What We Learned

3/13/2017 The University of Winnipeg Campus Sustainability Office

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Introduction

The transition to sustainability is a learning journey. For an institution like The University of Winnipeg, organizational learning is an essential component of effective sustainability governance and transformation toward resilience (Keen, Brown, & Dyball, 2005). Our fundamental commitment to sustainability incorporates organizational learning, resulting in new values and knowledge that leads us to change our behaviours and practices (Siebenhuner & Arnold, 2007). Just over ten years into our journey, it is time to acknowledge how far we have come, reflect on what we have learned along the way, and apply new lessons to our future plans. In other words, it is time to renew our commitment t

a row. Waste reduction and diversion remains a challenge. A more complete review of the challenges and accomplishments we have experienced appear in the table and chart below, with further detail available in our annual performance reports.

a le 2. Summary of goals, targets and key outcomes from 2012 UWinnipeg Sustainability Strategy

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Fg e 1. Sustainability Performance Summary for The University of Winnipeg from April 1, 2009 – March 31, 2016 showing percent change for waste collection, compost collection, recycling collection, water consumption, energy intensity, electricity consumption, natural gas consumption and greenhouse gas (GHG) emissions. GHG emissions and natural gas consumption are normalized for weather.

Sustainable Campuses for the Anthropocene

As we enter 2017, the landscape surrounding sustainability has changed both internationally and right here on campus. Over the last year, the University adopted a new Strategic Directions document as well as a new Integrated Academic and Research Plan (IARP). Both documents confirm the University's ongoing commitment to sustainability while also highlighting possibilities for new directions in our sustainability efforts by creating stronger links with the University's academic core. To these ends, it is time to consider re-framing our sustainability work to better suit our current internal and external context.

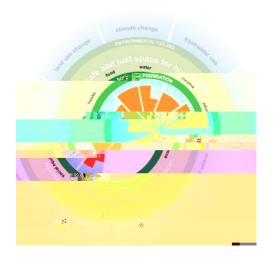
Alongside internal considerations emerging from our Strategic Directions and the IARP, four quite different external considerations are shaping the conversation on campus:

- 1. International dialogue about the concept of "sustainable development" including the Sustainable Development Goals and Kate Raworth's pioneering work on "donut economics" (Raworth, 2012);
- 2. The climate-justice movement in Canada, with its substantial Indigenous leadership and strong student presence;
- 3. Federal, provincial and municipal frameworks and legislation relevant to the sustainability conversation;
- 4. The Sustainability Tracking Assessment and Rating System (STARS) administered by the Association for the Advancement of Sustainability in Higher Education.

The concept of sustainability has always been contested and debated, as was outlined by our former President's first ever State of the University address (Axworthy, 2007). Since we established our first sustainability framework, the sense of urgency around environmental degradation has

increased considerably while linkages between environmental degradation and human wellbeing have come into sharper focus. The global carbon budget continues to shrink while greenhouse gas emissions rise toward critical levels capable of destabilizing many of the Earth's life support systems. The scope of the global sustainability problem can best be put into perspective by considering the extent to which human activity continues altering the biosphere. Thanks to research by Rockström et al. (2009) and Steffen et al. (2015), we now often speak of nine planetary boundaries relating to nine different biophysical processes that help maintain a safe operating space for humanity. Human development is beginning to push some of these boundary indicators to their known limit. One of the most pressing is the need to restrict

Planetary boundaries form part of a broader understanding of what many social and scientific researchers refer to as the Anthropocene: the current geological epoch that began with an industrial revolution and that defines a time during which human activity is having influential and measurable impacts on land, ecosystems and the climate (Lewis & Maslin,



The United Nation Development Programme's Sustainable Development Goals (SDGs) represent another example of a framework aimed at addressing the intersection of environmental boundaries and human wellbeing. The SDGs are a significant evolution from the UN's previous development creed, the Millennium Development Goals, as they merge together commitments to addressing poverty, health, equality and human rights with the overarching priority of sustaining the biosphere (United Nations, 2015). As Griggs et al. (2013) argue, sustainable development must be framed not as a byproduct of smart economic growth, but as a commitment to preserving the planetary life support systems that future generations depend on for their wellbeing, leading to a reshuffling of economic priorities in ways that benefit historically marginalized peoples.

Major federal developments related to environmental sustainability over the past decade have included sweeping changes to Canada's environmental assessment legislation as well as several other Canadian

environmental laws (Gibson, 2012; Powell, 2012). Further promises from our relatively new Federal government have been made to reverse some of these changes (Liberal Party of Canada, 2017). The new Pan-Canadian Framework on Clean Growth and Climate Change (Government of Canada, 2016) and the Canadian Energy Strategy (Council of the Federation, 2015) mark attempts to achieve some degree of agreement on a path forward on these issues in a setting often complicated by jurisdictional disputes. While some have praised these plans, others have criticized them both for how they have addressed relationship

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the importance of working with third party systems in a way that recognizes that they must be approached with healthy caution. These types of third party reporting systems are one mechanism used for mitigating the greenwashing that can result from calls for better sustainability performance in the absence of any reputable standard against which to measure sustainability claims. Good systems are designed based on sound research and represent consensus on complicated environmental issues. They can play an important role in charting a course toward a sustainable future. However, if not approached cautiously and with a genuine commitment to sustainability leadership, reporting systems can quickly become part of the greenwashing problem. Achieving a certification for a certain standard or rating system can become the

transparent emission reduction targets, and a number have succeeded in meeting or exceeding them. UWinnipeg can be proud to be among these successes, especially given its unprecedented growth in occupied space over the emission reduction period. The role universities are playing in modeling emission reduction processes speaks to a larger trend: over the last decade, in the absence of cohesive government action on climate, institutions and local governments have often taken more prominent leadership in this work.

While government-led climate action remains notoriously slow at all levels, the past decade has seen some meaningful gains with respect to climate policy. Frameworks pursued by international bodies such as UNFCCC and UNDP, and by national, provincial and local governments here in Canada are beginning to produce tangible targets and deliverables. In December 2015, nations party to the UN Framework Convention on Climate Change met in Paris to hash out the world's most comprehensive international climate change policy framework to date: the Paris Agreement. Succeeding the 1997 Kyoto Accord as the world's top-level climate change governance mechanism, the Paris Agreement was signed by 194 countries, many of whom are now working to ratify their commitments with national policies and regulations (UNFCCC, 2015).

The agreement has been lauded by many observers for its ambitious goals, chiefly its commitment to limit global temperature rise " to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels" (UNFCCC, 2015). However, there are also well-founded criticisms of the deal. For example, while signatory nations are required to submit nationally determined contributions to global emissions reductions, the targets are not legally binding and presently equate to a 3°C rise in temperatures (IISD, 2016). Nonetheless, Paris marks a turning point in global climate change governance and provides the University of Winnipeg with a compass bearing and a frame of reference as we flesh out our own approach to emissions reductions.

Canada has now signed and ratified the Paris Agreement, committing to "an economy-wide target to reduce greenhouse gas emissions by 30% below 2005 levels by 2030" (UNFCCC, 2015). This target has been criticized as not being ambitious enough, particularly by those advocating for

Canada's new national carbon strategy may present both opportunities and costs for the University of Winnipeg. Carbon pricing structures should strengthen the economic argument for reducing the emissions footprint of facility operations by taking such measures as reducing natural gas consumption and accessing potential federal funding for retrofits and other capital projects designed to improve energy innovation. At the same time, a price on carbon means paying more for the fossil fuels we use, especially natural gas. It is unclear if, or how, a carbon price will make the use of heating fuels other than natural gas economically preferable to natural gas. There is a risk that once established, a carbon price will increase the price of natural gas, but that natural gas will remain the cheapest heating option. In this instance, we will lack an economic argument for switching to a lower-carbon heating source but will still pay more for heating.

Here in Manitoba, the provincial government is developing its own "made-in-Manitoba" approach to carbon pricing that has yet to be announced. We can hope that this approach will circumvent this potential challenge. Beyond carbon pricing, we remain optimistic that the provincial government will take meaningful action on climate change and that it will look to the University as a committed partner especially in the areas of research, innovation and sharing of our own emissions reduction experience. We are uniquely situated to provide provincial climate leadership, especially with the newly established Prairie Climate Centre which aims to "enable governments, businesses and community members across the Prairies to reduce their vulnerability to climate variability and change by providing access to an innovative, stakeholder-driven hub for data, guidance, research, knowledge exchange, training and capacity building" (Prairie Climate Centre, 2016).

We can also recognize that it is time for us as an institution to take transparent and meaningful steps towards diversifying our energy mix on campus. Energy intensity of campus operations decreased by 27% compared to 2009, meaning that we substantially surpassed our target to achieve an 18% reduction. However, despite surpassing this target, we earned fewer STARS points than average as compared to our peers in the energy category in large part because we have not yet implemented any major renewable energy projects on campus. The campus community has likewise indicated wanting to see these types of projects as a sign of our commitment to sustainability.

Over the past two years, we have undertaken several feasibility studies for different types of renewable energy, for which we see two main benefits. In the first instance, they would play a role in beginning to mainstream renewable energy installations in our province. Secondly, they would help UWinnipeg achieve greater energy resilience. We would have greater flexibility with fuel choice as the energy landscape changes over time. Low prices for natural gas and electricity continue to make it challenging to diversify the energy mix on campus. For this reason, we must start with a modest target and hope for better in five years. Still, electricity rates are projected to go up considerably in the years ahead

Over the past decade, our emission reduction efforts have often been viewed as our flagship sustainability project. Despite this, our survey demonstr

sustainability efforts for the last decade. These targets address the people and places impacted by the natural resources and labour we use to keep the heat on, the boilers running, and the university supplied with the goods and services we need to operate.

The survey also yielded many comments about campus food services. Many expressed pride in

Still, there continue to be others who believe that different approaches to reflecting our commitment to sustainability in our investment practices would be more appropriate. These perspectives were heard throughout the engagement process last winter and in comments received through the two surveys administered over the same period. Some suggested partial divestment strategies that target companies with particularly egregious track records regarding slowing climate progress or disrespecting Indigenous rights. Others argued that a decision to divest would hamper our ability to influence precisely those companies most in need of some assertive nudging. Many holding this view saw divestment as "checking out" of the challenge of fossil fuel transition altogether and considered approaches involving shareholder engagement to have higher potential for impact.

This issue is complicated by the fact that the University itself does not actually hold any investments. The University of Winnipeg Foundation is an arms

- efforts. Complete framework by the end of 2018 and report on ongoing learning activities and outcomes annually in the annual Sustainability Performance report.
- 8. Link to the work of existing University bodies addressing human rights, equity, wellness, and accessibility for students, staff and faculty and include a summary of progress in the annual sustainability planning and reporting process by FY2017. Building on the experience of the Sustainability Office in setting goals and measuring progress, work with the responsible offices for each of the aforementioned areas to establish and report ongoing data improvement processes to aid in evaluation and planning related to work in these areas, and include data in the annual sustainability performance report as it becomes available.

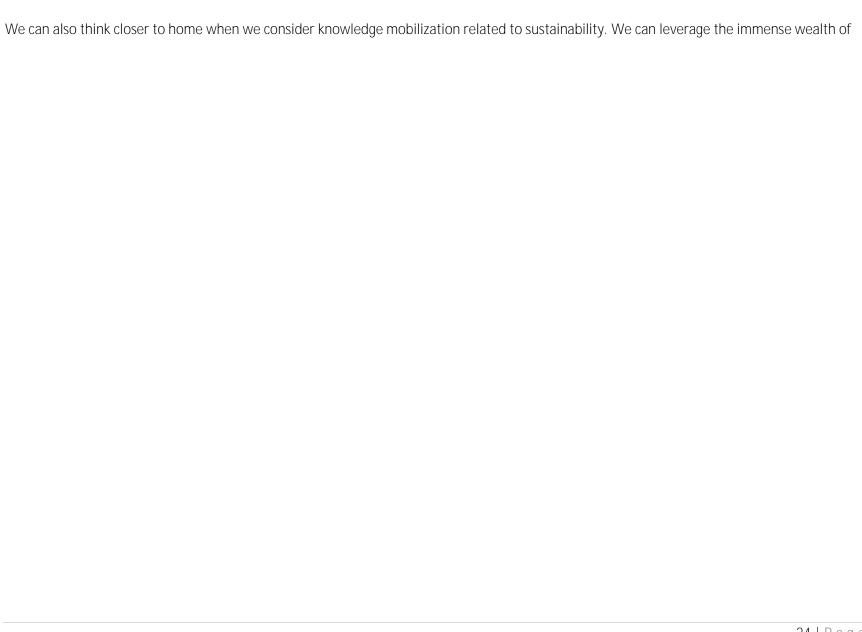
While 84% of UWinnipeg students who responded to the survey said that they believe that a good understanding of sustainability will be

Finally, while classes may not be the only way students learn about sustainability, they are still foundational. If emissions reductions are a necessary but not sufficient condition for our taking on responsibilities for climate change, then good sustainability curriculum is the necessary but not sufficient condition for ensuring students graduate with the knowledge they need to be part of solutions. Subsequently, we need to support efforts to continually improve curriculum, and we need to do so in a way that respects faculty's independence in deciding on curriculum. Our survey demonstrates that faculty are most supportive of efforts that provide them with options, networks and resources while leaving them with the freedom to use them as they like. While some spoke in favour of an effort similar to the Indigenous course requirement, most preferred a different approach to sustainability curriculum. Target 5 seeks to set out such an approach.

The five draft targets for the goal of developing and delivering curriculum, student services, and programming that deepen student knowledge about sustainability and helps motivate thoughtful leadership and action are:

- 1. In collaboration with departments responsible for implementing sustainability action on campus, generate, publish and promote a list of campus-based sustainability related student research opportunities annually for thesis or special projects.
- 2. Establish Campus Sustainability Course as a standing course in the University course catalogue, and offer the course at least twice by 2021.
- 3. Undertake a research project in 2017 using appreciative inquiry to better understand the learning process, learning outcomes, and interests of students who act and lead. In 2018, apply findings to develop a

5. Support a formal, ongoing, "community of practice" for



Indigenization and no decolonization." Others have reminded us that as important conversations about divestment are ongoing, there is so much more universities can contribute to the work involved in cultivating a better relationship with the living world and so much more to be learned from the richness of Indigenous voices across Manitoba and Canada about how to maintain these relationships.

On the other hand, environmental movements have historically had difficult and often opportunistic relationships with Indigenous groups, appealing to Indigenous rights arguments when it suits their cause and then abandoning the partnership when it no longer serves their environmental goal (Lee, 2011; Dauvergne, 2016). Some will also argue that flattening the Indigenization – Sustainability relationship would fail to recognize the diversity of views regarding the relationship between these two issues. While a clear consensus on how Indigenization and Sustainability can and should relate in the years ahead is not likely to emerge, we can recognize the importance of approaching the issue with curiosity, humility, patience, and a commitment to listening and learning.

Conclusion

The process that generated the content of this document brought to the surface, yet again, the wealth of knowledge, passion and expertise at t

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