



Climate Action Plan

Research Report

March 30, 2016



UNIVERSITY
OF MANITOBA

Ashriya Panesar
Asif Ahmed
Chidera Bisong
Nguvan Ivue

Table of contents

Executive Summary	2
Introduction	3
Methodology	4
Project findings	5
Phase I	5
Phase II	6
Research Summary	7
Recommendation for UofM	7
Appendix	9
Key Contacts	9
University commitment, target and goals	10
University registration, base/achievement year, number of pages	16
Interviews	22



UNIVERSITY
OF MANITOBA

Executive Summary

This report provides information regarding the climate action plans of various esteemed universities in North America and their current strategies to cut down on GHG emissions. This report throws light into the processes involved in the setup of their plan, the basic components considered in setting up an action plan as well as the challenges encountered and recommendations and advice. The report becomes a very handy tool in the hands of any individual or entity looking to set up an action plan. It also contains some statistical information of the action plan of the various universities considered in the research and also contains website links that leads to directly to the action plan of the school in question.

The emissions are divided into 3 scopes: Scope 1 is emissions right on campus or sources owned and controlled by the University. Scope 2 includes indirect emissions from the generation of the energy consumed by the school. Scope 3 describes emissions from outside sources not owned or controlled by the University.

Phase 1 discusses various universities' target and base year/achievement year, number of pages (how long is the plan). Phase 2 discusses the overall development process including: who developed the plan, who approved said plan, how they report on progress, key contact information and other key actions.

The primary findings of the research are compiled into tables that can be found in the appendix. The report finds that the Universities use a base year range of 1990-2008 levels, most of the, aiming to achieve climate neutrality by 2020-2050. It also finds that in the case of who signs off on the plan, the President/head of the University did the signing.

Interviews were conducted with some of the above listed universities to find out more detailed information and get recommendations on how to have a successful Climate Action Plan. The results of the interviews can be found under Primary findings.

Introduction

In 2008 President David T. Barnard signed the University and College Presidents' Climate Change Statement of Action for Canada, showing our commitment to a climate action plan. Following this, the U of M Office of Sustainability was established in 2013. Three years later the U of M is on her way to drafting a climate action plan and this will be the first proposal. In this report, we have presented our findings on what various Universities are doing as a guide moving forward.

Methodology

For our project, we will contact the sustainability department and interview key personnel at the following universities. The method of communication will involve face to face meetings, email and on call interview.

USA	Canada
Brown University Harvard University Johns Hopkins University San Francisco University Stanford University University of Tennessee, Knoxville University of Tennessee, Chattanooga University of California, Los Angeles University of California, San Diego Western Washington University	Dalhousie University McMaster University Queen's University University Laval University of British Columbia University of Calgary University of Saskatchewan University of Winnipeg



UNIVERSITY
OF MANITOBA

Project findings

I. Phase I

Phase one of the project consists the research that is conducted on the sustainability websites of different universities. Additionally, our research team conducted thorough research on the current climate action plan of the universities mentioned above and compiled data on the goals and targets, key actions, key contacts, total number of pages, and website links. The detailed datas are consolidated in a table in the appendix section of the report.

Summary for table involving base/achievement year


Communities Involved

Basically universities have certain communities they are either registered with or signed with. This communities act as a watchdog to the activities carried out by the university as well as assist the university set up a solid action/sustainability plan. They also enhance transparency and set targets and guidelines for the universities to met.

It would be very useful for any university to be part of one or more of these communities. A common trend is that most universities in the United States are signatories of the American College and University Presidents' Climate Commitment (ACUPCC). The ACUPCC's main aim is to neutralize greenhouse gas emissions as well as foster research. They do this by creating a network of colleges and universities who have pledged to commit to the course. The ACUPCC is a huge catalyst to ensuring universities practice effective GHG emission reduction activities.

Harvard University is aligned directly with the United Nations Intergovernmental Panel on Climate Change (UN IPCC). Another very effective community is the Association for the Advancement of Sustainability in Higher Education (AASHE) which is a very transparent and self reporting framework for universities measure and gauge progress to towards sustainability. Western Washington University for example is aligned with AASHE. In Canada University of Alberta is aligned with AASHE.

In Canada a major trend observed is that most of the universities that have an action plan especially U15 universities are signed with the University and College Presidents Climate Change Statement of Action (UCPCCS). UCPCCS has proved to



be a very effective community to be aligned with if you are looking to achieve carbon neutrality. The organization has over 600 signatories that have committed to becoming climate neutral.

It is the sister counterpart to ACUPCC and just like the ACUPCC, the Canadian Statement focuses on both the responsibility of universities to reduce emissions, as well as opportunities to accelerate larger solutions beyond our campuses. Some universities in Canada that are aligned with the UCPCCS include; Dalhousie University, Queen's University, and University of Calgary.

University of Winnipeg report with the Climate Registry and they prepare annual reports and create a new plan in the month of June every year.

Targets

In terms of targets there are variations, most universities base year range from 2005 – 2008, a few other use the 1990 Kyoto Protocol base year, while a few other use the year 2000 and only a handful have base years of 2010 and 2012.

The achievement year is more complicated. Most of the schools break down their achievement year into more specialized steps with targets. Schools like San Francisco University has achievement year targets of 25% by 2020 and 40% by 2030. Dalhousie University has achievement year target of 15% by 2013; 20% by 2016 and 50% by 2020. University of Tennessee, Knoxville has target achievement years of 20% by 2021, 40% by 2031, 60% by 2041, 80% by 2051, and 100% by 2061. And University of Calgary among many have target achievement years of 45% by 2015, 80% by 2050. And the list goes on and on. The table in the appendix section can be referenced for more information on this.

Size of Action Plan

Based on the schools involved in our study, the average page count of the various action plan is 49 pages. The maximum is University of Calgary with 108 pages and the minimum is University of Saskatchewan with 20 pages but yet very concise and accurate.

It is interesting to note that most of the universities expressed the desire to create much simpler and less complex action plans in the future.

II. Phase II

The phase two of the research basically compiles responses from other universities and face to face and online interviews. Interviews constituted a set of informative questionnaire which is as follows.

- Primary factors in consideration of early development stage?
- ◆ Like University of Saskatchewan that signed up for UCPCCS, there are 27 other schools and colleges that have joined hands together to take some action on adapting climate change
- Who developed the climate action plan?
- ◆ Normally the Climate Action Plan is developed by project team that works under the Sustainability Department. Usually the plan is developed by the campus sustainability committee. Each area is led by a specialized expert in order to have clear objectives.
- Who is in charge of the implementation?
- ◆ The campus sustainability is responsible for the implementation and makes sure that we are on the right track. Promises to collaborate on all the grounds of the campus like Parking and Transportation etc in order to work for a healthier and greener campus.
- Who signs off/approve the project?
- ◆ The Climate Action Plan is like in most other cases approved by the President's Executive Committee of Environment/Sustainability Department.
- How is the progress reported?
- ◆ The progress is not usually reported on a weekly or a monthly basis but fortunately there is a annual report on GHG emissions and Carbon Neutrality, which is indeed the key of success for climate action plan.
- Advice to kick off a climate action plan?
- ◆ Engage leadership and educating future associates, students, political leaders and members of the campus about controlling emissions is a good start. There are also many different stakeholders and areas of strategies that need to be addressed.



UNIVERSITY
OF MANITOBA

Research Summary

In summary, as imperative of having a climate action plan is, it is also a complex and sensitive process that requires absolute precision and meticulousness on the part of the developer. First and foremost the university has to genuinely commit to the course of GHG emissions, if there is no genuinity in commitment then the authenticity of the plan being effective will be called into question as well as the quality of the plan. Secondly, a university, college or institution that has in mind to develop an action plan has to educate its community on sustainability and best practices involving carbon cuts. Most universities that have had a successful plan gave credence to educating the university community; students, staff members, faculty council etc. on this issues. The problem of sustainability and climate change is a corporate problem and is never an individual one, it is not an exclusive preserve for the administrative class. Basically the higher community involvement, the higher effectivity of the action plan.

Also the institution/university must take into consideration capital developments in the school when it wants to set target and develop an action plan. They must make sure capital project planning is aligned with climate action plan. And last but definitely not the least, it is very necessary for the institution to be part of a community/entity that has a goal of attaining carbon friendly targets and achieving sustainability.

Recommendations for University of Manitoba

The University of Manitoba is already on a path to setting targets and developing an action plan which is very good. Basically the school need to have a consolidated and organized team who would be directly in charge of tackling the issue. This team then liases with a host of other entities who will all work as a unified team and contribute from their various perspectives to create a solid action plan as well as set reasonable and feasible targets. We've come to realize that setting up of an action plan involves a lot more parties that one would imagine.

Lastly, It will be very useful for university to be part of a community/entity that has a goal of attaining carbon friendly targets and achieving sustainability. Such entities include Association for the Advancement of Sustainability in Higher Education (AASHE) and the University and College Presidents Climate Change Statement of Action (UCPCCS). This entities have certain targets, guidelines and requirements that they impose on their members to aid them in creation of an effective action plan. They also influence transparency. Another good thing is that these entities

have help generate a simplified report that can be used by all levels of faculties and facilities in the university. Being part of one would really be advantageous to the University of Manitoba.

Appendix

Key Contacts

Universities	Key contact	Contact info
Harvard University	Colin B. Durant Sustainability communications director	colin_durrant@harvard.edu 617.495.1585
Johns Hopkins	John Ullman Sustainability coordinator	jullman1@jhu.edu 443.997.4002
McGill University	Kim McGrath Sustainability officer	kim.mcgrath@mcgill.ca n/a
McMaster University	Zeinab Rahal Sustainability coordinator	rahalz2@mcmaster.ca n/a
Queen's University	Aaron Ball Sustainability manager	balla@queensu.ca 613-533-3379
San Francisco State University	Nick Kordesch Sustainability Coordinator	kordesch@sfsu.edu 415.338.7164
Stanford University	Fahmida Ahmed Sustainability director	fahmida@stanford.edu 650.721.1518
University of Alberta	Kayleigh Wiebe Project Planner - Student Engagement	kayleigh.wiebe@ualberta.ca 780.492.6472
University Laval	Helene Melancon	Helene.Melancon@dc.ulaval.ca
University of Calgary	Joanne Perdue	jperdue@ucalgary.ca

	Chief Sustainability Officer	403.220.8547
University of California at Los Angeles	Bonny Bentzin Deputy chief sustainability officer	bbentzin@facnet.ucla.edu 310.206.6667
University of California at San Diego	Sara J. McKinstry Sustainability director	smckinstry@ucsd.edu 858.534.5563
University of Tennessee at Chattanooga	Ms. Lisa Darger Sustainability coordinator	Lisa-Darger@utc.edu 706.483.3616
University of Saskatchewan	Erin Akins Sustainability initiatives coordinator	erin.akins@usask.ca 306.966.2282
University of Toronto	Lauren Binette Sustainability Coordinator	lauren.binette@utoronto.ca 416.946.5335
University of Winnipeg	Alexander R. Wieb Sustainability officer	a.wieb@uwinnipeg.ca 204.988.7618

University commitment, target and goals

Universities	Targets /Goals	Commitment
Brown university	→ Aspires to reduce greenhouse gas emissions by 80% below 1990 by levels 2050. → Implements policy to achieve carbon neutrality. → Serves as a leadership position in addressing climate change (more energy efficient)	42% below 2007 levels by 2020.

Dalhousie University	<p>Increasing Climate change Knowledge via various strategies</p> <ul style="list-style-type: none"> → Campus Energy System (fuel conservation, bury power lines) → Green Buildings (campus lighting) → Sustainable Transport (transportation demand management) → Knowledge Behaviour (design guidelines, emergency measures planning, space utilization) → Natural Environment (Native trees) → Carbon Offsets (campus natural ecosystems) 	<p>Current Situation is to increase conservation behaviour and also increase energy security</p> <p>Target is to offer experiential education programs to students and members of university for a healthier and a greener society.</p> <p>Reduce 54,500 tonnes of GHG emissions by year 2050.</p>
Harvard university	<ul style="list-style-type: none"> → Aims to reduce 30% reduction by 2016 → Specifies to reduce waste per capita 50% by 2020 → Proclaims to green it standards by 2017 → Develops climate preparedness by 2016 	<p>Reduce electronic waste generated per capita by 2020</p> <p>Climate change recommendations to reduce emissions by 80% by 2050</p>
Johns Hopkins University	<ul style="list-style-type: none"> → The main focus is to create a Sustainably Cultural environment → Second priority that goes hand in hand is to have a systematic approach for Continuous Carbon Reduction → Aims at providing 	<p>51% reduction by 2050</p>

	<p>Leadership for the Community (task force recognizes sustainability accomplishments with the university)</p> <p>→ Establishes a long term Coordination , so as to work together for the implementation of the goals to be successful</p>	
Mcmaster University	<p>Top most priority is to have Sustainable procurement program.</p> <p>Goals/Strategies made to achieve targets were:</p> <p>→ Waste Diversion - involves waste reduction plan and office space composting.</p> <p>→ Infrastructure involves campus bike racks.</p> <p>→ Occupancy behaviour specifies employee engagement for fuel reduction goals and also promises to build energy challenges.</p>	<p>→ Energy – reduction of 4% annually for a five year period, resulting in a 20% reduction by the end of the fiscal year 2017/18</p> <p>→ Waste - reduction of 10% annually for the next five years respectively.</p> <p>→ Reduction in emissions caused by transportation.</p>
Queen's university	<p>→ Produce a plan that meet the requirements</p> <p>→ Leverage expertise within the university from the academic, staff and student communities to determine how Queen's could and should meet the commitment.</p>	<p>Scope 1 - reducing emissions</p> <p>Scope 2 - reducing carbon footprint.</p>

	<p>→ Ensure that the Queen's broader stakeholders were appropriately consulted.</p> <p>→ Ensure alignment with other significant strategic planning initiatives</p>	
San Francisco State university	<p>→ SF State has a goal of 75% waste diversion by 2010, with a goal of Zero waste by 2020.</p> <p>→ Coordinates with the best sustainable transportation program to reduce greenhouse gases & congestion management</p>	By 2020, university proclaims to set an example of sustainability among urban and political institutions
Stanford university	<p>→ The first priority is to have a balanced approach to Energy and climate solutions</p> <p>→ Energy conservation in Existing new buildings</p> <p>→ Reduction of emissions is a staple goal for all universities and a moral responsibility of every citizen of the country.</p>	20% below 1990 levels by 2020
UC Los Angeles	<p>→ Aims at working Kyoto Protocol Greenhouse Gases - (carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, sulphur hexafluoride, PFCs are no longer being used on campus - perfluorocarbons)</p>	<p>Target is to fulfil the accomplishment of the 3R's</p> <p>→ For Fall Quarter focus is on Recycling</p> <p>→ Winter Quarter is based on Reduction of gases and wastes</p>

		→ Spring Quarter aims at Reusing the resources sustainability
UC San Diego	→ Focuses clearly on reducing GHG emissions, and wants to educate future students Also wants to have a greener university	15% reductions of GHG emissions by 2020 and 50% by 2035
University laval	<p>→ Compile data on the university's scope 1 and scope 2 GHG emissions on an annual basis, and carry out a complete assessment of all emissions every three years.</p> <p>→ Reduce 3,250 tons of CO₂ equivalent emissions related to heating, compared to 2014-2015 thresholds.</p> <p>→ Maintain campus carbon neutrality</p> <p>→ Maintain and enhance the green and wooded areas of the university.</p> <p>→ Establish an internship program in fighting climate change.</p>	<p>→ Reduce the proportion of annual parking permits sold per full time student (FTS) by 8% compared to 2012-2013.</p> <p>→ Maintain scope 3 GHG emissions offsets at 1,000 tonnes of CO₂ equivalent per year.</p>
University of British Columbia	UBC compiles an annual Greenhouse Gas (GHG) Inventory to measure and monitor our campus emissions, which are reported in our annual Carbon Neutral Action	100 % by 2050 (33% by 2015)

	<p>Report.</p> <p>Also claims to achieve operational cost savings, Enhanced working environment and a severe reduction in energy consumption and GHG.</p>	
University of Calgary	<p>→ U of C's focus to reduce emissions in three different categories. Built Environment emissions, Transportation, Purchasing and Organic Waste emissions. U of C is educating future political leaders, engineers, teachers, designers. Also provides students with knowledge and skills needed to find solutions to climate change.</p>	<p>45% reduction of environment related emissions by 2015</p> <p>60% reducing transportation emissions by 2020</p> <p>80% reduction in purchasing emissions by 2050</p>
University of Saskatchewan	<p>Goals:</p> <p>→ Energy Management plan</p> <p>→ Space management</p> <p>→ Green Building Standard</p>	<p>Scope 1</p> <p>Direct GHG emissions from sources owned or controlled by the university.</p> <p>Scope 2 emissions:</p> <p>Indirect GHG emissions from the generation of electricity consumed by the university.</p> <p>Scope 3 emissions: All other indirect emissions from sources not owned or controlled by the</p>

		university. Reporting is optional.
University of Tennessee, Knoxville	→ Reduction of emissions for sure is the priority To reduce landfill waste	Reduction in overall GHG emissions
University of Winnipeg	Reduce GHG to 6% below 1990 levels by 2012 and 10% below 1990 levels by 2016.	In Manitoba, The Climate Change and Emissions Reduction Act is in effect in June 2008. The Act already sets an Emission Reduction Target 10% by 2016. U of W is trying its level best to focus not only on reducing emissions but also improving its research and teaching methodology on Climate Change.

University registration, base/achievement year, number of pages

University	Communities/societies report to	# of Pages	Base year/achievement year	Website Link
Brown University	→ Ivy plus sustainability working group → Emerald Cities Collaborative (ECC) → Providence Sustainability Roundtable → Energy Efficiency	55	Base year: 2007, Achievement year: 2020	http://bit.ly/22uTLDE

	and Resource Management Council (EERMC) → International Sustainable Campus Network (ISCN)			
Dalhousie University	→ Signed the University and College's Climate Change Statement for Canada.	35	Base year: 2008/2009, Achievement year: 15% by 2013; 20% by 2016 and 50% by 2020.	http://bit.ly/1pYLOZw
Harvard University	→ Aligned with the United Nations Intergovernmental Panel on Climate Change's recommendations to reduce emissions 80% by 2050. (Adopted in 2008)	40	Base year: 2006, Achievement year: 2016	http://bit.ly/1U390IN
John Hopkins University	→ Recommendations of the Task Force were followed in 2009 with a more specific set of strategies in The Implementation Plan for Achieving Sustainability and Climate Stewardship.	29	Base year: 2008, Achievement year: 2025	http://bit.ly/1S28PBb

McMaster University	→ The National Climate Change Accord	2010 - 23 pages	2010 Action Plan: Base year: 2010, Achievement year: 2015 2013 Action Plan: Base year: 2013, Achievement year: 2018	http://bit.ly/1ReQfIC
Queen's University	→ Signatory to the University and College Presidents Climate Change Statement of Action for Canada	36	Base year: 2008, Achievement year: 35% by 2020, and 70% by 2030	http://bit.ly/21ErJmY
San Francisco University	→ Signed the American College and University Presidents' Climate Commitment (ACUPCC)	33	Base year: 1990 Achievement year: 25% by 2020 and 40% by 2030	http://bit.ly/1RJsxRH
Stanford University	Various initiatives such as; → The Global Climate and Energy Project → The Stanford Woods Institute for the Environment → The Precourt Institute for Energy → The Program on	78	Base year: 2000 Achievement year: 50% by 2050	http://stanford.io/1ROoAS0

	Energy and Sustainable Development.			
University of Tennessee, Knoxville	→ Signatory to the American College and University Presidents' Climate Commitment (ACUPCC)	54	Base year: 2007/2008, Achievement year: 20% by 2021, 40% by 2031, 60% by 2041, 80% by 2051, and 100% by 2061	http://bit.ly/22sZ89X
UC Los Angeles	→ Signatory to the American College and University Presidents' Climate Commitment (ACUPCC) → Aligned with the California Global Warming Solutions Act of 2006 (Assembly Bill 32)	95	Reduction in campus emissions to year 2000 levels by 2014; Reduction in campus emissions to year 1990 levels by 2020; and Attainment of climate neutrality as soon as possible.	http://bit.ly/1hP4xui
UC San Diego	→ Signatory to the American College and University	73	2000 levels by 2013;	http://bit.ly/1UgVpYD

	Presidents' Climate Commitment (ACUPCC)		1990 levels by 2020; Climate neutral by 2025	
Université Laval	→ Sustainability Tracking Assessment and Rating System (STARS)	31	Base year: 2006, Achievement year: 2018	http://bit.ly/1RgJUu2
University of Alberta	→ Every 2 to 3 years a report is submitted to the Association for the Advancement of Sustainability in Higher Education (AASHE) through their Sustainability Tracking, Assessment, and Rating System (STARS) → Public Accountability	36	Base year: 2005, Achievement year: 17% by 2020	http://bit.ly/1MA8HMP
University of British Columbia	→ ISCN-Gulf Sustainable Campus Charter → LEED Building Standard Code → Residential Environmental Assessment Program (REAP)	34	Base year: 2007, Achievement year: 2015	http://bit.ly/1U39Zm2

	→ C&CP, SHHS Building			
University of Calgary	→ University and College Presidents Climate Change Statement of Action (UCPCCS) → World Resources Institute's (WRI) Greenhouse Gas Protocol	108	Base year: 2008, Achievement year: 45% by 2015, 80% by 2050	http://bit.ly/1pGEz8C
University of Saskatchewan	→ Signed the University and College Presidents' Climate Change Statement of Action for Canada	20	Base year: 2006/2007, Achievement year: 2020	http://bit.ly/1SehOlj
University of Winnipeg	→ The Climate Registry (TCR) → ISO14064 Standard	41	Base year: 2012, Achievement year: 2016	http://bit.ly/1Rc9N1r
Western Washington University	→ Signed with the Association for the Advancement of Sustainability in Higher Education (AASHE 2009).	54	Base year: 2005, Achievement year: 2020 Climate neutral campus by 2050.	http://bit.ly/22AUnYg

Interviews

University of Saskatchewan

1. What key factors were in consideration in the early development stage of the climate action plan?

→ One of twenty commitments in the University's second integrated plan (2008-2012) (<http://www.usask.ca/ipa/integrated-plans/second-integrated-plan.php>) was:

SUSTAINABILITY AS A SHARED CHALLENGE In both its intellectual life and its operational activities, the University of Saskatchewan will address the great issues of our time, including sustainability, and it must do so in a collaborative way.


The integrated planning cycle is 4 years and the major accomplishments of the Sustainability Working Group (tasked with the implementation of the above commitment) were:

- Sustainability Definition, Vision and Guiding Principles
- Campus Sustainability Plan
- Climate Change Statement of Action (see details below)
- Lead to Climate Action Plan
- Benchmarking of our Sustainability Performance
- Evaluation of Organizational Capacity
- Identification of Transitional Strategies

On October 1, 2010, upon signing the [University and College Presidents' Climate Change Statement of Action for Canada](#) (UCPCCS), the University of Saskatchewan joined 27 other Canadian post-secondary schools in committing their institutions to showing leadership and taking action on climate change. One of the key deliverables from signing the commitment was development of a Climate Action Plan within 2 years.

2. Who developed the climate action plan?

The Climate Action plan was developed by the Climate Action Plan Project Team under the direction of the Sustainability Commitment Working Group. We had 5 Sub-Committees that reported to the Project Team in the areas of: Energy, Transportation, Waste, Purchasing & Food, Education & Research, and



Communications/Community Engagement. There was a large group of diverse stakeholders that were involved in each working group.

The larger Campus Sustainability Plan had been developed in the preceding years, so it was used as a base for the Climate Action Plan. Strategies within the Campus Sustainability Plan were used and further development for inclusion in the Climate Action Plan.

3. Who is in charge of the implementation?

No one person has been tasked with this implementation. The University of Saskatchewan Office of Sustainability is the main coordinator and works with all stakeholder groups to advance the strategies. Since energy is the largest opportunity for emissions reductions, this responsibility is mostly with our Facilities Management Division.

4. Who in the institution signs off/approve the project?

The Climate Action Plan was approved by the President's Executive Committee, however there was no funding arrangements for strategy implementation.

5. How is the progress reported?

There are currently no reporting mechanisms, so progress of the plan has not been reported. We do however report our annual GHG emissions which is the key metric of success for the Climate Action Plan.

6. What are the social process of the climate action plan? (was there any student engagement)

Due to the reduced timeline of having to produce the Climate Action Plan within 1 year, to meet our commitments for the UCPCCS (we didn't start the planning process until 1 year after signing the UCPCCS, so we had 1 year to complete) we had limited student involvement. Representatives from the University of Saskatchewan Students Union and the Graduate Students Association were involved in the Campus Sustainability Plan, but not directly with the Climate Action Plan.

We did however have a Community Engagement Sub-Committee that provided engagement and communications recommendations.

7. What advice would you give to kick off a campus climate action plan?

- Top-level buy-in was critical to the success of developing the Climate Action Plan, if you can find higher level support and advocates then the process should work well.

- There are also many different stakeholders and areas of strategies that need to be addressed, so you need a large audience of stakeholders.

University of California, San Diego

1. What key factors were in consideration in the early development stage of the climate action plan?

Our planning involves students, faculty, administrators, staff and coordination with the City of San Diego, the region and often the state. Students are actively involved, while plan writing and implementation are lead by a variety of staff who report to the Vice Chancellor for Resource Management and Planning.

2. Who developed the climate action plan?

See above

3. How is it processed?

I'm not sure what you mean by processed? It's my job to ensure we finalize our climate action plan and implement it. Staff in Environmental Health and Safety work with me and others on campus to do our legal greenhouse gas emissions reporting to The Climate Registry (for our CA state laws) and the US Environmental Protection Agency. I also share our data with the University of California Office of the President.


4. Who is in charge of the implementation?

Sustainability in partnership with a variety of staff across the Vice Chancellor for Resource Management and Planning unit. Ultimately this Vice Chancellor is responsible.

5. Who in the institution signs off/approve the project?

We have many strategies with projects underneath them in our climate action planning, and depending on the project different people sign off, including but not limited to our Chancellor, Chief Financial Officer, Vice Chancellor for Resource Management and Planning, Campus Architect, etc., etc. High-level projects with state funding need to be approved by the UC Regents.

6. How is the progress reported?



Via our annual greenhouse gas emissions reporting to The Climate Registry, US EPA, UC Office of the President, Second Nature (American College and University Presidents Climate Commitment), STARS, the Sierra Club, the Princeton Review, etc.

7. What advice would you give to kick off a campus climate action plan?

Have 1 - 2 staff who will be involved in implementing the plan once it's done lead the effort to "herd the cats." Engage leadership early and often. Engage students; their commitment and enthusiasm and big ideas can help motivate faculty and staff. And it's going to take time, so be prepared for that

San Francisco State University

1. What key factors were in consideration in the early development stage of the climate action plan?

We considered the ACUPCC commitment, city and state sustainability goals, opportunities for the campus to excel in sustainability categories, and regional factors like transit and rainfall.

2. Who developed the climate action plan?

Caitlin Steele, our current Sustainability Director led the process when she was our Sustainability Coordinator. The plan was developed by the entire Campus Sustainability Committee. Each section was led by a subject area expert. The campus planner led transportation goals, our grounds director led the landscape goals, energy manager led the energy goals etc.

3. Who is in charge of the implementation?

The Office of Sustainability is in charge of most implementation, which requires collaboration with many other groups on campus like the Grounds team, electricians, Parking and Transportation, etc. The Campus Sustainability Committee is in charge of making sure we are on track for implementation.

4. Who in the institution signs off/approve the project?

The Campus Sustainability Committee decides for most major policies, but the Office of Sustainability implements most projects without needing specific approvals.

5. How is the progress reported?

Periodic updates to the CAP, reports back to the Committee, and we will start doing AASHE STARS this year.

6. What are the social process of the climate action plan? (was there any student engagement)

Yes, there are student representatives on the Sustainability Committee.

7. What advice would you give to kick off a campus climate action plan?

If we were re-writing it today, we would make it much more succinct and easier to read. It would get used by more campus leaders if it were much less detailed! Think bullet points on a web page rather than paragraphs on a PDF. Also, we would do a better job of relying on local goals, California State University goals, and state government goals instead of reinventing the wheel. We're about to do an update and we'll be aiming for something very brief and useable.

University of Tennessee at Chattanooga

1. What key factors were in consideration in the early development stage of the climate action plan?

UTC had some early adopters who supported reducing our campus carbon footprint. These professors were members of AASHE, and subsequently drove the initiative to conduct the CAP.

2. Who developed the climate action plan?

UTC hired a local consultant (UTC alumni) who prepared the first greenhouse gas inventory, and worked with the committee to prepare the CAP.

3. Who is in charge of the implementation?

Originally, the Climate Action Plan Committee, then the Efficiency and Effectiveness committee (academic focused) incorporated facilities/energy management into its agenda. In 2008-09, the students instituted a self-imposed Student Green Fee, and a sustainability coordinator position was advertised in fall 2010. In fall 2011, clearance was given to actually hire a person to focus on the GGI/CAP and other sustainable initiatives.

4. Who in the institution signs off/approve the project?

Originally, the chancellor signed the ACUPCC commitment.

5. How is the progress reported?

GGI results are reported to the ACUPCC.

6. What advice would you give to kick off a campus climate action plan?

Bring ALL groups together, including Facilities, so that realistic steps can be taken. This past year, the new Innovations in Honors program chose Sustainability as their theme; and subsequently had the campus third-party certified; reached out to the Chattanooga community; and ultimately was instrumental in having UTC partner with the City of Chattanooga in the USDOE's Better Buildings Challenge. This will be announced on April 19, 2016. So student/SGA support is vital, as well.

University of Winnipeg

1. What key factors were in consideration in the early development stage of the CAP?

The scope of GHG emissions and reporting has three different levels of reporting which is scope 1, scope 2, and scope 3. So the question is which of them is going to be focused on. Their focus is scope 1 and 2 which forms one piece of the scope and the other piece consists basically of properties owned such as buildings, land etc. And another component is they type of commitments , base lines and emissions target. University of Winnipeg uses the Kyoto Protocol (1990) as a baseline.

What most institutions do is set up an intensity based target rather than setting up an absolute reduction target. So they can decide to reduce their emission by say X tonnes of co2 per sq foot for e.g. But UofW made absolute reduction goals.

The targets were announced in 2005 and was supposed to be achieved by 2012 but the plan was not consolidated until around 2009/2010. This was because UofW hadn't done it before so it wasn't really well thought through.

- Does it help having a Climate Action Plan?

Because the targets were set so early before the plan the challenge was estimating the amount of emissions that would be released from new buildings coupled with also managing the emissions from the old ones. They knew that there would be new buildings coming up when the targets were set in 2009, so conservation assumptions had to be made of the emissions that would come from them.

If you compare emissions from their old buildings between 2009 and now, they are about 44% lower than they were in 2009.

2. Who developed the climate action plan?

University of Winnipeg have a body called the *Campus Sustainability Council* which meets four times a year and consists mostly of people with key operational responsibilities that have an impact on sustainability so they include people like the Executive Director of Facilities, the Director of Physical Plant, their Building Systems Manager, the Director of Purchasing, and of Finance.

In addition to these people when developing the plan they also had a working group that included the group of people responsible for capital development to help manage that aspect. It also involved working with the design team that was involved in their building projects. They also have an entity called *The Community Renewal Corporation* which is an arms length entity that manages their buildings. So they also worked with them.

The Sustainability Office did the analytical work/writings.

A major step took to creating a plan was that they completed a facilities audit in 2009 where they hired an external engineering firm to look at all of their buildings and figure out where they can achieve efficiency.

3. Who in the institution signs off/approve the project?

The plan went through the President's office and then put online. There is really no difference between what is on the plan and what they have in their sustainability strategy except for more detail in the plan.

Why this wasn't really a problem was because there was really no difference between it and the strategy and the strategy was already approved by the administrative board, the finance committee and also the sustainability council who was also part of writing it.

-Any Social process, like student involvement?

The Geography and Environmental Studies Student's Association started fundraising every year and launched something called the Eco Grant; and basically the way the Eco Grant works is that they open up a Conference Emissions where any student or any form of key campus member can submit a proposal and act. Sort of use funds to do something that is going to enhance sustainability in the campus.

A group of students actually applied for funding to coordinate a student submission that would help and inform the course.

There are also students on the Sustainability Council, about five of them which is over a third of the people on the council.

They also organised focused groups with students, staffs, faculty councils and a town hall.

4. How is the progress reported?

They do annual reporting on a whole bunch of things such as like emissions, energy, water etc. This has actually been on since 2006 and it includes an emissions inventory as well as an energy profile.

The emissions inventory was reported through the Climate Registry and verified by them. But they didn't continue with this process with the Climate Registry because it was expensive and they didn't find anomaly. UofW was complying with best practice and no unusual mistakes were found.

They also monitor actions, they have the campus sustainability council which meets four times a year. And in June every year they have an action planning meeting for the following year where core actions to be undertaken for the following year are decided upon.

And a list of actions committed to in a year are published in the annual report as well as the action plan for the next year. They try to be as transparent as possible.

5. What advice would you give to kick off a campus climate action plan?

Thinking about Intensity based vs. Absolute is really important. Also another technical challenge is figuring out how to reconcile capital development and pressures around the need for more space with emissions.

It is crucial to make sure that capital project planning and climate action plan are aligned. That is where the major problem is most times.

- No Incentives for collaborating for other departments and faculties