inspires leaders who shape the future, and who can take on the world's toughest problems. Our responsibility as a post-secondary institution is to prepare citizens for the future.

We are at a time in our history where inaction will lead to catastrophic damage. A failure to act will ripple out through our local community, and through every organization and community that our students connect to.

This five-year Climate Action Plan builds on Royal Roads University's strengths as a changemaking university and sets the tone and direction for the next 25 years. This path forward integrates principles and practices of Indigenization, equity, diversity, inclusion, sustainability and innovation. The plan sets out bold actions and targets to address the climate emergency and amplify the abilities of our students, faculty, and staff to be the changemakers and climate action leaders that the world needs.

The Climate Action Plan builds on RRU's six critical commitments:

- → Build on our strengths in applied and professional programming, inter- and trans-disciplinarity and innovative delivery.
- → Grow our innovative and entrepreneurial culture, and respond quickly to changes in the workplace and society.
- → Enhance the inclusion and engagement of people of diverse backgrounds and ideas in all aspects of university life.
- → Implement the recommendations of the Truth and Reconciliation Commission (TRC) and honour the spirit of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP).
- → Advance sustainability in all our academic programs and operations, with a focus on the UN Sustainable Development Goals.
- → Promote research and education to tackle the climate emergency, rapid advances in technology, and interconnected social, economic and political challenges.

By acting now through this five-year plan, we lay out our ambitions for the future—for what and who Royal Roads is over the next 25 years. We help to shape the world and take a definitive stand for what is right and just. Climate leadership moves us toward addressing other critical and connected issues of our time. We will contribute to creating a healthy world where living beings thrive and co-exist, where diversity is celebrated and sought, where we all understand and protect the importance and value of the natural world of which we are a part.



Climate change presents the single biggest threat

to sustainable development everywhere and its widespread, unprecedented impacts disproportionately burden the poorest and most vulnerable. **Urgent action to halt** climate change and deal with its impacts is integral to successfully achieving all Sustainable Development Goals (SDGs).

- United Nations Framework Convention on Climate Change, (Action on Climate and SDGs, 2021)

Confronting Climate Change with Courage and Action

Climate change is the biggest social, environmental, health and economic threat in human history and the window of opportunity for taking action to reduce impacts is rapidly closing (IPCC, 2021; Intergovernmental Science-Policy Platform, 2019; Tong et al, 2019; Warren & Lemmen, 2014). As the key global challenge for the 21st century (United Nations, 2020), climate change is impacting all areas and spheres of life, from the micro to macro. Climate change will continue to create increasingly severe and cascading disruptions on human and natural systems, impacting human development, security, economic systems, biodiversity, and planetary and regional ecosystems.

We are "at a moment of truth for people and planet alike" as UN Secretary-General António Guterres stated this past December (UN, 2020). Our inability to substantially curtail emissions has put us on a path to major crisis. Given our current trajectory' and the feedback loops² caused by the effects of climate change, it is critical that every government, every institution, and every citizen takes bold climate action now. This includes not only a reduction of greenhouse gas (GHG) emissions, but also adaptation actions to reduce the risks, impacts and suffering, and adapt to those impacts we can no longer avoid. Urgent action, supported by collaboration and strong investments, will increase the resilience of countries, communities, ecosystems and humans. Decisions taken today will determine the degree of future changes and our resilience to climate risks (Warren & Lulham, 2021). Climate risks continue to escalate and are projected to have devastating consequences for human, built and natural systems (BC Government, 2020). Climate risks such as sea-level rise, severe flooding, coastal storm surges, increased and more extreme wildfire activity, water shortages and heat waves all have human costs, as well as social, economic and political costs. To effectively address these risks and reduce suffering and losses requires that all sectors—private and public—understand the risks, work to reduce vulnerabilities, and prepare and adapt to the changes that can no longer be avoided. Governments, communities and businesses are only now starting to understand the extent of the threats and beginning to identify the necessary steps to address these threats and build a climate-prepared, and climate just and resilient future. Taking bold climate action is not only an urgent necessity, but also a moral imperative.

We do not have time for each community, organization or government to start from scratch in developing solutions that will protect people, property and ecosystems from climate change impacts. A patchwork of small-scale actions is insufficient and inefficient. As Lara Hansen, chief scientist and executive director at EcoAdapt aptly states, "[w]e need bold and powerful approaches, undertaken by people working together to advance climate adaptation action, whether they are policy-makers, engineers, business leaders, software developers, school teachers, farmers, or artists, creating and accessing data, tools, case studies, and stories that connect people, accelerate impact, and foster innovation" (Personal communication, March 23, 2021).

¹ The UN Emissions Gap Report 2019 describes how we need to bring down emissions drastically within the next few years to keep global temperature rise within a 1.5-2 °C of pre-industrial temperatures. ² According to the NASA Global Climate Change website, sudden climate change will occur once Earth's ice sheets begin to melt, as methane is released from the Arctic's permafrost and as ocean circulation patterns drastically change from the melting ice sheets.

Higher education has a pivotal role to accelerate and amplify climate action across all sectors and to help build a climateready society. As a nimble and innovative university, with courage, creativity and caring at its core, Royal Roads is uniquely positioned to empower transformative actions and innovations for <u>climate mitigation</u> and <u>adaptation</u>. Through learning, teaching, research and partnerships, Royal Roads can help foster the necessary skills, <u>climate competencies</u> and collaboration. By way of this work we can unleash the power of collective reimagining and restructuring of systems to achieve a resilient, equitable, sustainable and just future.

If appropriately resourced, and implemented, the Climate Action Plan positions the university to address the climate emergency through a variety of channels. Actions at the individual, community and organizational level include a range of opportunities for reducing GHGs, anticipating and preparing for the impacts of climate change, and contributing to the resilience and wellbeing of the local, national and global communities that Royal Roads is connected to.

Justice and equity at the core

While climate change will impact everyone, the impacts of climate change are profoundly unequal. "Systemically marginalized communities have typically contributed the least to climate change but are disproportionately negatively impacted by climate-related events, such as wildfires, extreme heat, flooding and extreme weather" (Hoogeveen et al., 2021). At the heart of climate solutions work, we need to make space for the wisdom, experience and leadership of people and communities who have contributed the least to climate change yet experience the greatest adverse impacts. These voices are often systemically marginalized from dominant positions of power, and we need to make space so they can be heard. Movements for climate justice will only be successful through meaningful relationships, coalitions, and cross-sector alignment with other social movements, including those led by Indigenous peoples, people of colour, and youth. In addition, climate change solutions need to address compounding forms of discrimination such as racism, gender and poverty. A diversity of different backgrounds and experiences is critical in forging our path towards a more equitable and safe future for all of us.

Climate action integrated with other priorities

At Royal Roads, we inspire leaders who shape the future and who can solve the world's toughest problems. It's central to our mandate and purpose as a university. Rather than a standalone initiative, climate action is woven through the university's strategic priorities—be it the UN Sustainable Development Goals; equity, diversity and inclusion; reconciliation and commitments to Indigenous rights; changemaking and innovative learning. Our programs respond to the critical issues of our time, offering research-informed curriculum taught by experts in climate change, sustainability, and social change. With courage, creativity and caring at its core, along with deep community connections, RRU is uniquely positioned to lead and catalyze climate action alongside necessary social change. In every program at every level, our students are empowered to develop the collaborative skills, deep knowledge and leadership competencies that can help drive transformative climate action and achieve a more equitable, sustainable and just future.

Climate action in a time of pandemic recovery

The COVID-19 pandemic — its origin, impacts, and anticipated recovery — are intertwined with climate change and action. During the initial lockdown periods worldwide, we saw many positive albeit time-limited effects from reduced human-caused emissions (Arora et al, 2020; Bar, 2021). However, like the climate emergency, COVID-19 also exposed the disproportionate burden of impacts that those who are most vulnerable and marginalized face. As we adjust and adapt to these intersecting and compounding crises, there is a significant opportunity to align our responses in a way that improves human and planetary health, and our collective economic futures. We have a chance to shape the COVID-19 recovery in ways that attend simultaneously to the systemic issues underlying climate change, biodiversity health. Woven throughout this plan is a belief that we cannot fix the climate emergency and related social and environmental problems with the same tools, mindsets and behaviours that created these issues.

Climate Risks and Impacts

Across the world, climate change is creating a "code red for humanity" and the planet (IPCC, 2021). Unlivable heat waves, drought leading to failed crops and declarations of states of agricultural emergency, unprecedented floods and wildfires are affecting people and livelihoods across the globe. According to the IPCC (2021) and the recently released update to the National Adaptation Strategy (Government of Canada, 2021), Canada is on the front line of climate change with our climate warming twice as fast as the global average.

As identified by the BC <u>Preliminary Strategic Climate Risk Assessment</u>, the greatest climate risks to the province are severe wildfire, seasonal water shortage, heat wave, ocean acidification, glacier mass loss and long-term water shortage events. Other risks with significant consequences include severe river flooding and severe coastal storm surge. Each of these risks would result in significant and costly financial, human, environmental, and cultural impacts (Ministry of Environment and Climate Change, 2019). At a local level, climate models project an average annual warming of about 3°C in the Capital Regional District by the 2050s (CRD, 2017). See the map on the facing page for an illustration of climate projections and impacts in the province, although we are experiencing many of these changes already.

Climate changes are already being felt in dramatic ways, with scientists concerned that tipping points are being reached with irreversible consequences (IPCC, 2021). There are substantial changes on the horizon, resulting in different lived experiences and climate realities than we are used to. Finding adaptation solutions that are just and equitable can contribute to other societal goals including poverty reduction and sustainable development.

We will not go back to normal. **Normal never was.**

Our pre-corona existence was not normal other than we normalized greed, inequity, exhaustion, depletion, extraction... **We should not long to return**,

my friends. We are being given the opportunity to stitch a new garment. One that fits all of humanity and nature.

- Sonya Renee Taylor (March 2020)

Climate Projections and Impacts in B.C.

(Source: BC Ministry of Environment and Climate Change Strategy, Climate Preparedness and Adaptation Strategy, 2021)



Climate changes will not always happen consistently over regions or over time. Seasonal and yearly variations and extreme heat and weather events will become more common, making it increasingly difficult to predict the future. Data about past and historical climate is no longer a good guide for planning on its own. Using regional and local climate projections to inform our adaptation strategies is critical to ensure we are prepared for the risks ahead. Moreover, the risks and impacts of climate change are layered together and compound one another, making robust planning and preparation even more critical (Mahul, 2021; Phillips et al., 2021). In BC, we have already seen examples of this complexity as the intersecting risks and impacts of climate change (e.g., 2021 heat dome, wildfires, and floods), the opioid crises, and the COVID-19 pandemic take their toll on households, communities, health care systems and workers.

Preparing and Adapting to a Changing Climate

Confronting climate change is about "avoiding the unmanageable and managing the unavoidable" (Scientific Expert Group on Climate Change, 2007) — simultaneous and equally urgent tasks focused on both mitigation and adaptation. *Avoiding the unmanageable* means that we need to ramp up mitigation efforts quickly so that global warming does not exceed 1.5°C to avoid the catastrophic impacts of climate change. However, even with these mitigation efforts, the magnitude of local, regional and global changes in the 21st century will be substantial. *Managing the unavoidable* is about promoting adaptation to intensifying climate change and building capacity for recovery and resilience from extreme events and ongoing impacts.

BC's draft Climate Preparedness and Adaptation Strategy builds on the Provincial Climate Risk Assessment by examining the actions needed to prepare for these risks. More than ever, there is a recognition of the urgent need for climate adaptation. Royal Roads is committed to being a proactive partner in this important work and aligning this Climate Action Plan and subsequent adaptation work with regional, provincial and national efforts.

There is a great cost to inaction: every day that we delay meaningful action increases our institutional, individual and collective risks. Delay also increases future costs, in financial terms and in lives. Every organization, government and individual has a responsibility to demonstrate leadership in the face of the climate emergency. Royal Roads' responsibility lies not only in preparing our own organization and community for the risks that are to come, but as importantly, to make a significant contribution to the efforts to reduce global warming and build a just and climate resilient future for all.

The table below identifies the four key pathways of action in the provincial <u>*Climate Preparedness and Adaptation Strategy*</u>, alongside complementary Royal Roads University Climate Action Plan goals and initiatives identified further in this plan.

	BC Climate Preparedness and Adaptation Strategy pathway of action	Royal Roads University Climate Action Plan Initiative
1	Strengthen foundations for success: data, monitoring, education and partnerships	Goal 2: Build Knowledge and Capacity Increase climate change awareness and action through education, research and engagement. Advance learning that is responsive to place, people and nature.
2	Enhance community climate resilience	Goal 3: Collaborate Co-create climate action solutions, leverage resources and amplify positive impact through relationships, partnerships and dialogue.
3	Foster resilient species and ecosystems	 Goal 1: Lead and Enable Make urgent climate action core to the university's purpose and business by establishing climate-driven governance, policies and competencies. Be a leading example of mitigation and resilience. Goal 2: Build Knowledge and Capacity Increase climate change awareness and action through education, research and engagement. Advance learning that is responsive to place, people and nature.
4	Advance a climate ready economy and infrastructure	Goal 1, 2 and 3 Includes actions such as climate risk assessment and resilience- building on campus, developing and integrating adaptation learning competencies and knowledge into curriculum and courses, and developing to partnerships to support and strengthen climate resilient communities.

The Royal Roads Context and Background

Sustainability has been a core value of Royal Roads since its inception. The 2020 launch of a new strategic vision for Royal Roads, Learning for Life, orients the university toward a renewed focus on playing a larger role in addressing global challenges by creating leaders who change the world. This vision looks forward 25 years, with goals and actions that provide a focus on research and education to tackle the climate crisis; interconnected social, economic and political challenges; and integrating sustainability in all our academic programs and operations, with a focus on the UN Sustainable Development Goals (UN SDGs).

With this vision, Royal Roads has an opportunity and a responsibility to lead in ways that demonstrate the power of education to create a culture shift toward a more equitable, sustainable, safer and healthier world. **In a purpose-driven way, and with the urgency that climate emergency demands, we must amplify the university's influence and impact through research, education and training in order to engage, empower and activate a groundswell of climate actions in communities and regions, nationally and globally.** A deliberate and unified response is needed to position Royal Roads University as a climate action leader.

This work builds on the solid foundation of accomplishments resulting from the university's Sustainability Plan 2015-2020. Over the last five years, this plan guided initiatives in ten target areas focused on reducing the university's climate impact and environmental footprint, together with engagement, curriculum, research and partnerships. Campus operational GHG emissions reductions (43% from 2007 levels) were a key achievement of the plan. In 2005, Royal Roads achieved a Silver under the STARS rating program of AASHE³, becoming the first university in Canada to do so. In 2014, this Silver star was turned to Gold, based on improvements in operations.

A significant number of academic and research initiatives have similarly been initiated including:

- → The creation and launch of the Master of Arts and Graduate Diploma in Climate Action Leadership.
- → A growing suite of climate change courses and programming in the School of Environment and Sustainability, such as the Graduate Certificate in Science and Policy of Climate Change.
- → The ResilienceByDesign (RbD) Research Innovation Lab's Adaptation Learning Network (ALN) and the climate adaptation competency framework, and professional and continuing studies programming it has designed and implemented.
- → The launch of the Cascade Institute.
- → Canada Research Chair positions including Reimagining Capitalism, Advancing the UN Sustainable Development Goals, Biodiversity, Climate and Sustainability.
- → The Ashoka U Changemaker Campus designation.
- → An extensive number of research projects and a range of ad hoc sustainability and climate change related programming within other schools.

³ The Sustainability Tracking, Assessment & Rating System™ (STARS) is a transparent, self-reporting framework for colleges and universities to measure their sustainability performance. STARS is a program of the Association of Advancement for Sustainability in Higher Education (AASHE).

Sneq'wa e'lun. The IPCC projects 0.6 to 1.1 metres of global sea-level rise by 2100 (or about 15 millimetres per year) if GHG emissions remain at high rates (IPCC, 2019).

Climate Action Task Force and Plan Development Process

At the close of the university's Sustainability Plan 2015-2020, the climate action planning process was initiated to set a clear direction for the university to address the climate emergency. In 2019, Dr. Robin Cox and the ResilienceByDesign (RbD) Research Innovation Lab partnered with President Philip Steenkamp to host a Campus Conversation on Climate Action at Royal Roads. The campus-wide discussion garnered participation from over 250 members of the Royal Roads community and elicited a broad range of climate-related suggestions. After the event, the RbD Lab brought together interested faculty and staff to continue the dialogue and create a draft climate action proposal that resulted in the establishment of the Climate Action Task Force in Fall 2020.

In response to the draft climate action proposal, President Steenkamp recruited members for the Climate Action Task Force and asked Dr. Cox, professor in the School of Humanitarian Studies, and Maria Bremner, manager of Resilience, to co-lead the work. The mandate of the task force was to develop a bold and strategic climate action plan for the university addressing both academic and operational concerns. The task force launched a multi-phased planning process in fall 2020. The process included the Task Force Leadership Team (consisting of staff, faculty, associate faculty, students and the Office of Indigenous Engagement), two advisory councils (Faculty and Staff; Students), and the university's executive (see Appendix B for the task force structure and members). Direct meetings with senior managers and stakeholders, a Campus Conversation (Feb 2021), a universitywide survey (sent to more than 4,300 people), and input from the President's Steering Committee on Equity, Diversity and Inclusion provided engagement and consultation.

Throughout this work, the task force strove to identify the opportunities, challenges and priorities for the institution in response to the local, regional, national and global contexts for strategic climate action. The process was also shaped by future-and systems-thinking to explore adaptation and innovation strategies for navigating the ongoing and unpredictable changes and uncertainty that characterize the world at this unprecedented time.

Throughout the process, the task force was conscious of the need to align the emerging climate action plan with other university initiatives and priorities (e.g., Indigenous-led stewardship; Equity Diversity and Inclusion). The resultant plan put forward by the Climate Action Task Force includes actions that stem from three goals into critical pathways of work that include the engagement and involvement of all units across the university.

Assumptions

The Climate Action Task Force identified the following assumptions to creating a shared understanding in the strategic development and priority setting of the plan. These are:

Urgent action in the face of existential threat. We have less than 10 years to implement the policy and system changes to limit climate catastrophe. Rapid, scalable actions are needed that span from dramatic emissions reductions to building adaptive capacity.

Building resilience and adaptive capacity is critical. Even if we succeed in reducing global emissions, the effects of climate change are already being experienced, with associated risks and impacts projected to intensify over the coming decades. Despite Intergovernmental Panel on Climate Change warnings that global warming must not exceed 1.5°C to avoid catastrophic impacts, climate change is likely to exceed these levels. It will create compounding and synergistic disruptions on society, the economy, ecosystems and human communities.

Climate change action is about social justice and creating a more inclusive and equitable world. Those benefiting the most from existing systems (economic, political, social) bear a greater responsibility for creating climate change; by contrast, vulnerable, marginalized and under-served people and communities have contributed the least to climate change yet experience the greatest adverse impacts. Climate change will further increase these impacts and will magnify existing injustices and inequities. Climate plans and actions must, therefore, safeguard the rights of the most vulnerable, and ensure fair, equitable and intersectional approaches to addressing climate change and its impacts.

The climate emergency is a whole-of-university priority. This mirrors the whole-of-societal effort and approach that is needed to address the climate emergency. Climate action priorities will be integrated across all areas of the university.

Biodiversity and ecosystem health are inextricably linked to climate change and there are significant co-benefits of addressing these interrelated issues together. Climate change and biodiversity loss compound each other; neither can be resolved unless both are tackled together.

Higher education has a critical role and a moral responsibility to contribute resources and expertise to climate change challenges. We need to prepare and empower society and our students in all disciplines and programs for the challenges we face now and in the future. Education, research, and partnerships are critical levers to accomplishing this.

We can lead by example. At a time when critical tipping points are being reached, we can inspire others through our actions. Not only can we model innovation and action by shifting how we operate and function, we can also inspire transformational change with our leading-edge educational programs and critical research, and by convening, collaborating and partnership-building for climate solutions.

Climate change demands systems change. The climate emergency is a product of Western, colonial, and capitalist systems, values and ideologies. Our response to this crisis needs to build in Indigenous worldviews, creativity, adaptation, innovation, empathy and compassion.





ABOUT THE CLIMATE ACINATE ACTION DLAN

The plan is designed as a living document, outlining local to global actions in an iterative way that is adaptive to the rapidly changing eco-socio-political landscapes of our world. Indicators and targets will be refined as baselines are established and kept ambitious and responsive to new or cascading developments.

Collaborative, Integrated and Adaptive

This plan provides a roadmap for the university to engage, empower, and activate transformative change and leadership for climate action. It sets the stage for initiatives that mobilize climate actions at the local and regional levels while helping neighbouring and other communities learn to prepare for, adapt to, and be resilient in the face of climate change impacts. The university's institutional leadership is an enabling and inspiring driver of this work—by nature, we are a purpose-driven university. Royal Roads' greatest potential for impactful climate action lies in our ability to foster local and global changemaking through knowledge generation and collaboration, by imagining and implementing integrated solutions, and by being prepared to iterate, pivot and adapt to ongoing changes and impacts.

Knowledge Generation and Collaboration.

One of the most significant ways that we can make positive impacts is by working together to create a new shared future. Individual actions, while important, are insufficient to address the scale and urgency of the climate emergency which, by its nature, calls on human society to work cooperatively and collaboratively in ways we never have before. The Climate Action Plan changes the context in which Royal Roads addresses key priorities by taking university-wide deliberate, urgent, and reflexive action on climate change. By leveraging our Learning, Teaching, and Research Model⁴ (LTRM), we can affect change, inspire hope, and empower action through education, research, and skill building.

As well, RRU is ideally positioned to foster much-needed collaboration - whether by harnessing our human and intellectual "capital" to address complex problems; convening, facilitating, and providing space for dialogue; working with partners to design and test new technologies and methodologies; or co-creating capacity, we are poised to contribute significantly to solutions.

Integrated.

Climate action is inseparable from reconciliation, equity, diversity, inclusion, and climate justice. At the centre of our intentions, actions, and ways of being, we must continually work together to change inequitable systems that cause harm to people and the planet. Royal Roads has committed to integrating the UN SDGs throughout our academic programming and operations including a universal call to action to end poverty, protect the planet and ensure peace and prosperity for all people. This commitment to advancing and achieving the UN SDGs is intrinsically linked with RRU's role as a changemaking university and a climate action leader. The goals outlined in this plan reflect and integrate with the UN SDG goals. Some particularly strong connections are SDG 13 (Climate Action), SDG 4 (Quality Education), SDG 10 (Reduced Inequality) and SDG 11 (Sustainable Cities and Communities). As a university-wide commitment, responsibility for implementing the Climate Action Plan will be distributed across the university for a holistic, unified approach to address the complexity and magnitude of the challenge at hand.

Adaptive.

The world continues to change at a pace and scale that demands that we stay adaptive. Emerging climate impacts and risks will require a plan and actions that are themselves adaptable. Converging economic, political, and health issues are exacerbated by a planet facing an ecological collapse. Indeed, we are only beginning to see the extended effects of the COVID-19 pandemic on the local and global scales.

With great humility, we acknowledge that we don't have all the answers—not even a fraction of them. We need to stay open and responsive to new information, relationships, risks, knowledge systems, and technologies.

*The RRU Learning. Teaching and Research Model expands on how, what and why we learn, teach and research. It is based on the shared core values of the university and sets the foundation for our work as being applied, authentic, caring, community-based and transformational.

Guiding Values and Principles

Climate action at Royal Roads University will be guided by the principles and values outlined below. In keeping with our institutional values, actions will require that we are caring, creative and courageous.

CARING A diverse and supportive community for all life.

- → The world is interconnected. Understanding these connections, it is our ethical obligation to live with respect, understanding and reciprocity in relationships with all life.
- → The ongoing process of reconciliation will shape the direction and the work we do together.
- → A just and equitable approach must be front and centre.

CREATIVE

Innovation in all we do; we continually seek new and better ways to do things.

- → We cannot use the same ways of thinking that created the crisis that we are in.
- → The climate emergency requires a whole-of-society approach that embraces multiple ways of knowing, being, and doing and a creative orientation. New approaches are needed across all sectors at the macro level, within and across communities, perspectives, behaviours and cultures.
- → Taking a systems approach, decisions or actions consider the relationships and interdependencies of climate change and other urgent issues such as biodiversity loss, pollution, habitat destruction, food insecurity, mass migration, livelihood and economic insecurity, political instability and conflict, to name a few.
- → Creative solutions are designed to be scalable (scale up to laws and policies, scale out to benefit greater numbers through dissemination and replication, and to scale deep, transforming culture, hearts and minds) (Riddell and Moore, 2015).

COURAGEOUS

Bold in our actions; we meet challenges and take thoughtful risks.

- → The climate emergency demands urgent action and transformative leadership.
 We must pull on the most impactful levers possible and lead by example.
- → We will be adaptive to generate and respond to new knowledge and understanding, be resilient by staying open to taking informed risks; by being able to examine our own feelings, beliefs reactions and motives that influence what we do and think; and by seeking out opportunities to act.

Plan Structure and Overview

The Climate Action Plan was developed through an outcomes-based planning process that looked ahead five, 10 and 30 years to consider how our actions contribute to the kind of world we want to live in. The guiding values and principles provide a foundation and are infused throughout the work, informing both the vision and the intention and orientation of every action area. Goals provide strategic direction and articulate the role of Royal Roads University in addressing the climate emergency. The priority areas identify categories under which actions will occur to create the desired impact and outcomes. Desired outcomes are a change in knowledge, attitudes, skills, abilities and ways of being. They provide a guiding direction for actions, the activities and initiatives that Royal Roads will commit to in a phased approach over the next five years. The collective sum of this work forms RRU's path to climate action leadership.





Inspiring people with the courage to **transform the world.**



Goals

3

Three goals guide Royal Roads' Climate Action Plan, through campus leadership to community and global impact. These goals define a pathway forward not just an endpoint. For the university to have a true impact, we must reimagine ways of being and doing that support new patterns of behavior, habits and mindsets. Strong, sustained, and committed leadership on the part of the President and the Board of Governors, will signal both the importance of this plan and the institutional support for the ongoing engagement and empowerment of staff, faculty and students from all units of the university. The first goal, Lead and Enable, is seen as a critical and fundamental foundation for enabling and activating the success of the other two goals.

GOAL 1

LEAD AND ENABLE

Make urgent climate action core to the university's purpose and business by establishing climate-driven governance, policies and competencies. Be a leading example of mitigation and resilience.

GOAL 2

BUILD KNOWLEDGE AND CAPACITY

Increase climate change awareness and action through education, research and engagement. Advance learning that is responsive to place, people and nature.

GOAL 3

COLLABORATE FOR SOLUTIONS

Co-create climate action solutions, leverage resources and amplify positive impact through relationships, partnerships and dialogue.

Priority Areas

The RRU Climate Action Plan has been organized into five priority areas:

- 1) leadership and governance;
- 2) administration;
- 3) operations;
- 4) education, knowledge and research; and
- 5) collaboration, engagement and outreach.

Each priority area has associated outcomes and actions that Royal Roads will implement in a phased approach.

5

Figure 2 (beside) explains how the priority areas interact with each other. At the core are guiding values and principles, providing guidance and stability. Surrounding this is a strong foundation of leadership and governance, supported by administration processes and structures that are critical to enabling the necessary organizational shifts. Transformative change is possible through education, knowledge and research and by engaging in collaboration, engagement and outreach; and exemplifying action through operations. The outer edges of the diagram show the impact these actions will have on people, place and planet, while the arrows within the circle recognize the interchangeable network between these areas, outcomes and actions.

LANET PLACE COLLABORATION, CAMPUS OS- ADMINIS, ENGAGEMENT AND **OPERATIONS** GUIDING ATIO VALUES AND PRINCIPLES 2 (FADERSHIP KNOWLEDGE, EDUCATION AND RESEARCH **DEOPLE**

Figure 2. RRU Climate Action Priority Areas of Focus



70 sub-actions, targets, indicators, timelines, and accountabilities included in a more detailed implementation plan (*available upon request*)

As referenced earlier, climate action priority areas intersect with other priorities of the university, including anti-racism, reconciliation, digital transformation, integration of the UN Sustainable Development Goals, and changemaking. Integration of existing and emerging priorities is essential so that climate action is part of how we educate, learn and orient ourselves with the world.

To prioritize specific actions, we have identified those that are critical to other actions, offer amplified impacts, build momentum or are currently underway.

The following icons will be used to distinguish such actions:



CRITICAL ENABLING

Indicates an essential action that is necessary to allow other actions/outcomes to be realized.





Actions that will result in strong benefits to climate action, either through results that will lead to significant mitigation, adaptation or broader knowledge, engagement and/or cultural shifts.



QUICK WIN

An action that can be implemented relatively quickly to build momentum for the plan (year one).



UNDERWAY

In progress or planned, but continued support/momentum is needed to complete.



Critical Enabling Factors – Year 1

President's Climate Action Commitments

Strong climate action leadership is the precursor and foundation for the university's new direction to integrate climate action into everything we do, and with the urgency that this work requires. In addition to a central role for the president, the plan's outward reaching focus will benefit from proactive and sustained support and engagement from the Board of Governors, including drawing on their networks to act as a bridge to other partners in order to help amplify the impact of this important work.

2

Climate Action Hub

A critical focal point of this work is the Climate Action Hub. The hub is envisioned as a mechanism for amplifying and connecting climate action leadership, education, research and collaboration. Through dedicated and sustained resourcing, the hub supports existing climate and sustainability focused programs, initiates new climate actions across the university, and builds momentum for action by fostering connections, learning and partnerships.

Policies

Provide the prerequisite enabling organizational tools and structures to ensure we meet our mitigation and adaptation goals and targets.

4

Sufficient Funding and Resources

Implementing the Climate Action Plan with currently allocated resources and through existing roles and workloads will not be possible. RRU will need multiple people dedicated to this work across the university and it will be important to define the necessary institutional structures and processes early on to achieve the outcomes of this plan. Enlisting other faculty and staff will be critical in our efforts to translate complex ideas into specific and actionable tasks and for facilitating important cross-departmental conversations. Appropriate levels of investment in human and financial resources will be needed to deliver on the actions outlined in the plan. Without this level of investment, the ambition of the plan will remain only that.

Partnerships Framework

The scale and urgency of the climate emergency demands that we work cooperatively and collaboratively across existing structural and disciplinary silos, inviting in and venturing out with respect and through a lens of reconciliation, social equity, and justice. RRU has a lot to offer towards the development of mutually beneficial partnerships. This includes human and intellectual capital through research, education and ideation, physical and online space to meet and work from, the ability to help innovate and test new technologies or approaches, building students' capacities as changemakers, contributing to the awareness and capacity of partners/leaders, convening and facilitating dialogues, leading by example, etc.



Baselines and Targets

Having baselines and targets provides essential reference points for assessing changes and impacts, to ensure adequate reporting and monitoring of the effectiveness of the plan and progress.

Culture

Climate change awareness, the urgency to take meaningful action and the guiding values and principles are integrated into everything we do.

8

Communications and Marketing

A clear, consistent, strategic and transparent communications strategy will reinforce our institutional commitments to climate action, internally and externally. Tailored communications can help raise awareness both within and outside the RRU community and enhance support and engagement with the Climate Action Plan and RRU's ongoing role in climate action leadership. Telling stories of climate action engagement, actions, and outcomes in meaningful, impactful ways can also create additional opportunities for RRU by raising the university's profile as a changemaking university and cultivating ambassadors and leaders in strategic parts of the university. Communications plays a central role in inspiring and motivating RRU community members and reaching audiences beyond campus.



COVID-19 Recovery

As society responds to the pandemic, there is a unique opportunity to use this time as a focusing event to integrate our recovery efforts with radical revisioning, which requires new approaches to deal with the effects of the pandemic as well as pre-existing vulnerabilities and threats (Cox et al., 2020). COVID-19 and the climate crisis are two concurrent global emergencies; decisions being made now must tackle both crises simultaneously to amplify the power of our investments (human, financial, material) and ensure the most effective, equitable responses and outcomes.

Distributed Leadership Model

Transformative leadership not only includes the President, Executive Team and Board of Governors, it also requires a distributed leadership model. Figure 3 is a model of leadership for RRU's Climate Action Plan.

At the centre of this plan is action, made possible by leadership from various members of the RRU community, Indigenous rights holders, and neighbouring communities. In the inner circle, are partners and Indigenous rights holders, the Climate Leadership Committee, the Climate Action Hub, and working groups and advisories. Surrounding, supporting and interacting with these leadership groups are the institutional decision makers: the Board of Governors, RRU's executive team, and representatives from the local, global and university community. Each action listed within this plan depends on varying levels of support and interaction from all groups and stakeholders, through all phases of the planning process from inception to execution and monitoring and evaluation. This model speaks to the interconnected ways in which we must learn and work together to address the climate emergency.

CLIMATE ACTION HUB

The Climate Action Hub will serve as a physical and digital information centre, focal point, and connector at RRU for climate-informed and focused education, research and partnerships. The hub will enable greater collaboration and engagement, including supporting innovative projects and initiatives for mitigation and adaptation such as those envisioned as part of a living lab initiative. As the university's plan evolves, the hub will coordinate new actions, and serve as one of several important resources designed to amplify and support faculty, staff and student leadership work.



Climate Action as Changemaking

Royal Roads is an **AshokaU Changemaker**

Campus⁵. Consistent with that designation, the Climate Action Plan incorporates the changemaking process to determine and structure our priority areas for focus. Climate action fundamentally requires a changemaking orientation, and the willingness to imagine and implement bottom-up, inclusive and innovative approaches and solutions. Through education, research and collaboration, RRU can amplify climate action beyond campus to broader society. Strong institutional leadership, governance, administration and campus operations is critical to providing a strong, enabling foundation. None of these areas of action or change are discrete. As relationships and ways of understanding shift, they inform new opportunities and learning. The Climate Action Hub plays a central role in fostering an integrated approach, facilitating feedback and connections across the university and its community.

As illustrated here, the changemaking process must invoke actions at multiple scales, beginning with inputs and resources that enables activities, policies, institutional norms and standards. Changing perspectives (through new mindsets, attitudes and beliefs) is a precursor to behaviour change (through knowledge, skills and practice) which, in turn, leads to culture change through participation, engagement and relationships. Finally, cascading impacts are achieved, influencing systems, security, economics, biosphere, climate and overall planetary health.



⁵ The AshokaU Changemaker Campus designation is awarded to post-secondary institutions with a proven track record of social innovation, collaboration and a commitment to changemaking that is woven into academic and institutional priorities.



LEAD AND ENABLE

LEAD AND ENABLE

Make urgent climate action core to the university's purpose and business by establishing climatedriven governance, policies and competencies. Be a leading example of mitigation and resilience.

Priority Area 1: Leadership and Governance



Outcome 1: Commitment

Students, staff, faculty, partner communities and external stakeholders demonstrate confidence in the university leadership's commitment to achieving its climate action goals. The university's climate action efforts integrate reconciliation, equity, diversity, inclusion, and justice into all work.





The president publicly declares the climate emergency and the university's commitment to climate leadership including the following targets and commitments:

- → To align with the 1.5°C ambition⁶, RRU reduces its emissions⁷ 65% by 2025 (from 2010 levels) and has implemented the necessary supports to achieve 80% reduction by 2030 and net zero by 2050. By 2023, no new buildings will be constructed that rely on fossil fuels as the primary energy source.
- → To extend institutional responsibility and leadership to reduce scope 3 emissions 50% by 2030 (from 2019 levels) and to offset the remainder⁸.
- → To increase the institution's climate resilience by activating key steps such as risk assessments and development of a Climate Preparedness and Adaptation Strategy by 2025.
- → Climate change education and capacity building will be a core purpose and strategic direction for RRU's academic mandate.
- → To pilot innovative solutions for climate mitigation and adaptation, and to share results and learnings with others.
- → To align institutional policies, plans and decisions with climate action goals.
- → To improve inclusivity

Action 1.2

The university affirms its commitment by working with other alliances, groups, or networks to identify mutual areas of interest and opportunities to lead provincial, national, and international efforts to promote climate action⁹.

Action 1.3

Alongside and integrated with the university's climate action commitments, the president identifies specific UN SDGs that are priority commitments central to RRU's vision and mandate.

Action 1.4

Commit to Indigenous collaboration and paired governance. Connect and consult with Indigenous communities to identify what their climate change plans and priorities are; collaborate upon shared organizational/governance model.

⁶ The UN climate report concludes that we need to keep global warming to a maximum of 1.5°C to avoid high risk of catastrophic consequences for people and our living environment. To achieve the 1.5°C ambition, global greenhouse gas emissions must stop growing by 2020 and we must halve emissions every decade to approach net-zero by 2050, while at the same time removing some of the carbon already emitted into the atmosphere (IPCC, 2018).

Scope 1 emissions are direct greenhouse gas (GHG) emissions that occur from sources controlled or owned by an organization while Scope 2 emissions are indirect GHG emissions associated with the purchase of electricity or energy. (GHG Protocol)

^{*} Phase 1 scoope 3 accounting is proposed to include: Commuting, business air travel, solid waste (disposal only), and building lifecycle (For comparison, this comprises 65% of UBC's total emissions for scope 1, 2 and 3) ⁹ For example, Pacific Institute for Climate Solutions (PICS), Universities Climate Change Coalition UC₃), Second Nature's Climate Leadership Network, Race to Net Zero, UN SDG Accord, the Investment Charter for Canadian Universities, etc.

Outcome 2: Decision-making

University decisions integrate climate change considerations (including climate justice, risks, impacts, mitigation and adaptation actions). Policies are in place that guide and mandate the University leadership in its responsibilities and commitments to the Climate Action Plan.



Action 2.1

The board, executive and senior committees ensure that they maintain sufficient understanding of climate change, derived from both internal (e.g., the hub) and external sources.

Action 2.2

The president directs that climate considerations (including the guiding principles of the Climate Action Plan) be integrated into all strategic-level plans, meetings, budgets, policies and reports. Complimentary to this, senior leadership communicate their support for and endorsement of integrating the climate actions outlined in the plan into the standard operations of the university.



The president delegates responsibility for developing, revising, and/or expediting review and approval of plans, policies and procedures to align operations, administration, institutional service delivery and the Learning, Teaching and Research Model with overarching climate goals and principles. (See also, Administration Outcome 5: *Policy Development*)

Outcome 3: Resources

Individuals and committees within the university community are empowered with the authority, resources, responsibility and accountability for their climate action roles.



Establish a climate leadership structure with adequate resourcing. As part of this, the president approves an organization-wide, cross-disciplinary leadership structure to support inclusive governance, resourcing and oversight of the Climate Action Plan. Additionally, the university approves sufficient financial and other needed resources through the annual budget process to support the activities required to achieve its Climate Action commitments.

Outcome 4: Climate Action Hub

The university establishes a Climate Action Hub that enables, amplifies and connects climate action information and activities both inside and outside the university.



The president approves the establishment of the Climate Action Hub, including 1) the allocation of sufficient resources to build the foundation for and enable its sustained operation; 2) a leadership and management framework for the Climate Action Hub; and 3) the appointment of both administrative staff and faculty.

Outcome 5: Resilience

Climate risk is integrated into the university's enterprise risk management framework. The university identifies, discloses and determines a management approach in response to the university's material climate risks and opportunities.



Action 5.1

Conduct a climate risk and vulnerability assessment¹⁰ to determine priority risks and impacts under a range of climate scenarios.

Action 5.2

Develop and resource a Climate Adaptation Plan (informed by the climate risk assessment) to integrate climate risk and resilience into University governance, administration, operations, business development and service delivery models.

Action 5.3

Integrate disaster risk reduction and climate adaptation considerations and targets into university emergency plans with annual updates to reflect new regional climate risk projections and business continuity plans.

UN SUSTAINABLE DEVELOPMENT GOALS ALIGNMENT

Within Leadership and Governance, there are possible integrations with the following UN SGDs:

- \rightarrow Climate Action;
- \rightarrow Reduced Inequalities;
- \rightarrow Partnerships for the Goals; and
- $\rightarrow\,$ Peace, Justice and Strong Institutions.

Outcome 6: Transparency and Accountability

The university builds accountability into climate action governance structures. University stakeholders and rightsholders have access to sufficient information to evaluate the university's climate action performance.



Action 6.1

The university publishes a comprehensive, integrated, and complete annual report that incorporates:

- **6.1.1** Mandatory disclosures, in accordance with BC's Climate Change Accountability Act requirements; and,
- **6.1.2** Voluntary disclosures, including all key performance indicators included in the Climate Action Plan.
- **6.1.3** Material climate-related risks, including the management approach to each risk.

Action 6.2

The university regularly shares information about climate activities and progress with the university community.

Action 6.3

The president updates the Board of Governors semi-annually on progress toward climate action targets.

^o The climate risk and vulnerability assessment will include campus energy, buildings and infrastructure; interdependent services/community infrastructure; environment, social, cultural, global connections and impacts that affect client/customer base, supply chains, etc.

Outcome 7: Inclusive Governance

The university's governance structure promotes equity, diversity and inclusion as part of its climate action decision-making process. Indigenous knowledge and leadership are invited and included.



Action 7.1

Establish mechanisms and processes that ensure diverse perspectives, communities and worldviews shape the development and implementation of climate-related initiatives and policies. Facilitate student and community members inclusion in climate governance.

Action 7.2

Incorporate different knowledge systems for climate action with an emphasis on Indigenous knowledge.

Action 7.3

Enhance community-driven participation in decision-making by encouraging members of vulnerable and impacted communities to identify the challenges they face and propose solutions that are relevant to them.



Summary of Action Milestones, Indicators and Targets

OUTCOME AREA	ACTION MILESTONES	AND TARGETS
LEADERSHIP COMMITMENT	 → By Jan. 2022, public declaration posted to website including the following targets and commitments: • GHG emissions reductions targets: 65% by 2025, 80% by 2030 and net zero by 2050. By 2023, no new buildings will be constructed that rely on fossil fuels as the primary energy source • Reduce scope 3 emissions by 50% from 2019 levels and offset the remainder (by 2030) • Climate Preparedness and Adaptation Strategy (2025) • Pilot innovative climate solutions and share results and learnings with others • Align institutional policies, plans and decisions with climate action goals • Improve inclusivity → Create at least one climate-focused partnership/alliance; profile via launch/ hosting event (2022/23) 	 → GHG emission reductions (all scopes) → Climate resilience key performance indicators – TBD → # pilot projects initiated on campus in partnership with others (target: launch one innovation project per year by 2023) → One major climate-focused partnership fostered by 2022/23
DECISION- MAKING	 → Establish ongoing, calendarized training. First executive climate training session held spring 2022 → Develop Climate Action Charter to which senior members sign on as part of their executive functions (FY 22/23) → President direction and leadership endorsement for integrating climate actions in the plan into policies and the standard operations of the university (FY 22/23) 	 → All senior members take climate change fundamentals course → By 2025, 100% of all RRU plans and policies integrate climate (mitigation and adaptation) and EDI considerations → Culture of engagement on climate action (as measured by surveys)
RESOURCES	 → President establishes Climate Leadership Committee with VP co-chairs to support inclusive climate governance, resourcing and oversight (December 2021) → The university approves sufficient financial and other needed resources through the annual budget process to support the activities required to achieve its climate leadership commitment. (April 2022) 	→ Approved structure, accountabilities and funding approvals in place by April 2022
CLIMATE ACTION HUB	→ President approves the Climate Action Hub and allocates sufficient resources to build the foundation for and enable its sustained operation (April 2022)	→ Approved structure, accountabilities and funding approvals in place by April 2022
 → Climate Risk and Vulnerability Assessment complete (FY 22/23) → Review findings with stakeholders and rights holders and integrate within ERM framework (FY 23/24) → Complete climate adaptation plan (FY 23/24) → Climate risk and adaptation: share findings and lessons; conduct ongoing review and management of climate risks/adaptation measures (FY 24/25) 		→ 85% of risks have identified risk controls that are deemed "adequate"
TRANSPARENCY and ACCOUNTABILITY	→ RRU publishes a comprehensive and integrated annual reports and communications (FY 22/23)	→ Annual reporting
INCLUSIVE GOVERNANCE	→ TBD based on consultation with rights holders and stakeholders (FY 22/23, ongoing)	 → % of stakeholder/rights holder groups in positions of climate action authority → % of stakeholder/rights holder groups participating in climate committees

Priority Area 2: Administration

Outcome 1: Delegation/ Distributed Leadership

The university embeds climate initiatives throughout the institution. The university and its stakeholders clearly identify individuals and teams responsible for leading, monitoring and evaluating each element of the plan.

Action 1.1

Individuals and committees with delegated authority are accountable for the implementation, of the Climate Action Plan under timebound milestones.

Action 1.2

Role descriptions, annual work plans and annual performance reviews explicitly incorporate Climate Action Plan duties, responsibilities and outcomes across all identified portfolio areas.

Outcome 2: Decision-making and Implementation

All university decisions will consider and incorporate climate change (mitigation, adaptation and climate justice).

Action 2.1

A screening tool (or a variety of methods) is used to assess every decision's contribution to addressing climate change and promoting equity, diversity and inclusion.

Action 2.2

Climate impacts and risk assessment (including the climate performance of suppliers) is incorporated into every purchasing, procurement and investment decision.

Action 2.3

Align strategic university decisions with relevant principles, goals, and targets of the Climate Action Plan, thereby integrating climate and sustainability considerations.



A Climate Action Leadership Team with broad and inclusive representation and expertise ensures that the university maximizes investments (financial and human) by targeting highpriority climate actions.

Action 2.5

The university identifies and implements innovative funding models, financial tools and external funding partnerships to support the plan's goals and targets.

Outcome 3: Planning and Policy Development

The implementation of key elements of the Climate Action Plan is guided and informed by approved policies and plans.

Action 3.1

Develop and/or refresh University plans and policies to align with Climate Action Plan goals and targets. Aligning with the university's policy framework and with requirements specified in the internal implementation plan, delegated groups have researched, consulted on, developed and submitted the following plans and draft policies for approval":

Plans¹²

- → Campus Master Plan
 - Energy and Utilities Master Plan
 - Biodiversity Plan
 - Transportation Demand Management Plan
- → RRU Sustainable Food Vision (including food services contracts)
- → Climate Vulnerability and Adaptation Plan

Policies

- \rightarrow Net zero and adaptive building design and construction policy
- → Sustainable investment policy, including UN Principles for Responsible Investment criteria
- ightarrow Sustainable procurement policy
- \rightarrow Low emissions travel policy
- → Flexible and equitable work policy, including accessibility parameters and remote work options to reduce commuting emissions
- \rightarrow Partnership engagement policy and framework
- → Ecosystem governance policy

Outcome 4: Scope 3 Emissions Reductions

By 2030, RRU has reduced its scope 3 emissions by 50% (from 2019 levels) and has offset the remainder.

Action 4.1

Establish scope 3 baseline. Prioritize, measure and publicly report on a preliminary set of scope 3 emissions: 1) business travel, 2) commuter travel (employees and students), 3) waste, 4) food, and 5) embodied energy in new building materials.

Action 4.2



Action 4.3

Develop a transportation demand management (TDM) plan to reduce commuting-related emissions, and to enable reporting and offsetting of commuting travel emissions for both students and employees.

UN SUSTAINABLE DEVELOPMENT GOALS ALIGNMENT

Within Administration, there are possible integrations with the following UN SDGs:

- \rightarrow Climate Action;
- → Reduced Inequalities;
- → Partnerships for the Goals; and
- → Peace, Justice and Strong Institutions.

" Note: this is not an exhaustive list and could include more plans and policies to support the outcomes, as needed.

Infrastructure, landscape and program planning that aim to reduce GHG emissions and build adaptive capacity to future climate risks while respecting the heritage status, natural setting and Indigenous rights holders.

Summary of Action Milestones, Indicators and Targets

OUTCOME AREA	ACTION MILESTONES	PROPOSED INDICATORS AND TARGETS
DELEGATION/ DISTRIBUTED LEADERSHIP	→ Identify accountabilities for the Climate Action Plan, role descriptions, and work plans, and incorporate climate-related responsibilities and outcomes into annual performance reviews (FY 22/23)	 → % of workplans or performance plans that include climate competencies or accountabilities. → % of job profiles that include climate skills, competencies
DECISION- MAKING and IMPLEMENTATION	 → Establish Climate Leadership Committee (FY 21/22) → Research and design screening tools (FY 21/22); implement tool(s) (2022/23) → Project charter and research to identify funding models, financial tools and enabling partnerships (FY 22/23) → Align every decision with relevant policies, plans and principles of the Climate Action Plan (2025) 	 → % university decisions that are aligned with/integrate climate and EDI → \$\$ of additional external funding secured → # funded activities ratio to unfunded
PLANNING and POLICY DEVELOPMENT	 → Initiate preliminary work for climate policy and planning leadership initiative (i.e., RFPs, project charters, research) (FY 21/22) → Phase 1: Policy and Planning leadership initiative – initiate Campus Master Plan, adopt climate screening tool, update procurement policy, flexible and equitable work policy, align RRU Investments with UNPRI criteria (FY 22/23) → Phase 2: Policy and Planning leadership initiative – renew food supplier contract, adopt Campus Master Plan, achieve UNPRI designation, TDM program initiated, research opportunities to divest pension funds (FY 23/34) → Phase 3: Initiate Policy & Planning leadership initiative, Phase III, FY 24/25 	 → By 2025, there are approved policies and campus plans in place to support climate action → % of unds divested (maintain 100%) → % of contracts and policies that are reviewed under climate/social/ environmental criteria (2025 targets: 100% of new contracts, 75% of policies)
SCOPE 3 EMISSIONS REDUCTIONS	 Phase 1: Initiate (FY 21/22 -22/23) → Establish baseline for scope 3 categories → Develop and initiate business process to measure and report on scope 3 emissions → Research offset program for remaining scope 3 emissions Phase 2: Scope 3 business processes (FY 22/23) → Establish reporting system, business processes and travel policy → Implement mitigation and offset program Phase 3: Research additional scope 3 impact areas and identify strategies to measure, mitigate or influence (FY 23/24) → Transportation Demand Management recommendation review (FY23); TDM plan complete by 2024/25 	 → GHG emissions, scope 3 → \$\$ offsets purchased → TDM target: TBD on baseline → % commuting mode share by type



Priority Area 3: Operations

Outcome 1: GHG Reductions

In line with the university's leadership commitments, RRU has implemented the necessary solutions to reduce operational GHG emissions (buildings, fleet and paper) to meet targets.

Strategy Area 1: Buildings and Energy Action 1.1

Conduct a campus-wide energy and performance audit to identify priority actions for efficiency improvements, emissions reductions and adaptation co-benefits for future risks/impacts (see Action 2.1).

Action 1.2

Informed by the audit (1.1, above) and the Campus Master Plan, develop an energy and utilities master plan to provide a comprehensive roadmap to meet university targets for energy, emission reductions, climate resilience and costs.

Action 1.3

Identify and implement a building operations and management program that aligns with performance standards for energy, emissions, water, waste, accessibility, heritage considerations, well-being and other sustainability standards.13

Action 1.4

Develop a plan to optimize the use of buildings and space to reduce emissions and costs, to retire inefficient buildings, and to adapt to current and future climate risks.

Strategy Area 2: Fleet



Transition RRU fleet to 100% zero emission vehicles by 2030.

Strategy Area 3: Paper Usage Action 1.6

Cap paper procurement at 2020 levels and shift all processes to electronic.

Outcome 2: Climate Risk, **Resilience and Adaptation**

The university establishes a Climate Action Hub that enables, amplifies and connects climate action information and activities both inside and outside the university.

Action 2.1

In line with provincial compliance requirements, assess, monitor, report and manage institutional climate risks; ensure new buildings and major renovations integrate climate risk considerations; and develop mitigation and adaptation responses.

Action 2.2

In conjunction with the energy audit, review existing buildings and infrastructure to determine an initial score for future climate readiness and/or climate risks

Action 2.3

Develop a water management plan, informed both by water audits (interior and exterior), climate risks (extreme weather, stormwater surge) and regional factors.

Action 2.4



Develop a roster of student research projects and volunteer opportunities that integrate with campus mitigation, climate risk and resilience goals. As part of this, identify an operations staff lead to support faculty and students in developing and advancing the university's Living Lab model and projects (including project development, coordination and implementation).

UN SUSTAINABLE DEVELOPMENT GOALS ALIGNMENT

Within Operations, there are possible integrations with the following UN SDGs:

- \rightarrow Climate Action;
- \rightarrow Clean Energy;
- \rightarrow Responsible Consumption and Production;
- \rightarrow Life on the Land;
- → Life below Water;
- → Industry, Innovation and Infrastructure; and
- → Sustainable Cities and Communities.

Summary of Action Milestones, Indicators and Targets

OUTCOME AREA	ACTION MILESTONES	PROPOSED INDICATORS AND TARGETS
GHG REDUCTIONS	 Buildings Energy manager in place (FY 22/23) Initiate building energy management tools tracking (FY 22 – 24) Campus-wide energy, performance and climate risk audit complete (FY 22/23) Develop an energy and utilities master plan (FY 23/24) Identify and implement a holistic building operations and management program (FY 24/25) Develop building optimization plan (FY 24/25) Fleet Develop fleet transition plan to shift all vehicles to be 100% zero emissions by 2030 (FY 22/23) Increase electric charging infrastructure on campus for both fleet and public electric vehicles (FY 2024/25) Pursue funding and grants for electric vehicle infrastructure and equipment Paper Cap paper procurement at 2020 levels and shift all processes to electronic (FY 23/24) Develop plan to centralize printers to support reduced printing (24/25) 	 → GHG emissions reductions targets: 65% by 2025, 80% by 2030 and net zero by 2050 → Scope 3 target for embodied energy - TBD → # of buildings identified with a % efficiency use (and # of inefficient buildings retired) Target: TBD → ZEV fleet = 40% by 2025; 100% by 2030 → 6 fleet charging stations by 2022; 24 public chargers by 2025 → # of paper packages purchased and GHGs (tCO2e) from paper (target: 90% paper and printer reduction by 2025) → % electronic process (target: by 2024, 100% of RRU's processes are conducted electronically)
CLIMATE RISK, RESILIENCE & ADAPTATION	 → Research available funding for energy and resilience audits (FY 21/22) → Campus-wide energy, performance and climate risk audit complete (FY 22/23) → Water audit and subsequent water management plan (FY 23/24) → Develop a roster of applied learning student projects and volunteer opportunities (FY 23/24) → Identify operations staff to support Living Lab project development, coordination and implementation (FY 23/24) 	 → % of climate risks with identified mitigation strategies → Water consumption and water costs. Target: TBD (X% reduced by 2025)

¹⁰ Rationale: How buildings are designed, constructed and operated has significant impacts on the sustainability of our campus as well as the wellbeing of the people who study, work and live here. Additional great resource for development: <u>https://planning.ubc.ca/sites/default/files/2019-n/PLAN_UBC_Green_Building_Action_InstitutionalGBAP.pdf</u>



BUILD KNOWLEDGE AND CAPACITY

BUILD KNOWLEDGE AND CAPACITY

Increase climate change awareness and action through education, research and engagement. Advance learning that is responsive to place, people and nature.

Priority Area 4: Education, Knowledge and Research

>

Outcome 1: Climate Change Education

The educational mandate and core values of the university include a commitment to building climate change awareness and literacy, and to empowering climate action with all members of its community -students, staff and faculty.





Define and clarify academic direction for climate change education and curricula as a strategic direction for the university.

Action 1.2

Design and develop climate-related courses and integrate climatefocused curricula into programs so that all students are exposed to the fundamentals of climate science, climate justice and climate action (mitigation and adaptation).

Action 1.3

Establish and resource a Climate Action Hub with supporting governance structure and mandate to support and advance Climate Action Plan actions and initiatives (see Outcome 4 in Goal 1, Priority Area 1).

Action 1.4

Develop and incorporate a climate literacy module as part of onboarding staff, faculty and students. This module would provide an orientation to climate change and the university's commitments to climate justice and climate action (similar to the Introduction to Academic Integrity module).

Action 1.5

Establish and resource a climate teaching connector program that engages, trains and pays students with expertise in climate subject matter to act as resources to instructors integrating climate change in their courses.

Action 1.6

Develop a suite of accessible (low cost/no cost; multiple offering) courses (credit and non-credit) and educational outreach initiatives that raise awareness, increase understanding, encourage involvement, and build support for innovative climate actions within and outside the RRU community. Included in this roster are courses related to a range of climate action competencies including climate science, climate justice, social science and landbased approaches to climate adaptation and climate resilience, biodiversity and Indigenous rights.

Outcome 2: Advance Living Labs for Climate and Sustainability Solutions

A **Living Lab** model builds upon existing approaches to experiential learning, and provides staff, faculty, and students opportunities within campus and the lands as sites for learning, research, designing, and testing solutions to climate change challenges and UN SDG projects.



2.1

Develop a Living Lab program that provides nature-based, climate change-related education and research opportunities.

Action 2.2

Create opportunities for interdisciplinary teams of staff, faculty and students to learn, test and apply knowledge in a real-world context.

Action 2.3

Build on and enhance relationships with local Indigenous knowledge-keepers and their families to identify and implement collaborative, land- and nature-responsive learning and research initiatives.

Action 2.4

Conduct a baseline study of biodiversity and ecosystem health and develop a biodiversity plan as a Living Lab project.



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Develop a Kitchen Garden as a Living Lab, building on partnerships, Indigenous and other knowledge systems and ways of working.

Outcome 3: Research

Promote climate action through inter- and trans-disciplinary climate research initiatives and funding opportunities.

Action 3.1

Fund internal research projects focused on climate change and climate action research.

Action 3.2

Identify and promote additional funding opportunities and partnerships (other universities, private/public sector organizations) that support collaborative, inter- or transdisciplinary climate change and climate action research

Action 3.3

Sponsor and host climate-action focused research, knowledge-sharing and empowerment events (e.g., open conference, webinars).

Action 3.4

Establish a repository of climate mitigation and adaptation case studies and a searchable, public database on climate change and climate action research.

UN SUSTAINABLE DEVELOPMENT GOALS ALIGNMENT

Within Education, Knowledge and Research, there are possible integrations with the following UN SDGs:

- → Quality Education;
- \rightarrow Climate Action;
- → Life on the Land; and
- → Life below Water.

Summary of Action Milestones, Indicators and Targets

OUTCOME AREA	ACTION MILESTONES	PROPOSED INDICATORS AND TARGETS
	Climate as core to education → Define and clarify academic direction for climate change education and curricula as a core purpose/ strategic direction for the university (FY 22/23)	→ Support/approval from the Board of Governors, the Academic Priority and Planning Committee, and the Educational Programs Committee
	 Curricula Conduct an inventory of existing programs and curricula; establish targets for climate content (FY 22/23) Design one or more courses/modules to provide climate literacy and training in programs as appropriate for students, staff and faculty (FY 22/23) Integrate Indigenous ways of knowing in program curriculum and staff/faculty training (FY 23/24) The Curriculum Committee supports inclusion of climate literacy/climate action into most programs as appropriate (FY 23/24) Build OER adaptation courses and materials into PCS (FY 22/23) Use the Climate Adaptation Competency Framework to design and assess learning outcomes (FY 22/23) The Climate Action Hub builds connections and networks to resource instructors (FY22/23, ongoing) 	 <i>→</i> # non-credit courses developed <i>→</i> % of programs that have meaningful content related to climate change (where appropriate; target to have most programs include climate- related content by 2025 <i>→</i> % of respondents who feel they have improved their knowledge of climate change and climate action (target 90% by 2026) <i>→</i> # of faculty and IDs that support climate literacy curriculum and teaching
CLIMATE CHANGE EDUCATION	 Educational Profile and Outreach Develop a suite of accessible (low cost/no cost; multiple offerings) courses (credit and non-credit) and educational outreach initiatives (FY 22/23) Sponsor and host online climate action forums, workshops, webinars, etc. to interested communities for free/low fee (FY 22/23) Offer free/low cost climate change education (FY 22/23) Increase climate-action course offerings and access (FY 23/24) Design and implement training resources on teaching climate change (FY 23/24) Establish an RRU learning community and PD learning programs (FY 23/24) 	 → 75% registration uptake; 60% completion rates rising to 90% uptake and 85% completion → # of free/low cost education opportunities offered to the broader community → Key performance indicator: registration and completion rates
	Onboarding → Incorporate a climate literacy module in onboarding and instructional design (FY 22/23) → Implement a code of conduct (FY 22/23)	 → 90% of respondents that feel they have improved their climate literacy through courses → # of signatories to code of conduct
	Teacher Connector → Launch climate teaching connector program (FY 23/24) → Identify a program sponsor to design and conduct the student training (FY 23/24)	 → # of instructors who access hub for course content. Target: 50% increase each year for 4 years, then 25% increase annually → % of respondents that say they have the support and resources to improve climate literacy and leadership
ADVANCE LIVING LABS FOR CLIMATE AND SUSTAINABILITY SOLUTIONS	 Graduate student research and recommendations on Living Lab (LL) model; consultation and working definition on RRU's LL model (FY 22/23) Instructional design support for integrating LL pedagogy into RRU programs (FY23/24) Document and communicate LL case studies (FY 22/23, ongoing) Explore funding, partnerships and opportunities (FY23/24) Create marketing materials about Living Lab (FY23/24) Convene interdisciplinary teams to tackle real-world climate challenges (FY23/24) With local Indigenous leaders and families, identify and implement land-base learning and research projects (TBD) Conduct a baseline study of biodiversity (initiate FY22/23) Complete campus biodiversity plan (FY 24/25) Develop and implement a Kitchen Garden research and education program as part of the Living Lab (in progress) Campus Biodiversity Interactive Map (24/25) 	 <i>+</i> or % of students who have engaged with a Living Lab project at RRU (target: TBD) <i>+</i> of collaborative living lab projects (target: TBD) <i>+</i> of land-based learning projects based on Indigenous knowledge (target: TBD) <i>+</i> Baseline study completed that includes all ecosystems on campus, and social/cultural value mapping <i>+</i> Plan developed to preserve existing biodiversity and ecosystems (informed by baseline) that meets or exceeds regional targets <i>+</i> Kitchen Garden key performance indicators TBD by team
RESEARCH	 → Fund research projects focused on climate change and climate action research. Establish a new internal research grant stream in the amount of \$40,000 annually (FY 23/24) → Identify external research funding opportunities and partners (FY 22/23) → Create research plans that incorporate climate action, biodiversity, and climate resilience (FY 23/24) → Design/develop research-sharing event(s) (FY 22/23) → Sponsor, develop and host climate action focused research, knowledge- sharing, and empowerment events (FY 23/24, ongoing) → Establish a repository of climate case studies and a searchable database on climate-related research (FY 22/23) → Launch showcase of RRU climate action research (FY 23/24) → Embed climate action in institutional research plan (FY 24/25) 	 → \$\$ available through IRG (target \$40k/year) → # of research projects that have connection to at least one UN SDG (vs. total projects) Target: 60% of research projects are tied to at least one UN SDG within 3 years; increasing to at least 80% ongoing by year 4 → # of events hosted and supported, # of registrations/in attendance at events → # of unique and repeat users for literature and expertise for course and program development and for community and media inquiries-growth is 50% each year for 4 years, then 25% increase annually

COLLABORATE FOR SOLUTIONS

COLLABORATE FOR SOLUTIONS

Co-create climate action solutions, leverage resources and amplify positive impact through relationships, partnerships and dialogue.

Priority Area 5: Collaboration, Engagement and Outreach

Outcome 1: Relationships and Partnerships with Indigenous Rights Holders

Establish reciprocal relationships and identify and implement community-engaged climate action work with RRU Heron People Circle members and local Indigenous communities. In partnership with local Indigenous communities, explore the creation of cultural and environmental protected areas.



Action 1.1

Map out current partnerships and relationships and use this to inform a strategic partnership framework based on common goals.

Action 1.2



Consult with Lekwungen (Songhees), Xwsepsum (Esquimalt), and other local Indigenous groups to determine what their climate change plans and priorities are and what they desire/require from partnership agreements.

Action 1.3

Establish dynamic and adaptive working models of collaboration between RRU and Lekwungen and Xwsepsum rights holders in the local community.

Action 1.4

Engage with local First Nations and the Heron People Circle, faculty, and Indigenous scholars to exchange resources and references related to climate change action and to explore learnings and teachings from local Indigenous knowledge holders. Undertake a collaborative co-creation of knowledge through participatory research and capacity development projects. Consult on the design and collaborative opportunities for nature-based solutions and living labs.

Outcome 2: Community Engagement

Cultivate partnerships and relationships that invite collaboration and leadership for climate action with external communities, businesses, organizations and partners. Promote and celebrate individual, collective and regional resilience through formal and informal programs, events and knowledge sharing



Action 2.1

Map out current partnerships and use this to inform a strategic partnership framework with a climate action lens.





Create and foster partnerships with the local community to identify priority areas for co-creation and implementation of climate research and action including mitigation, adaptation, and naturebased solutions.

Action 2.3

Develop climate action focused relationships and partnerships with other post-secondary universities and community colleges. Examine feasibility of meeting criteria for and joining provincial, national, and international climate focused organizations (e.g., PICS, UC₃) or other accreditations (see also Governance & Leadership, 1.3).

Action 2.4

Engage alumni and students, link with faculty to showcase climate projects, research, community and funding opportunities. Translate research findings and Living Lab outputs into opportunities for community climate actions and collaborations.





Provide climate-related policy support, tools and advice to external governments, businesses and partners to assist with climate policy development.

Outcome 3: University Engagement

Foster university-wide engagement, awareness-raising and support to build resilience and inspire faculty, staff and students to take an active role in climate action on campus and beyond.

Action 3.1

Establish overview of existing initiatives, projects, plans and opportunities for campus engagement. Identify points of alignment between climate action priorities and other university priorities.

Action 3.2



Develop learning opportunities, awareness, engagement for climate action through resources, courses, training and dialogue. Support staff who are setting personal goals that align with RRU's climate action targets and goals.

Action 3.3

Facilitate student climate programs including but not limited to: climate and UN SDG's Ambassadors programs focused on engaging students as climate action leaders.

Action 3.4

Establish volunteering program that provides opportunities for employees, faculty and students to engage with climate action and sustainability initiatives.

- Action 3.4.1 Develop a roster of student projects and volunteer opportunities that integrate with climate action plan goals.
- Action 3.4.2 Establish RRU Ecosystem Stewardship program with Indigenous rights holders. Engage campus and community members in regular outdoor programs and initiatives (voluntary and curriculum based where appropriate)

GOAL 3 / COLLABORATE FOR SOLUTIONS / Priority Area 5: Collaboration, Engagement and Outreach

Outcome 4: Communications and Marketing

Develop and deliver on a communications and marketing strategy to promote uptake and engagement with climate action internally and externally.

Outcome 5: Events



Sponsor and host climate-action focused knowledge-sharing, collaboration and empowerment events. For example, these can include hosting an annual signature festival, co-hosting or sponsoring events, webinars, conferences, lectures and discussions focused on climate action, resilience, nature-based solutions, biodiversity protection and living labs.

Action 4.1



Create innovative and inspiring communications and marketing about climate change and action within and beyond campus.

Action 4.2

Activate a regular schedule of communications and storytelling, promoting climate actions of staff, faculty, partners and the hub, to effectively market climate action research, projects and opportunities.

UN SUSTAINABLE DEVELOPMENT GOALS ALIGNMENT

Within Collaboration, Engagement and Outreach, there are possible integrations with the following UN SDGs:

- → Climate Action;
- \rightarrow Reduced Inequalities;
- → Partnerships for the Goals; and
- → Peace, Justice and Strong Institutions.



Summary of Action Milestones, Indicators and Targets

OUTCOME AREA	ACTION MILESTONES	PROPOSED INDICATORS AND TARGETS
RELATIONSHIPS AND PARTNERSHIPS WITH INDIGENOUS RIGHTS HOLDERS	 → Establish baseline of current partnerships to inform a strategic partnership framework (FY 22/23) → Consult with Indigenous groups; articulate collaboration benefits/desires; co- create community climate/ sustainability values (FY 22/23, ongoing) → Establish working models of collaboration between RRU and Lekwungen and Xwsepsum rights holders (FY 23/24) → Enhance reciprocal knowledge-sharing through participatory research and capacity-building projects (FY 23/24) 	 → Baseline established by year one → 75% of groups identified as RRU climate action collaborators have shared their own climate action objectives and/or plans → 100% of groups sampled agree with climate partnership model and process → Partnership model of shared/mutual initiatives and reciprocal resources → % of partnerships who rank the partnership quality and value as "high"
COMMUNITY ENGAGEMENT	 → Establish baseline of partnerships and develop strategic framework and partnership priorities for climate action (FY 21 - 22/23) → Develop the Kitchen Garden program and biodiversity plan in line with partnership framework (FY 21 - 24) → Develop post-secondary alliances and partnerships (FY 21 - 22/34) → Launch alumni and student engagement program to showcase climate action (FY 23/24) → Provide climate-related policy support, tools and advice to external governments, businesses and partners (FY 22/23, ongoing) 	 → Baseline and framework established by year one → Establish at least one new formal community partnership to advance goals → Establish at least one new partnership with higher education institution/network within the first 1.5 years
UNIVERSITY ENGAGEMENT	 → Establish baseline of existing initiatives, projects, plans and opportunities for campus engagement. Identify points of alignment/intersection (FY 22/23) → Develop learning and engagement opportunities, training and awareness, etc.; promote programs focused on engaging students as climate action leaders (FY 22/23) → Facilitate orientation programs for incoming students/ in-residence on climate action and sustainability (FY 22/23) → Establish climate action volunteering program; develop a roster of student projects and volunteer opportunities that integrate with climate action plan goals (FY 22 - 23/24) → Launch Ecosystem Stewardship program with Indigenous rights holders (FY 22/23) → Engage campus and community members in regular outdoor programs and initiatives (voluntary and curriculum based where appropriate). → Pursue partnership opportunities to co-host and organize volunteer events (e.g., BC Invasive Species Council, pollinator initiative, native plant garden, nature-based solutions demonstration) (FY 24/25) 	 <i>→</i> # of students and alumni engaged increases 50% each year for 4 years, then 25% increase annually <i>→</i> % of respondents that feel part of the Climate Action Plan, % of RRU faculty, employees and students engaged in climate action (target: engagement has growth of 50% each year for 4 years, then 25% increase annually) <i>→</i> % participation (target: stewardship- related engagement has growth of 50% each year for 4 years, then 25% increase annually) <i>→</i> (target: stewardship- related engagement has growth of 50% each year for 4 years, then 25% increase annually) <i>→</i> (target: stewardship- related engagement has growth of 50% each year for 4 years, then 25% increase annually) <i>→</i> (target: stewardship- related engagement has growth of (target: stewardship- related engagement has growth of 50% each year for 4 years, then 25% increase annually) <i>→</i> (target: stewardship- related engagement has growth of (target: stewardship-
COMMUNICATIONS AND MARKETING	 → Launch communications and marketing campaign and regular schedule connected to initiatives in this plan (FY 21/22, ongoing) → Launch web pages for climate action (FY 21/22) 	→ % rate of participation, social media analytics on climate-related content (target: public engagement has growth of 50% each year for 4 years, then 25% increase annually)
EVENTS	 → Develop and host program of climate action focused knowledge-sharing, collaboration and empowerment events (FY 22/23, ongoing) → Develop and host an annual celebration event featuring progress, local innovations and actions (FY 23/24) → Co-design and co-host a climate action conference (2025/26) → Proactively seek opportunities and attend external events to share information, research, practices, and activities about climate change action (e.g., Adaptation 2020 Conference, Climate Risk and Resilience Community of Practice) 	 → # of events hosted and supported, # attendees at events. Targets: 1 signature event launched in 23/24 (ongoing) 12 public webinars/panel discussions hosted annually 1 community workshop hosted/ facilitated annually 1 conference co-hosted by 2025/26 Engagement through events has growth of 50% ask waar for 4 waars

increase annually

Monitoring and Reporting

Transparency and Accountability

As outlined in Leadership and Governance (Outcome 7), Royal Roads will build accountability and transparency into the Climate Action Plan process by implementing a system for monitoring, measuring and reporting on activities and progress toward the climate action goals.

Aligned with the approved goals, actions and targets, the university will publish an annual report that includes:

- → Mandatory disclosures, as per provincially legislated requirements in the Climate Change Accountability Act.
- → Voluntary disclosures, including disclosure of performance against all approved key performance indicators included in the Climate Action Plan.
- → Climate risk reporting, including the management approach to each risk.

Through the Climate Leadership Committee, the Board of Governors will be updated, semi-annually on progress toward the climate action targets.

Communications and University Engagement

In addition to the above, the university will regularly share information about climate activities and progress, and posts this to the university community via Crossroads and other channels.

Iterative Development

As mentioned previously, this plan will be iterative and responsive to emerging changes and issues. The world continues to change at a pace and scale that demands that we stay adaptive, and the plan needs to reflect this adaptive management orientation and ensure that actions are themselves adaptable. RRU will stay open and responsive to new information, relationships, knowledge systems, technologies, needs and challenges. This plan and the university's approach to climate action will strive to embody the flexibility, creativity, continual learning, collaborative and transformative agenda that is foundational to this work.

APPENDIX A: Definitions

The following definitions convey how these concepts and terms are used or framed in the Royal Roads Climate Action Plan. There may be divergences and/or convergences from some standard definitions given the wide variations in meaning, but the following define how they are used in this plan document.

Adaptation

Adaptation measures are focused on reducing climate change vulnerability or moderating harm from impacts but can also take advantage of new opportunities. It refers to adjustments made to human or natural systems based on actual or anticipated impacts of climate change. Examples of adaptation measures would be landscape restoration, preparedness plans, infrastructure upgrades to accommodate new or changing environmental conditions caused by climate, and diversifying food cultivation.

Changemaking

In a Royal Roads context, changemaking speaks to actions taken that embrace collaborative and creative methods to tackle local and global challenges to create positive impact. It also includes advancing social innovation through empathy, dialogue, distributed leadership, and establishing mutually beneficial partnerships. By leading through examples of socially and environmentally conscious efforts, we can improve human life and equality, and contribute to planetary health. Actively sharing these results, learnings and best practices, both inspires and amplifies the changemaking efforts of others. Climate Action is Goal 13 of the United Nations Sustainable Development Goals: "Take urgent action to combat climate change and its impacts". (<u>https://www.un.org/</u> <u>sustainabledevelopment/climate-action/</u>)

Climate Action

Climate action reaches beyond mitigation and adaptation to enhance ecosystems, protect biodiversity, address inequality, and contribute to transformative change. These include climate change efforts that span from reducing greenhouse gas emissions to strengthening resilience and adaptive capacity in ways that are inclusive and socially just (see climate justice definition below).

Climate competencies

Climate competencies define the skills, knowledge, attitudes, and abilities that are desired for people who work in climate change related jobs. For more about this, refer to the *Climate Adaption Competency Framework*, developed by the Adaptation Learning Network.

Climate justice*

Climate justice focuses on the inequities of the causes, impacts and solutions to climate change. It's a recognition of and addresses the fact that the climate emergency has profoundly disproportionate consequences on those who have contributed the least warming. Climate change impacts exacerbate inequitable social conditions and have differing social, economic, public health and other adverse impacts on underprivileged or marginalized populations. Climate change action must address these injustices and power-imbalances through a human-centered, intersectional approach that is inclusive of those who will be most affected. The costs of mitigation, adaptation and recovery must be unequally carried by those that contributed the most warming and/or profit from the climate emergency.

*closely related to social justice and just transition

Social justice: Striving beyond equity to redress and alleviate inequalities in strategic ways and to remove the structures that create inequalities. Incorporating participatory methods that ensure representation and accountability.

Just transition: A framework that encompasses a range of social interventions needed to secure rights and livelihoods of energy providers and consumers when economies are shifting to sustainable production, primarily combating climate change and protecting biodiversity.

Climate literacy

Climate literacy is a foundational understanding of climate science, and the causes and impacts of human-caused climate change. It includes climate actions (mitigation measures and adaptation strategies) as well as an understanding of the human and natural influences on climate (including feedback loops), and the probabilities, risks and consequences a changing climate has and will have on humans, societies, systems and other life on earth.

Co-benefits

Co-benefits refer to the positive effects that a policy, strategy or action might have in addition to the direct benefits of addressing outcomes focused on climate change mitigation or adaptation. Measures that reduce greenhouse gases and simultaneously improve adaptative capacity are also considered co-benefits. Cobenefits can also be referred to as ancillary benefits, synergies, or multiple benefits. The opposite of co-benefits are trade-offs or conflicts. Any decision-making to determine strategies, policies and actions should aim to maximize benefits and minimize conflicts.

Indigenization

A long-term process of shifting ways of doing and interacting so that Indigenous perspectives, world views, culture and traditional ways are restored and included. For the Royal Roads context, this includes changes to course content, learning contexts and ways of operating. This process aims to recognize and address the historical and current suppression of Indigenous Peoples and supports the efforts of Indigenous Peoples to reclaim what was taken from them. This definition will continue to shift as learning and understanding grows.

Living labs*

Living labs are immersive places, courses, programs or sessions where faculty, staff and students come together to use the campus and surrounding community to test exciting ideas as possible solutions to real-world challenges. Labs can take the form of campus-based innovations or place-responsive programs that offer multidisciplinary, iterative and experiential learning across a range of scales to broaden knowledge, skills, competencies and connections. Living Lab users co-create, explore and exchange emerging ideas, research and concepts during collaborative experimentation and capacity-building experiences.

*to be defined further for the RRU context during initial consultation and case-study research

Mitigation

Climate change mitigation efforts are human interventions that addresses the root causes of climate change by reducing or eliminating GHG emissions and creating carbon sinks. Current mitigation efforts are focussed on stabilizing atmospheric GHG concentrations below a level where we can avoid the most harmful effects of climate change within a time frame that would allow humans and ecosystems to adapt naturally to climate change. Examples of mitigation include using fossil fuels more efficiently for industrial processes or electricity generation, switching to solar energy or wind power, improving the insulation of buildings, and expanding forests and other "sinks" to remove greater amounts of CO2 from the atmosphere.

Nature-based solutions

Nature-based solutions are outdoor or environmental actions that improve the well-being of humans and the resilience of natural systems while having co-benefits of mitigating climate change or adapting to climate impacts. Examples include protecting ecosystem health and biodiversity.

Net zero emissions

We will achieve net zero emissions when human-caused emissions are reduced to as close to zero CO2e as possible (i.e., carbon neutral). Any remaining GHGs will be balanced with an equivalent amount of carbon removal from elsewhere in the carbon cycle, often known as "offsets."

NOTE: Net zero differs from net negative which goes beyond carbon neutrality by removing GHGs from the atmosphere or reducing emissions to the atmosphere such that the total reductions and removals exceed any emissions. Net zero also differs from absolute zero which is a longer-term outcome since it requires emissions from all energy sources, industrial processes, agriculture and building practices to be completely decarbonized.

Reconciliation

A continued commitment to raise awareness about colonization and its ongoing effects on Indigenous peoples, as well as contributing to repairing the effects of that oppression. The ongoing effort to weave Indigenous knowledge, worldviews and ways of knowing and being into the way we work and learn, and to walk forward in a good way with Indigenous Peoples. This includes ensuring there is consultation and reciprocal knowledge-sharing with Indigenous rights holders and that it is embedded in processes and planning. Specific to the Royal Roads context, reconciliation also includes applying Indigenous protocols to research with Indigenous peoples, celebrating Indigenous cultures and respecting the people of these lands. The reconciliation process aims to create a new shared future for Indigenous peoples, immigrant-descendants and immigrants in Canada. This definition will continue to shift as learning and understanding grows.

Resilience

Resilience speaks to the capacity of humans and/or social, economic and environmental systems to cope with crises or stress by responding in ways that sustain their essential function, identity and structure while also maintaining the capacity for managing, adapting, learning and transforming. In this plan, improving resilience occurs at multiple levels (e.g., personal, institutional, community and global). For example, institutional resilience is increased through the prioritization of risk management and impact reduction strategies. Another example is improving community resilience by building capacity for effective climate change-related planning, with a focus on historically under-represented groups such as women, youth and marginalized communities.



Scope 3 emissions

Scope 3 emissions include all indirect emissions that occur in a company or organization's value chain (emissions related to commuting, travel, solid waste, food, procurement and embodied building emissions) that are not included within scope 1 and 2 categories. Scope 1 includes direct emissions from owned or controlled sources and scope 2 covers indirect emissions from the generation of purchased electricity, heating and cooling.

APPENDIX B: Climate Action Task Force and Consulted Groups

From September 2020 to May 2021, members of the Royal Roads University Climate Action Task Force contributed many hours of time, energy, expertise and passion to the process of developing this plan. This work is the embodiment of caring, courage and creativity in the face of one of the most important issues of our time.

The university expresses sincere gratitude to everyone who contributed, supported and shaped this vital work. Our hope is that the resulting Climate Action Plan will be instrumental in setting a path forward to address the climate emergency and guiding Royal Roads in our own growth as a climate-focused community. The following is a list of students, staff, faculty, associate faculty and community members who were involved in the development of this plan.

We would also like to acknowledge the hundreds of RRU faculty, researchers, staff, alumni, and students who have devoted themselves to every aspect of the climate sustainability challenge. Since the university's inception, the collective commitment to making these values a central part of Royal Roads University, and to advancing this through research, curriculum, operations and how we interact with one another, has created the foundation for this work to continue.



CLIMATE ACTION TASK FORCE MEMBERS

Name, University Role(s)	Department, School or Program Area
Task Force Co-chairs	
Robin Cox, Program Head, Professor and Director	School of Humanitarian Studies, MA Climate Action Leadership; ResiliencebyDesign Lab
Maria Bremner, Manager	Office of Research and Innovation
Coordination	
Beverly de Vries, Coordinator	Office of Research and Innovation
Task Force Leadership Team (TFLT)	
Asma-na-hi Antoine, Associate Director	Indigenous Engagement
David Oswald, Associate Faculty	School of Environment and Sustainability
Hilary Leighton, Associate Professor and Program Head	School of Environment and Sustainability, MA in Environmental Education
Wanda Krause, Associate Professor and Program Head	School of Leadership Studies, MA Global Leadership
Leslie King, Professor and Director	School of Environment and Sustainability, MA/MSc in Environmental Practice
Todd Thexton, Assistant Professor and Director	School of Business
Ann Dale, School Director and Program Head	School of Environment and Sustainability, MSc Environment and Management
Julie Johnston, Associate Faculty	Interdisciplinary Program
Deborah Zornes, Director	Office of Research and Innovation
Michelle Rodrigue, Manager	Admissions and Enrolment Services
Rhett Reilkoff, Program Coordinator	School of Humanitarian Studies
Kirsty Armstrong, Manager	Creative Services
Courtney Loftus, Student (also on Advisory)	MA Environmental Practice
Jess Wittman, Student (also on Advisory)	BA Professional Communication
Sarah Abbott (also on Advisory)	Doctorate Social Sciences
Kathleen Manion, Program Head, Associate Professor (also on Advisory)	School of Humanitarian Studies, Bachelor of Justice Studies
Climate Action Staff and Faculty Advisory Council	
Amy Hinrichs, Advancement Manager	Communications and Advancement
Rudra Shrestha, Associate Faculty	School of Environment and Sustainability
Erin Edwards, School Manager	School of Environment and Sustainability
Kathleen Manion, Program Head, Associate Professor (also on TFLT)	Bachelor of Justice Studies
Marnie Jull, Program Head and Associate Professor	School of Humanitarian Studies
Rick Kool, Professor	School of Environment and Sustainability
Alec Balasescu, Associate Faculty	School of Leadership (MA Global Leadership)
Russ Johnston, Advisor	Indigenous Education
Debbie Dupuis, Executive Assistant	Office of the VP, Research and International
Christie Jones, Education Advisor	Branding, Marketing and Recruitment
Roger Wells, Associate Director	Client Services
Nancy Prevost-Maurice, Event Coordinator	Campus Services
Jason Oliver, Team Coach	Student Services
Ron Granados, Director	Operations
Climate Action Student Advisory Council	
Reza (Gholamreza) Olad	MA Global Management
Linda Shin	BA Environmental Practice
Arielle Luchich	MA Disaster and Emergency Management
Julie Kaplan	MA Leadership
Yogita Bang	MA Intercultural and International Communication
Mona Keffer	MA Environmental Practice
Anu Metso	MA Global Management
Dan Burt	Doctorate Social Sciences
Haley (Xiaolin) Gong	BA International Hotel Management
Adam Bala-Gaye	MA Human Security and Peace Building
Courtney Loftus (also on TFLT)	MA Environmental Practice
Jess Wittman (also on TFLT)	BA Professional Communication

- Other Groups or Individuals Consulted → President and Executive Sponsors → Academic Leadership Team Extended

- → Academic Leadership Ieam Extended
 → Senior Leadership Team
 → Vice-President Research and International Leadership Team
 → President's Steering Committee on Equity, Diversity and Inclusion
 → Heron People Circle
 → Operations Leadership Team
 → General University Community (via Campus Conversation (Feb. 2021), Climate Action Survey (March 2021))
 → Working group contributors: June Pretzer and Emily Lewis

APPENDIX C: Resources, Plans and Frameworks Consulted

Although many resources, plans and frameworks were consulted during the Climate Action Plan development process, the following sources were notably applied:

- → Pan-Canadian Framework on Clean Growth and Climate Change from Government of Canada
- → <u>CleanBC Plan from Government of British Columbia</u>
- → <u>ClimateReady: Preparing Together from Government of British Columbia</u>
- → <u>Preliminary Strategic Climate Risk Assessment for British Columbia</u>
- → Climate Preparedness and Adaptation Strategy from Government of British Columbia
- → UN International Panel on Climate Change (IPCC) <u>https://www.ipcc.ch/</u>
- → <u>United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP)</u>
- → National Centre for Truth and Reconciliation <u>https://nctr.ca/</u>
- → <u>United Nations Sustainable Development Goals (UN SDGs)</u>

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