



## **Viessmann Centre for Engagement and Research in Sustainability**

### **Wilfrid Laurier University**

## **2022 Report to the Senate Committee of Research and Publications**

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## 1. Name and purpose of the Centre/Institute

The Viessmann Centre for Engagement and Research in Sustainability (VERiS) is an interdisciplinary and community-engaged research centre. Our purpose is to enable transdisciplinary multi-sector applied research projects focused on the human dimensions of sustainability and global climate change.

*Identify the vision, mission, and goals for the Centre/Institute, together with the areas of research activity which align with Laurier's strategic plans and objectives. For example, Laurier's 2019-2024 Strategic Plan includes two pillars: Thriving Community and Future Readiness. More details about these pillars (including sub-pillars) and Laurier's research themes can be found in the [Strategic Research Plan 2020-2025](#). This section of the report should be no more than 750 words. Please indicate your word count.*

Word count: 585

Our vision is a society with strong cultures of sustainability across organizations and communities and a sustainable future where everybody belongs. We understand Cultures of Sustainability, “as characterized by shared values, symbols, rituals and practices grounded in sustainability principles leading to individual and societal choices that promote environmental protection, social justice and wellbeing, and a supportive economy” (from Dreyer, Riemer, Spadafore, et al., 2021).

Our mission is to be a catalyst and nexus for the transition toward strong cultures of sustainability. We are using a transdisciplinary and equitable systems-approach to work alongside equity-seeking groups, environmental non-governmental organizations, local governments, industry partners and other community stakeholders to co-produce innovative, multidisciplinary, and action-oriented research that contributes to evidence-based climate action and pathways to sustainability that are equitable and accessible.

We have active research programs related to cultures of sustainability and wellbeing within green buildings (e.g., evol1, Canada's first commercial net-positive energy multi-tenant office building), closing the equity-deficit within municipal climate action, and other projects initiated and led by our members, fellows, and students. VERiS is also home of the *Flourishing Enterprise Institute (FEI)*, a vibrant global network of nodes undertaking applied research, developing innovation practices, and mobilizing knowledge to enable leaders to realize Flourishing Enterprises worldwide.

Our work is clearly closely aligned with and furthers Laurier strategic research plan. VERiS is committed to excellence in promoting thriving sustainable and socially just communities by creating a culture of engagement that is grounded in long-term committed relationships with a diverse group of individuals, organizations, institutions, and communities. We have been entrusted with developing and leading large local, national, and international multi-sectorial partnerships, such as ReGENERATE and TEAMCA (see below). With our work we are fostering a new generation of community-engaged scholars who master the science and art of tackling complex challenges through broad partnership-based research collaborations. We are committed to do our part to work towards decolonization, reconciliation, and Indigenization. For example, our director, Dr. Riemer, is the co-chair of a national group promoting decoloniality and anti-racism in psychology. We are also working on several research projects that include considerations of decoloniality, human rights, and anti-racism and provide mentorship to Indigenous students and junior scholars.

We are working together with collaborators from universities in a variety of countries such as the USA, Germany, the UK, Columbia as well as some of the largest international organizations working on sustainability and climate resilience such as ICLEI World Secretariat and the Global Resilient Cities Network.

We also are closely aligned with Laurier second strategic pillar, *Future Readiness*. For example, we are supporting the development of highly qualified personnel, who are able to bridge disciplines and sectors and navigate complex challenges and promote creative innovations through research. Our student fellows are actively involved in developing and engaging with large community-university collaborations including diverse partners. With our focus on the interconnection of community, environment, and justice and the psychology of sustainability, VERiS fills an important gap within Canada's sustainability landscape. The FEI, operating under the umbrella and mentorship of VERiS, is working closely with our leadership in radically shifting the way municipalities do strategic management so that they are better prepared to deal with emerging complex challenges such as climate change, rising divisions and inequality, and public health crises, such as the current pandemic. This shift holds the promise to move from incremental change to the kind of systems transformation that is needed to adapt to the emerging challenges to avoid future harm, especially for equity-seeking groups who are already marginalized.

## 2. Progress report

### 2.1 Achievement of Objectives

*Describe generally how and why the centre/institute has achieved or revised its original objectives over the past 3 years. This preamble should be no more than 500 words. Please indicate your word count.*

Word Count: 500

The key objectives identified in our strategic plan were:

- 1) Establish three vibrant and successful research streams under the umbrella of VERiS in addition to the general research agenda of VERiS.
- 2) Develop a positive internal and external reputation as a centre of excellence for research and engagement.
- 3) Create a strong financial and logistic foundation for the centre.
- 4) Build a strong human foundation for the centre.
- 5) Attract and foster strong talent.
- 6) Develop a vibrant regional, national, and international network of partners and collaborators.
- 7) Set up a living lab within the evol1.
- 8) Provide a supportive environment where people affiliated with the centre are well and thrive.

We have made significant progress regarding all of these original objectives. Since its inception in 2018, VERiS has quickly emerged as a leader in applied transdisciplinary sustainability research. This is reflected at local, provincial, national, and international levels. For example, at the local level we had significant impact on the recently released community climate action plan for Waterloo region. This contribution, among others, was recognized with the Champion of the Year award by Sustainable Waterloo Region. At the provincial level we have received prestigious grants such as the Ontario Research Fund – Research Excellence grant (a Laurier first), whose one million dollars were matched by

another two million in cash and in-kind through our 53 industry and community partners. At the national level we are leading the Toward Equity and Accessibility in Municipal Climate Action partnership (TEAMCA), with over 64 partners. Internationally, we were asked to lead a 5-country grant submission to the Transatlantic Atlantic Platform competition and have developed key partnerships with influential organizations such as ICLEI World Secretariat, the Global Resilient Cities Network, and r3.0. Our reputation has enabled us to lead or co-lead a total of 14 grant applications, 12 of which were successful, 3 pending, and two unsuccessful. We have also published 7 papers and book chapters with many more in progress at various stages.

With an endowment producing \$11,000 or more per year and strong financial support from the Office of Research Services and the Faculty of Science totalling over \$70,000, VERiS has a strong financial foundation to support its research and engagement activities. With an engaged director, an administrative manager, a fulltime project manager (financed through research grants), a halftime postdoc, and other HQP, we have a strong human foundation as well. Our Centre is strategically located in evolv1, Canada's first certified carbon-neutral and net-positive energy building, where we have set up a living lab with funding from the Canadian Foundation of Innovation, the Ontario Research Fund, and accumulated interests from the Viessmann endowment.

While we are in the process of finalizing our next 3-year strategic plan, all of these objectives continue to be a high priority for VERiS. In moving forward, we want to build upon this strong foundation and further our leadership in advancing applied research and action focused on creating a sustainable just future where everybody belongs and can thrive.

*Provide a table listing the Centre/Institute's objectives and a brief description of the progress towards achievement (see example, below).*

**2019-2021**

Objective	Description of progress
<p>1. Establish three vibrant and successful research streams under the umbrella of VERiS in addition to the general research agenda of VERiS.</p>	<p>a) We have established three specific and one general streams. Dr. Riemer has been leading the general stream and the Flourishing Enterprise Stream is being co-led by Randy Sa'd and Dr. Jones, the European Research Stream by Bianca Dreyer (located in Berlin) and Dr. Riemer, and the Wellbeing Stream by Dr. Coulombe.</p> <p>b) While Dr. Coulombe's has left Laurier, our Board decided to keep the Wellbeing Stream. There are continuous research and knowledge mobilization activities related to wellbeing in green buildings and related to COVID-19. The stream is currently co-led by Drs. Coulombe and Riemer.</p> <p>c) While we have conceptualized 3 specific and one general research streams, the practical reality is that research and knowledge mobilization projects cut across these different streams and cannot always uniquely attributed to one stream.</p> <p>d) <i>The Flourishing Stream</i> is thriving, including the launch of the first node of the Flourishing Enterprise Institute at VERiS with the support of a SSHRC Connection Grant. The</p>

	<p>FEI now includes a community of practice of over 1500 practitioners, social innovators, and academics across the globe. A second node at Georgian College is under development and several others are in early planning stages.</p> <p>e) <i>The European Stream</i> has been engaged in a research project in Portugal with Critical Concrete, which aims to develop an in-depth, socio-ecological understanding of the transformative potential of urban just sustainability projects in the area of affordable housing, using an in-depth case study focused on exploring how participatory co-production projects can address ecological and social needs. We also submitted a joint Transatlantic Portal grant application with partners in Germany and Great Britain (as well as Columbia and the USA) and made connections to related research centres in Goteborg, Sweden and Potsdam, Germany as well as the European Academy Otzenhausen in Germany.</p> <p>f) The <i>Wellbeing Stream</i> completed a research project on wellbeing in green office building funded by the Government of Alberta. Two articles have been published in high-impact journals, another one submitted, and a fourth one is in development. In addition, we have had a photo voice exhibition about wellbeing in green buildings in the Kitchener Museum, online on the website of Sustainable Waterloo Region, and now in <i>evolv1</i>. Multiple student projects have been either completed or are in development as well. We have also developed a collaboration with the International WELL Building Institute, which oversees the Well Certification for green buildings.</p> <p>g) Within the general stream we have led the ReGENERATE partnership and the Toward Equity and Accessibility in Municipal Climate Action (TEAMCA) partnership, which together include over 58 partners from academia, government, industry, NGOs, and community. We have also consulted with ClimateAction Waterloo Region on the regional community climate action plan, especially regarding the integration of social justice considerations. We have also engaged in various knowledge mobilization activities, including the lounge of our <a href="#">evolv1 story report</a>.</p>
<p>2. Develop a positive internal and external reputation as a centre of excellence for research and engagement.</p>	<p>a) VERiS is considered a leader in applied community-engaged research on the interconnection of community, environment, and justice as reflected in this statement by board member Dr. Barry Colbert: “<i>The VERiS centre at Laurier is highly regarded in the scholarly and regional communities as a leading, credible source of high-quality research and action in sustainability.</i>” This is evidenced by</p>

	<p>local recognitions, such as the Champion of the Year award from SWR and our leadership on large national and international partnerships, as previously mentioned. VERiS has also received very positive press coverage both within Laurier and externally.</p> <p>b) Our various knowledge mobilization and research development workshops have been attended by hundreds of academics and practitioners.</p> <p>c) Influential organizations such as ICLEI, the Global Resilient Cities Network, the David Suzuki Foundation, the International WELL Building Institute, r3.0., and others have invested in their collaboration with VERiS.</p> <p>d) Multiple prestigious national and provincial grants have been awarded to VERiS (see below).</p>
<p>3. Create a strong financial and logistic foundation for the centre.</p>	<p>a) VERiS has a strong base for operational funding of over \$80K per year</p> <p>b) VERiS has a well-equipped office space within evolGREEN, a hub for innovation and research in support of developing Canada’s clean economy.</p> <p>c) We have been able to generate over \$1.5 x Million in external research funds.</p>
<p>4. Build a strong human foundation for the centre.</p>	<p>a) We have one director with one course release per year (funded through the Viessmann endowment)</p> <p>b) We have four co-directors for the three research streams</p> <p>c) We have one admin manager with 4 days a week</p> <p>d) We have one fulltime research project manager</p> <p>e) We have worked with another 4 Research Associates</p> <p>f) We have an excellent board with 10 members</p> <p>g) In the last 3 years we had 2 affiliated Postdoctoral Fellows and 27 affiliated students</p> <p>h) A key strength is also our 4 actively engaged community fellows and many other external partners</p>
<p>5. Attract and foster strong talent.</p>	<p>a) We had 4 PhD students from Laurier and another 3 from other institutions (University of Waterloo, York University)</p> <p>b) We had 5 Master-level students from Laurier and another 6 from other institutions (including 3 co-op students)</p> <p>c) We had 5 undergraduate honour students and 10 research assistants</p> <p>d) Student affiliated with VERiS received prestigious awards and scholarship such as one Vanier scholarship, and four SSHRC graduate scholarships as well as 2 Laurier Library Research Awards, 2 NSERC Faculty of Science Student Research Awards, and 2 awards for best honour thesis from the Canadian Psychological Association.</p>
<p>6. Develop a vibrant regional, national, and international network of partners and collaborators.</p>	<p>a) We have engaged over 100 partners across multiple projects</p> <p>b) The FEI has a community of practice with over 1500 members globally</p>

	<p>c) We have submitted and received one SSHRC Partnership Development Grant, 4 SSHRC Connection Grants, 2 Partnership Engage Grants, 1 Ontario Research Fund – Research Excellence Grant and submitted a Transatlantic Platform grant involving 19 partners from 5 countries (unsuccessful) and SSHRC Partnership Grant involving 29 individual and 29 organizational partners (pending).</p> <p>d) Across these projects our partners have invested or committed over \$3 Million in matching funding</p>
<p>7. Set up a living lab within the evolv1.</p>	<p>a) We have set up an office space with three types of work spaces (fully closed, semi-closed, and open) in evolv1</p> <p>b) We have installed a network of wirelessly connected sensors across all three floors of the building measuring temperature, air quality, noise and light levels, and occupancy.</p> <p>c) All sensor data and the building systems data are being stored in a devoted shared server at the University of Waterloo</p> <p>d) Selected building data will soon be accessible to the public in real time through our interactive website <i>explore-evolv1</i> connected to the data on the server</p> <p>e) We have conducted various observations in the building (e.g., use of elevators and stairs, waste audits, space use)</p> <p>f) During the work-from-home orders we have collected survey data from people working in their home offices</p>
<p>8. Provide a supportive environment where people affiliated with the centre are well and thrive.</p>	<p>a) We have established a well-being strategy for VERiS</p> <p>b) During the pandemic, we have provided our staff with office equipment and flexible work hours to accommodate childcare and other specific needs</p> <p>c) We have received a lot of positive feedback from our members and students that VERiS provides a positive environment for thriving (see testimonials in Appendix C) as well expressed by Jennifer Dobai, a graduate student fellow: <i>“Most importantly, VERiS has provided me a sense of community where I can collaborate and learn with like-minded people,”</i> and co-director Randy Sa’d: <i>“The foundation of trust, integrity and openness that underpins our relationship has made our collaboration highly functional and effective.”</i></p>

## 2.2 Most significant research accomplishments

*Members of a research centre/institute are expected to engage in some or all of the following activities: co-publishing; co-applications for grants and/or contracts; co-supervision of students; and/or co-presentations. It is expected that members will identify themselves as centre members in publications related to the focus of the centre.*

*Describe generally the most significant research accomplishments of the centre/institute over the past 3 years. Please include accomplishments aligned with the outlined expectations, not for individual faculty that are members of the Centre/Institute but not involved in collaborative activities. This preamble should be no more than 500 words. Please indicate your word count.*

Word Count: 474

Today's key societal challenges, such as climate change, are complex and emergent. This requires a new type of research that is responsive to that complexity, spans across disciplines, is flexible and responsive to emergent needs, and is conducted in close collaboration with diverse partners. VERiS excels in this applied community-engaged transdisciplinary research. In the last 3 years, VERiS researchers led a total of 13 research projects across the three major themes: a) Cultures of Sustainability, b) Wellbeing in Green Buildings, and c) Sustainability Justice.

We are now in the fourth year of our major evol<sup>1</sup> research program, which is focused on cultures of sustainability and wellbeing in green office buildings. This research is funded by a SSHRC Partnership Development Grant, an Ontario Research Fund – Research Excellence Grant, and a Canadian Foundation of Innovation Grant with a matching ORF innovation grant. The research program includes an active living lab in Canada's first net-positive energy commercial multi-tenant office building and multiple related research projects by faculty and students. While our research has certainly been impacted by the pandemic, we have been able to adapt and continue culture of sustainability programming and data collection such as our annual survey and focus groups. Last year, we launched a report featuring the unique story of evol<sup>1</sup> as well as a photo voice exhibit in The Museum and online. We recently also completed the development of an interactive website that allows the building occupants and the general public to engage live with the performance of evol<sup>1</sup>. Other knowledge mobilization outputs have been produced with several more in development or planned (see table below).

Last year we completed the final report for a study with a municipality in Alberta and comparison sites across Canada focused on wellbeing in green buildings. We have been invited to present our findings to a variety of groups and have two papers published, one submitted and one in development.

Funded by a SSHRC PEG, we began a pilot research project with the City of Kitchener and our partner REFOCUS to study the implementation of the Enterprise Evolution approach with the corporate leadership team of the City. This approach is focused on enabling municipal leaders to adapt their strategic management practices to today's complex and interconnected societal challenges. In addition, funded by a SSHRC Connection Grant, we organized three workshops with over 70 participants, which resulted in the formation of the TEAMCA Partnership, which includes 8 municipalities and over 40 partners. This partnership recently submitted a SSHRC Partnership Grant. Another Connection grant is supporting a related project focused on engaging Black and Indigenous groups with the City of Kitchener in co-producing a decolonial and anti-racist approach to municipal community engagement.

In addition, there are several smaller research projects led by faculty and students that are all related to the major themes and inform our major research agenda.

Provide a table listing the Centre/Institute’s most significant research accomplishments (see example, below).

**2019-2022: Most significant Research Accomplishments**

Project	Year(s)	Members	Funding	Outcomes
<b>Decolonizing and Transforming the Engagement of Indigenous and Black Peoples within Municipal Planning in Kitchener</b>	2021-2022	Cheryl Teelucksingh Ryerson U (PI); Miguel Sioui WLU (Co-PI); Manuel Riemer; Randy Sa’d	\$ 21,769.00 SSHRC Connection Grant	<p>We expect four key knowledge outputs for this project:</p> <ol style="list-style-type: none"> <li>1. A virtual workshop series (2 three-hour workshops) to understand better decolonization and settler colonial relations in municipal planning among multiple stakeholders (academics, municipal actors, Indigenous and Black community organizations, and innovation actors). The goal of the workshop series is to learn and co-create with knowledge holders and build knowledge about strategies to decolonize in municipal engagement using the City of Kitchener as a test location;</li> <li>2. A brief knowledge report to summarize workshop findings;</li> <li>3. A scholarly paper to contribute to the literature on municipal governance and decolonization</li> <li>4. Social media engagement to capture and share with a wider audience workshop findings in an accessible format.</li> </ol> <p>Furthermore, the workshop series and the knowledge creation process provide valuable opportunities for training and mentoring graduate and undergraduate students, including one MA thesis in progress.</p>

<p><b>Mapping the convergence of Climate change and community safety</b></p>	<p>2021-2021</p>	<p>Felix Munger                  CMNC (PI)                  Manuel Riemer                  (Co-PI)                  Roxanne Springer                  (Research Associate)</p>	<p>\$ 20,520.00                  SSHRC – Connection Grant</p>	<p>In partnership with the <a href="#">Canadian Municipal Network on Crime Prevention</a> (CMNCP), a series of three connected online workshops exploring the complex interconnections between climate change and community safety and urban security was conducted in the summer of 2021. As a result of the workshops the 42 Canadian and international experts highlighted four main challenges related to climate change and community safety:</p> <ol style="list-style-type: none"> <li>1. Limited research and an absence of conceptual frameworks;</li> <li>2. Lack of support for practitioners both in climate change adaptation and urban security;</li> <li>3. The need for an equity/justice lens; and</li> <li>4. No known opportunities for knowledge exchange.</li> </ol> <ul style="list-style-type: none"> <li>• The podcast: <a href="#">Exploring the Intersection Between Climate Change and Crime, Violence and Community Safety</a>, produced in the context of the workshops, summarizes the state of the current knowledge.</li> <li>• A report summarizing the discussion and results EXPLORING THE LINK BETWEEN CLIMATE CHANGE HAZARDS AND COMMUNITY SAFETY and a video based on the workshops are in progress.</li> <li>• During the October 2021 <i>Security, Democracy, &amp; Cities Conference</i> of the <a href="#">European Forum for Urban Security</a> (EFUS), which attracted over 600 participants, Mayor Specht of Mannheim, Germany, highlighted the climate change and urban security nexus as a vital topic for future engagements following attending a panel on climate change initiated by Dr. Felix Munger.</li> <li>• Under the leadership of Dr. Munger, we have outlined a strategy to develop an International Expert Group and eventually an International Centre of Collaboration on Climate Change and Urban Security to tackle the increasingly important link between climate change and local security risks.</li> </ul>
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<p><b>Toward Just Transitions: Integrating Sustainability Justice into Municipal Climate Action Planning</b></p>	<p>2020-2021</p>	<p>Manuel Riemer (PI); Alex Latta; Alexis Buettgen; Claire Bennet; Peter Jones; Sean Geobey; Barry Colbert; Kai Reimer-Watts</p>	<p>\$ 20,506.00 SSHRC – Connection Grant</p>	<ul style="list-style-type: none"> <li>• In the summer and fall of 2020, we conducted a three-part workshop series bringing together over 70 academic experts, municipal planners involved in climate action and sustainability planning, social innovators, and representatives from equity seeking groups to exchange their theoretical, empirical, and practical knowledge, assess the state of current knowledge, identify gaps, key challenges, and opportunities, and establish how to tap into the strengths of existing organizational networks.</li> <li>• As a result of this workshop the Towards Equity and Accessibility in Municipal Climate Action partnership (TEAMCA) was formed (originally called the Climate Justice Partnership).</li> <li>• A research agenda was established resulting in joint submissions of a Partnership Engage Grant (see below), Transatlantic Platform Grant (rejected), a Trottier Foundation grant (pending), and most recently a SSHRC Partnership Grant (pending).</li> <li>• Two summary reports were generated: 1) <i>Sustainability Justice in the Context of Municipal Climate Action Planning: Key Considerations</i> &amp; 2) <i>Local Climate Action Planning in the Canadian Context – A Summary</i>.</li> <li>• One honour thesis by Jennifer Dobai was developed and one MA thesis by Alicia Beavan is under development.</li> </ul> <p><b>Peer reviewed publication</b></p> <ul style="list-style-type: none"> <li>• Dobai, J. &amp; Riemer, M. (2022). Closing the Equity-Deficit: Sustainability Justice in Municipal Climate Action Planning in the Waterloo Region. Manuscript under review at the <i>American Journal of Community Psychology</i>.</li> </ul> <p><b>Book Chapter</b></p> <ul style="list-style-type: none"> <li>• Trott, C.D., Reimer-Watts, K., &amp; Riemer, M. (in press). In the pursuit of a practical utopia: Transitioning towards climate justice. In C. Kagan, A. Constanzo, J. Akhurst, J. Alfaro, R. Lawthom, and M. Richards (Eds.). <i>Routledge International Handbook of Community Psychology</i>:</li> </ul>
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				<p>Facing Global Crises with Hope.                  Routledge.</p> <p><b>Conference</b></p> <ul style="list-style-type: none"> <li>• Dobai, J., Riemer, M., &amp; Bevan, A. (2021). Towards sustainability justice: Addressing the equity gap in municipal climate action planning. Paper presented at the 2021 Biennial Conference of the Society for Community, Research, and Action, online format.</li> <li>• Trott, C., Reimer-Watts, K., &amp; Riemer, M. (2021). Convoking a radical imaginary for climate justice: The role of Community Psychology. Paper presented at the 2021 Biennial Conference of the Society for Community, Research, and Action, online format.</li> <li>• Ashcroft, A., Riemer, M., Sa'd, R., Vrbanovic, B. (2020, October). Climate action planning for equity and transformation. Panel presented at the 2020 Federation of Canadian Municipalities Sustainable Communities Conference, online format.</li> <li>• Riemer, M. &amp; Harré, N. (2020). Sustainability and Social Justice: Possibilities and tensions. Paper presented at the International Community Psych Conference – University of Victoria, Australia, online format.</li> </ul>
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<p><b>COVID-19: Developing decision making in municipal planning to enable recovery, future adaptability and long-term resiliency</b></p>	<p>2021-2022</p>	<p>Peter Jones (PI); Manuel Riemer (Co-PI); Gryph Loubier; Brittany Spadafore (project manager); Randy Sa'd; Claire Bennet; + students</p>	<p>\$ 24,925.00  SSHRC – Partnership Engage Grant</p>	<p><b>Peer reviewed publication</b></p> <ul style="list-style-type: none"> <li>Jones, P., Theriault-Loubier, G., Riemer, M., &amp; Spadafore, B. (2022). Adapting municipal strategic management to complexity: A pathway to resilience. Manuscript in progress.</li> </ul> <p><b>Report</b></p> <ul style="list-style-type: none"> <li>Jones, P., Riemer, M., Loubier, G, Spadafore, B. (2021). <i>Shifting mindsets for Managing Complexity: A case study</i>. Report delivered to the City of Kitchener; VERiS, Wilfrid Laurier University, Waterloo, ON, Canada.</li> </ul> <p><b>Conferences</b></p> <ul style="list-style-type: none"> <li>Bennett, C., Davies, S., Riemer, M., Sa'd, R. (2020, September). Innovating strategy development for flourishing enterprise futures. Case study presented at the r3.0 Conference 2020, Redesign for a Regenerative &amp; Distributive Economy: Closing Systemic Gaps, online format.</li> </ul>
<p><b>The accessibility of sustainability: Fostering inclusion of Individuals with vision loss to improve waste diversion in public spaces</b></p>	<p>2020-2022</p>	<p>Manuel Riemer (PI); Stephanie Whitney (Co-PI); Brittany Spadafore; + students</p>	<p>\$ 24,718.00  SSHRC – Partnership Engage Grant</p>	<p><b>Reports</b></p> <ul style="list-style-type: none"> <li>Riemer, M., Spadafore, B., Bevan, A., Dobai, J., Amuge, K. (2022). <i>Sustainability Through an Inclusive Lens (STIL) increasing the accessibility of multi-stream waste disposal systems – A research report</i>. VERiS, Wilfrid Laurier University, Waterloo, ON, Canada.</li> </ul> <p><b>Peer reviewed publication</b> One manuscript is planned based on the final report.</p>
<p><b>Closing the performance gap in high performance in green buildings by cultivating a culture of sustainability (evol1)</b></p>	<p>2018-2023</p>	<p>Manuel Riemer (PI), Joel Marcus (Co-PI), Paul Parker, Simon Coulombe, Noam Miller, Sean Geobey,</p>	<p>\$ 999,667.00  Ontario Ministry for Research And Innovation – Ontario Research Fund Research Excellence</p>	<p><b>Peer Reviewed Publications</b></p> <ul style="list-style-type: none"> <li>Reimer-Watts, K., Abel. E., Coulombe. C., Riemer, M. (2022) <i>Co-Creating Cultures of Sustainability and Co-Imagining the Teaching Green Building: The Use of a Participatory Photovoice Process in a HPGb Context</i>. Manuscript under review.</li> <li>Geobey, S. (2022). <i>Reckoning with Reality: Reflections on a Place-Based Social Innovation Lab</i> [Manuscript submitted for publication].</li> </ul>
<p><b>ReGENERATE: an intersectorial</b></p>	<p>2018-2023</p>	<p>Tova Davidson,</p>	<p>\$ 199,759.00</p>	

<p><b>partnership to investigate human factors in green office buildings (evol1)</b></p>		<p>Brittany Spadafore, Stephanie Whitney, + students</p>	<p>Social Sciences and Humanities Research Council – Partnership Development Grant</p>	<ul style="list-style-type: none"> <li>• Dreyer, B. C., Riemer, M., Spadafore, B., Marcus, J., Fernandes, D., Taylor, A., ... &amp; Dennett, A. (2021). Fostering Cultures of Sustainability in a Multi-Unit Office Building: A Theory of Change. <i>Frontiers in Psychology</i>, 12, 1569.</li> </ul> <p>+ 5 manuscripts in progress</p>
<p><b>Creating a living lab for the optimization of green building performance (evol1)</b></p>	<p>2019 &amp; 2020</p>		<p>\$ 59,419.00 &amp;                  \$ 58,675.00</p> <p>Canadian Foundation for Innovation (CFI) – John Evans Leaders Fund (JELF)</p>	<p><b>Theses</b></p> <ul style="list-style-type: none"> <li>• Poposki, J. (2021). Agents at work: Modeling how space can influence people in the workplace. (Master's thesis, Wilfrid Laurier University).</li> <li>• Kawabata, T. (2021). Energy Saving Behaviours of Occupants in a Multi-Tenant Zero-Carbon Office Building: The Integration of Social Influence Theory and the Energy Cultures Framework (Master's thesis, University of Waterloo).</li> <li>• Spadafore, B. (2020). Reducing Meat Consumption: Drawing on Participatory Action Research to Explore Ways of Engaging in a Process of Meat Consumption Reduction (Master's thesis, Wilfrid Laurier University).</li> <li>• Zhu, Z. (2020). Estimating commercial/institutional building energy consumption and carbon emission trends and measuring stair/elevator usage patterns (Master's thesis, University of Waterloo).</li> <li>• Paxton-Beesley, O. (2020). Assessing the Pre-occupancy and Post-occupancy Baseline Sustainability Practices of Multiple Tenants in a Zero-Carbon Office Building (Master's thesis, University of Waterloo).</li> <li>• Fernandes, D. (2018). Assessing Job Seekers' Attraction to Working in Green Buildings (Master's thesis, Wilfrid Laurier University).</li> </ul> <p><b>Conference</b></p> <ul style="list-style-type: none"> <li>• Palaschuk, P. (2019, November). Exploring a new role of organizational culture in reducing carbon footprints. Presented at Behaviour, Energy &amp; Climate Change 2019 Conference, Sacramento, CA.</li> <li>• Riemer, M. (2019, November). Transitioning to highly sustainable office buildings: The role of occupants and</li> </ul>

				<p>managers. Presented at Behaviour, Energy &amp; Climate Change 2019 Conference, Sacramento, CA.</p> <ul style="list-style-type: none"> <li>• Riemer, M., Harre, N., Trott, C., &amp; Reimer-Watts, K. (2019, June). Creating cultures of sustainability through community and organizational partnerships. Case Study presented at the 2019 Biennial Conference of the Society for Community, Research, and Action, Chicago, USA.</li> <li>• Reimer-Watts, K. (2019, June). The use of participatory arts-based symbolism to support a culture of sustainability. Paper presented at the 2019 Biennial Conference of the Society for Community, Research, and Action, Chicago, USA.</li> <li>• Riemer, M., Whitney, S., Dreyer, B., Coulombe, S., &amp; Marcus, J. (2019, June). Creating a culture of sustainability in Canada's first net-positive and carbon neutral multitenant office building. Paper presented at the 2019 Biennial Conference of the Society for Community, Research, and Action, Chicago, USA.</li> <li>• Riemer, M., Harre, N., Pellman, J., &amp; Trott, C. (2019, June). Community Psychology and cultures of sustainability. Roundtable presented at the 2019 Biennial Conference of the Society for Community, Research, and Action, Chicago, USA.</li> <li>• Spadafore, B. (2019, June). Reducing meat consumption: A group exploration into understanding what it takes to reduce the amount of meat you consume. Paper presented at the 2019 Biennial Conference of the Society for Community, Research, and Action, Chicago, USA.</li> <li>• Riemer, M., Whitney, S., Dreyer, B., Coulombe, S., &amp; Marcus, J. (2019, June). Creating a culture of sustainability in Canada's first net-positive and carbon neutral multitenant office building. Paper presented at the 2019 Biennial Conference of the Society for Community, Research, and Action, Chicago, USA.</li> <li>• Whitney, S., Markvart, T., &amp; Riemer, M. (2019, May) Creating Cultures of Sustainability within Green Office Buildings. Presented at Canadian Society for Ecological Economics CANSEE 2019: Engaging Economies of Change Conference. Waterloo, ON.</li> </ul>
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				<ul style="list-style-type: none"> <li>Whitney, S., Markvart, T., &amp; Riemer, M. (2019, May) Creating Cultures of Sustainability within Green Office Buildings. Presented at Canadian Society for Ecological Economics CANSEE 2019: Engaging Economies of Change Conference. Waterloo, ON.</li> <li>Parker, P. (2019, May) Collaboration for Change Zero Carbon or Low Carbon Buildings Presented at Canadian Society for Ecological Economics CANSEE 2019: Engaging Economies of Change Conference. Waterloo, ON.</li> <li>Mather, D., &amp; Parker, P. (2018, November). Zero-combustion office building in a cold climate: Targeting net-positive, annual energy performance. Presented at Technology Innovation &amp; Policy Forum, Waterloo, ON.</li> <li>Paxton-Beesley, O., Zhu, Z., &amp; Parker, P. (2018, November). Pre-occupancy assessment of environmental performance among evolv1 tenants: Investigating human factors in green office buildings. Presented at Technology Innovation &amp; Policy Forum, Waterloo, ON.</li> </ul>
Green 'net-positive' building case study	2019-2021	Manuel Riemer (PI)	\$ 5,000.00  Regional Municipality of Waterloo - Community Environmental Fund	<p><b>Reports</b></p> <p>Riemer, M., Reimer-Watts, K., Whitney, S., &amp; Leitan-Claymo, S. (2021). <i>The Unique Story of evolv1 in Waterloo Region</i>. VERiS, Wilfrid Laurier University, Waterloo, ON, Canada. Available at: <a href="https://researchcentres.wlu.ca/viessmann-centre-for-engagement-and-research-in-sustainability/assets/documents/evolv1story.pdf">https://researchcentres.wlu.ca/viessmann-centre-for-engagement-and-research-in-sustainability/assets/documents/evolv1story.pdf</a></p> <p><b>Launch Event</b></p> <p>Riemer, M., Reimer-Watts, K.; Davidson, T. (2021). <i>Disrupt and Evolv: Building the Future Together</i>. Online. VERiS &amp; Sustainable Waterloo Region, Waterloo, ON, Canada.</p>

<p><b>Realizing the full potential of green-certified government office buildings in promoting employee mental health</b></p>	<p>2018-2020</p>	<p>Manuel Riemer (PI)</p>	<p>\$ 95,925.00  Government of Alberta – OHS Futures Grant.</p>	<p><b>Peer Reviewed Publications</b></p> <ul style="list-style-type: none"> <li>• Spadafore, B., Zitars, J., Coulombe, S., Riemer, M., Dreyer, B., Whitney, S. (2022). <i>Understanding the psycho-environmental potential functions of a green building to promote employee health, wellbeing and productivity: Part two - A case study</i> [Manuscript in preparation]. Department of Psychology, Wilfrid Laurier University. [Pending submission]</li> <li>• Zitars, J., Spadafore, B., Coulombe, S., Riemer, M., Dreyer, B., &amp; Whitney, S. (2021). Understanding the psycho-environmental potential functions of a green building to promote employee health, wellbeing and productivity: A theoretical perspective. <i>Building and Environment</i>, 108268.</li> <li>• Dreyer, B.C., Coulombe, S., Whitney, S., Riemer, M., &amp; Labbe, D. (2018). Beyond exposure to outdoor nature: Exploration of the benefits of a green building's indoor environment on wellbeing. <i>Frontiers in Psychology</i>, 9, 1583. doi:10.3389/fpsyg.2018.01583.</li> </ul> <p><b>Conferences</b></p> <ul style="list-style-type: none"> <li>• Riemer, M. &amp; Coulombe, S. (2020, October). How does working in a green building relate to employee's wellbeing? Invited talk at The Great Indoors: Environmental Quality, Health and Wellbeing in a Quarantining Society Event, University of Toronto, ON.</li> <li>• Zitars, J., Spadafore, B., Dreyer, B., Whitney, S., Coulombe, S., Riemer, M., &amp; Marcus, J. (2020, June). Exploring the potential of green-certified office buildings to promote employee wellbeing. Presented at IAPS Conference 2020: International Association People-Environment Studies, Quebec City, QC.</li> <li>• Riemer, M. (2019, November). Transitioning to highly sustainable office buildings: The role of occupants and managers. Presented at Behaviour, Energy &amp; Climate Change 2019 Conference, Sacramento, CA.</li> </ul>
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				<p><b>Reports</b></p> <ul style="list-style-type: none"> <li>Coulombe, S., Whitney, S., Dreyer, B., Riemer, M., Marcus, J., Spadafore, B., Jillian Zitars, Jovan Poposki, Natalia Cooper, Kai Reimer-Watts. <i>Realizing the full potential of green-certified government office buildings in promoting employee mental health</i>. Report delivered to Alberta Government - Occupational Health and Safety. VERiS, Wilfrid Laurier University, Waterloo, ON, Canada.</li> </ul>
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### 2.3 External investments

*Describe generally the external investments of the centre/institute over the past 3 years. Please include (funding/grants) aligned with the outlined expectations, not for individual faculty that are members of the Centre/Institute but not involved in collaborative activities. This preamble should be no more than 500 words. Please indicate your word count.*

Word Count: 174

VERiS researchers have been very successful in securing external research investments. Out of 14 submitted grant applications 12 were successful (86% success rate). Across these 12 grants we have generated over \$1.5 Million in external research funding. We have 3 more grant application pending (a SSHRC Partnership Grant, a SSHRC Insight Grant, and a grant from the Trottier Family Foundation) totalling \$3.1 Million in potential additional research funding. The grants we have received include prestigious ones such as a SSHRC Partnership Development Grant and an Ontario Research Fund – Research Excellence Grant. We also received funding from the Canadian Foundation of Innovation with matching funding from the Ontario Research Fund to set up a living lab in evol1. Our successful grants have been matched by over \$2 Million in cash and in-kind funding from our partners, which is evidence of the trust our partners have in our leadership and the quality of our research. Our major international partner, the ICLEI World Secretariat, is eager to pursue major funding in Europe in collaboration with VERiS this summer.

*Provide a table listing the Centre/Institute’s external investments (see example, below) or if all external investments are included in the research accomplishments table, the general description is sufficient.*

**2019-2021: External Investments**

Project	Year(s)	Grant Type	Funding
Decolonizing and Transforming the Engagement of Indigenous and Black Peoples within Municipal Planning in Kitchener	2021-2022	SSHRC – Connection Grant	\$ 21,769.00
Mapping the convergence of Climate change and community safety	2021-2021	SSHRC – Connection Grant	\$ 20,520.00
Toward Just Transitions: Integrating Sustainability Justice into Municipal Climate Action Planning	2021-2021	SSHRC – Connection Grant	\$ 20,506.00
COVID-19: Developing decision making in municipal planning to enable recovery, future adaptability and long-term resiliency	2020-2021	SSHRC – Partnership Engage Grant	\$ 24,925.00
The accessibility of sustainability: Fostering inclusion of Individuals with vision loss to improve waste diversion in public spaces	2020-2021	SSHRC – Partnership Engage Grant	\$ 24,718.00
Closing the performance gap in high performance in green buildings by cultivating a culture of sustainability (Evolv1)	2018-2023	Ontario Research Fund - Research Excellence	\$ 999,667.00
ReGENERATE: an intersectorial partnership to investigate human factors in green office buildings (Evolv1)	2018-2021	Social Sciences and Humanities Research Council – Partnership Development Grant	\$ 199,759.00
Creating a living lab for the optimization of green building performance	2019-2021	Canadian Foundation for Innovation (CFI) – John Evans Leaders Fund (JELF))	\$ 59,419.00
Creating a living lab for the optimization of green building performance	2020-2021	Ontario Leaders Opportunity Fund - Stream 1	\$ 58,675.00
Green ‘net-positive’ building case study	2019-2020	Regional Municipality of Waterloo - Community Environmental Fund	\$ 5,000.00
Realizing the full potential of green-certified government office buildings in promoting employee mental health	2018-2019	Government of Alberta – OHS Futures Grant.	\$ 95,925.00

**Total Grants Income: \$ 1,530,883.00**

## 2022: Pending Grants

Project	Year(s)	Grant Type	Funding
Integrating Social Justice in the Implementation of Community Climate Action Plans: Theory, Measurement, and Culture of Just Sustainabilities	2022-2023	SSHRC – Insight Grant	\$ 399,307.00
Toward Equity and Accessibility in Climate Action	2022-2027	Trottier Foundation Grant	\$ 248,300.00
Toward Equity & Accessibility in Municipal Climate Action	2022-2027	SSHRC – Partnership Grant	\$ 2,454,700.00

**Total Grants Pending: \$ 3,102,307.00**

### 2.4 Current membership list

*Members of a centre actively engage in the work of the centre and contribute to the centre through collaborative research, publishing, mobilization of knowledge, as well as seminars/ conferences/ workshops organized by the centre. It is expected that members will identify themselves as centre members in publications related to the focus of the centre.*

*Provide a categorized listing of the current membership and a brief (250 words or less) description of the engagement of the members in Centre/Institute activities.*

As a community-engaged transdisciplinary centre engaged in complex partnership-based research projects, VERiS's membership is quite diverse, including members and fellows from other institutions and sectors. Altogether, we have 4 faculty members from Laurier, 1 senior research fellow, 5 research fellows, 2 staff, 4 community fellows and/or board members, and 2 Junior fellows. It is this diversity in membership that is one of our key strengths. Most of the internal and external faculty members are actively engaged in various research projects as principal investigators, co-PIs, co-investigators, and collaborators (see above). Together with these members and our affiliated students we are generating various research outputs such as collaborative journal publications, book chapters, conference presentations, research reports, exhibitions, websites, among others (see above). Over the last three years we have also organized 12 workshops, which involved many of our members and community fellows. We are co-located with some of our external members (e.g., Davidson, Parker, Geobey) in evolGREEN, which itself is a partnership among Sustainable Waterloo Region, the Accelerator Centre, the University of Waterloo – Faculty of Environment, and Laurier (VERiS), drawing on the strength and expertise of these different partners. Many of our students are being co-supervised by VERiS members. For example, Gryph Lobier, a PhD student of Dr. Sean Geobey, is engaged in two research projects with Drs. Riemer and Jones while PhD student Nicholas Palaschuk is being co-supervised by Drs. Parker, Marcus, and Riemer. Our ongoing exchange has led to several large-scale partnership-based project, such as the evol1 project and TEAMCA.

Category	Name	Title	Institution
Internal Faculty	Alex Latta	Faculty	WLU
Internal Faculty	Barry Colbert	Faculty	WLU
Internal Faculty	Miguel Sioui	Faculty	WLU
Internal Faculty	Noam Miller	Faculty	WLU
Senior Research Fellow	Paul Parker	External Faculty	UW
Research Fellow	Felix Monger	External - Staff	Canadian Municipal Network on Crime Prevention
Research Fellow	Joel Marcus	External Faculty	York U
Research Fellow	Peter Jones	External Faculty	OCAD
Research Fellow	Sean Geobey	External Faculty	UW
VERiS Board Member + Research Fellow	Simon Coulombe	External Faculty	U Laval
External Faculty Member	Cheryl Teelucksingh	External Faculty	Ryerson U
Internal Staff	Ela Desmarchelier	Non Academic	WLU
VERiS Board Member + Internal Staff	Emmanuel Songsore	Staff	WLU
Internal Staff	Stephanie Whitney	Post Doc and Staff	WLU
Junior Research Fellow	David Mather	External - Staff	UW
Junior Fellow	Tim Posselt	Post Doc	Friedrich-Alexander University Erlangen-Nuremberg
Internal Student	Alison Eady	PhD	WLU
Internal Student	Bianca Dreyer	PhD	WLU
Internal Student	Esther Abel	PhD	WLU
Internal Student	Kai Reimer-Watts	PhD	WLU
Internal Student	Alicia Bevan	MA	WLU
Internal Student + Staff	Brittany Spadafore	MA	WLU 2020
Internal Student	Carlos Zaterain	MA	WLU 2021
Internal Student	Jovan Poposki	MA	WLU
Internal Student	Kaylagh Start	MA	WLU
Internal Student	Faith Grassa	UG	WLU
Internal Student	Isabelle Schreiner	UG	WLU
Internal Student	Jennifer Doabi	UG and MA	WLU
Internal Student	Jillian Zitars	UG	WLU 2021
Internal Student	Kayla Amuge	UG	WLU
Internal Student	Sarah Phan	UG	WLU 2019
Internal Student	Taylor Loucks	UG	WLU
External Student	Gryphon Loubier	PhD	UW
External Student	Haimanot Moges	PhD	UW
External Student	Nicholas Palaschuk	PhD	UW
External Student	Jenna Ritch	MA	York
External Student	Oliver Smelt	MA	York

External Student	Smit Patel	MA	UW
External Student	Timon Sengewald	MA	Friedrich-Alexander University Erlangen-Nuremberg
External Student	Tomomi Kawabata	MA	UW
External Student	Zheng (Zac) Zhu	MA	UW
External Student	Emily Hu	UG	UW
External Student	Mei Jin	UG	UW
Community Fellow	Ash Dennett	Non Academic	Sustainable Waterloo Region
Community Fellow	Claire Bennett	Non Academic	City of Kitchener
Community Fellow	Randy Sa'd	Non Academic	Refocus
VERiS Board Member + Community Fellow	Tova Davidson	Non Academic	Sustainable Waterloo Region
VERiS Board Member	John Robinson	External Faculty	U Toronto
VERiS Board Member	Sheri Longboat	External Faculty	U of Guelph
VERiS Board Member	Hazel Sutton	External Non Academic	BOMA
VERiS Board Member	Jerry Leyte	External Non Academic	Viessmann Group
VERiS Board Member	Julie Sperling	External Non Academic	Artist

## 2.5 Reflections of the opinions of current membership

*The governing body of a research centre/institute can solicit opinions of the current membership in a variety of ways such as administration of short surveys and/or more detailed discussion with select members (ideally representing all categories of membership) about positive aspects of engagement, and opportunities for improvement. Please describe the approach taken to obtain feedback from the current membership and attach any relevant documents as appendices to this report. This section should be no more than 500 words. Please indicate your word count.*

Word Count: 496

As we are in regular communication with our various members, fellows, and partners, as well as our board members, we have yet to go through a formal process of soliciting systematic feedback. However, in preparation of this report we have asked various members and fellows to provide testimonials that speak to the value that being part of VERiS is providing to them (see Appendix C). From these statements it is clear that VERiS had a significant impact on our members and fellows. Community Fellow and Executive Director of the FEI, Randy Sa'd, for example, stated that his *"experience as a VERiS fellow has been career-changing. The deep partnership I have established with VERiS has allowed me to align credible, applied academic research with efforts to test disruptive management innovations in practice."* Similarly, PhD student fellow Kai Reimer-Watts expressed that: *"My association with VERiS has challenged me in highly useful and unforeseen ways, to go beyond my initial comfort zones as a community-based scholar-activist [...] I feel personally proud of the work I've been able to contribute to as a member of VERiS, and grateful*

*for the many opportunities I've been able to step into as an emerging scholar through my association.”* Members also describe how they have been engaged in various inter- and transdisciplinary collaboration, such as Dr. Miguel Sioui, an Indigenous scholar of Geography at Laurier, who said that, *“it is critical for scholars and municipal policymakers to work to address these injustices, and to use anti-racist and decolonial approaches to advance equity and social justice in the municipal planning process. [...] As such, I am grateful to be working with my colleagues Drs. Manuel Riemer and Cheryl Teelucksingh on our shared project, which aims to decolonize climate change action in Kitchener by establishing partnerships with some of the City's key municipal planners, as well as Indigenous and Black organizations in the area.”* Tova Davidson, the Executive Director of Sustainable Waterloo Region, one of our key community partners, reflected that: *“As the application partner in the research on building a culture of sustainability in our shared workspace, evolvGREEN in evolv1, we have benefited so greatly in understanding the opportunities and the barriers to the cultural work that needs to be done to help us reach an equitable, prosperous, low-carbon future. The work done in this project not only supports our efforts to help individual organizations reduce their impact on the environment, it has also brought a fuller understanding to the community climate action work, including integration of the human element of climate change, and the braiding in of justice and equity into our carbon reduction planning.”* Behavioural neuroscientist Dr. Noam Miller felt that *“the Evolv1 living lab project, and the associated CFI and ORF grants, that I have been a collaborator on for the past two and a half years have allowed me to take my expertise in animal collective behavior and apply it to the movements and interactions of humans in the workplace.”*

## 2.6 Financial Statement

*Provide a detailed financial statement including a 3-year table indicating how the centre/institute will sustain itself financially, and including anticipated income from all sources – University, government, industry, overhead, royalties – and proposed expenditures and disbursements. As noted in the [Procedure for the Establishment of Research Centres](#), all Centres/Institutes are subject to an annual budgetary process and university support is not guaranteed (3.02i). Any description of the centre/institute's financial statement supporting the table should be no more than 250 words. Please indicate your word count.*

Word Count: 169

The office of Research Services has agreed to support VERiS with 35,000.00 per year as of the 2022-2023 financial year (on the provision of successful annual evaluations). The Faculty of Science has also agreed to support VERiS with 10,000.00 for rent, and 25,000.00 (with annual increases related to salary adjustments) for administration support for a further 3 years. This brings internal support to over 70,000.00 per year. In addition, VERiS is the benefactor of the interests generated by the endowment provided by the Viessmann family. Annual interest payments have fluctuated between \$11,000 and \$14,000 bringing the base operational funding to over \$80,000. Additional income for the Centre's core operation will also come from charges for administrative costs to external grants (estimated to be \$12,000 annually). Projected costs include rent for our office space in evolvGREEN, additional fees and costs related to that office, the salary for our fulltime admin manager, one course release for the Director per year, meetings for Knowledge dissemination and workshops, software and operating expenses are the other main expenses VERiS anticipates.

## 2019-2022 Financial Statement

*Table removed for Web version.*

## Projection

*Table removed for Web version.*

Income and expense line items should reflect the annual budgets approved by the VP-Research (university centres) or Dean (faculty centres).

## 2.7 Highly qualified personnel

*Provide a categorized listing or table of the current highly qualified personnel (HQP) and a brief (250 words or less) description of their engagement in Centre/Institute activities. Please include HQP as related to the Centre/Institute's collaborative initiatives, not solely those supervised by faculty that are members of the Centre/Institute.*

Word Count: 250

Postdocs and students play a key role within VERiS. All our grants include funding for student scholarships and research assistants. They are also involved in writing grant applications, learning key skills critical for emerging scholars. For example, MA student Alicia Beavan managed all our partner involvements as part of the recently submitted SSHRC Partnership Grant while Postdoc Tim Posselt and MA student Jennifer Dobai both contributed to the writing. Several of our students also actively participated in the various workshops we have offered, both in their preparation and during their execution. In summer of 2020, five VERiS students organized an online workshops series for Laurier and University of Waterloo students on how to advocate for a just transition out of the COVID-19 pandemic. Students are given the opportunity to develop thesis projects related to existing VERiS projects or develop their own projects connected to VERiS's mission. In the last three years, students have been engaged in five honour theses, 12 MA thesis projects, and 8 PhD related research projects as well as multiple directed studies at the undergraduate and graduate level. Through their engagement in VERiS and thesis-related projects students and postdocs learn how be effective and trusted members of multi-layered inter- and transdisciplinary community-engaged research teams. In addition, we encourage student to take on active roles, including leadership, on knowledge mobilization products and activities, such as first authorship on reports and peer-reviewed journal articles. There are also various opportunities to engage in intellectual exchange with other members.

## 2019-2022 HQP

Name	Title	Supervisor	Institution
Stephanie Whitney	Post Doc	Manuel Riemer	VERiS
Tim Posselt	Post Doc	Manuel Riemer	Friedrich-Alexander University Erlangen-Nuremberg & VERiS
Alison Eady	PhD	Manuel Riemer	WLU
Bianca Dreyer	PhD	Manuel Riemer	WLU
Esther Abel	PhD	Manuel Riemer	WLU
Kai Reimer Watts	PhD	Manuel Riemer	WLU

David Mather	PhD	Paul Parker	UW
Gryphon Loubier	PhD	Sean Geobey	UW
Haimanot Moges	PhD	Paul Parker	UW
Nicholas Palaschuk	PhD	Paul Parker & Joel Marcus	UW
Alicia Bevan	MA	Manuel Riemer	WLU
Brittany Spadafore	MA	Manuel Riemer	WLU
Carlos Zaterain	MA	Manuel Riemer	WLU
Jennifer Dobai	MA & UG Honour Student	Manuel Riemer	WLU
Jovan Poposki	MA	Manuel Riemer	WLU
Kaylagh Start	MA	Manuel Riemer	WLU
Smit Patel	MA	Paul Parker	UW
Tomomi Kawabata	MA	Paul Parker	UW
Zheng (Zac) Zhu	MA	Paul Parker	UW
Jenna Ritch	MA	Joel Marcus	York
Oliver Smelt	MA	Joel Marcus	York
Timon Sengewald	MA	Manuel Riemer	Friedrich-Alexander University Erlangen-Nuremberg
Faith Grassa	UG – Honour Student	Manuel Riemer	WLU
Isabelle Schreiner	UG – Honour Student	Manuel Riemer	WLU
Jillian Zitars	UG – Honour Student & RA	Manuel Riemer	WLU
Taylor Loucks	UG – Honour Student	Manuel Riemer & Alicia Bevan	WLU
Emily Hu	Co-Op Student	Manuel Riemer & Paul Parker	UW
Mei Jin	Co-Op Student	Manuel Riemer & Paul Parker	UW
Kayla Amuge	UG - RA	Brittany Spadafore & Manuel Riemer	WLU
Sarah Phan	UG - RA	Stephanie Whitney	WLU

## 2.8 Statements of sanction and commitment

*Letters of commitment from relevant Chairs/Directors and Faculty Deans, including provision of space to the Centre/Institute, teaching relief, etc., are required as per Section 3.02j of Laurier’s Procedure for the Review of Research Centres (11.1).*

*Please provide a brief description of the statements of sanction and commitment that are included in this report and attach all letters as Appendices. Any provision of financial resources should be documented and signed by those authorized to make such commitments.*

The Office of Research Services as of 2022-2023 financial year has agreed to support VERiS with 35,000.00 per year in addition to in-kind support. A letter from Dr. Jonathan Newman is attached.

The Faculty of Science has agreed to support VERiS with 10,000.00 for Rent, and 25,000.00 for Administrative Support for a further 3 years including yearly increments to account for annual salary increases based on the collective agreement. A letter from Dean Dr. Anthony Clarke is attached.

### 3 Governance structure

*The governance structure of each Research Centre/Institute will be set out in a constitution or charter approved by SCRAP that includes objectives, organizational and reporting structure, composition of, and terms of reference for, its Governing Body, as well as term limits for members of that body, criteria for and categories of membership, privileges and responsibilities of membership, terms, and conditions of affiliates programs, if any.*

*Please attach the Centre's constitution or charter as an Appendix to this report.*

As an organizational member of Wilfrid Laurier University, we are governed by a diverse board of community and university leaders, led by the Centre's Director Dr. Manuel Riemer. There are three research streams operating under the VERiS umbrella: the European Research Stream, the Flourishing Enterprise Stream, and the Wellbeing Stream. Each of these streams is led by one of VERiS' co-directors and includes university and community fellows, students, collaborators, and partner organizations. The Centre's operation is supported by our Administrative Manager Ela Desmarchelier, Laurier's Offices of Research Services and Research Finance, and multiple research assistants and associates. The Board of Directors have term limits of 3 terms of 2 years. The VERiS Director has a limit of 2 terms of 3 years. A visual overview of VERiS's organizational structure, our Terms of Reference, and our original strategic plans can be found in Appendix A.



## BACKGROUND

The purpose of VERiS is to be a catalyst and nexus for the transition of organizations, communities, and societies toward a culture of sustainability. We thrive to be a centre of excellence in the psychological, social, and cultural science of sustainability as well as a hub for key decision-makers and change makers to find practical evidence-based approaches to key sustainability challenges that relate to engaging people in shifting values, changing practices, and creating symbols that represent a culture of sustainability. We want to contribute to finding effective ways of empowering members of communities, especially those who are marginalized, to meaningfully participate in the process of creating approaches for just sustainabilities. As a centre, VERiS promotes research excellence, enables meaningful collaborations and partnerships, fosters engagement, and mobilizes knowledge related to transitioning to cultures of sustainability.

## VERiS BOARD OF DIRECTORS MANDATE

The VERiS Board of Directors provides strategic direction for the centre as well as guidance and support to the VERiS director and management team. It also creates opportunities for information sharing, network building, and knowledge mobilization in support of the centre's research and outreach activities. The Board of Directors approves the strategic plan, the annual budget, the annual report, and every three years the appointment (or re-appointment) of the director.

This VERiS Board of Directors is the Governing Body of the research centre, serving as the primary executive authority that oversees its activities, in accordance with Wilfrid Laurier University's *Policy 11.1 Establishment, Operations and Review of Research Centres*.

Laurier's Office of Research Services will ensure compliance with all university policies and regulations. They will review and approve the Board of Directors terms of reference, the director, and the budget based on the recommendations of the Board.

### Research

The Board of Directors provides input to the director for VERiS' research directions and priorities related to its overall purpose. The Board of Directors also participates in the development of innovative research models that allow for collaborative, multi-sectorial, and diverse research and practice.

### Knowledge dissemination

VERiS Board of Directors members identify research links produced by network members through diverse formats and channels including online, in person, conference calls, workshops, videos, webinars, papers, and reports. These efforts are ongoing to ensure that knowledge dissemination is timely and enables continuous feedback.

### Network building

Through research and knowledge mobilization, the VERiS Board of Directors will help to build partnerships and to identify collaborative and comparative research projects among Board of Directors members, affiliated members, community partners, and VERiS staff.

## BOARD OF DIRECTORS MEMBERSHIP

The VERiS Board of Directors is made up of a diverse group of academic, community, government, and private sector partners with an interest in developing, supporting, and/or researching sustainability. When new board members are recruited, the director and the current board members will make a concerted effort to ensure that the diversity in backgrounds and perspectives of the board is maintained or expanded.

Regular Faculty at Wilfrid Laurier University should be clearly represented on the board. The members of VERiS shall also be represented sufficiently on the Board of Directors.

A link to current Board of Directors members can be found here:

<https://researchcentres.wlu.ca/viessmann-centre-for-engagement-and-research-in-sustainability/people.html>

## FUNCTIONS

The VERiS Board of Directors has the authority to execute and monitor the affairs of VERiS, subject to all applicable policies, procedures and guidelines of Wilfrid Laurier University. This includes the ability to:

- Enact rules and regulations for membership of the VERiS Board of Directors and the conduct of its affairs;
- Recommend appointment of the Director and other leaders to the vice-president, research;
- Appoint and remove Members, and establish categories of membership and associated fees;
- Plan and implement VERiS' development;
- Establish processes to manage and monitor VERiS' financial affairs;
- Establish and enforce rules and regulations governing the research centre activities, provided such rules and regulations are consistent with policies, procedures and guidelines at Wilfrid Laurier University; and
- Establish such committees as it deems necessary to discharge its responsibilities; this may include establishing advisory bodies comprised primarily of external members for the purpose of providing strategic or scientific advice to the VERiS Board of Directors or the Director.

## ROLES AND RESPONSIBILITIES

VERiS Board of Directors members are required to:

- Participate in at least one meeting per year
- Provide advice and guidance to VERiS on an ongoing basis
- Assist with knowledge mobilization
- Provide input into funding opportunities and grant writing activities as needed
- Participate in discussions in preparation for reporting as needed
- Participate in strategic visioning on an ongoing basis

The VERiS Director is required to:

- Coordinate meetings, set agendas, chair meetings, and ensure that meeting notes are disseminated in a timely fashion

- Communicate VERiS Board of Directors advice and recommendations to the VERiS Management Team
- Report on VERiS activities and needs
- Prepare a budget and coordinate funding related activities
- Facilitate strategic visioning processes for VERiS
- Prepare a strategic plan every three years.

## MEETINGS

The VERiS Board of Directors is required to meet at least once per year and additionally as appropriate, with an aim to hold at least two, 90-minute meetings per year. Meetings of the VERiS Board of Directors will be open to members of VERiS, with as many members as possible attending in-person (subject to funding).

Meeting dates will be set at least 4 months in advance, and are by invitation. Minutes will be taken at all meetings of the Board of Directors and will be made available to VERiS members. Meeting agendas and records will be circulated in a timely fashion to ensure that members have sufficient time to review and comment on all relevant materials.

## QUORUM

A quorum comprises 50% of appointed members.

## VERiS MEMBER TENURE AND PROCESS OF RESIGNATION

VERiS Board of Directors members may serve on the Board for three consecutive terms. A term is two years.

Board members should provide 14 days' notice of their intent to resign. Resignation should be in writing and addressed to the VERiS Director.

VERiS Board of Directors Members that are unable to participate according to the Terms of Reference may be asked to step down from the Board of Directors by the Director.

## DECISION MAKING

Decisions will be made using consensus procedures. If consensus cannot be reached, a majority vote will be held. In specific cases (e.g., for urgent matters that require board approval), an electronic vote can be held.

## CONFLICT OF INTEREST

Members will avoid situations that could result in an inconsistency between the mandate of the Board of Directors and a personal or vested interest that arises in connection with their duties as a Board of Directors member.

## REVIEW

The VERiS Director, with input from Board of Directors members, will review the mandate, activities, Terms of Reference, and relevance of the VERiS Board of Directors annually to ensure that it continues to meet ongoing needs. Recommendations for improvement will be considered on an ongoing basis.

## VERiS

### Viessmann Centre for Engagement & Research in Sustainability

#### A 3-Year Vision

Board Meeting, November 19, 2018

Presented by Manuel Riemer, Director

#### Introduction

This document provides some strategic directions of how we can successfully develop VERiS into a leading community-engaged research centre within the psychological, social, and cultural science of sustainability. Our understanding of sustainability is grounded in the UN Sustainability Goals (<https://sustainabledevelopment.un.org>) and broadly refers to development that meets the needs of the present without compromising the ability of future generations to meet their own needs (Brundtland, 1987). We embrace an integrated consideration of social, economic, and ecological concerns. Only in this integration can we create the conditions in which people can thrive and live a good and satisfying life without destroying the ecosystems that sustains them (UN, 2016). We believe that interpretations of sustainability emerge from conversations about desired futures that are informed by some understanding of the ecological, social and economic impacts of different courses of action (Parris & Kates, 2003; Robinson, 2004). This document serves as a guide for the VERiS Director and Associate Director in their day-to-day leadership of the Centre. These strategic directions are grounded in a few observations of current developments and specific challenges and opportunities related to the psychological, social, and cultural aspects of sustainability. These aspects encompass critical questions and instrumental, practical, and emancipatory knowledge (Habermas, YEAR) related to a successful transition toward a culture of sustainability within our organizations, communities, and our national and global society. A culture of sustainability is characterized by shared values, norms, language, and practices among members of an organizational unit (e.g., a university or local community) focused on making individual and societal choices that foster social, economic and environmental sustainability. I will begin by discussing some of these challenges and opportunities because they inform our strategic direction. I will then describe the purpose and approach of VERiS. I will also propose some specific objectives, strategies, and actions for the next three years.

#### Observations & Opportunities

*Culture of Sustainability (COS)*. There is an increasing recognition that acting on climate change and other environmental degradation is no longer a choice but a necessity. Both the federal and the provincial

governments have set ambitious carbon reduction goals and now feel the pressure of following through with those. Institutions (e.g., universities) and private companies are also increasingly incorporating sustainability into their decision-making. This demand for change has spurred significant innovation and investment in technological solutions for sustainability, with positive impacts on our collective footprint. There is a growing understanding, however, that technological solutions are not sufficient. In addition to a technological revolution, we also need a cultural revolution in order to move toward a COS (i.e., values, norms, practices, and language and symbols that are aligned with the environmental, social, and economic aspects of sustainability). A good example is the performance gap in high-performance green-certified buildings. While these buildings are designed to be highly energy-efficient, their actual performance often does not meet the initial expectations, which has been attributed to the human factors within those buildings (e.g., the building managers and inhabitants) among other factors (Fedoruk et al., 2015). Innovation on this psycho-social and cultural aspect of sustainability is lacking behind the technological one, however. There is a need to develop effective approaches for the transition toward a COS at multiple scales. We need to better understand how to take a systems approach to shifting core values and deeply embedded practices and create symbols in our environments that represent a shifting social norm. This ranges from understanding how to engage employees in sustainability (see below) to developing new flourishing business models in which sustainability is deeply embedded. Generating this type of comprehension can only be accomplished through ongoing conversations and collaborative work among scholars, practitioners, and community representatives from a variety of disciplines and sectors. Our vision is that VERiS will become a catalyst and nexus for these types of conversations and collaborative projects.

*Need for effective evidence-based strategies for engagement.* In conversations with NGOs, industry leaders (e.g., the Building Owners and Managers Association of Canada, BOMA), institutions (e.g., Laurier, York), and representatives of regional, provincial, and federal governments it has become clear that there is a strong need for effective evidence-based strategies for engaging people (e.g., employees, managers) in sustainability in order to develop a culture of sustainability. The recent success of our partnership with two major grants focused on this issue (i.e., a SSHRC Partnership Development Grant and the Ontario Research Fund – Research Excellence) suggest that the scholarly experts and funding agencies also see a need for innovation in this area. Current psychological approaches to foster change are often insufficient because they are too narrowly focused and do not adequately address the complexity of behaviour change in real-world organizational systems. Approaches that are creating long-term engagement in sustainability rather than simple behaviour changes are required. A centre of excellence to guide new developments and provide evidence-based expertise to decision-makers and change agents is urgently needed.

*Wellbeing and Flourishing.* There is an increasing interest in understanding under which conditions people will thrive and flourish. This also applies to green buildings, which have been shown to provide positive benefits for wellbeing but not consistently so. There is a need to better understand the psycho-environmental needs of people and to what degree and how green buildings are meeting those needs (Coulombe et al, 2016; Dreyer et al., 2018).

*Integration of Technology and People.* Technological innovation in sustainability has great potential and is an important aspect of the complex solutions to the sustainability challenge. All too often, however, technological innovation for environmental sustainability, driven by engineers, neglects important considerations of human aspects. Green buildings, for example, have the potential to encourage change in environmental attitudes and behaviours and contribute to improvements in the wellbeing of their inhabitants. These potentials, however, are often not realized. Furthermore, the negative human impacts

of technological changes are frequently insufficiently considered in decision-making. For example, while an investment in a LRT has the potential to encourage increased use of public transportation and will attract wealthy residents to the city core, it will also further spur gentrification pushing out those already at the margin of the society, who now have to rely on a car to get into the city. There is an urgent need for more and more effective transdisciplinary system-thinking, for creating productive collaboration and communications across sectors, and for engaging community members in the planning and decision-making.

*Sustainability Justice.* The above example is one of many of how issues of social justice and environmental sustainability interact in complex ways (Agyeman, 2018; Agyeman, et al., 2002; Warner, 2010). Financial burden of carbon taxes, the inaccessibility of organic food for many, and restrictive immigration laws and regulations as the number of climate change related migrants significantly increases, are other examples. While theoretically there is a recognition of the importance of social justice within the sustainability movement, in practice these social justice aspects of sustainability are often insufficiently considered. Finding ways to create sustainability justice or just sustainabilities in a practical way is an important challenge to be addressed (Agyeman, 2018). Julian Agyeman (2018) defined just sustainabilities as “*the need to ensure a better quality of life for all, now, and into the future, in a just and equitable manner, whilst living within the limits of supporting ecosystems*”. That is, within a COS we need to find approaches and policies for sustainability that do not exacerbate existing or create new injustices but rather reduce or eliminate existing injustices. This requires meaningful community engagement in research, policy development, and planning, especially among those members who are marginalized in society.

*Local Context.* Community engagement is most effective at the local level. Waterloo region is positioning itself to become a leader in sustainability innovation. Moving beyond the existing climate action plan, the Region of Waterloo and the cities of Kitchener, Waterloo, and Cambridge recently unanimously approved an ambitious goal of reducing their carbon footprint by 2050 by 80% relative to the 2010 levels. Inspired by a community visioning process and led by Sustainability Waterloo Region, the region is home to Canada’s first commercial energy-positive multi-tenant office building, the evolV1 (developed and owned by the Cora Group). Within the heart of this important demonstration project is evolVGREEN, an innovation hub for the transition to a clean economy. VERiS is a founding partner of evolVGREEN. This local commitment provides an ideal environment to ask and tackle some of the challenging but important questions related to a transition toward a COS.

*European Context.* In many ways, Europe has been a leader in pushing the sustainability agenda both within their own context and globally. In their efforts, many important questions and critical challenges related to the transition toward a COS have emerged and need to be addressed. Given both Canada’s and VERiS’s historical connection to Europe, there are great opportunities for exchange, mutual learning, and collaborative work. VERiS can create connections for European centres and networks of excellence in sustainability research such as the Institute for Sustainability Studies in Germany, Mistra Urban Futures in Sweden, and the Centre for Sustainability and Society in Denmark.

## **Purpose**

Grounded in the needs identified above, the purpose of VERiS is to be a catalyst and nexus for the transition of organizations, communities, and societies toward a culture of sustainability. We thrive to be a centre of excellence in the psychological, social, and cultural science of sustainability as well as a hub for key decision-makers and change makers to find practical evidence-based approaches to key sustainability challenges that relate to engaging people in shifting values, changing practices, and creating

symbols that represent a culture of sustainability. We want to contribute to finding effective ways of empowering members of communities, especially those that are marginalized, to meaningfully participate in the process of creating approaches for just sustainabilities.

## **Approach / What we Do**

*Promote Research Excellence.* We promote research excellence by providing a first-class space within an interdisciplinary innovation hub, which includes leading scholars conducting research on climate change, renewable energy systems, and the psychology of sustainability, a successful and influential environmental NGO, and a technology incubator focused on innovations for a clean economy. Researchers have access to a unique living lab within Canada's first commercial net-positive and carbon-neutral multi-tenant office building, evol<sup>v1</sup>. Researchers are also supported through our leadership team and support staff, who together have significant experience in developing effective partnerships, generating research funding, and mobilizing knowledge. Through our student and post-doctorial fellowship and our educational program we foster the new generation of interdisciplinary community-engaged scholars in the psychological, social, and cultural science of sustainability.

*Enable Meaningful Collaborations and Partnership.* As a community-engaged research centre, a key role, besides producing first-class research, is to bridge the academic and the practice spheres so the actors from each can enhance each other's work, collaborate, and generate practical and evidence-based approaches for the transition to cultures of sustainability. For this purpose, we both participate in and initiate meaningful local, national, and international collaborations and partnerships as well as networks. Through research and systematic reflection on these types of collaborations, we also contribute to the optimization of such over time.

*Foster Engagement.* We see ourselves not as distant actors who produce knowledge that others will apply, but instead engage actively in the application of that knowledge by being accessible to change agents and communities and by being present in local, national, and international efforts to transition toward cultures of sustainability. A key focus of this work is to actively foster engagement in sustainability among people from various backgrounds and at multiple scales (organizations, buildings, communities, etc.).

*Mobilize Knowledge.* We mobilize knowledge from researchers affiliated with VERiS by engaging key stakeholders throughout the research process and by generating relevant manuscripts, reports, presentations, fact sheets, knowledge briefs, and practical manuals and guides based on our research and literature reviews.

## **Structure**

VERiS has a central management and administration team (including the director and associate director) and multiple research streams under the umbrella of VERiS (see Organizational Structure figure). VERiS also has faculty members and (student, postdoctoral, and community) fellows. It is expected that the structure will develop organically over time as new members with new ideas will come under the umbrella of VERiS. Each stream will have a director (or co-directors), members, and (student, postdoctoral, and community) fellows. The Board of Directors provide oversight and approve the overall strategic direction. The Office of Research Services ensures compliance with all university policies and regulations.

## Objectives for the next three years

- 1. Establish three vibrant and successful research streams under the umbrella of VERiS in addition to the general research agenda of VERiS.** One stream will focus on research related to Europe, one on wellbeing and flourishing, and the third one flourishing enterprises.  
At the end of three years, each research stream, should have a clear identity, one or more leader(s), received at least one external grant, and be engaged in research and action with the potential for impact and good opportunities for development of emerging scholars.
- 2. Develop a positive internal and external reputation as a centre of excellence for research and engagement.**  
At the end of three years, key stakeholders within Laurier, the local community, and beyond will recognize VERiS as a Laurier-based centre for excellence in the psychological, social, and cultural science of sustainability, specifically related to transitioning to cultures of sustainability. Scholars will seek out and reference the work produced by members of the centre and key decision-makers in the non-profit world, government, and industry will seek advice from VERiS staff and members.
- 3. Create a strong financial and logistic foundation for the centre.**  
At the end of three years, the annual budget should be at least \$100,000, the centre should have a physical home that provides an environment where its members and staff thrive and provides opportunities for interdisciplinary and cross-sectorial collaboration.
- 4. Build a strong human foundation for the centre.**  
At the end of three years, the centre will have a faculty director, supported by at least one course release per year, an associate director, who is a full-time staff member (postdoc), a part-time assistant and research support staff, and at least one leader for each research stream. At least six professors will be affiliated with VERiS as members.
- 5. Attract and foster strong talent.**  
At the end of three years, the centre will have supported at least one postdoc, five graduate students, and six undergraduate students. Each graduate student will have at least one conference presentation and one peer-reviewed publication related to their work at the centre. The postdoc and the PhD students will have had at least one professional development opportunity supported by the centre.
- 6. Develop a vibrant regional, national, and international network of partners and collaborators.**  
At the end of three years, the centre will have strong interdisciplinary and multisectorial partnerships and collaborations within each of the research programs as well as a centre overall. The centre will have supported at least one international gathering of experts as well as the submission of a SSHRC Partnership Grant.
- 7. Set up a living lab within the evol1.**  
At the end of three years, a living lab including a variety of sensors, a data management and feedback system, and a research lab will be set up within the evol1.

**8. Provide a supportive environment where people affiliated with the centre are well and thrive.**

At the end of three years, the director, staff, and students affiliated with the centre report a high level of work satisfaction and that they feel supported in creating a positive work-life balance.

**Strategies**

1. Invest in a strong foundation
  - a. Budget
  - b. Physical location and resources
  - c. Staff
2. Secure core funding through institutional support and industry sponsorship
3. Obtain major research grants, especially those based on partnerships
4. Develop social enterprise opportunities such as professional development workshops and courses
5. Establish a strong, diverse, and supportive board
6. Hire a strong associate director and support staff
7. Build upon the existing strengths among the affiliated members and directors
8. Utilize the existing social capital and invest in its expansion
9. Provide relevant consultation to key decision-makers
10. Be present in the university and local community
11. Set up an effective and efficient organizational structure
12. Develop a strong communication plan
13. Establish an effective knowledge mobilization strategy
14. Create an effective wellbeing strategy in order to foster a positive and fun working environment

## Appendix B – Letters of Support: Faculty of Science and Office of Research Services

*Removed for Website.*

## Appendix C – Membership Responses

### Testimonial of VERiS Members

*As a social innovator and entrepreneur, my experience as a VERiS fellow has been career changing. The deep partnership I have established with VERiS has allowed me to align credible, applied academic research with efforts to test disruptive management innovations in practice. With VERiS' support and track record of success behind us, clients, funders and other critical partners have been many times easier to secure and more willing to engage in ambitious pursuits that would otherwise scare many of the same parties off. The foundation of trust, integrity and openness that underpins our relationship has made our collaboration highly functional and effective.*

**RANDY SA'D – FOUNDER & EXECUTIVE DIRECTOR OF REFOCUS; VERiS COMMUNITY FELLOW AND EXECUTIVE DIRECTOR, FLOURISHING ENTERPRISE INSTITUTE.**

*The VERiS centre at Laurier is highly regarded in the scholarly and regional communities as a leading, credible source of high-quality research and action in sustainability. Their 'culture of sustainability' work at the evol1 net-positive energy building, their fostering of the Flourishing Enterprise Institute, and their leadership on developing TEAMCA focused on municipalities are all projects that have advanced engagement in sustainability, and had a positive, real impact on people. Dr. Riemer has done a tremendous job of leveraging the university's modest financial contribution into a much bigger budget through research grants and partnerships, a testament to the engagement capabilities at the Centre. It has been a pleasure to serve on the VERiS board and collaborate on several projects together, and I look forward to more in the future.*

**DR. BARRY COLBERT, ASSOCIATE PROFESSOR, LAZARIDIS SCHOOL OF BUSINESS & DIRECTOR, THE CO-OPERATORS CENTRE FOR BUSINESS & SUSTAINABILITY; VERiS BOARD MEMBER**

*As an emerging scholar and PhD student with work situated at the intersections of community movement-building, sustainability activism, symbolism and the visual arts, I have been deeply grateful for the support and guidance I've received as a research fellow with VERiS. My association with VERiS has challenged me in highly useful and unforeseen ways, to go beyond my initial comfort zones as a community-based scholar-activist, and to build on existing leading research to strengthen my own scholarship and applied community research practices. I believe VERiS continues to do highly relevant and critical work to help challenge and shift our societies towards far more sustainable futures, and I feel personally proud of the work I've been able to contribute to as a member of VERiS, and grateful for the many opportunities I've been able to step into as an emerging scholar through my association. From the heart, I'd like to share a*

*sincere 'thank you!' to all of the team at VERiS and our funders for the important, crucial applied research work supported through these efforts.*

**KAI REIMER-WATTS, PHD STUDENT FELLOW, GRADUATE RESEARCH ASSISTANT.**

*Working with Dr. Manuel Riemer and the entire team at VERiS has brought a greater depth of understanding and capacity to our team and our network. As the application partner in the research on building a culture of sustainability in our shared workspace, evolGREEN in evolV1, we have benefited so greatly in understanding the opportunities and the barriers to the cultural work that needs to be done to help us reach an equitable, prosperous, low-carbon future. The work done in this project not only supports our efforts to help individual organizations reduce their impact on the environment, it has brought a fuller understanding to the community climate action work, including integration of the human element of climate change, and the braiding in of justice and equity into our carbon reduction planning. Dr. Riemer is an exceptional partner to SWR and his insight, practical research, generosity of knowledge sharing and more makes the work of SWR stronger in all that we do.*

**TOVA DAVIDSON, EXECUTIVE DIRECTOR SUSTAINABLE WATERLOO REGION, VERiS COMMUNITY FELLOW AND VERiS BOARD MEMBER.**

*As an Indigenous junior scholar at WLU, I have long been concerned with fostering opportunities for research collaboration between the Indigenous and Black communities, as well as our settler allies. As a socially conscious and engaged academic, I am deeply committed to creating safe and culturally appropriate spaces for equity-seeking individuals and groups to more meaningfully and wholly participate in municipal governance and planning processes. This is an arena that has typically been dominated by Western mental models and ways of understanding human relationships with space and place. Such discourses and approaches have relied on the (oftentimes violent) exclusion of non-Eurocentric voices in the municipal planning process. It is critical for scholars and municipal policymakers to work to redress these injustices, and to use anti-racist and decolonial approaches to advance equity and social justice in the municipal planning process. It is thus without hesitation that I accepted the invitation to be affiliated to VERiS. As such, I am grateful to be working with my colleagues Drs. Manuel Riemer and Cheryl Teelucksingh on our project Decolonizing and Transforming the Engagement of Indigenous and Black Peoples within Municipal Planning in Kitchener, which aims to decolonize climate change action in Kitchener by establishing partnerships with some of the City's key municipal planners, as well as Indigenous and Black organizations in the area. This project is in line with VERiS' broader objectives and calls for just sustainabilities, particularly in the realm of climate mitigation and adaptation initiatives.*

**DR. MIGUEL SIOUI, ASSISTANT PROFESSOR, DEPARTMENT OF GEOGRAPHY WLU, VERiS FACULTY MEMBER.**

*VERiS has provided me with a rich learning experience both through my undergraduate and graduate career. As an undergraduate student, I was able to further develop my research skills through literature reviews, quantitative coding and analysis, and collaboration with community members and organizations. These experiences allowed me to receive two undergraduate awards, the Laurier Library Research Award and NSERC Faculty of Science Student Research Award. At the graduate level, VERiS has allowed me to further my passion in community psychology and sustainability through applied community-engaged*

*research with diverse stakeholder groups. Most importantly, VERiS has provided me a sense of community where I can collaborate and learn with like-minded people.*

**JENNIFER DOBAI, MASTERS STUDENT WLU, VERiS RESEARCH ASSISTANT.**

*As most of my work is on animal behavior, being associated with VERiS has allowed me to explore an applied angle of my research that I do not usually get to work on. The Evolv1 living lab project, and the associated CFI and ORS grants, that I have been a collaborator on for the past two and a half years have allowed me to take my expertise in animal collective behavior and apply it to the movements and interactions of humans in the workplace. This work will have important implications for workplace design and will help us better understand the rapidly evolving nature of offices. On a more personal note, it is gratifying to see that my background in how animal groups coordinate their behavior is applicable – in broad strokes – to applied problems in human social and work behavior.*

**DR. NOAM MILLER, ASSOCIATE PROFESSOR, DEPARTMENT OF PSYCHOLOGY WLU, VERiS FACULTY MEMBER.**

*I began working at VERiS as a graduate student research assistant (RA) with limited research experience in 2017. In my role, I gained valuable, hands-on experience planning research projects, collecting and analyzing data, coordinating ethics applications, and much more. After graduating, I joined VERiS as a full-time research associate and have since then assumed a project management role. Working with VERiS, I've gained critical, hands-on experience that has allowed me to become a stronger researcher and develop transferable management skills.*

**BRITTANY SPADAFORE, PROJECT MANAGER, FORMER MASTERS STUDENT AND RESEARCH ASSISTANT WLU.**