



# CAMPUS STRATEGIC SUSTAINABILITY PLAN

October 2014



THOMPSON RIVERS UNIVERSITY

#MyGreenTRU #Conserve #Reduce Reuse Recycle



# Thompson Rivers University CAMPUS STRATEGIC SUSTAINABILITY PLAN

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The SSP was created by the Sustainability Office and Stantec Consulting Inc. with broad input from the TRU community.

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The tree symbolizes the environment and life force. The eye symbolizes humans, and our power to see potential and change it to reality. The tree is symbolically rooted around the eye (humans) providing resources and shelter, yet depending on our choices as much as we depend on it (the environment). And the pupil within the human eye is the planet whereby our existence survives - Earth.



cover image:

The cover art is by Emi Ohama. It was selected from among entries in a campus-wide competition which invited participants to submit an image, video or drawing that best represented what they would like to see as their desired future for TRU.

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CANS & BOTTLES



CANS & BOTTLES



CANS & BOTTLES



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# Executive Summary

In 2013 TRU established ‘increasing sustainability’ as one of its five strategic priorities for 2014-2019. This Strategic Sustainability Plan (SSP) is aligned with the university’s strategic plan, and provides a focus for TRU’s efforts toward sustainability over the same period.

The SSP is comprehensive in nature, and includes more than 130 recommended strategies across four key focus areas: Operations & Planning, Advocacy & Engagement, Learning, and Administration. The SSP is intended to provide a framework for each TRU department and operational unit to incorporate sustainability initiatives into their own planning processes (the structure of the plan is illustrated on the opposing page).

The SSP is a five year plan. The majority of the strategies are recommended for implementation over the short term (one to three years) and medium term (three to five); however the plan includes several strategies for consideration over the longer term (five plus years). These have been included to provide points of reference for longer term planning and resource allocation.

Unlike some strategic documents, the plan takes a comprehensive approach of documenting strategies over the next 5 years. These strategies are not all the responsibility of one department or office, but rather are shared among many. This comprehensive approach will allow each office or department to see where and how it can play a role in TRU’s sustainability journey. The SSP concludes with four strategic recommendations intended as essential first steps to ensure a strong foundation and ongoing success in implementing the SPP:

#### **1. Strengthen the governance structure**

Renaming the “Office of Environment and Sustainability” to the “Sustainability Office (TRUSO)” and broadening its scope to address all aspects of the SSP and to act as a liaison with other departments to realize their contribution to sustainability and formalize their commitments in their respective strategic plans. Further to change the name of the “Environmental Advisory Committee” to the “Sustainability Advisory Committee (SAC)” to provide ownership and oversight of the SSP, while also liaising with the Academic Priority and Planning Committee and the Educational Programs Committee.

#### **2. Allocate staffing resources**

Provide additional staffing resources. As a minimum, it is anticipated that TRUOS will require 4.5 FTEs.

#### **3. Improve the TRU sustainability image**

TRU has an opportunity to re-think how sustainability is incorporated into its branding and identity. The SSP also offers a key opportunity to publicly launch and revive the sustainability spirit on campus and beyond.

#### **4. Make strides in curriculum and research**

Demonstrating leadership in sustainability curriculum and research cannot be neglected as it is anticipated to become a crucial part of TRU’s competitive advantage in attracting and retaining students and faculty. It will be of more strategic importance in the coming years for TRU to fully assess and address its approach and response to demonstrating sustainability in its core function as a learning institution.

#### **5. Demonstrate leadership in water and waste**

TRU has been very successful in identifying and implementing energy savings strategies across campus. The learning from this process is transferable to other resource management challenges such as water management. Assess the current water consumption baseline and challenges and identify conservation measures and funding opportunities. The success in piloting the composting program further sets TRU up for leadership in the area of waste management.

#### **6. Report and update**





It is recommended that the SSP undergo an update every 4-5 years. Review the SSP strategies annually as part of the departmental strategic operations planning process. A dashboard should be developed in the short term to identify some of the top indicators that TRUOS and the SAC could use to communicate annual or bi-annual progress to the Board and TRU community.




VISION



GOALS

 <p><b>Operations &amp; Planning</b></p> <p>Our commitment to sustainability is evident in how we develop, operate, and maintain our campuses and regional centers.</p>	 <p><b>Advocacy &amp; Engagement</b></p> <p>The TRU community are sustainability ambassadors on and off campus.</p>	 <p><b>Learning</b></p> <p>TRU is a recognized as a leading academic institution for advancing sustainability education and research.</p>	 <p><b>Administration</b></p> <p>Sustainability is a core value in our institutional / administrative framework.</p>
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THEMES

<ul style="list-style-type: none"> <li> Design &amp; Construction</li> <li> Building Energy &amp; Air Quality</li> <li> Campus Grounds</li> <li> Transportation</li> <li> Waste</li> <li> Water</li> <li> Dining Services &amp; Food</li> <li> IT &amp; Print Shop Services</li> <li> Purchasing</li> </ul>	<ul style="list-style-type: none"> <li> Internal Advocacy</li> <li> External Advocacy</li> </ul>	<ul style="list-style-type: none"> <li> Curriculum</li> <li> Research</li> </ul>	<ul style="list-style-type: none"> <li> Governance</li> <li> Human Resources</li> <li> Investment</li> <li> Monitoring &amp; Communication</li> <li> Diversity &amp; Access</li> </ul>
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For each of the 18 Themes



CURRENT REALITY + DESIRED FUTURES





# Context

## 1.1 Background

Increasing sustainability is one of five strategic priorities established by Thompson Rivers University (TRU) for the 2014-2019 period. As part of this commitment, TRU is prioritizing sustainability initiatives that mutually benefit the university and the communities it serves in five areas:

- 1) Financial sustainability of TRU
- 2) Economic sustainability of the region and the province
- 3) Cultural and social sustainability of our communities
- 4) Creative and community arts sustainability
- 5) Environmental sustainability

The Strategic Sustainability Plan (SSP) aligns with and builds on the university's strategic priorities and sets a new course toward realizing a healthy, prosperous and sustainable campus community at TRU. TRU recognizes the integrated and interdisciplinary nature of sustainability, and as such has established the SSP as a university wide plan that is intended to provide strategic direction across the operational, administrative, learning and research functions of the university.

The SSP builds on the many campus sustainability initiatives established by the Office of Environment and Sustainability, and provides a comprehensive update to the first Campus Sustainability Action Plan, which was completed in 2012. The SSP provides a framework to align TRU's overarching strategic priority of "increasing sustainability" with divisional and departmental resources.

The SSP addresses 18 thematic areas in four categories: Operations and Planning; Advocacy and Engagement; Learning; and Administration.

The plan projects a desired future in each thematic area and recommends short, medium and long term strategies within the timeframe of the plan. Unlike some strategic documents, the plan takes a comprehensive approach of documenting strategies over the next 5 years. These strategies are not all the responsibility of one department or office, but rather are shared among many. Some key strategic first steps are outlined in the Implementation section of this document.

The organizational framework of the SSP is closely aligned with the Sustainability Tracking, Assessment & Rating System™ (STARS) established by the Association for the Advancement of Sustainability in Higher Education (AASHE). STARS is a fully transparent reporting tool for universities and colleges to measure their sustainability performance and benchmark it against other comparable institutions. STARS addresses performance in four areas: academics, engagement, operations, and planning & administration.

As a charter STARS participant, TRU was among the first wave of institutions to commit to completing the assessment in 2010. TRU obtained a Silver ranking with its first report in 2011. The SSP will serve as a strong foundation for the next TRU STARS report, anticipated in late 2014.



## 1.2 Key Drivers of Change

Universities play a key role in addressing global challenges. As hubs for education, research, and community involvement, academic institutions can facilitate long-lasting effects and societal change. Universities are charged with preparing students for the future marketplace and are often at the forefront of evolving economic, environmental, and social trends. Universities are therefore charged with not only incorporating sustainable practices into their curricula and internal operations, but are expected to act as thought and practice leaders. Being aware of the key drivers of change helps prepare TRU in planning for the future.

### Resource Scarcity and Climate Change

The world's population is projected to rise to more than 9 billion people by 2050. Beyond population growth, rising living standards will result in unprecedented demands for natural resources. Many of the resources that are considered renewable (i.e. forests and fresh water) may become finite, as human demands are growing more quickly than the ability of natural processes to replenish them. In Kamloops, water and energy consumption rates are some of the highest in Canada on a per capita basis, and watershed protection has been identified as an area of concern<sup>1</sup>. It is essential for institutions to address their demands on natural resources such as water, energy, and land and to turn their wastes into resources. This affects all areas of the institutions' design and operation, such as how buildings are constructed, how they operate, what materials and equipment the institution procures, etc.

Global climate change is how we plan for the future. Key global climate change trends include: changing precipitation patterns and melting snow, ice, and glaciers which are affecting water quantity and quality; negative impacts on crop yields; increased frequency and severity of extreme weather events such as heat waves and floods; and an increased burden from ill-health<sup>2</sup>. The Government of British Columbia has identified increases in frequency of extreme weather events, heat waves, and sea level rise and flooding risk as climate issues of concern for the province<sup>3</sup>. For Kamloops, a predicted warmer, dryer climate trend could result in elevated risks from forest fires, changes to local ecosystems which may affect natural resource industries, and rising building and infrastructure maintenance costs as a result of extreme weather events.

### Legislation and Regulation

Legislation intended to reduce greenhouse gas emissions and promote energy efficiency has been introduced by both the provincial and federal governments in recent years. Sample legislation includes:

- Federal Passenger Vehicle and Light Truck Greenhouse Gas Emission Regulations that require new vehicles sold in 2016 and beyond to be 40% more efficient than vehicles sold in 2008;
- The British Columbia Building Code now requires developers of complex buildings to meet the National Energy Code for Buildings 2011 standards or the ASHRAE 90.1 (2010) standards, which can achieve energy savings of 15%; and
- The National Energy Code of Canada for Buildings 2011 mandates an overall 25% improvement in energy efficiency over the previous model energy code.

1. <http://www.kamloops.ca/communityplanning/pdfs/11-SustainableKamloopsPlan-Foundations-12-11.pdf>

2. Intergovernmental Panel on Climate Change, *Climate Change 2014: Impacts, Adaptation, and Vulnerability* <https://www.ipcc.ch/report/ar5/wg2/>

3. <http://www2.gov.bc.ca/gov/topic.page?id=BE3D1E436EE14ADE8255FAoAD060659C>

These legislative changes are anticipated to transform the energy consumption and emissions associated with buildings and vehicles over time, as the market replaces existing stock with more efficient stock.

## Student Demographics and Attitudes

In an increasingly globalized world, competition for attracting the best and brightest students is no longer occurring at the regional level, but the international level. In Canada, the student population as a whole is becoming more diverse, both in terms of their cultural background and in their method of study. In 2007, international students accounted for approximately 9% of all university students in Canada, and the international student population is growing at an annual rate of 8%<sup>4,5</sup>. To attract the most talented students and faculty, universities are challenged to provide and help facilitate quality student experiences, services, and achieve excellence in teaching and research. Technology changes have made it possible to market to and attract students from distant places; even the way learning and teaching is happening is changing due to technology (such as online courses / distance learning).

The movement toward campus sustainability has been triggered at least in part by changing student attitudes. The Princeton Review survey indicates that 61% of prospective students polled and 60% of their parents stated that having the ability to compare universities based on their commitment to environmental issues would have an impact on their decision to attend a school<sup>6</sup>. This attitude is also reflected in the TRU SSP survey where 64% of respondents indicated that it is very or extremely important to them that TRU be a leader in sustainability among Canadian post-secondary institutions.

## Integration and Complexity

Thompson Rivers University is the fifth largest employer in the City of Kamloops, and a significant contributor to regional economic and sustainable growth<sup>7</sup>. University students, faculty and employees are residents in the community, and as an overall community partner, the university is influenced by (and can influence) local land use planning and other policy objectives. The City of Kamloops Foundations for Sustainability Plan for example cites Thompson Rivers University as a key contributor to the development of Kamloops' vision for community development. Universities are no longer just academic institutions. They are destinations that offer amenities that can be used by all and they generate traffic that affects the surrounding neighbourhoods. Universities are not isolated, and the trend is to integrate campuses with the community for a live-work-play and learning destination. This requires closer integration and coordination between the institution, surrounding land owners, transit authorities, the community, etc.

Integration is also increasingly seen in all other areas of the institution, creating much more complex systems and governance models. For example, energy generation integrates with building design and operation; waste management and landscape operations integrate to provide composting solutions; academic, retail, and housing might integrate into the same building; etc.

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4. [http://www.international.gc.ca/education/report-rapport/economic-impact-economique/sec\\_4.aspx?lang=eng](http://www.international.gc.ca/education/report-rapport/economic-impact-economique/sec_4.aspx?lang=eng)

5. <http://www.statcan.gc.ca/pub/81-004-x/2010005/article/11386-eng.htm>

6. Hopes and Worries Survey <http://www.princetonreview.com/college-hopes-worries.aspx>

7. <http://venturekamloops.com/labour-force/major-employers/>









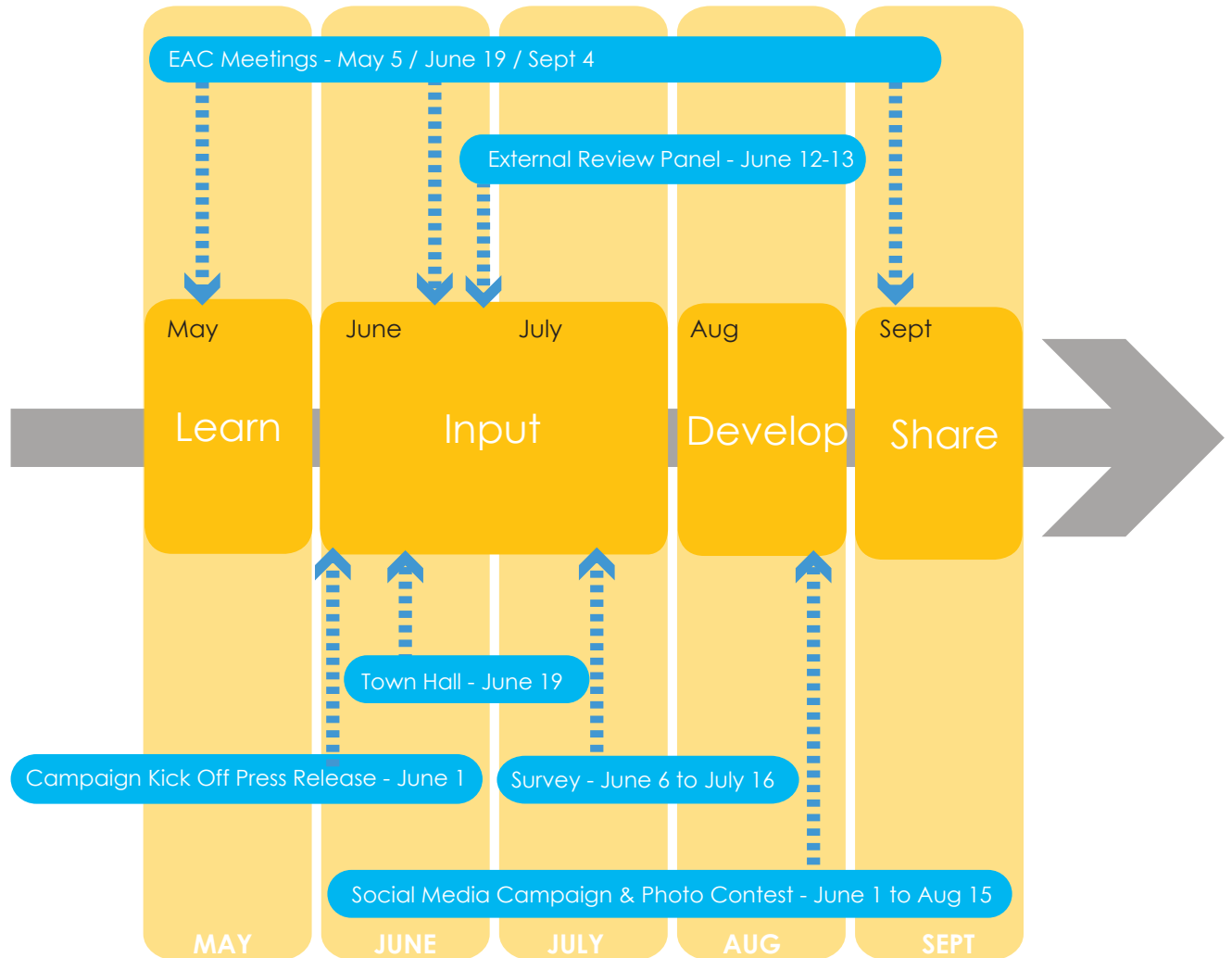
# Creating the Plan



Effective change toward sustainability in the university context requires support from across academic departments, operational units, student groups, and other stakeholders.

The engagement strategy for the SSP targeted the TRU Environmental Advisory Committee, students, staff & faculty, sustainability leaders at peer institutions, and selected stakeholders.

The diagram below illustrates the key elements of the engagement strategy.



### **Environmental Advisory Committee (May 6, June 19 and September 4, 2014)**

The role of the Environmental Advisory Committee (EAC) was to provide, advise and input on the process and to review the draft SSP. Three meetings were held with the EAC to review the proposed scope and focus of the SSP, identify potential challenges and opportunities, provide input on priorities and directions, and give feedback on the draft SSP.

### **TRU Sustainability Town Hall (June 19)**

The campus community was invited to a Sustainability Town Hall lunch session on June 19th to “share insight, vision, expertise, and values regarding sustainability on campus”. Despite the slow summer season, the event was very well attended, with more than 60 participants over a two hour period. Attendees included representatives of the TRU Student Union, the Environmental Advisory Committee, faculty, staff, administrators, community members, and City of Kamloops staff.

Participants were asked to review a series of information posters illustrating the 18 themes addressed in the SPP. Each poster included a visual representation of the ‘Current Reality’ for the theme in question, along with the proposed ‘Desired Outcome’ statements.

Participants were invited to participate in a ‘sticker- dot’ voting exercise in which they were asked to rank the relative importance of each ‘Desired Outcome’ statement, from ‘not important at all’ to ‘extremely important’.



### **Online Strategic Sustainability Plan Survey (June 6 – July 16, 2014)**

To supplement the Town Hall session and EAC meetings, the Office of Environment and Sustainability hosted an online survey using similar value-based questions asked of the Town Hall participants.

231 survey responses were received with the following breakdown:

Response	Count	Percent
TRU Student	67	29.0%
TRU Staff	57	24.7%
TRU Administration	24	10.4%
TRU Faculty	35	15.2%
TRU Alumni	24	10.4%
Other	24	10.4%

### **Social Media: Art & Photo Contest (June 1– August 15, 2014)**

The SSP social media campaign encouraged current or future students of TRU to visit the TRU Sustain Facebook Page and submit an image, video or drawing that best represented what they would like to see as their desired future for TRU.

The contest was hosted on Facebook and promoted through social media using YouTube, Facebook, Twitter, Instagram and the TRU Sustain Blog. In total there were 16 entries and 563 visits to the contest app. Combined there was a potential reach of 64,070 between all social media networks making the TRU community aware of the SSP process and engagement opportunities.

Following the close of this contest the images were judged by a panel established by the Office of Environment and Sustainability. The winning entry selected was a hand drawn image by Emi Ohama, as shown on the cover page.

### **External Review Panel Report (June 12-13, 2014)**

An External Review of the Office of Environment and Sustainability (OES) was conducted by a panel of peers from the University of British Columbia, Simon Fraser University, and the Natural Step in June 2014. The panel was asked to assess the OES in terms of its access to resources and funding, its allocation of resources and funding, and the potential expansion of its mandate.

The Panel interviewed various stakeholders at TRU on June 12-13, 2014. The questions posed in each interview were:

- What do you understand the core function of E&S Office to be?
- How well do feel supported by and engaged with the E&S Office?
- How is your department contributing to Sustainability at TRU?
- What resources do you need to continue or improve your contribution to sustainability at TRU?
- Do you have any thoughts on the Sustainability Framework proposed?

The panel provided a summary of its findings and identified both short and medium/long term recommendations for the University in many of the thematic areas covered by the SSP. The recommendations have been carefully reviewed and many have been incorporated into the SSP.







My Sustainability  
Pledge:

Continue - ☺  
encouraging the  
TRU community  
to recycle their  
coffee cups ☺

#MyGreenTRU

# Structure of the Plan



The SSP provides a sustainability planning framework that can be used to provide guidance and alignment between the strategic plans of all other university departments. Sustainability is not only an operational issue; it is a core value and top priority for the institution that permeates all aspects of TRU.

The SSP is an overarching strategic document that serves as a reference point for various TRU departments and offices during their own departmental strategic plans. The SSP does not replace other plans, policies and documents, such as the Campus Master Plan, the Strategic Energy Master Plan, the Procurement Policy, the HR Policy, etc. Instead it is intended to help guide other plans and the SSP should be considered in the update of other plans and policies to ensure that it advances the institution towards its sustainability ambitions.



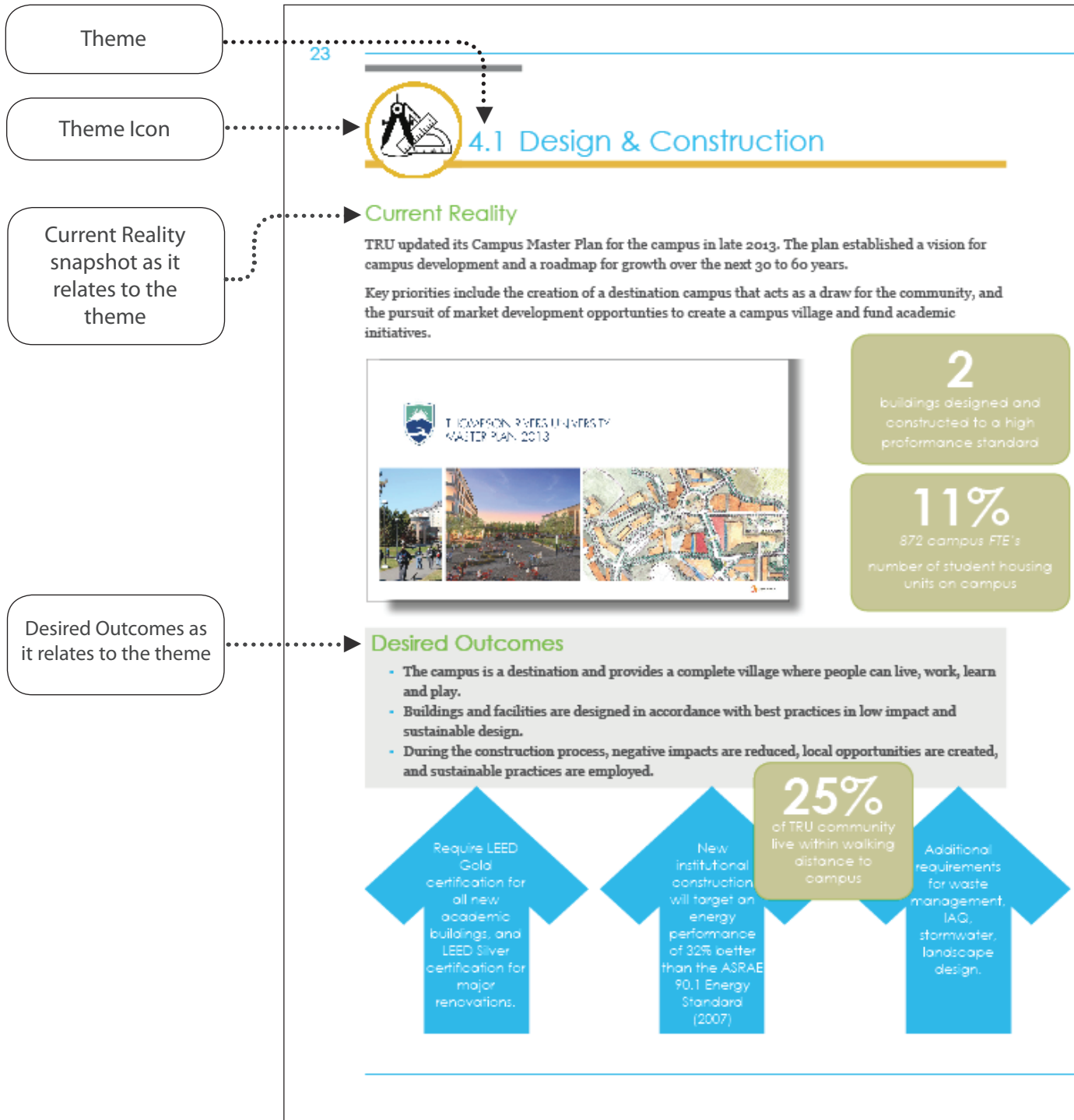
The SSP framework is comprised of the following key elements:

- Vision - As part of the online survey, respondents were asked in one or two words, to list the phrases or concepts that they felt were important elements in describing or representing TRU's vision for sustainability. Their combined responses form a collective vision for sustainability for the campus community and are illustrated in the sustainability vision 'wordle'.
- 4 Goals - The SSP is closely aligned with the STARS rating system, and sets high level goals consistent with those established by STARS in four key focus areas. The focus areas and the corresponding themes are illustrated below.
- 18 Themes – The themes build on the goals and the general alignment with the STARS rating system.
- Current reality – The current reality describes, in a snapshot, the highlights of where TRU is at currently in terms of the theme.
- 33 Desired outcomes – One or more desired outcomes for each theme helps to describe the future that TRU strives towards.
- 125 Strategies – The strategies identify what TRU aims to address help move the institution towards its desired outcomes, and ultimately its goals and vision.





## How to Use the Document



Strategies

Short Term 1-3 Years

Long Term 5+ Years

**Design Guidelines & Green Buildings**

Who: Director, E&S

Establish Development Guidelines and Green Building Requirements for new development on campus that include the following:

- 1) For institutional projects: LEED Gold Certification and minimum energy performance targets for new institutional projects (32% better than ASHRAE 90.1 Energy Standard, 2007) and LEED Silver Certification for major renovation projects.
- 2) For institutional and market projects: Minimum requirements in priority areas .

**Commissioning Process**

Who: Director, Facilities (with Director, E&S)

Create RFP documentation to support an independent commissioning process for TRU projects (i.e. one in which the commissioning function is separate from contractor scope of work) and include TRU facilities and sustainability staff in the commissioning process to ensure buildings meet sustainability, occupant, and operations objectives.

**Construction and Demolition Waste Diversion**

Who: Director, E&S (with Purchasing)

Develop zero waste procurement policy for campus construction projects.

**Engagement**

Who: VP Admin & Finance

Develop and communicate a consultation strategy for engaging internal stakeholders prior to any land being developed.

**University Village**

Who: TRUCT

Create a vibrant, mixed use campus by: creating a diverse range of housing options for students, staff and faculty (market and non-market housing) and exploring opportunities for retail and commercial uses along McGill and in the campus 'heart'.

**Showcase Project**

Who: Director, E&S

Identify opportunity to develop and profile a notable project that showcases TRU commitment to sustainability. This might be for instance be a large renewable (wind or solar) project.

Theme Cross-ref	STARS Cross-ref
	OP:4
	OP:24
	OP 24
	OP 21

Strategies over the Short, Medium, and Long-term.

Cross-reference to other Themes where Strategies achieve multiple outcomes.

Reference to the STARS rating system where strategies directly advance STARS credits.

Indicates the lead (and supporting) roles responsible for strategy implementation.

Indicates the Goal this Theme helps to advance.

Operations & Planning












# Goal 1:

## Operations & Planning

Our commitment to sustainability is evident in how we develop, operate, and maintain our campuses and regional centres.

### THEMES

-  Design & Construction
-  Building Energy & Air Quality
-  Campus Grounds
-  Transportation
-  Waste
-  Water
-  Dining Services & Food
-  IT & Print Shop Services
-  Purchasing



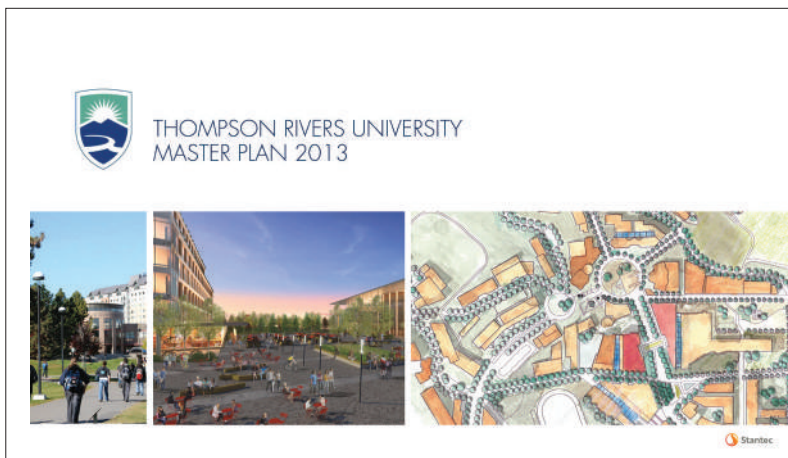


## 4.1 Design & Construction

### Current Reality

TRU updated its Campus Master Plan for the campus in late 2013. The plan established a vision for campus development and a roadmap for growth over the next 30 to 60 years.

Key priorities include the creation of a destination campus that acts as a draw for the community, and the pursuit of market development opportunities to create a campus village and fund academic initiatives.



**2** buildings designed and constructed to a high performance standard (e.g. LEED)

**11%** 872 campus FTE's number of student housing units on campus

### Desired Outcomes

- The campus is a destination and provides a complete village where people can live, work, learn and play.
- Buildings and facilities are designed in accordance with best practices in low impact and sustainable design.
- During the construction process, negative impacts are reduced, local opportunities are created, and sustainable practices are employed.









Require LEED Gold certification for all new academic buildings, and LEED Silver certification for major renovations.

New institutional construction will target an energy performance of 32% better than the ASRAE 90.1 Energy Standard (2007)

**25%** of TRU community live within walking distance to campus

Additional requirements for waste management, IAQ, stormwater, landscape design.

## Strategies

		Theme Cross-ref	STARS Cross-ref
Short Term 1-3 Years	<p><b>Design Guidelines &amp; Green Buildings</b> Who: Director, E&amp;S</p> <p>Establish Development Guidelines and Green Building Requirements for new development on campus that include the following:</p> <p>1) For institutional projects: LEED Gold Certification and minimum energy performance targets for new institutional projects (32% better than ASHRAE 90.1 Energy Standard, 2007) and LEED Silver Certification for major renovation projects.</p> <p>2) For institutional and market projects: Minimum requirements in priority areas</p>	  	OP 4 OP 24
	<p><b>Commissioning Process</b> Who: Director, Facilities (with Director, E&amp;S)</p> <p>Create RFP documentation to support an independent commissioning process for TRU projects (i.e. one in which the commissioning function is separate from contractor scope of work) and include TRU facilities and sustainability staff in the commissioning process to ensure buildings meet sustainability, occupant, and operations objectives.</p>	  	
	<p><b>Construction and Demolition Waste Diversion</b> Who: Director, E&amp;S (with Purchasing)</p> <p>Develop zero waste procurement policy for campus construction projects.</p>		OP 24
	<p><b>Engagement</b> Who: VP Admin &amp; Finance</p> <p>Develop and communicate a consultation strategy for engaging internal stakeholders prior to any land being developed.</p>		
Long Term 5+ Years	<p><b>University Village</b> Who: TRUCT</p> <p>Create a vibrant, mixed use campus by: creating a diverse range of housing options for students, staff and faculty (market and non-market housing) and exploring opportunities for retail and commercial uses along McGill and in the campus 'heart'.</p>		OP 21
	<p><b>Showcase Project</b> Who: Director, E&amp;S</p> <p>Identify opportunity to develop and profile a notable project that showcases TRU commitment to sustainability. This might be for instance be a large renewable (wind or solar) project.</p>		

Also see relevant cross-reference strategies under the following themes:



Buildings Energy & Air Quality



Transportation



Curriculum



Campus Grounds



Dining Services & Food

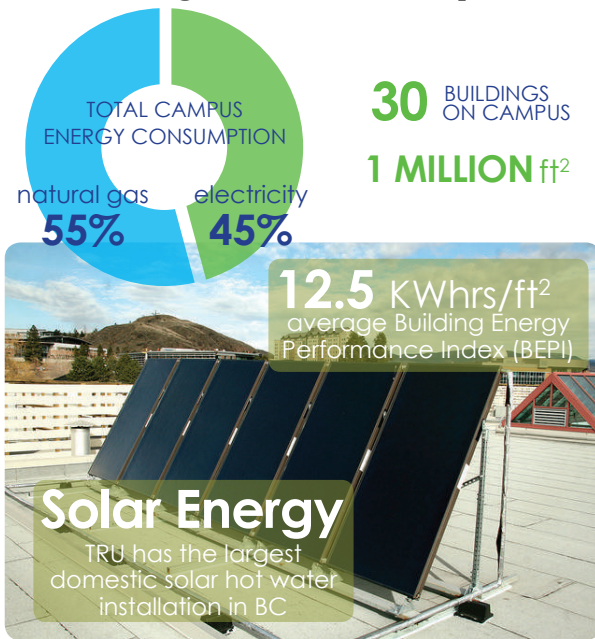


## 4.2 Buildings Energy & Air Quality

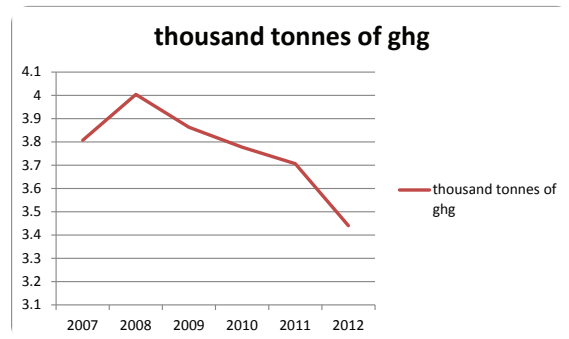
### Current Reality

TRU has reduced building energy consumption by 12% since 2009, saving the university approximately \$225,000 per year.

TRU GHG emissions have been declining steadily since 2009, despite significant increase in enrolment and building area of more than ten percent.



**1.9** tCO<sub>2</sub>e  
annual greenhouse gas emissions per student FTE

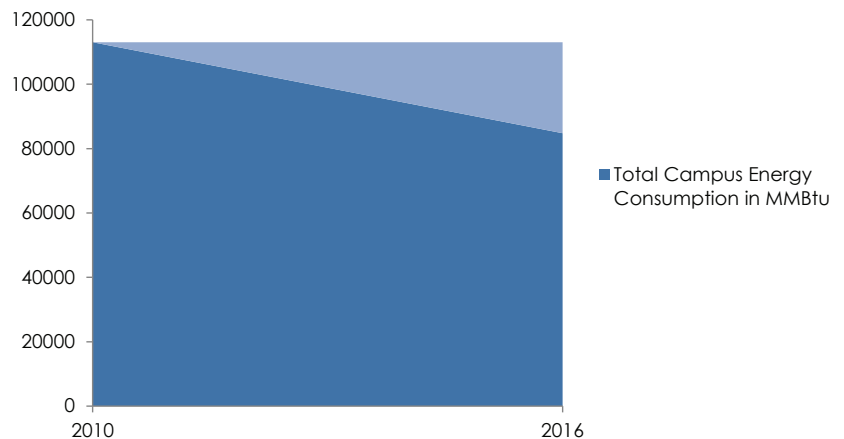


### Desired Outcomes

- Energy is derived from local, clean and renewable sources.
- Buildings use less energy/power and emit less greenhouse gas.
- Buildings protect human health through high quality indoor environments.

**25%** by 2016 **33%** by 2022  
reduction in GHGs / energy consumption

**10%** renewable energy



## Strategies

Short Term 1-3 Years

### Low VOC Materials

Who: VP Admin & Finance

Establish Development Guidelines and Green Building Requirements for new development on campus that include mandatory achievement of low VOC LEED credits.

### Energy Standard

Who: Director, E&S

Establish Development Guidelines and Green Building Requirements for new development on campus with minimum energy performance targets for new institutional projects that exceed the ASHRAE 90.1 Energy Standard, 2007.

### District Energy Potential

Who: Director, E&S (with Director, Facilities)

Explore the potential of a TRU district energy utility or alternative as part of the master plan build-out.

### Clean and Renewable Energy

Who: Director, E&S (with Director, Facilities)

Generate electricity from clean and renewable energy sources on campus. Establish Development Guidelines and Green Building Requirements for new development on campus that include minimum requirements for alternative energy, including solar thermal readiness and consideration of geothermal energy systems. Catalyze development of off-site clean and renewable energy sources through the purchase of Renewable Gas Certificates from Fortis BC.

### Energy Manager

Who: Director, E&S (with Director, Facilities)

Clarify role and responsibility of Facilities Department staff in energy management projects to avoid duplication with Sustainability Office. Consider transitioning utility management and billing functions into Sustainability Office. Consider a new hire or increased budget to support additional energy management efforts.

### Greenhouse Gas Emissions

Who: Director, E&S

Continue to update and report inventory of greenhouse gas (GHG) emissions annually and reduce the adjusted net Scope 1 and Scope 2 GHG emissions.

### Outdoor Air Quality





Who: Director, E&S

Conduct inventory of significant air emissions from stationary sources on campus.

### Building Energy Consumption



Who: Director, E&S (with Director, Facilities)

Ensure ongoing support from BC Hydro and Fortis by continuing to identify 1-3 year energy strategies that achieve reduction targets set out by BC Hydro and TRU's Office of Environment & Sustainability.

Theme Cross-ref	STARS Cross-ref
	
	
	
 	OP 9
	
	OP 1
	OP 2
	OP 8



Strategies (continued)

		Theme Cross-ref	STARS Cross-ref
Short Term 1-3 Years	<p><b>Energy Conservation Awareness</b> Who: Director, E&amp;S (with Director, Facilities)</p> <p>Maintain TRU’s participation in BC Hydro’s Workplace Conservation Awareness Program and work towards Tier 4 energy awareness status for the organization.</p>		OP 8
	<p><b>Building Operations and Maintenance</b> Who: Director, Facilities (with Director, E&amp;S)</p> <p>For non-certified buildings, adopt sustainable operations and maintenance guidelines for operations and maintenance.</p>		OP 3
	<p><b>Methodology for Revolving Fund</b> Who: Director E&amp;S</p> <p>Maintain confidence in the revolving fund by ensuring the methodology for measuring savings is transparent and clearly communicated (e.g. project M&amp;V, adjustments for controllable and non-controllable variables, etc.).</p>		
Medium Term 3-5 Years	<p><b>Deferred Maintenance</b> Who: VP Admin &amp; Finance (with Director E&amp;S)</p> <p>Address long term maintenance costs in capital planning for sustainability projects such as solar thermal arrays.</p>		
	<p><b>Facility Scheduling</b> Who: AVP Enrolment &amp; University Registrar (with Director, E&amp;S)</p> <p>Evaluate the class/facility scheduling process to ensure more efficient use of space, electricity, water, staffing etc. Consider a centralized booking system that enables optimal use of facilities and utilities especially in slower summer months.</p>		
	<p><b>IAQ Management</b> Who: Director, Facilities</p> <p>Implement an indoor air quality (IAQ) management program that includes regular auditing or monitoring, a mechanism for occupants to register complaints, and action plans to implement any corrective measures required in response to audits, monitoring or complaints.</p>		OP5

Also see relevant cross-reference strategies under the following themes:



Design & Construction





## 4.3 Campus Grounds

### Current Reality

The Campus Master Plan includes the following objectives:





- Embrace the native landscape of the region, preserve vistas and views and promote the pedestrian nature of the campus.
- Recognize the exiting topography of the campus and acknowledge the constraints this places on development.
- Buildings and open spaces should conform to best practice in environmental design.
- Parking and vehicle movement will be limited as much as possible to the periphery of the campus.



### Desired Outcomes

- Soft landscapes (such as plants, natural areas) are planned and maintained with the health of the local ecology in mind.
- Hard landscapes (such as plazas, fountains, roads) are planned and maintained to reduce environmental impacts and facilitate social interaction and cultural expression.

## Strategies

		Theme Cross-ref	STARS Cross-ref
Short Term 1-3 Years	<p><b>Wayfinding</b> Who: Director, E&amp;S</p> <p>Identify short-term solutions to improve way finding on campus and establish guidelines to improve long-term way finding through campus design.</p>		
	<p><b>Research and Teaching</b> Who: Relevant faculty (with Director E&amp;S)</p> <p>Raise awareness of the unique landscape and vegetation at TRU by identifying and celebrating those lands identified in the Master Plan as outdoor research and teaching and/or recreation areas.</p>		
Medium Term 3-5 Years	<p><b>Landscape Management</b> Who: Director, Facilities (with Director, E&amp;S)</p> <p>Update TRU Landscape Planting &amp; Rehabilitation Plan in accordance with Integrated Pest Management (IPM) principles to reduce pesticide and water use.</p>		OP10
	<p><b>Gathering Spaces</b> Who: Director, Fwacilities</p> <p>Create more outdoor seating and casual meeting spaces that can be used year round.</p>		
	<p><b>Biodiversity</b> Who: Relevant faculty (with Director E&amp;S)</p> <p>Conduct an assessment to identify and protect environmentally sensitive areas and/or endangered and vulnerable species (including migratory species) with habitats on institution-owned or -managed land. Assign specific biodiversity values to these areas and make recommendations for conservation and restoration.</p>		OP11

Also see relevant cross-reference strategies under the following themes:



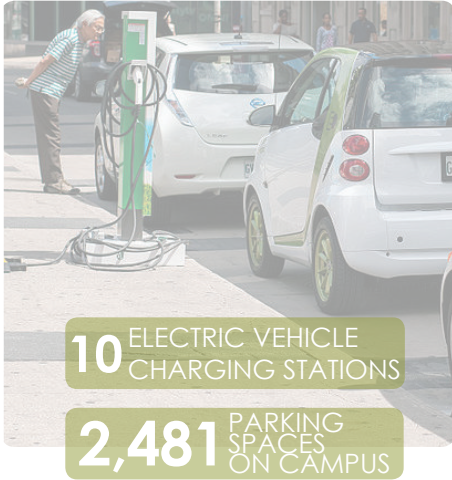
Water



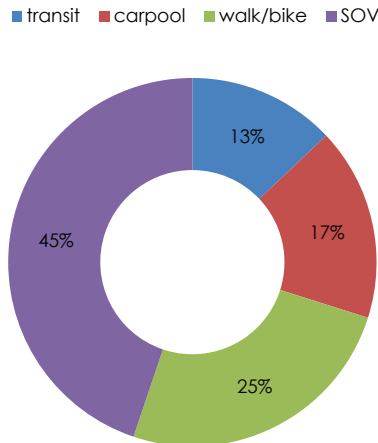


# 4.4 Transportation

## Current Reality



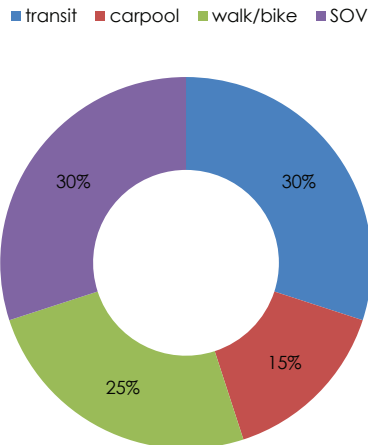
Campus Transportation in 2010



## Desired Outcomes

- The TRU community does not have to travel to/from campuses often.
- There is less need to travel to/from campus by car and when doing so it is through more efficient means (such as carpooling, using efficient vehicles, etc.).
- Travelling to/from campus by transit is a viable, convenient option.
- Travelling to/from and around campus by bike is a safe and convenient option.
- Campus is a pedestrian friendly environment that is easy to navigate.
- Operations vehicles and equipment (such as TRU trucks, lawn mowers, snow plows, etc.) use clean, efficient fuels.

Campus Transportation in 2019



## Strategies

Short Term 1-3 Years

### Outdoor Air Quality

Who: Director, E&S

Adopt policies or guidelines to improve outdoor air quality and minimize air pollutant emissions from mobile sources.

### Campus Fleet

Who: Director, E&S

Purchase an electric vehicle for regional travel and pilot use for one year; evaluate potential for conversion of entire campus fleet to electric or hybrid vehicles.

### Commute Modal Split

Who: Director, E&S

Conduct a travel survey to monitor modal split for students and employees.

### Accommodate Bikes

Who: Director, E&S

Develop and implement a “complete streets” or bicycle accommodation policy, develop guidelines for bicycle parking, storage and facilities, and/or participate in a bike-sharing program.

### Car Share

Who: Director, E&S

Explore a partnership with Interior CarShare Co-operative (or others) and provide car share vehicles and parking on campus.

### Electric Vehicles

Who: Director, E&S (with Director, Facilities)

Expand the electric vehicle recharging stations and replace existing TRU fleet with electric vehicles at end-of life. Make an electric vehicle(s) available for regional staff/faculty travel.

### Pedestrian Oriented Design

Who: Director, E&S

Design Walkable Public Spaces: Establish design guidelines that promote walking, and other active means of transport within campus to decrease the environmental impacts of driving from building-to-building.

Medium Term 3-5 Years

### Carpool / Ride Share

Who: Director, E&S

Increase the amount of high-occupancy parking stalls and continue to offer incentives.

### Telecommuting

Who: AVP HR & Planning

Explore the potential for telecommuting programs for employees.



### Condensed Work Week

Who: AVP HR & Planning

Explore the potential for condensed work week options for employees.

Theme Cross-ref:	STARS Cross-ref:
	OP 2
	OP 18
	OP 19 OP 20
	OP 21
	OP 21
	OP 21
	OP 21
	OP 21
	OP 21
	OP 21

Strategies (continued)

		Theme	STARS
		Cross-ref:	Cross-ref
Medium Term 3-5 Years	<p><b>Transportation Demand Management Plan</b> Who: Director, E&amp;S</p> <p>Participate in the City’s Transportation Demand Management planning process and advocate TRU’s transportation objectives.</p>		
	<p><b>Hillside Access</b> Who: VP Admin &amp; Finance</p> <p>Work with the City of Kamloops to establish an in-out access to campus along Hillside Road.</p>		
	<p><b>McGill Corridor</b> Who: VP Admin &amp; Finance</p> <p>Work with the City of Kamloops to establish McGill as a pedestrian friendly “main street”.</p>		
	<p><b>Improved Transit Service</b> Who: VP Admin &amp; Finance</p> <p>Initiate comprehensive transit service review process with BC Transit to identify opportunities to improve service and increase ridership.</p>		
Long Term 5+ Years	<p><b>GRT Program</b> Who: Director, E&amp;S</p> <p>Explore offering a guaranteed return trip (GRT) program to regular users of alternative modes of transportation, which provides transportation in case of emergencies, for example illness, emergencies, or the absence of a carpool / vanpool vehicle..</p>		OP 21
	<p><b>Parking Location</b> Who: VP Admin&amp; Finance</p> <p>Locate parking spaces for single occupant vehicles (excluding carpool, vehicle sharing and alternative fuel vehicles) in the campus perimeter, rather than campus centre. Explore feasibility of structured parking (underground, semi-underground, or above-ground structures).</p>		

Also see relevant cross-reference strategies under the following themes:



Design & Construction





50-376-1216

9837

NEAGLES SUMMIT

NEAGLES SUMMIT

RS

9706

BC Transit



RAMP  
Kneeling  
Bus



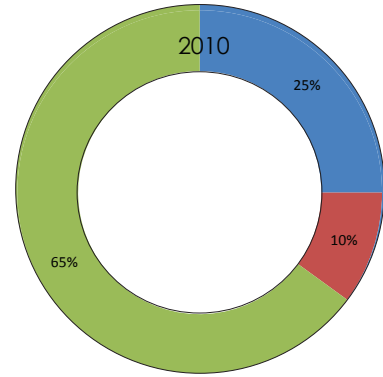


## 4.5 Waste

### Current Reality



■ recycled material ■ compostable organics ■ waste sent to landfill

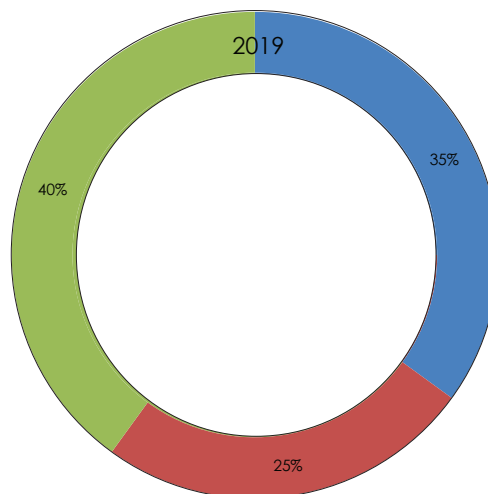


**1640** TONNES  
waste generated annually

### Desired Outcomes

- TRU aggressively moves towards zero waste (more recycling and composting, less to the landfill).
- Reduce the total amount of waste generated on campus. (i.e. less “stuff” such as packaging and disposables)
- Hazardous waste (includes pesticides, batteries, electronics, paints, etc.) is safely managed.

■ recycled material ■ compostable organics ■ waste sent to landfill



Short Term 1-3 Years

Medium Term 3-5 Years

## Strategies

### Waste Minimization

Who: Director, E&S

Identify and implement source reduction strategies to reduce the total amount of waste generated on campus. Develop a policy, guidelines or agreements that consider waste generated, by product packaging and end-of-life disposal when specifying items for purchase.

### Waste Diversion

Who: Director, E&S

Identify and implement strategies to divert materials from the landfill or incinerator by recycling, composting, reusing, donating, or re-selling.

### Event Management

Who: Director, E&S

Engage Ceremonies and Events staff to develop action plan and policies for waste management at major TRU events and ceremonies. Ensure zero waste stations are available at all events. Also consider catering policies to encourage non-disposables, compostables, and local food.

### Electronic Waste

Who: Director, E&S

Develop a program to recycle, reuse, and/or refurbish electronic waste generated on campus.

### Replace Hand Towels

Who: Director, Facilities (with Director, E&S)

Replace paper hand towels in campus washrooms with electric hand dryers.

### Composting

Who: Director, E&S (with Director, Ancillary Services)

Fully implement organics collection program through training for janitorial and building occupants. Expand composting program to include CAC and utilize the full capacity of the existing composter. Acquire a second composter as required.

### Plastic Beverage Containers

Who: Director, E&S (with Purchasing)

Reduce waste material associated with drinking containers by lobbying suppliers for alternatives and limiting the distribution of disposable plastic bottles on campus.

### Hazardous Waste Management

Who: Director, E&S

Identify and implement strategies to safely dispose of all hazardous, special, universal, and non-regulated chemical waste and seek to minimize the presence of these materials on campus.

Theme Cross-ref	STARS Cross-ref
	OP22
	OP23
	OP25
	OP25
	
	
	OP25

Also see relevant cross-reference strategies under the following themes:



Design & Construction



Dining Services & Food



IT & Print Shop Services

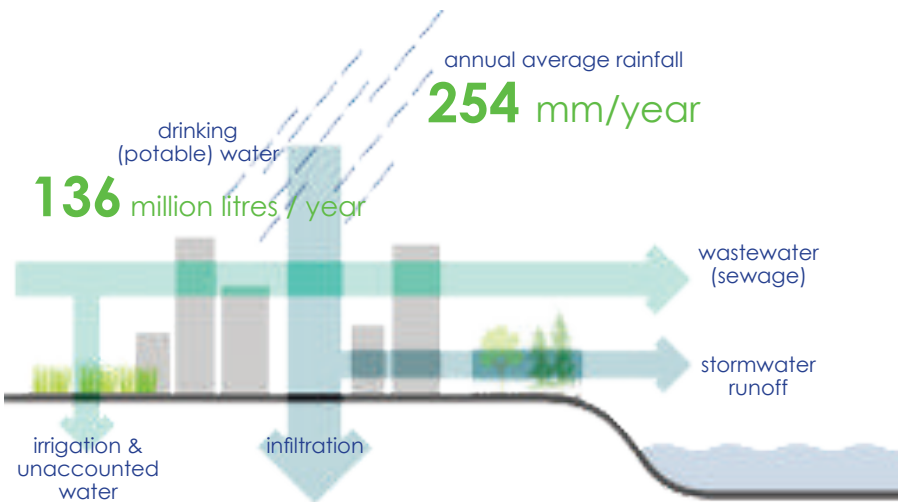


# 4.6 Water

## Current Reality

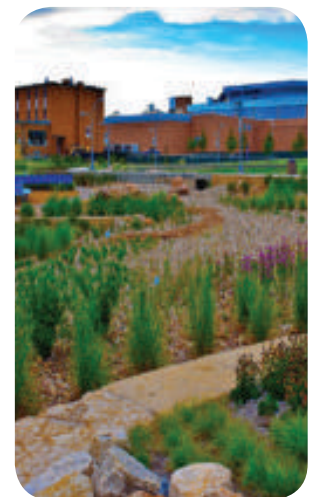
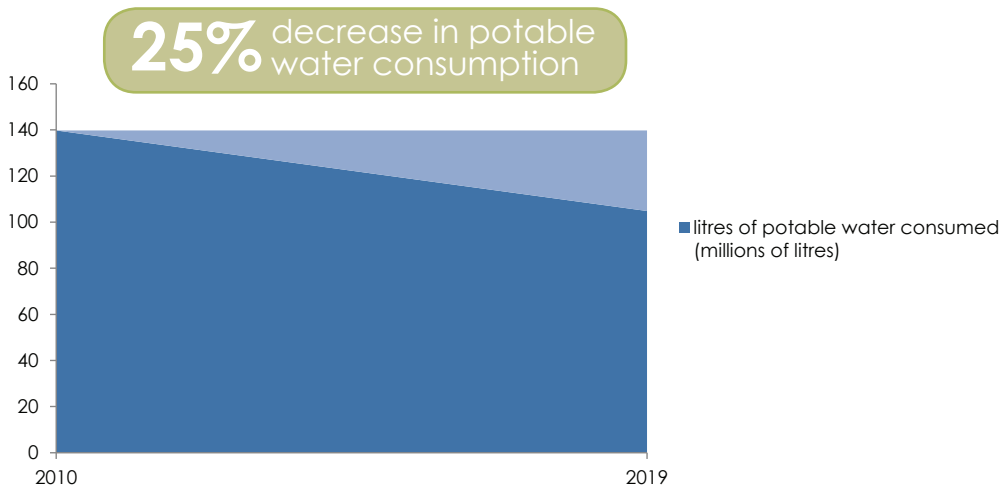
Potable water at TRU is supplied by the City of Kamloops municipal water system from the Thompson River. TRU uses approximately 37 million gallons of water per year, measured by a single campus wide water meter.

There are very significant opportunities to reduce potable water consumption at TRU; per capita water consumption in Kamloops is higher than the BC and Canadian averages.



## Desired Outcomes

- Buildings and facilities use less potable water (water “from the tap”).
- Rainwater is a precious resource that is harvested and utilized on campus grounds before it ends up in the storm sewer.
- Wastewater (water that is not safe for drinking such as water from hand washing, toilets., road surface runoff, etc.) is cleaned and reused before being discharged to the sewer system.



## Strategies

Short Term 1-3 Years

### Ozonated Water Cleaners

Who: Director, Facilities (with Director E&S)

Implement pilot program for chemical free ozonated water based cleaning units.

### Utilities Revolving Fund

Who: Director, E&S (with VP Admin & finance)

Incorporate financial savings associated with water efficiency measures into existing Energy Revolving Fund to establish a Utilities Revolving Fund to support future sustainability initiatives. Through the fund all measured utility savings will be reinvested in projects that facilitate further savings.

### Stormwater Management

Who: Director, E&S

Develop guidelines encouraging Low Impact Development (LID) practices to reduce peak rainwater/stormwater runoff volume and improve outgoing water quality for new construction and major renovation. Manage peak flow volumes so the post-development flows don't exceed predevelopment flows.

### Water Metering

Who: Director, Facilities (with Director, E&S)

Install water meters in each building and irrigation zone and establish a waster consumption baseline for each. This will enable TRU to better understand where and how much water is used in order to inform water reduction strategies.

Medium Term 3-5 Years

### Landscape Water Use

Who: Director, Facilities

Identify and implement potable water conservation strategies in landscape design and maintenance (such as replace water intensive areas with native and adaptive plants that require little to no irrigation, systems to monitor pipe leakage, smart irrigation controls, etc.).

### Building Water Use

Who: Director, E&S (with Director, Facilities)


Identify and implement potable water conservation strategies in existing buildings (such as replacing fixtures).

Long Term 5+

### Wastewater Management

Who: Director, E&S (with Director, Facilities)

Pilot and demonstrate the treatment of wastewater naturally (e.g. natural wastewater systems such as Living Machines and wetlands) on campus or in the local community.

Theme Cross-ref	STARS Cross-ref
	OP14
	
 	OP27
	OP26
	OP26
	OP28

Also see relevant cross-reference strategies under the following themes:

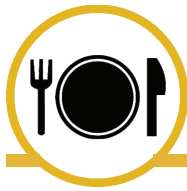


Design & Construction



Purchasing

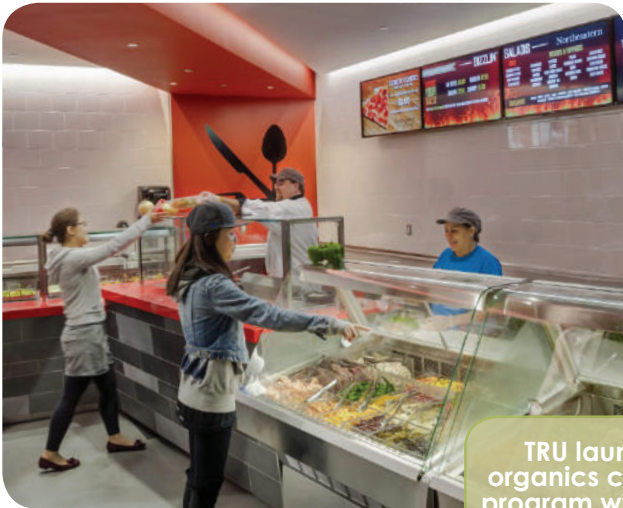




## 4.7 Dining Services & Food

### Current Reality

TRU supports healthy, sustainable food for on-campus dining and catering; the Campus Master Plan identified local food production, farmers markets, and research opportunities with the Horticulture and Culinary Arts programs as key themes.



TRU launched a new organics composting pilot program with Culinary Arts.

The composter has the capacity for kitchen waste of up to 200-300 people per day.



### Desired Outcomes

- The TRU community has opportunities to grow food on a small scale\*. (community gardens, plots, rooftops as oppose to agricultural production)
- TRU supports healthy, sustainable food for on-campus dining and catering.

## Strategies

Medium Term 3-5 Years

### Food and Beverage Purchasing

Who: Purchasing

Establish policies requiring the purchase of food and beverages that are local, community-based, or certified. Shifting to locally-sourced produce and food supplies will have significant impacts to the surrounding economy. As Kamloops' largest university, TRU stands to impact the local economy and food security in the region, in moving towards more sustainable food choices that are local, seasonal, and culturally appropriate.



OP6

### Low Impact Dining

Who: Director, Ancillary Services

For on-campus dining and catering, offer vegan options and animal products that have been verified to be sustainably produced.



OP7

### Garden Plots

Who: Relevant faculty (with Director E&S)

Identify and support strategic opportunities to establish garden plots as demonstration for educational uses and in residential developments. Identify the long-term operations and maintenance plan for garden plots. Food production can demonstrate closed-loop, zero-waste systems through composting and distribution within campus. On-site composting will strengthen TRUs capacity to grow food, by providing one of the key elements to highly productive land – nutrient-rich soil.



Long Term 5+ Years

### Food Stewardship & Learning

Who: Relevant faculty (with Director E&S)

Provide learning spaces and avenues for academic programs to facilitate food stewardship and learning through designated growing spaces, and food sourcing. The synergy between different disciplines in food production and sourcing will equip students with entrepreneurial skills to initiate food-related businesses, and further strengthen the local food system.



Also see relevant cross-reference strategies under the following themes:



Waste



Purchasing



## 4.8 IT & Print Shop Services

### Current Reality



### Desired Outcome

- IT and Print Shop services are delivered with responsible procurement, energy management, and waste reduction in mind.



## Strategies

Short Term 1-3 Years

### Paper Reduction

Who: AVP IT Services

Identify opportunities to eliminate paper based records and processes at TRU, thus reducing ongoing requirements for paper, printers, and toner (e.g. elimination of desktop printers, Paperless Records Initiative of the Registrar’s Office).

### Energy Savings

Who: AVP IT Services

Continue to implement best practice strategies in IT energy management.

### Virtual Desktop Units

Who: AVP IT Services

Pilot the use of Virtual Desktop Units (approximately 150) to assess energy savings and potential for comprehensive campus roll out (2,000 VDU’s will be considered as medium strategy).

### Office Paper Purchasing

Who: Purchasing

Develop a purchasing policy or guideline stating a preference to purchase office paper that has recycled and/or rapidly renewable (e.g. wheat) content, is certified by the Forest Stewardship Council (FSC), and/or is certified to similar and track compliance.

Medium Term 3-5 Years

### Equipment End-of-life

Who: AVP IT Services

Explore reuse and recycling options for IT equipment that has reached the end of its life, including laptops, tablets, smart phones, PCs, etc.

### Electronics Purchasing

Who: Purchasing

Develop a purchasing policy or guideline stating a preference to purchase computers and/or other electronic products that are EPEAT registered or similar and track compliance.

Theme Cross-ref	STARS Cross-ref
	
	
	
 	
	
 	OP12

Also see relevant cross-reference strategies under the following themes:



Waste



Purchasing



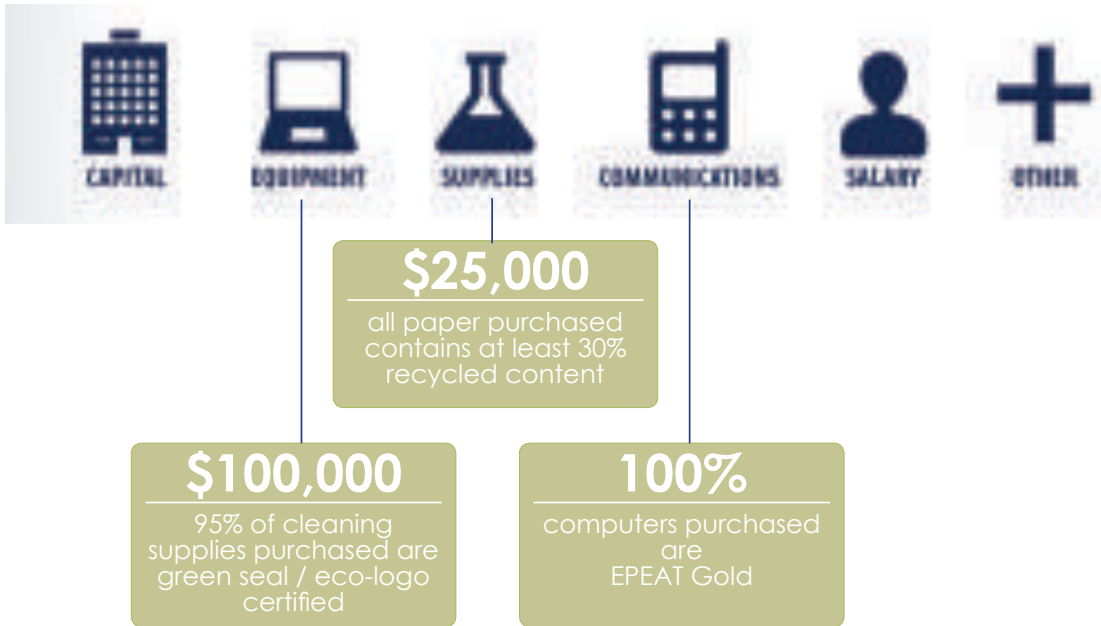


## 4.9 Purchasing

### Current Reality

### TRU Kamloops Expenditures

**\$172**  
MILLION



### Desired Outcome

- TRU uses its purchasing power to support more socially and environmentally responsible businesses and practices.

## Strategies

Short Term 1-3 Years

### Cleaning Product Purchasing

Who: Purchasing

Develop a purchasing policy or guideline stating a preference to purchase cleaning and janitorial products that are Green Seal™ or UL Environment (EcoLogo)™ certified and/or similar and track compliance.

### Life Cycle Cost Analysis

Who: Purchasing

Develop and employ Life Cycle Cost Analysis (LCCA) as a matter of policy and practice when evaluating energy- and water-using products and systems.

### Fair Trade Campus

Who: Purchasing (with Director, E&S)

Establish purchasing policies and guidelines designating TRU a Fair Trade Campus with respect to all procurement decisions.

Medium Term 3-5 Years

### Inclusive and Local Purchasing








Who: Purchasing

Develop a stated intent or policy to support and procure from inclusive businesses, social enterprises, and/or local community-based businesses and track compliance. Reduce waste and fuel consumption generated from transportation by specifying locally manufactured and extracted products, where feasible.

### Guidelines for Business Partners

Who: Purchasing

Develop and act on policies, guidelines and/or agreements that set expectations about the social and environmental responsibility of business partners.

Theme Cross-ref	STARS Cross-ref
	OP13
 	OP16
 	EN15
 	OP15
	OP17

Also see relevant cross-reference strategies under the following themes:



Water



IT & Print Shop Services



## Goal 2: Advocacy & Engagement

The TRU community are sustainability ambassadors on and off campus.

### THEMES



Internal Advocacy



External Advocacy





## 5.1 Internal Advocacy

### Current Reality

The Office of Environment and Sustainability is a leader in engaging the campus community in sustainability initiatives. The department hosts a long list of events, programs, and outreach activities each year, including active participation in new student orientation, and initiatives to promote sustainable behavior in residence, at home, in the classroom, and when traveling to campus. OES also partners with student and affiliate groups to expand its reach. For example, the TRU Eco Club is a student group that holds a number of events throughout the year to raise sustainability awareness.



### Desired Outcome

- Leaders, faculty, staff and students actively seek and integrate sustainability learning into their personal lives and share their learning with the TRU community.

## Strategies

Short Term 1-3 Years

### Outreach Materials and Publications

Who: Director, E&S

Develop co-curricular programs and initiatives that facilitate students learning about sustainability outside of the formal classroom.



EN 4

### Student Orientation

Who: Office of Student & Community Engagement

Expand upon sustainability content and programming at orientation.

EN 2

Medium Term 3-5 Years

### Student Life

Who: Director E&S (with Office of Student & Community Engagement)

Develop co-curricular programs and initiatives that facilitate students learning about sustainability outside of the formal classroom.



EN 3

### Outreach Campaign

Who: Director, E&S (with Office of Student & Community Engagement)

Hold sustainability outreach campaigns that yield measurable, positive results in advancing the institution's sustainability performance



EN 5

### Employee Orientation

Who: AVP HR & Planning

Develop new work routines and habits to help encourage the adoption of environmentally and socially preferable habits, routines, and choices.



EN 7

### Staff Professional Development

Who: AVP HR & Planning

Offer training and/or other professional development opportunities in sustainability for staff / faculty.



EN 8

### Campus Tour

Who: Director, E&S

Create a sustainability tour on campus highlighting projects and achievements, similar to those in the House of Learning, i.e. self directed and using mobile technology to allow people to learn more.



Strategies (continued)

Long Term 5+

**Employee Educators Program**

Who: Provost and VP Academic (with Office of Student & Community Engagement)

Coordinate programs in which faculty and staff members educate and mobilize their peers around sustainability initiatives and programs.

**Student Educators Program**

Who: Director, E&S / Office of Student & Community Engagement

Select and train students to serve as “eco-reps” / educators in peer-to-peer sustainability outreach where they might be able to help disseminate sustainability concepts and a sustainability ethic on campus.

Theme Cross-ref	STARS Cross-ref
	EN 6
	EN 1

Also see relevant cross-reference strategies under the following themes:



Diversity & Access



Human Resources



Monitoring & Communication







## 5.2 External Advocacy

### Current Reality

The Office of Environment and Sustainability is actively engaged in the broader community through numerous community sustainability partnerships. TRU Environment & Sustainability has sponsored conference speakers, hosted events, and provided volunteers to contribute to initiatives of the BC Sustainable Energy Association, Kamloops 350, and the Thompson Environmental Network. TRU is also working with the City of Kamloops to help improve the public transit system and the bike paths in and around campus. These initiatives can help make these forms of transportation more accessible and popular.



**Kamloops 350**



Thompson Environmental Network



### Desired Outcome

- Leaders, faculty, staff and students are active in advancing sustainability initiatives and learning beyond the TRU community.

## Strategies

Short Term  
1-3 Years

### Inter-Campus Collaboration

Who: Director, E&S

Continue to collaborate with other colleges or universities to help build campus sustainability broadly.

Theme  
Cross-ref

STARS  
Cross-ref

EN 10

### Community Partnerships

Who: Director, E&S

Continue to develop partnerships with local communities to advance sustainability.

EN 9

### Continuing Education

Who: Office of Student & Community Engagement

Provide continuing education courses and programs in sustainability to the community.



EN 11

### Community Service

Who: Office of Student & Community Engagement

Engage student bodies in community service.

EN 12

### Community Stakeholder Engagement

Who: Director, E&S

Adopt a framework to identify and engage community stakeholders in the college or university's ongoing governance, strategy and operations.

EN 13

### Participation in Public Policy

Who: Director, E&S

Advocate for national, state/provincial, or local public policies that support campus sustainability or that otherwise advance sustainability.

EN 14

### Trademark Licensing

Who: Director, Ancillary Services

Join a monitoring and verification organization to help ensure that apparel bearing the institution's name is produced under fair conditions.



EN 15

Medium Term  
3-5 Years

Also see relevant cross-reference strategies under the following themes:



Curriculum



## Goal 3: Learning

TRU is recognized as a leading academic institution for advancing sustainability education and research.

### THEMES



Curriculum



Research





## 6.1 Curriculum

### Current Reality

TRU’s academic curriculum offers several courses in sustainability, and a credential on Environmental Leadership, paving the development of more educational opportunities within the campus. The campus’ proximity to Kenna Cartwright Park and Guerin Creek offers natural learning environments for ecological studies.



Departments that offer at least one sustainability related or focused course:  
**52%**

Graduates covered by sustainability learning outcomes:  
**17%**

Sustainability Focused or Related Courses:  
**3%**

### Desired Outcome

- TRU students have access to training and education that help equip them to lead society toward a sustainable future.

## Strategies

### Course Inventory

Who: Provost and VP Academic

Update, and report to the Board, the inventory of course work as part of STARS assessment to see the proportion of available courses that are sustainability-related. This can be shown overall at TRU but also by program area.

### Academic Champions

Who: Provost and VP Academic

Identify internal academics or recruit external academics who have credibility both in sustainability and a particular discipline (e.g. business, economics, etc.) to provide leadership on sustainability and education.

### Learning Outcomes

Who: Provost and VP Academic

Develop sustainability learning outcomes associated with program degrees and/or courses of study.

### Undergraduate Program

Who: Provost and VP Academic

Offer a formal, undergraduate-level degree program focused on sustainability. Initially, proceed with a minor in sustainability (1-3years) and continue to explore a major in sustainability over the long-term (5+years).

### Graduate Program

Who: AVP Research & Graduate Studies

Offer formal, graduate academic degree programs focused on sustainability.

### Immersive Experience



Who: Office of Student & Community Engagement

Provide students with opportunities for immersive experiences to witness and learn in-depth about sustainability challenges and solutions.

### Literacy Baseline Survey

Who: Director, E&S / Human Resources

Conduct, and report to the Board, a baseline survey of staff related to their knowledge of sustainability, desire for increased TRU leadership, motivators to contribute, and ability or contribute related to organizational issues such as senior management commitment, supporting policies, etc. Include in the next student survey similar questions related to knowledge and perceptions of sustainability performance at TRU and report to the Board.

Theme Cross-ref	STARS Cross-ref
	AC 1
	
	AC 2
	AC 3
	AC 4
	AC 5
	AC6

Strategies (continued)

Medium Term 3-5 Years

**Campus as a Living Laboratory**

Who: Relevant Faculty / Director E&S

Utilize campus as a living environments for experiential learning, applied research and practical work that advances sustainability on campus.

**External Partnerships**

Who: Director, E&S / External Advocacy

Explore possibilities to bring sustainability into the classroom or to provide experiential learning opportunities through partnership with B.C. Hydro, the City of Kamloops, and others, to develop energy and sustainability educational opportunities for TRU students (internships, funding, course development, etc.).

Theme Cross-ref	STARS Cross-ref
	AC8
	

Also see relevant cross-reference strategies under the following themes:



Internal Advocacy



External Advocacy



Governance







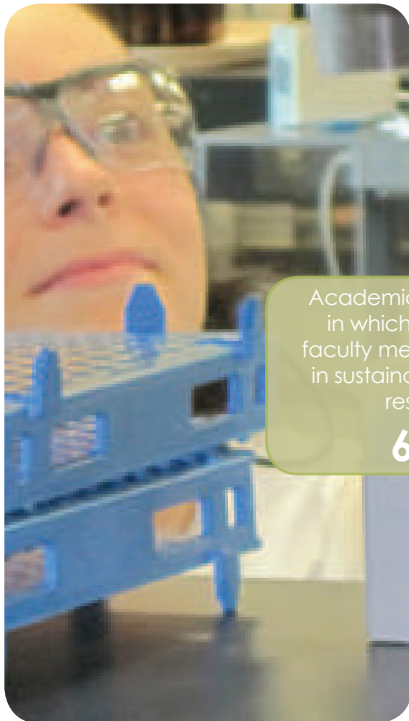


## 6.2 Research

### Current Reality

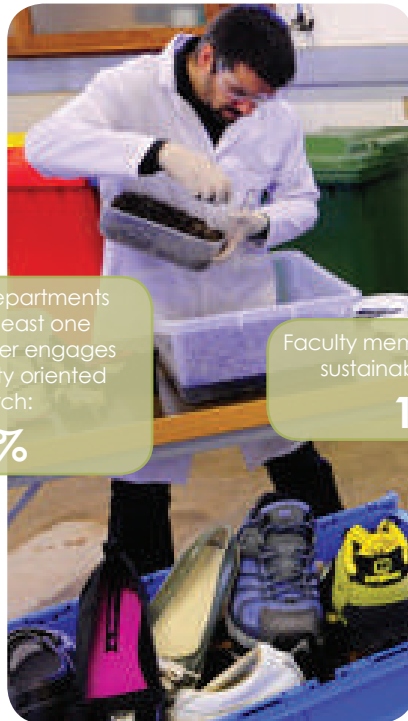
Researchers at TRU are leaders in the BC Interior — and major contributors province wide — in informed, solution-driven research. Industry throughout the region relies on TRU for applied research expertise on issues ranging from energy optimization to land reclamation.

TRU strives to foster and develop collaborative work environments between researchers, industry partners, community groups and funding agencies. Through the Office of Environment and Sustainability, TRU allocates funding on an annual basis from the Sustainability Grant Fund to encourage students and faculty members to undertake sustainability research. and students.



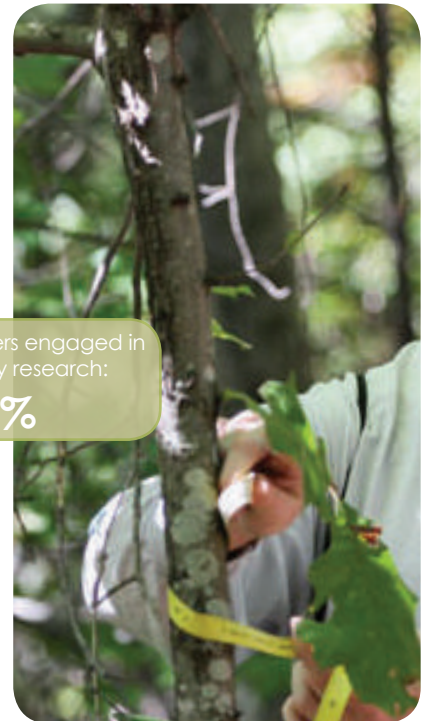
Academic departments  
in which at least one  
faculty member engages  
in sustainability oriented  
research:

**64%**



Faculty members engaged in  
sustainability research:

**13%**



### Desired Outcome

- A wide-spread, multi-disciplinary research community is engaged in sustainability research to help address society's challenges for a sustainable future.

## Strategies

Short Term  
1-3 Years

### Academic Research

Who: AVP Research & Graduate Studies

Update, and report publicly, the inventory of sustainability research underway at TRU and assess strengths and areas for development.

### Support for Research

Who: AVP Research & Graduate Studies

Continue to allocate funding from the Sustainability Grant Fund to encourage students and faculty members to undertake sustainability research.

Long Term  
5+ Years

### Access to Research

Who: AVP Research & Graduate Studies

Empower faculty to distribute their research freely to help stimulate learning and innovation, and facilitate the translation of this knowledge into public benefits that advance sustainability.

Theme Cross-ref	STARS Cross-ref
	<b>AC 9</b>
	<b>AC 10</b>
	<b>AC 11</b>





# Goal 4:

## Administration

Sustainability is a core value in our institutional / administrative framework.

### THEMES

-  Governance
-  Human Resources
-  Investment
-  Monitoring & Communication
-  Diversity & Access



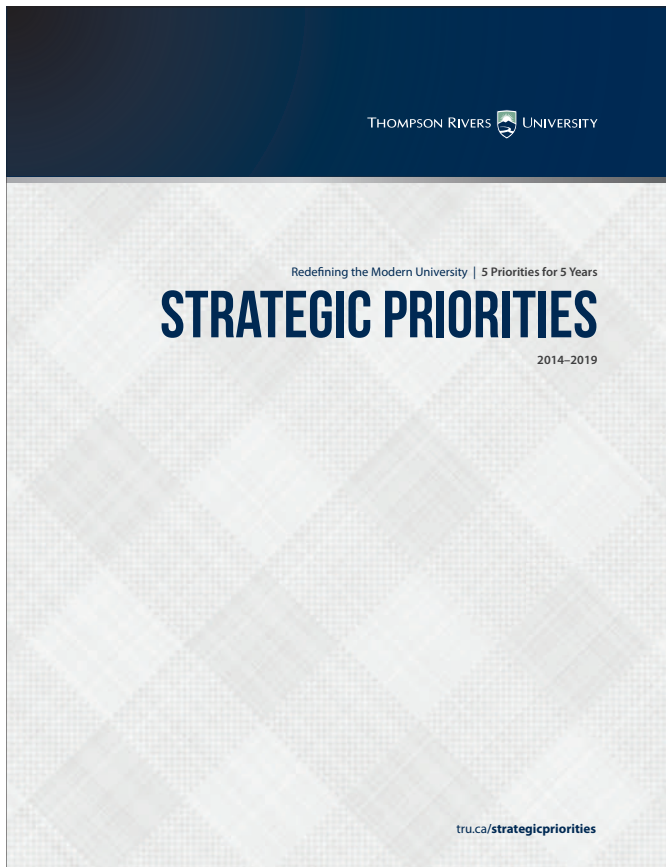


## 7.1 Governance

### Current Reality

Increasing sustainability has been identified as one of the five Strategic Priorities at TRU for 2014-2019. TRU is working towards centralizing and standardizing its approach to sustainability and will prioritize initiatives that mutually benefit the university and the communities we serve in the context of:

- Financial sustainability of the university
- Economic sustainability of the region and the province
- Cultural and social sustainability of our communities
- Creative and community arts sustainability
- Environmental sustainability



increase student success **1.**

increase intercultural understanding **2.**

increase research capacity **3.**

increase entrepreneurial capacity **4.**

increase sustainability **5.**

### Desired Outcome

- Sustainability is a core and integrated part of TRU's governance framework.

## Strategies

### Sustainability Office

Who: VP Admin & Finance

Change name of Office of Environmental Sustainability to Sustainability Office. Expand scope of Office of Environmental Sustainability to include all aspects in the SSP. The Office would continue its leadership in energy and operational sustainability, but also act as liaison with other departments to realize their contribution to sustainability.

### TRU Governance

Who: Office of Student & Community Engagement

Continuously identify and communicate avenues for faculty, staff and students to directly participate in TRU's governance. This might be (through direct participation or the election of representatives) in one or more governance bodies such as the Student Union, Senate/Board advisory committees, ect.

### Define Academic Direction

Who: Provost and VP Academic

Clarify the role of sustainability as a strategic intention between the Board, the Academic Priority and Planning Committee, the Environmental Advisory Committee and the Educational Programs Committee. Key questions to consider: Does TRU want to show leadership in sustainability education? If so, then what does "leadership in sustainability education" look like at TRU? How are we performing relative to this? What needs to be done?

### SSP Framework

Who: Director, E&S

Engage departments with the Strategic Sustainability Planning Framework as a way to frame the sustainability component of departmental Strategic Plans.

### Sustainability Advisory Committee

Who: VP Admin & Finance

Change name of Environmental Advisory Committee to the Sustainability Advisory Committee. Expand mandate to include oversight of the SSP implementation and tracking of key indicators. The SAC should also closely liaise (possibly through cross-representation) with the Academic Priority and Planning Committee and the Educational Programs Committee.

### Departmental Strategic Plans

Who: VP Admin & Finance

Integrate sustainability (SSP goals, themes, and strategies) into departmental Strategic Plans and evaluate annually.

Theme Cross-ref	STARS Cross-ref
	PA1
	PA3
	
	PA1, PA2

## Strategies (continued)

		Theme Cross-ref	STARS Cross-ref
Short Term 1-3 Years	<p><b>Resourcing</b> Who: VP Admin &amp; Finance</p> <p>Allocate temporary resources in the short-term, and define and secure long-term resources, to assist with implementing the expanded mandate of the Sustainability Office. Flexibility in staffing until the resource needs are clearer e.g. one or two year term positions may provide increased flexibility for the Office.</p>		
Medium Term 3-5 Years	<p><b>Academic Coordinator</b> Who: Director E&amp;S (with Provost and VP Academic)</p> <p>Establish role of academic coordinator in the Sustainability Office to facilitate academic partnerships, priorities, and reporting. Establish joint reporting to Provost and VP Admin.</p>		
Long Term 5+ Years	<p><b>Sustainability Planning</b> Who: Director E&amp;S</p> <p>Update the comprehensive Strategic Sustainability Plan vision and road map every 4-5 years to guide decision making.</p>		PA2

Also see relevant cross-reference strategies under the following themes:

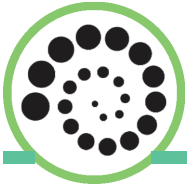


Diversity & Access





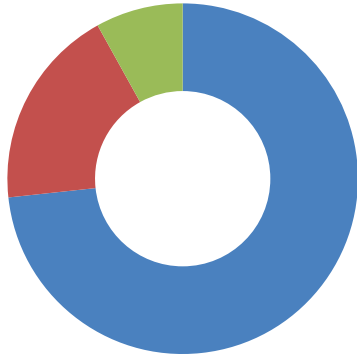




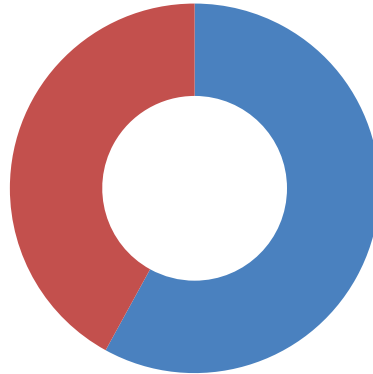
## 7.2 Diversity & Access

TOTAL FTEs

**6243**



- International Student (25%) 1,588
- Aboriginal Students (11%) 687
- Other Students (64%) 3,968




- Female Population (58%)
- Male Population (42%)



### Desired Outcome

- TRU is a diverse community that is accessible.

## Strategies

		Theme Cross-ref	STARS Cross-ref
Medium Term 3-5	<p><b>Support for Underrepresented Groups</b> Who: Office of Student &amp; Community Engagement</p> <p>Establish mentoring, counseling, peer support, academic support, or other programs to support underrepresented groups on campus.</p>		PA 6
	<p><b>Access</b> Who: AVP Enrolment &amp; University Registrar</p> <p>Continue to make TRU accessible to students from a range of socio economic backgrounds, and/or to support non-traditional students.</p>		PA 8
	<p><b>Diversity and Equity Training</b> Who: AVP HR &amp; Planning</p> <p>Make cultural competence trainings and activities available to all students, staff, faculty, and/or administrators.</p>		PA 4
Long Term 5+ Years	<p><b>Faculty and Staff Diversity</b> Who: AVP HR &amp; Planning</p> <p>Administer and/or participate in a program(s) to help build a diverse faculty and staff.</p>		PA 7



## 7.3 Human Resources

### Current Reality

Through its bargaining agreements, TRU strives towards employee compensation standards that are sustainable in terms of poverty threshold or low income cut-off.



Regular Health and Safety meetings ensure that the issue of health and safety is at the forefront and part of the TRU culture.



### Desired Outcome

- Sustainability is incorporated into human resources programs and policies.

## Strategies

		Theme Cross-ref	STARS Cross-ref
Short Term 1-3 Years	<p><b>Workplace Health and Safety</b> Who: AVP HR &amp; Planning</p> <p>Identify and implement strategies to reduce the total number of reportable workplace injuries and occupational disease cases.</p>		PA 12
	<p><b>President's Award</b> Who: AVP HR &amp; Planning</p> <p>Rename existing Environmental Achievement Award to the Sustainability Award to highlight exceptional sustainability ideas and / or performance and create a higher profile and stronger awareness.</p>		
	<p><b>Assessing Employee Satisfaction</b> Who: AVP HR &amp; Planning</p> <p>Conduct a survey or other evaluation that allows for anonymous feedback to measure employee satisfaction and engagement.</p>		PA 10
Medium Term 3-5 Years	<p><b>Hiring &amp; Performance</b> Who: AVP HR &amp; Planning</p> <p>Integrate Sustainability into job descriptions and performance reviews.</p>		
	<p><b>Wellness Program</b> Who: AVP HR &amp; Planning</p> <p>Continue the work of the TRU Wellness Centre to provide counseling, referral, and wellbeing services to all members of students, staff, and/or faculty.</p>		PA 11

Also see relevant cross-reference strategies under the following themes:



Internal Advocacy



Curriculum





## 7.4 Investment

### Current Reality

TRU is a founding contributor to the Billion Dollar Green Challenge, a partnership between universities and colleges for a self-managed revolving fund to finance energy efficiency improvements and greenhouse gas emissions within participating campuses.



#### **Billion Dollar Green Revolving Fund:**

TRU is a founding contributor of the Billion Dollar Green Challenge, a partnership between universities and colleges for a self-managed revolving fund to finance energy efficiency improvements and GHG reduction strategies at participating campuses.



#### **TRU Energy Revolving Fund:**

100% of savings from campus energy efficiency initiatives (\$1.5 million in 2011) have been used to capitalize the fund, which will fund additional energy conservation projects with less than a two year pay back.



#### **TRU Sustainability Grant Fund:**

TRU provides \$100,000 per year to improve operational environmental performance, foster environmental literacy and campus community engagement, advance applied research, and demonstrate the viability of sustainability technologies.

### Desired Outcome

- Endowment investment decisions are made with local and global sustainability in mind.

## Strategies

	Theme Cross-ref	STARS Cross-ref
<p><b>Short Term</b> 1-3 Years</p> <p><b>Sustainable Investment</b> Who: AVP Finance</p> <p>Develop a Responsible Endowment Investment Policy. Identify and pursue investments that promote sustainability and engaging with companies in which they already hold investments.</p>		<b>PA 14</b>
<p><b>Medium Term</b> 3-5 Years</p> <p><b>Investment Disclosure</b> Who: AVP Finance</p> <p>Annually, or more frequently, makes a snapshot of investment holdings available to the public, including the amount invested in each fund and/or company and proxy voting records.</p>		<b>PA 15</b>

Also see relevant cross-reference strategies under the following themes:



Building Energy & Air Quality

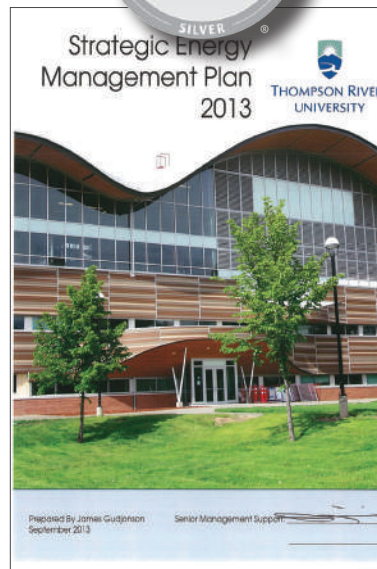
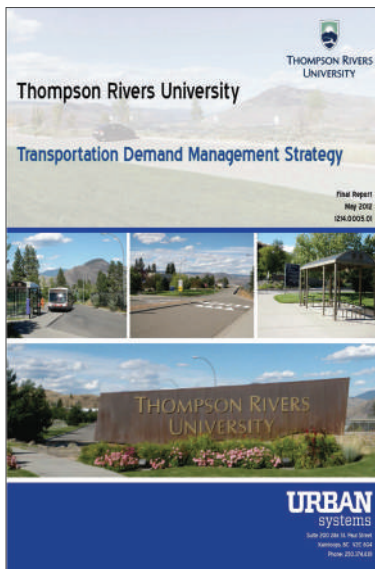


Water



## 7.5 Monitoring & Communication

### Current Reality



### Desired Outcome

- Sustainability performance and action is tracked, packaged, celebrated and communicated on campus and beyond.

## Strategies

### STARS Reporting

Who: Director, E&S

Continue to report out on STARS criteria every three years. Target is to achieve a Gold rating.

### Dashboard

Who: Director, E&S

Develop a subset of key indicators, which represent the key themes of the SSP and the STARS framework, as a reporting & communication dashboard to the Board and broader TRU community.

### Sustainability Branding

Who: Director, E&S

Integrate sustainability into the TRU brand. Sustainability should be integral to the story of TRU, it's website, key messages, and what it stands for as an institution.

### Visibility of Sustainability

Who: Director, E&S

Identify and implement strategies to improve the visibility of sustainability features on campus such as awareness raising posters/ notices around campus. Over time this can become part of a sustainable campus tour.

### Launch SSP Publicly

Who: Director, E&S

Launch this SPP at a public event that showcases and catalyzes TRU's commitment to sustainability. Involve Marketing to ensure that this event is a key media event. Strongly consider the presence of the President at the event to showcase leadership commitment in the context of the campus Strategic Priorities.

### Board Updates

Who: Director, E&S

Provide annual updates to the Board on sustainability to check in on key indicators and highlight important issues.

Theme Cross-ref	STARS Cross-ref
	
	PA2

Short Term 1-3 Years

Also see relevant cross-reference strategies under the following themes:



Internal Advocacy





# Implementation



The most immediate step in implementing the SSP is to position the institution for success. The following recommendations are essential first steps to ensure a strong foundation and ongoing success in implementing the SSP:

## 8.1 Strengthen the Governance Structure

A number of strategies intend to strengthen and clarify the sustainability governance structure. An important first step is to address the perception of sustainability at TRU being an environmental and/or operational issue.

Such a perception can be shifted through simple actions such as changing the name of the current “Office of Environment and Sustainability” to something more general and comprehensive such as the “Sustainability Office (TRUSO)”. Furthermore, change the name of the “Environmental Advisory Committee” to the “Sustainability Advisory Committee (SAC)”.

Along with the name change, comes a change in scope and focus for both TRUSO and SAC that includes all aspects of the SSP. TRUSO would continue its leadership in energy and operational sustainability, but also act as liaison with other departments to realize their contribution to sustainability and to formalize these commitments in their respective strategic operations and/or plans.

The SAC would play an essential role as “keepers” of the SSP and provide oversight to ensure ongoing progress and implementation. The SAC would also be a key ally in helping to clarify the strategic intention with the Board and building stronger linkages and collaboration with the academic side of the organization through close liaison (possibly through cross-representation) with the Academic Priority and Planning Committee and the Educational Programs Committee.

Refer to Strategies:



“Sustainability Office” Strategy



“Sustainability Advisory Committee” Strategy



“Define Academic Direction” Strategy



“Departmental Strategic Plans” Strategy

## 8.2 Allocate Staffing Resources

The current staffing levels are not expected to be sufficient for implementing the SSP. While the SSP involves effort from numerous departments, a coordinated, core team of TRUSO staff will be key to ensuring ongoing progress. As a minimum, it is anticipated that TRUSO will require the following staff (note that “titles” are used for interpretation purposes only and may not reflect actual job titles:

- A full-time “director” to lead the Office and act as champion and key liaison with other departments, the Board, SAC etc. The focus will be to maintain and oversee the current momentum and leadership in sustainable operations and energy, but further lead and catalyze momentum in new non-operational aspects of TRU’s overall sustainability such as Advocacy, HR, Purchasing, etc.
- A full-time “energy manager” to manage and oversee the energy aspects of campus operations, education and planning.
- A half-time “academic liaison” with a strong reputation and respect among the TRU academic community that can help to advance TRU’s sustainability research and academic reputation. Establish joint reporting to the Provost and VP Admin.
- A full-time “outreach coordinator” to manage and oversee education, outreach, and behavior change initiatives that help communicate TRUs commitment and help staff, faculty and students understand how to live more sustainably.
- A full-time “sustainable operations coordinator” that can work on other emerging priorities in campus operations such as water, waste, campus grounds, dining services & food, and transportation. This person would allow the “director” to focus more effort on non-operational aspects.

It is recommended that resourcing needs be evaluated in the context of annual departmental operation plans. In the short-term temporary staffing resources might be allocated until such time that long-term resources are identified and secured. Flexibility in staffing e.g. one or two year term positions can be considered to provide long-term flexibility.

Refer to Strategies:



“Resourcing” Strategy



“Academic Coordinator” Strategy

## 8.3 Improve the TRU Sustainability Image

In addition to addressing governance and staffing as essential first steps, it is important for TRU to intentionally make an effort to improve its sustainability image. The 2014 branding initiative provides a crucial opportunity to re-think sustainability as part of TRUs image and to prominently embed sustainability in the institutions’ key messaging, website, promotional material, etc.

The completion of the SSP also offers a key opportunity to publicly launch and revive the sustainability spirit on campus and beyond. Investigate upcoming opportunities, such as a conference or event, where TRU can showcase and celebrate its commitment to sustainability.

Refer to Strategies:



“Sustainability Branding” Strategy



“Launch SPP Publicly” Strategy



## 8.4 Make Strides in Curriculum and Research

Demonstrating leadership in sustainability curriculum and research cannot be neglected as it is anticipated to become a crucial part of TRU's competitive advantage in attracting and retaining students and faculty. While some successes can be demonstrated, it will be of more strategic importance in the coming years for TRU to fully assess and address its approach and response to demonstrating sustainability in its core function as a learning institution.

Refer to Strategies:



All strategies under the curriculum theme



All strategies under the research theme

## 8.5 Demonstrate Leadership in Water and Waste

TRU has been very successful in identifying and implementing energy savings strategies across campus. The learning from this process is transferable to other resource management challenges such as water management. Assess the current water consumption baseline and challenges and identify conservation measures and funding opportunities. The recent success in piloting the composting program further sets TRU up for leadership in the area of waste management.

Refer to Strategies:



All strategies under the water theme



All strategies under the waste theme

## 8.6 Report and Update

The SSP is not a static document. Rather it sets the ball in motion at a given point in time. The strategies in this plan should be evaluated annually, by the TRUSO "director" in consultation with the SAC and various departments, as part of the departmental strategic operations planning process. This will be an opportunity to review and prioritize potential strategies based on resources and emerging opportunities (such as funding and partnerships). The SAC will provide ongoing oversight and monitoring of progress on the SSP strategies. It is recommended that the SSP undergo an update every 4-5 years to revisit the direction and review future strategies more comprehensively.

A reporting dashboard should be developed in the short term to identify some of the top indicators that TRUSO and the SAC could use to communicate annual or bi-annual progress to the Board and TRU community. These indicators should be aligned with and can be a subset of the more comprehensive Sustainability Tracking, Assessment & Rating System (STARS). TRU should continue to report out on STARS criteria every 3 years.

Refer to Strategies:



"STARS Reporting" Strategy



"Dashboard" Strategy



"Sustainability Planning" Strategy

