

Incorporating Sustainability Indicators into Decision Making in Post Secondary Education: A University of British Columbia Case Study

Presented by:

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OUTLINE

1. UBC Context
2. Campus Sustainability Plan and Indicator Framework
3. Lessons Learned



UBC CONTEXT



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PLACE AND PROMISE: THE UBC PLAN (2009)

VISION

As one of the world's leading universities, the University of British Columbia creates an exceptional learning environment that fosters global citizenship, advances a civil and sustainable society, and supports outstanding research to serve the people of British Columbia, Canada, and the world.



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SUSTAINABLE DEVELOPMENT POLICY

UBC will implement practices, *“mindful of the need to balance ecological, social, and economic imperatives, and to do so, in an open and transparent way with the involvement of all stakeholders.”*



INSPIRATIONS & ASPIRATIONS 2006

SOCIAL GOALS

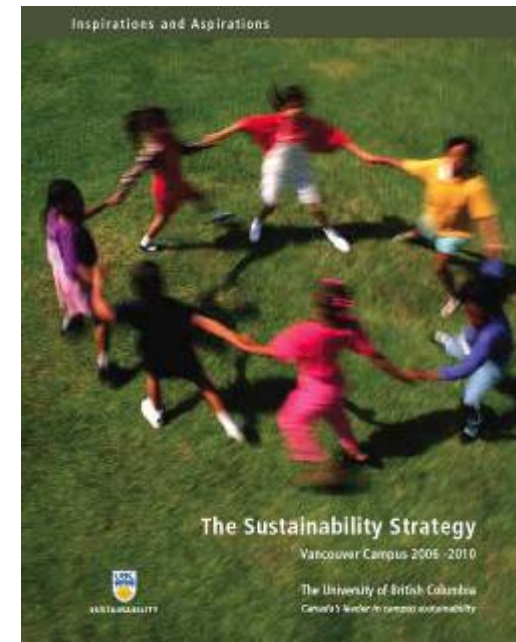
- A) Improve Human Health & Safety
- B) Make UBC a Sustainable Community
- C) Increase Understanding of Sustainability Inside and Outside the University

ECONOMIC GOALS

- D) Ensure Ongoing Economic Viability
- E) Maintain and Enhance the Asset Base
- F) Maintain and Maximize the Utilization of the Physical Infrastructure

ENVIRONMENTAL GOALS

- H) Reduce Pollution
- I) Conserve Resources
- J) Protect Biodiversity



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OFFICIAL CAMPUS PLAN

Official Community Plan for Part of Electoral Area 'A'

(Adopted July 25, 1997)

and

GVRD-UBC Memorandum of Understanding

(December 18, 2000)



Greater Vancouver Regional District
Policy and Planning Department



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INSPIRATIONS & ASPIRATIONS: SELECTED RESULTS (2008/9)

Model Campus	Result (Trend data where available)
<p>Reduce pollution Maintain annual average auto traffic at or below 1997 per capita levels for UBC-Vancouver</p>	<p>2005-2006 – 24% reduction 2006-2007 – 22% reduction 2007-2008 – 20% reduction</p>
<p>Conserve Resources Reduce non renewable energy consumption in institutional buildings by 30% (adjusted for growth) from 2000 levels</p>	<p>2005-2006 – 17% reduction 2006-2007 – 23% reduction 2007-2008 – 26% reduction</p>
<p>Model Campus Ensure that 20% of new residential dwellings will be rental housing,</p>	<p>2005-2006 – 39% 2006-2007 – 28% 2007-2008 – 26%</p>



UBC Consumption Counter

The counter uses an equation that takes the estimated consumption and estimated savings and then divides that number by the seconds in a year. It is not real-time, but it does give a snapshot and a powerful visual to explain usage and savings at UBC.

LEGEND



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CURRENT SUSTAINABILITY REPORTING REQUIREMENTS

UBC Internal Strategic Plans and Monitoring Requirements	
Strategic Plans	Reports
The UBC Plan: Place and Promise (2009)	Annual Report
UBC Sustainability Academic Strategy (2009)	Annual Report
Inspirations and Aspirations: Sustainability Strategy (2006-2010)	Annual Report (Triple Bottom Line) Campus Sustainability Office Report
Vancouver Campus Plan (2010)	Reported Annually
Sector Plans (Climate Action, Transportation, etc.)	Reported Annually
External Reporting Systems	
Organisation	Reporting System
Province of BC	SMART Tool, Climate Neutral Action Report
AASHE (Association of Advancement in Sustainability in Higher Education)	STARS (Sustainability Tracking, Assessment & Rating System)
Sustainable Endowment Institute	Green Report Card



HOW MANY INDICATORS WE MONITOR

UBC Internal Reporting		
Reports	How many indicators?	Data source
Campus Sustainability Annual Report	9 goals, 68 metrics	About 30 departments across Campus
Vancouver Campus Plan Monitoring Report	20 indicators	4 departments
Campus Climate Action Plan	Development of indicators in process	6 working groups, 30 departments provide information for GHG inventory
External Reporting		
Ranking System	How many indicators?	Data source
SMART Tool	Buildings - 55; fleet – 12; paper – 15; fugitive emissions – 3	4 departments
Carbon Neutral Action Report	33 actions, 98 indicators	overlap working & inventory
STARS (Sustainability Tracking, Assessment & Rating System)	4 categories, 139 credits	About 20 Departments
Green Report Card	9 categories, 87 indicators	5 departments



REPORTING TIME LINES

Reporting mechanism		Data collection																	
UBC Internal reporting system	Report due	2010	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	2011	Jan	Feb	Mar	Apr
Annual Report for AGM	September '10																		
Sustainability Academic Strategy Report	September '10																		
CSO Annual Board Report	May '10																		
Campus Plan	March '10																		
Climate Action Plan Report	March '11																		
External Reporting System	Report due																		
Carbon Neutral Action Report	First quarter																		
SMART Tool	Quarterly																		
STARS	January '11																		
Green Report Card	July '10																		



AASHE STARS PILOT PROGRAM



CATEGORY 1 Education & Research <i>66 points possible</i>	CATEGORY 2 Operations <i>61 points possible</i>	CATEGORY 3 Admin & Finance <i>61 points possible</i>
Co-curricular education	Buildings	Investment
Curriculum	Dinning Services	Planning
Faculty & Staff Development and Training	Energy & Climate	Sustainability Infrastructure
Research	Grounds	Community Relations & Partnerships
	Materials, Recycling and Waste Management	Diversity, Access and Affordability
	Purchasing	Human Resources
	Transportation	Trademark Licensing



SUSTAINABLE ENDOWMENT INSTITUTE GREEN REPORT CARD (2009)

Overall Grade 2010	B+
Administration	A
Climate Change & Energy	A
Food & Recycling	A
Green Building	A
Student Involvement	B
Transportation	A
Endowment Transparency	A
Investment Priorities	B
Shareholder Engagement	D



Actions Towards Carbon Neutrality		
The actions listed below contribute to a reduction in greenhouse gas emissions from sources for which public sector organizations are responsible under the carbon neutral government regulation of the <i>Greenhouse Gas Reduction Targets Act</i> .		
Action	Status (as of 12/31 /09)	Performance to Date (as of 12/31/09)
Mobile Fuel Combustion (Fleet and other mobile equipment)		
Note: For this section, commuting to and from home are outside of scope (see B.6)		
Vehicle fuel efficiency		
Replace vehicles with more fuel-efficient models		% of vehicles are fuel- efficient models
Replace larger vehicles with smaller models according to fleet " right-sizing " principles		% of vehicles down-sized since start year indicated
Perform regular fleet maintenance to improve fuel-efficiency		% of vehicles are subject to regular maintenance for fuel efficiency
Replace small maintenance vehicles with more fuel-efficient models		% of small maintenance vehicles are fuel-efficient
Behaviour change program		
Provide fleet driver training to reduce fuel use		% of current drivers are trained
Introduce anti-idling policy and/or raise anti-idling awareness for fleet drivers (e.g., signs, stickers, messages)		
Encourage carpooling in fleet vehicles		
Promote alternatives to fleet vehicle travel where possible (e.g., bicycles, public transit, walking)		



LESSONS LEARNED

- Cost
 - one FT staff requires 40 days to complete 2 of the systems working with 100 staff across campus to collect data
- Utility
 - Metrics needs to be based on very good systems understanding, and be 'lean'
 - Organizations can only focus on a few areas at any point in time, and need to do so consistently with 'game changing' items
 - Accountability concerns
- Implementation
 - Align sustainability reporting with other reporting requirements
 - Do not alienate your organization
 - Consider an electronic management system for data collection





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