

### SUSTAINABILITY IN K-12 EDUCATION

### CLOSING THE RESEARCH GAP ON LINDERSTANDING NATIONAL TRENDS

Educational institutions are a critical venue for teaching and motivating students to understand and act on sustainability issues, but there has been little study of the inclusion of sustainability in education across Canada at the ministry of education or school division levels. The Sustainability and Education Policy Network (SEPN) conducted a nation-wide census to address this gap.

### 13 PROVINCIAL AND TERRITORIAL MINISTRIES OF EDUCATION

**374 SCHOOL DIVISIONS** 

Ministry of Education Policies The provincial and territorial ministries of education engage with sustainability issues through sustainability-specific policies and general curriculum frameworks

		Sustainability in				
Province	Bovernance	Cumbulun	Operations	Research	Correctly Outreach	Curriculum Framework
4B		8		*	χ	•
BC	1	1			X	/
VB	3	<i>s</i>		3		
MEGNLANSGE	8	K	K	×	X	1
MT	X	3	K		X.	NA
MT	K	1	K		X	1
DIN	3	3	3		X	NA
QC	1	K	K	×	X	1
SK	8	- A	8		<u> </u>	3
10	8	.5	K	1	X	R/A

### **School Division Policies**

Over half of Canada's school divisions had sustainabilityspecific policies.

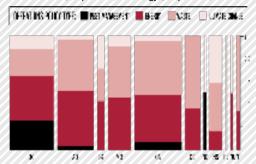
## Sustainability focus in school division policies

Of a total of 219 policies across the school divisions, 58% were operations policies, 33% were governance policies, 31% were curriculum policies, 6% were community outreach policies, and none were research policies.



# The majority of sustainability-specific policies were operations policies

Almost half of all 177 operations policies focused on either waste (81 policies) or energy (77 policies).



# 31% OF SCHOOL DIVISIONS HAD UNDERTAKEN A SUSTAINABILITY CERTIFICATION

The most common eco-certification programs were EcoSchools and Établissement vert Brundtland.

ONLY 7% OF CANADA'S 374
SCHOOL DIVISIONS HAD
SUSTAINABILITY STAFF

### "ENVIRONMENT"

was the dominant term used in school division policy titles across the country

# Sustainability-specific policies increase after 2006

Sustainability-specific school division policy dates followed a distinct temporal trend, with few policy dates before 2006, a rapid increase until 2010, and a slow decline to the present. Only 77 policies were dated between 1978 and 2005. 187 policies were dated between 2006 and 2014.

### Average Provincial Sustainability Initiative Scores

Average scores of school divisions in a province. Each school division gets 1 point for each of the three sustainability initiatives they have (eco-certification, staff, policy). SI scores have a possible range of 0-3 points.



SEPN's findings suggest that while there has been a steady increase in uptake of sustainability in K-12 education over the past decade, more can be done both at the ministry of education and school division levels to further mobilize knowledge and solutions that enable change for a more sustainable future.

Learn more about us at www.sepn.ca

### SUSTAINABILITY IN CANADIAN POST-SECONDARY INSTITUTIONS

THE LEADERS, THE LAGGARDS AND WHERE THEY LIVE

institutions were scored on their uptake of four high-level Sustainability Initiatives (SI)

- Undertaking a sustainability assessment
- Signing a national or international environmental or sustainability declaration
- Having a sustainability office or officer
- Having institution-wide sustainability policies

# SI score of 4





sustainability initiatives





# SI score of O

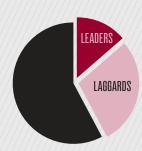








Institutions with no sustainability initiatives

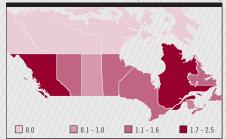


Québec and British Columbia had the highest number of SI leaders (9 and 6 institutions respectively). Higher scoring institutions appeared more frequently in larger cities, although SI scores in Quebec's larger centres were only marginally higher than its smaller centres.

### 63/220 SI Laggards Saskatchewan and the territories had the

lowest average SI scores.

SUSTAINABILITY	INITIATIVE	SCORE	(PROVINCIAL	AVERAGE)



Provinces	BC	AB	SK	MB	ON	QC	NB	NS	PE	NL	YT	NT	NU	<u>                                     </u>
Leaders	6	4//	//1//	3//	4//	//9//	0//	//2//	//0//	1/1//	//0//	//0//	0	////30
Laggards	6///6	6	//9//	5//	18	6//	2//	5	//1//	//2//	1/1///	//1//	1/1///	63
SI Score Average	////2.1/	1.7	0.6	/1.4/	1.5	2.4	//1.0/	1.3	1.3	/1.3/	0.0	0.0	//0.0///	/////1.7/

# ASSESSMENT,

The study by SEPN identifies strong linkages between these three sustainability initiatives suggesting that the uptake of one might encourage the uptake of others. In contrast, there was a weak relationship between signing a declaration and undertaking other sustainability initiatives.

The existence of sustainability policies was strongly related to province:

<b>85</b> %	<b>67</b> %	14%	<b>13</b> %	<b>0</b> %	0%	<b>0</b> %
QC	BC	NB	SK	YT	NT	NU
LEAD	ERS///	7/////	//////	AGGARDS	:////	//////

- \* Do provincial political cultures influence sustainability in education?
- higher engagement levels in BC and Quebec's smaller communities resulted in those provinces having the highest average rates of sustainability initiatives.
- Québec's Cégep Vert program is an example of the influence that provincial policies can have on sustainability uptake in education institutions.

### ENVIRONMENT

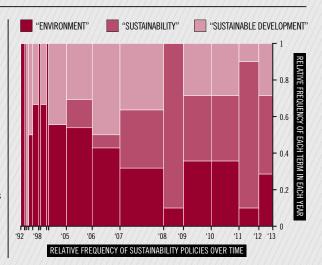


### SUSTAINABILITY

The study by SEPN identified a shift in terminological preferences over time, with 'sustainable development' and 'environment' decreasing, and 'sustainability' increasing.

### LET'S MAKE A DIFFERE

Other important elements of sustainability uptake in postsecondary institutions can include active student sustainability groups, sustainability champions in specific units of institutions, and operational innovations. Identifying these types of sustainability initiatives as well as the SI score rankings are important indicators for students and university leadership as they make decisions about enrollment, recruitment, and investment in further sustainability initiatives.





### STRATEGIC PLANNING FOR SUSTAINABILITY IN CANADIAN HIGHER EDUCATION

higher education institutions' (HEIs) strategic plans were analyzed for engagement with sustainability and categorized by Sustainability Response Type

#### BREADTH OF ENGAGEMENT



Governance 3 Research

5 Community Outreach

#### DEPTH OF ENGAGEMENT

Meaningful discussion of sustainability in relation to core values, goals, and sustainability-specific policies

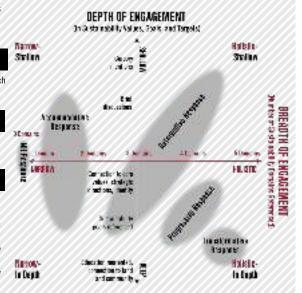
#### INSTITUTIONAL SUSTAINABILITY RESPONSE TYPES

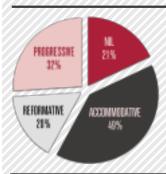
No engagement with sustainability in policy or practice

ACCOMMODATIVE Sustainability one of many priorities; 1-2 domains in variable depth

REFORMATIVE Policy priorities align with sustainability values in 3-5 domains, variable depth PROGRESSIVE Sustainability in mission, goals, policy

TRANSFORMATIVE Rethinks educational paradigms to correspond with sustainability values



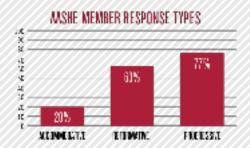


Accommodative and reformative responses were the most common response types. These strategic plans had weak language related to sustainability and lacked specific sustainability goals. No plans had transformative responses that reoriented educational purposes and paradigms to correspond with sustainability values. A lack of engagement with community outreach was evident in all strategic plans.

#### SUSTAINABILITY INITIATIVE SCORES

Drawing on SEPN's previous sustainability policy initiatives census, Sustainability Initiative (SI) Leaders (with all of sustainability assessment, declaration, policy, office) engaged more strongly with sustainability in strategic planning. Only 7 of 20 (or 35%) accommodative responders were SI Leaders whereas 4 of 8 (50%) reformative and 10 of 13 (77%) progressive responders were SI Leaders.

Institutions affiliated with the Association for the Advancement of Sustainability in Higher Education (AAHSE) were more likely to exhibit reformative or progressive sustainability responses in their strategic plans. Only 4 of 20 (20%) accommodative responders were AASHE members whereas 5 of 8 (63%) reformative responders and 10 of 13 (77%) progressive responders were AASHE members. The results suggest AASHE membership may be a significant factor in progressive engagement with sustainability at the strategic planning level.



#### OVERCOMING BARRIERS

A Dirone, consisted givening structures A ligh legally and departmental actionary If with identify beginning research priorities. # Politicization of sustain ability values

SHETING EDUCATIONAL PARADIGMS

- Specific curerete autoinatility quals WAIL assessment processes
- Integrates, holistic targets
- Improved mantering equalities Be-more religios per more al obres en

Integration of incigenous perspectives

WHERE NEXT? Stronger engagement with sustainability is needed in strategic planning in Canadian HEIs. The shift to transformative sustainability responses requires HEIs to re-think existing educational paradigms and re-conceptualize the purpose of higher education to support the transition to more sustainable societies.



### THE STATE OF FOSSIL FUEL DIVESTMENT

#### IN CANADIAN POST-SECONDARY INSTITUTIONS

#### **What is Fossil Fuel Divestment?**

Post-secondary institutions have a significant amount of their endowment funds invested endowment funds invested in the fossil fuel industry. Divestment is a movement asking institutions to move their money out of oil, coal and gas companies, in an attempt to reduce climate change.

Divestment moves endowment money away from the top 200 Start most polluting fossil fuel industries

Why is Divestment Important?

The divestment movement advocates that endowment funds must be invested responsibly in areas that promote cleaner futures for

**Current and Future** Generations.



The 2015 Paris agreement (United Nations Framework Convention on Climate Change) set a target to limit temperature increase to

1.5° above pre-industrial levels.

Global emissions were 31%

above 1990 levels in 2010



8.8% of the operating budget of 835 surveyed U.S. colleges and universities came from their endowment funds in 2013



The divestment movement has been growing in Canada

#### As of May 2016,

There were 37 active divestment campaigns across 9 provinces

Approximately \$3.4 trillion was divested worldwide by **526** as of December 2015



The movement has been led by: Students, Faculty, Alumni, and Community Members

24% 14% 13%

13% Colleges 6% 3% For-Pr

1%

"If it is wrong to wreak the climate, then it is wrong to profit from that wreckage.

- Bill McKibben, 350.org

While some campuses have positioned themselves as sustainability leaders, They are still heavily invested in fossil

Name of Institution	Total Endowment	Amount Invested in Fossil Fuels	Student Vote	Faculty Vote	Board of Governors Decision
University of Toronto	1,500,000,000	32,400,000		~	Rejected
University of British Columbia	1,100,000,000	120,000,000	~	V	Rejected
McGill University	1,400,000,000	84,000,000	~		Rejected
Queen's University	658,000,000	29,000,000	~		Rejected
McMaster University	655,000,000	47,000,000	~		In process
University of Calgary	710,000,000	40,000,000			Rejected
Dalhousie University	465,000,000	20,300,000	V		Rejected
Simon Fraser University	367,000,000		~	V	In process
University of Victoria	365,000,000	21,000,000	~	~	Rejected
University of Guelph	270,000,000	40,500,000	~		In process
University of Ottawa	193,000,000				Agreed, no timeline
University of New Brunswick	198,000,000		~		In process
Concordia University	136,000,000	10,000,000	~		Partial divestment
Mount Allison University	140,000,000			~	In process
University of Winnipeg	57,500,000	2,580,000	~		In process
Trent University	41 000 000	34 000 000	.,		In process

Institutional Greenwashing: When sustainability policies and initiatives give the appearance of taking steps towards protecting the environment while a higher prioritization is given to the institution's economic considerations.

In November 2014, Concordia University became the first in Canada to Partially divest \$5 million of its endowment funds. In April 2016, the University of Ottawa decided to divest from fossil fuels, although the timeline of this divestment is not yet clear.

What's next

"When we return in the fall, we will channel our inner anthropogenic climate change, and turn up the heat on you every step of the way. Students will organize, mobilize and escalate until the University of Victoria divests. - Divest UVic

With only two Canadian higher education institutions committing to some type of divestment, students, faculty, alumni, and community members are not giving up just yet. They are committed to escalating their calls to divestment until the administration agrees to divest.



### GREENWASHING IN EDUCATION

HOW NEOLIBERALISM AND POLICY MOBILITY MAY UNDERMINE ENVIRONMENTAL SUSTAINABILITY

Sustainability and neoliberalism are mobile concepts and processes that when twinned, undermine the way environmental sustainability is being developed and implemented in education policy and practice.



In this context, any policy that takes up the natural environment in some capacity, including in relation to social, economic, culture, health, and other factors. While we are concerned with the various ways sustainability terminology is engaged, we have limited the scope to those cases which include some reference and consideration of environment.

Political economic practices liberating individual entrepreneurial freedoms and skills within an institutional framework characterized by strong private property rights, free markets, and free trade.

### SUSTAINABILITY IS A VEHICULAR IDEA.

It is a flexible and vague concept which can be absorbed and used in different contexts.



Mobility approaches in policy studies focus on the movement of objects, people, and ideas around the globe.



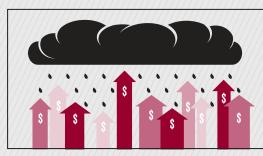




Policy is a product of its surroundings, influenced by ideas that are both situated and mobile, producing variations developed in response to different policy contexts and relationships.

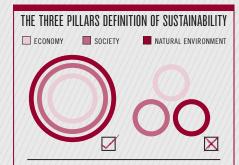
Policy mobility is useful for understanding how 'sustainability' can become part of neoliberal processes.

#### NEOLIBERALIZATION OF SUSTAINABILITY IN EDUCATION POLICY:



Institutional greenwashing: when sustainability policies and related high level initiatives such as signing of declarations, act as 'sustainability fixes' giving the appearance of taking steps towards protecting the environment while a higher prioritization remains given to the institution's economic considerations.

### RESEARCH SUSTAINABILITY IN THE EDUCATION POLICY OF POST-SECONDARY INSTITUTIONS:



The three pillars is a sustainability concept used to describe the relationship between the 'natural environment,' 'society' and 'economy.' It is based on the understanding that without a natural environment human beings would not exist, and without a society to create it, there would be no economy.

The 'nested' hierarchy model (above left) is distinct from the segmented model where the pillars are seen as separate (above right), because it emphasizes the interrelationship between the three pillars.

SEPN completed a case study of terms used in sustainability policy. Our initial analysis indicated a shift in terminology usage and meaning, from "environment" to "sustainability."

The vagueness of a sustainability definition without explicit prioritization of the natural environment runs the risk of enabling sustainability as a vehicular idea that can be 'greenwashed,' as well as enabling sustainability to be 'fixed' in certain ways (i.e., giving priority to the economy pillar).

It is important to look at how sustainability is understood in education policies, and whether priorities of neoliberalization are embedded within how sustainability is conceptualized and practiced. Segmenting the three pillars can insulate the economy pillar from those of social and environmental sustainability, enabling a form of neoliberal sustainability.