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Environment and Sustainable Development Policy Development in K-12 Schools in Manitoba and Canada

An initial exploration

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Environment and Sustainable Development Policy Development in K–12 Schools: An initial exploration

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1.0. Introduction

The declaration of the United Nations Decade of Education for Sustainable Development (ESD) focuses attention on reorienting education on the long-term future of the economy, ecology and equity. This educational effort is intended to "encourage changes in behaviour that will create a more sustainable future."

In Canada, Manitoba has taken a leadership position nationally in working with Learning for a Sustainable Future (http://www.lsf-lst.ca/en/home/) and the National Experts Council for ESD on activities for the Decade. Specifically, the Manitoba Education for Sustainable Development Working Group is focusing on three streams of work:

- policies, guidelines and regulations;
- the school as a learning facility; and
- curriculum, learning resources and professional development.

IISD, a partner in this initiative with Manitoba Education, Citizenship and Youth, is launching a K–12 (kindergarten to grade 12/Senior 4) sustainable development policy bank (http://www.iisd.org/leaders/policybank). This database provides access to policies from across the country developed by school districts in order to manage their facilities in a manner consistent with sustainable development principles and practices. Policies cover a range of school operations, including general commitments to sustainable practices; energy management; recycling and waste management; environmental policies, particularly the use and disposal of hazardous chemicals; procurement policies; and others.

The purpose of the Sustainable School and Campus Policy Bank is to promote policy development at the school district/school board level and to provide examples of policies that might serve as templates for individual school districts and boards.

However, in the process of searching for K–12 environment and sustainable development policies across Canada, we observed that the state of policy development at the school district/board level does not yet appear to match what has evolved since 1990 in university and college institutions. In particular, we noted that the Council of Ministries of Education, Canada (CMEC) recent report to the United Nations Economic Commission for Europe (UNECE) and the United Nations Educational, Scientific and Cultural Organization (UNESCO) on indicators for ESD, while detailing a comprehensive range of K–12 programming, does not comment on whether enabling policy environments and long-term commitments at the school district/board level across Canada have been established (CMEC, 2006).

A review of the literature and related Web resources was therefore undertaken in order to determine the state of K–12 school policy development in other jurisdictions. In so doing, we have identified the need for a more comprehensive exploration on whether and how these policies can catalyze and sustain education and management practices in schools; how such policies are developed, implemented and monitored at the school level; and, in

http://portal.unesco.org/education/en/ev.php-URL_ID=27234&URL_DO=DO_TOPIC&URL_SECTION=201.html

particular, whether the existence of these policies serves to reinforce what students learn about sustainable development in the classroom.

1.1. Experience of the tertiary education sector

University and colleges were early adopters of the view that educational institutions have a major role to play in moving the world towards more sustainable pathways; and that role involves "walking the talk": going beyond educating their students to managing their facilities in a more environmentally responsible manner. The following series of declarations has provided the impetus for individual universities to establish new policies for sustainability:

1990: The Talloires Declaration (led to the establishment of the Association of University Leaders for a Sustainable Future)

1991: The Halifax Declaration

1993: The Swansea Declaration (Association of Commonwealth Universities)

1993: The Kyoto Declaration (International Association of Universities)

1993: The Copernicus Charter (University Charter for Sustainable Development – Association of European Universities CRE)

2005: Graz Declaration on Committing Universities to Sustainable Development (UNESCO and others)²

Canada was an early proponent of environmental citizenship for universities and colleges, with the Association of Canadian Community Colleges (ACCC) introducing their Environmental Citizenship program in the early '90s and with the publication by ACCC and IISD of David Chernushenko's "Greening Campuses" guide. Many guidelines and manuals for sustainable development management on campus have been published since that time, including the resources provided by the International Association of Universities (http://www.unesco.org/iau/); the University Leaders for a Sustainable Future (http://www.ulsf.org/); Second Nature (http://www.secondnature.org); the National Wildlife Federation's Campus Ecology Program (http://www.nwf.org/campusecology/); and, in Canada, the Sierra Youth Coalition's Sustainable Campuses initiative (http://www.syc-cjs.org/sustainable/tiki-index.php).

From 1996 to 1998, IISD collected representative policies from universities and colleges around the world as part of promoting a suite of tools for campus decision-makers. The Institute has since updated the collection for Canadian institutions, and encourages other institutions to submit their policies directly. This "Sustainable Campus Policy Bank" has now been expanded to include policies for K–12 institutions in Canada.

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² The full text of all declarations except Graz can be found at http://www.uisd.org/educate/declare.htm. Graz is available at http://www.uni-graz.at/sustainability/.

³ Published on diskette; now out of print.

⁴ Archived at http://www.iisd.org/educate/.

The Talloires Declaration: University Presidents for a Sustainable Future

We, the presidents, rectors, and vice chancellors of universities from all regions of the world are deeply concerned about the unprecedented scale and speed of environmental pollution and degradation, and the depletion of natural resources. Local, regional, and global air pollution; accumulation and distribution of toxic wastes; destruction and depletion of forests, soil, and water; depletion of the ozone layer and emission of "green house" gases threaten the survival of humans and thousands of other living species, the integrity of the earth and its biodiversity, the security of nations, and the heritage of future generations. These environmental changes are caused by inequitable and unsustainable production and consumption patterns that aggravate poverty in many regions of the world.

We believe that urgent actions are needed to address these fundamental problems and reverse the trends. Stabilization of human population, adoption of environmentally sound industrial and agricultural technologies, reforestation, and ecological restoration are crucial elements in creating an equitable and sustainable future for all humankind in harmony with nature. Universities have a major role in the education, research, policy formation, and information exchange necessary to make these goals possible.

The university heads must provide the leadership and support to mobilize internal and external resources so that their institutions respond to this urgent challenge. We, therefore, agree to take the following actions:

- 1. Use every opportunity to raise public, government, industry, foundation, and university awareness by publicly addressing the urgent need to move toward an environmentally sustainable future.
- 2. Encourage all universities to engage in education, research, policy formation, and information exchange on population, environment, and development to move toward a sustainable future.
- 3. Establish programs to produce expertise in environmental management, sustainable economic development, population, and related fields to ensure that all university graduates are environmentally literate and responsible citizens.
- 4. Create programs to develop the capability of university faculty to teach environmental literacy to all undergraduate, graduate, and professional school students.
- 5. Set an example of environmental responsibility by establishing programs of resource conservation, recycling, and waste reduction at the universities.
- 6. Encourage the involvement of government (at all levels), foundations, and industry in supporting university research, education, policy formation, and information exchange in environmentally sustainable development. Expand work with nongovernmental organizations to assist in finding solutions to environmental problems.
- 7. Convene school deans and environmental practitioners to develop research, policy, information exchange programs, and curricula for an environmentally sustainable future.
- 8. Establish partnerships with primary and secondary schools to help develop the capability of their faculty to teach about population, environment, and sustainable development issues.
- 9. Work with the UN Conference on Environment and Development, the UN Environment Programme, and other national and international organizations to promote a worldwide university effort toward a sustainable future.
- 10. Establish a steering committee and a secretariat to continue this momentum and inform and support each other's efforts in carrying out this declaration.

University of Winnipeg Sustainability Policy

Purpose: The University of Winnipeg will maintain a sustainability management system to ensure that University operations, activities, programs and facilities are sustainable.

Scope: This Policy applies to the facilities and activities identified in Appendix "A" – Scope of the Sustainability Policy.

Definitions: Sustainability means the capacity of a thing, action, activity or process to be maintained indefinitely and meeting the needs of the present without compromising the ability of future generations to meet their own needs.

Responsibilities:

- 1. The University will comply with applicable legislative requirements, including federal/provincial statutes, regulations, standards and guidelines, and applicable standards established by the International Organization for Standardization (ISO), as amended from time to time.
- 2. The President is responsible for the maintenance, administration of this Policy, and the communication and promotion of the Policy, both within and outside the University, and will report openly on the University's sustainability performance at timely intervals.

Accountability: The University will set and review sustainability objectives from time to time, and audit progress against these objectives.

Goals: In order to achieve the sustainability management system, the University seeks to meet the following goals:

- 1. To fulfill its mission and goals as an education and research institution without compromising the ability of present and future generations to fulfill their own goals.
- 2. To equip students with the skills and knowledge, and encourage research and scholarship, that will enable people to actively contribute to a more sustainable world.
- 3. To develop academic and research programs, offer services and carry on its activities in such a way as to:
- a) reduce consumption of non-renewable resources and the wastes generated from them,
- b) use all renewable materials and energy resources at rates equal to, or lower than, their natural rates of deposition, reformation or reproduction in the ecosphere and,
- c) reduce and eventually eliminate the toxicity of these operations to the productivity and diversity of the ecosphere.
- 4. To encourage the development and adoption by students, administration and faculty, of modes of transportation that progressively reduce consumption of nonrenewable resources, renewable resources, and energy resources, and that eliminate discharges of toxic substances and wastes to the ecosphere.
- 5. To integrate environmental, social and economic considerations in all aspects of management decision-making.
- 6. To further develop its sustainability management system, to address and include the social and economic dimensions of sustainability.
- 7. To establish decision-making processes, policies and procedures for sustainability which encourage participation by all those affected by the decisions made.
- 8. To continuously improve the University's sustainability management system.

Policy Review: This Policy is to be reviewed in accordance with University policy review practice.

1.2 What is school policy for sustainable development?

Policies in general provide the context, commitment and guidelines for courses of action, and the framework for monitoring performance and results. They are established by school districts and boards to guide decision-making. Broadly construed, school policies for sustainable development should aim to create a healthy, ecological, economic and socially responsible living and learning environment for all students and staff, and to make the school a model of best practice for the whole community. Sustainable development policies may be set at the school division level. Policies may simply establish a commitment to the environment, with general guidelines on the range of plans and actions that could be adopted at the individual school level. One such example is *The Swan Valley School Division* in Manitoba's environmental policy regarding their overall operating and programming procedures.

The Swan Valley School Division: The Environment Within Division Operation and Programming (Policy 6.01)

The Swan Valley School Division recognizes its responsibilities regarding the protection of our environment and the encouragement of environmental awareness and understanding within the program offerings of our schools. Accordingly, the Division recognizes the "safeguard of our environment" to be a major focus in future planning and direction within the Division and as a major consideration in programming and decision making as follows:

- 1. Environmental cost and/or benefit will be regarded as a major consideration in decision making with regard to procurement decisions, the prioritizing and use of resources, and in waste disposal practices.
- 2. Encouragement of the consideration of integrating environmental awareness issues and topics within existing curricula, K Grade 12, wherever possible and appropriate so as to promote and encourage environmental awareness amongst our student population; and to encourage activities at the individual school and classroom level which promote and illustrate sound environmental practices.

A Divisional committee will be organized, on an ad hoc basis, to consider environment issues as they relate to Division operations and programming.

Schools are encouraged to participate in community recycling programs and clean-up activities and in environmental programs such as SEEDS.

Specific issues that may need to be addressed in school policies and planning include: recycling and waste reduction and management; energy efficiency; school bus fleet management (such as anti idling policies); policies on "green" procurement (use of paper with recycled content) and supply chain management (dealing with suppliers who themselves have introduced their own sustainability practices); use of fair trade coffee; use of local food in cafeterias; staff and student volunteering in local community social and environmental projects; integration of sustainable development into the curriculum; use of the school itself

⁵Based on UNESCO description for school health policies: http://portal.unesco.org/education/en/ev.php-urll_ID=36627&URL_DO=DO_TOPIC&URL_SECTION=201.html

as a place to practice and measure environmental responsibility, and so forth. Central to policy development is the commitment to compliance, which requires the establishment of mechanisms for monitoring and reporting on actions.

1.3 Why are school policies for sustainable development important?

Proponents of sustainable development policies at the K–12 level suggest the following reasons to consider such policies for the planning and management of schools

1. Reinforces what is taught in the classroom: It is strongly suggested by those who have developed school policies that students who see what they are taught in the classroom being practised in their immediate surroundings are more likely to develop those values, attitudes and behaviours in their own lifestyles:

"They aim to offer students a context for developing active citizenship and participation embracing the complexity of the combined social, economic, political and environmental dimensions of sustainable development" (Mayer and Mogenson, 2005)

"Students learn informally through the messages and meanings hidden in the physical surroundings, operational practices and organizational principles of a school. This learning can either reinforce or undermine the formal curriculum" (Enviroschools, nd)

It is further suggested that these environmentally friendly attitudes "go home" with students and influence the choices of their immediate families.

- 2. Establishes the school itself as a laboratory, and therefore contributes resources to the curriculum: Students can become directly involved in the essential process of implementation, monitoring and reporting on performance, through energy audits, waste audits, "greening" the school grounds and so forth.
- 3. Improves the school's own ecological "footprint," with the potential for financial benefits (energy and water cost savings for example); health benefits (improved indoor air quality, reduction in exposure to chemicals, etc.); and other similar improvements.
- 4. Strengthens public relations with the surrounding community by being seen to be a good community citizen. As suggested by the New Zealand Enviroschools program, these policies, and their implementation plans, can provide a focal point for parents and community groups to have a greater involvement with their local school (Enviroschools, nd).

Schools share with the private sector the last two objectives: to improve their footprint and strengthen their relationship with their surrounding community. Private sector companies in recent years have been encouraged to develop sustainability policies in order to reduce their impact on the environment; save money and protect shareholder value in the longer term; improve their corporate image and strengthen their "licence to operate" within their communities; and, in some cases, comply with legislation. For schools, however, there are

⁶ The direct and indirect consumption and degradation of land, water and other resources required to support the school.

two significant additional drivers: to teach students by example and by experience. Schools' environmental reforms can provide a positive learning opportunity for everyone. When students observe changes being made in a school's environmental practices, they become more aware of the institutional impacts and responsibility. But the most active learning takes place when students become engaged in the school's environmental reform through hands-on learning. Influencing the future behaviour of students may be the most valuable result of institutionalizing environmental reforms. "A well-designed and cared-for estate provides a rich resource for learning and playing—not only about the environment but more widely—benefiting pupils' well-being and behaviour" (U.K. Department of Education and Skills, 2006). Schools can set a powerful example for their staff and pupils to follow. It is therefore interesting that many school districts and boards do not appear to have established the policy frameworks to encourage such actions at the individual school level.

1.4 Scope of the literature review

Several databases with an education focus including ERIC (Education Resource Information Centre – http://eric.ed.gov/), and others such as Ingenta and ProQuest, as well as the World Wide Web were searched using combinations of keywords such as school policy, environmental management, sustainable development, recycling, waste management, energy and so on. The WWW was also searched in French, although with a more limited selection of keywords.

The academic and professional education literature yielded very little in the way of independent description, verification and analysis of school policies and related programs. More information is available on the Web but is largely descriptive in nature, by the proponents of the policies and programs.

As our main focus was Canada, an online scan of school board Web sites was conducted to locate policies that addressed sustainable development and environmental management. The search resulted in 93 school board policies from across Canada that dealt with environment and sustainable development, whether in the values of the school, the curriculum or more specific environmental management issues. These have been entered into IISD's Sustainable Campus Policy Bank (http://www.iisd.org/leaders/policybank/). A significant number were located in British Columbia due to availability of a searchable database on school policies at the British Columbia School Trustees Association Web site, which made sourcing easier (http://www.bcsta.org/main/). Also valuable was the Canadian School Boards Association (CSBA) Policy Database (http://www.cepan.ca/ev.php?URL_ID=1581&URL_DO-DO-Topic&URL_SECTION=201&reload=1108669253), although, unlike the B.C. database, it was not searchable and therefore more time consuming to mine. In our search, we were not able to locate policies online for Newfoundland, Nunavut, the Northwest Territories and New Brunswick.

We must note that more policies may exist than we were able to source. Not all school districts have active Web sites; and not all of those Web sites publish their policy manuals online.

2.0. Approaches to K-12 School Policy Development

School environmental management is of more recent origin than environmental curriculum development "and draws heavily on the literature and practices of industrial and commercial environmental management..." (Scott, Gough & Reid 2000, 3). Advocates argue that "curriculum reform without complementary school reform will be less effective than it might otherwise be..." (ibid). For the most part environmental education has had little to say about the environmental performance management of schools, but the advent of sustainable development has changed this as it pushes the boundaries of environment education to consider the institution, i.e., the entire school community, in which it happens (ibid, 4).

Based on the information found, we have observed three approaches

- the "whole school" approach, driven by state or national education department directives and guidelines;
- independent certification and awards programs; and
- individual policy development by school districts.

2.1 The "whole school" approach, driven by state or federal education department directives and guidelines

Several examples of government-led approaches were located in Australia, the U.K. and Europe. The level of government varied: state level, for Australia; national, for the U.K.; and local authority, for France. Of particular note is the U.K. program, that devolved directly from the U.K. government's overarching sustainable development strategy, tabled in 2005 (Securing the Future: http://www.sustainable-development.gov.uk/publications/uk-strategy/index.htm) (Scott, 2006).

2.1.1 New South Wales, Australia – Sustainable Schools Program

The goal of sustainability has redefined the role of schools and their relationships with the community. The focus has shifted beyond "what to teach students" and "how they are behaving" to seeing schools as a focal point where children, adults and the community interact and learn together (Henderson & Tilbury, 2004, 8).

The New South Wales program was piloted in 2003 under the umbrella national program "Australian Schools Sustainability Initiative" (led by the Department of the Environment and Heritage: http://www.environment.gov.au/education/aussi/index.html). The state of Victoria also piloted a similar program. The Sustainable Schools Program in NSW is jointly managed by the state departments of education and environment. It has been promoted throughout the 2,200 NSW primary and secondary schools. This is not a mandatory program, nor is there a formal, external accreditation process; instead, a recognition and reward component has been introduced: Those schools that meet the strict requirements to be declared an "ecologically sustainable facility" are rewarded with prizes contributed by sponsors.

This "whole-school approach to sustainability" necessarily includes in-school resource management such as waste, water and energy reductions in addition to raising awareness

among students and teachers (ibid, 12). "The key first stage, common to all whole-school programs, is to tackle the issue of school governance" to ensure that the school's management and governing body "is actively involved in all aspects of the program planning and operations..." (ibid, 35). It follows that school policy related to whole-school approaches are necessary and all international programs utilize environmental audits as a key component (ibid, 36). "For the most part, environmental audits have been primarily focused on environmental issues, such as resource consumption and school grounds" with little emphasis on other aspects of sustainability (ibid, 36).

Several case studies are available on whole-school initiatives on environmental management in Australian schools at *Sustainable Schools NSW (Australia)* (http://www.sustainableschools.nsw.edu.au/)

In 2004-05, an independent review of the NSW and Victoria pilots was commissioned by the Australian government Department of the Environment and Heritage. Key findings included:

- o a facilitation model that was the catalyst for diffusion and change management;
- o a high degree of funding and sponsorship generated by the pilot, from government and support agencies;
- o high workloads and reports of extensive unpaid overtime;
- o a range of identifiable educational, social, and community benefits;
- o short and longer-term impacts;
- o ambitious expectations of facilitators;
- o mechanisms to generate awareness and commitment in school communities and achieve broad-based involvement and ownership of decision-making; and
- o responses to preferring ongoing rewards and recognition mechanisms rather than end-point accreditation (Larri, 2006).

Sustainable Schools NSW (Australia) Web site links

Sustainable Schools NSW aims to support all schools, their partners and the community in realizing a positive environmental vision. Through a School Environmental Management Plan, your school community can implement, review and celebrate sustainability education initiatives.

Falls Creek Public School Environment Management Plan

http://www.sustainableschools.nsw.edu.au/Portals/0/Content/Downloads/38 Falls%20Creek%20Public%20SEMPdoc.doc

Middle Harbour Public School: To air condition or not? – A journey of sustainability

http://www.sustainableschools.nsw.edu.au/Default.aspx?tabid=191&&TID=30

School achievements in resource management

http://www.sustainableschools.nsw.edu.au/Default.aspx?tabid=163&&TID=10

Waste management case studies

http://www.sustainableschools.nsw.edu.au/Default.aspx?tabid=173&&TID=21

Grounds management

http://www.sustainableschools.nsw.edu.au/Default.aspx?tabid=70

Whole school planning

http://www.sustainableschools.nsw.edu.au/Default.aspx?tabid=72

Whole School Planning Achievements

http://www.sustainableschools.nsw.edu.au/Default.aspx?tabid=165&&TID=14

2.1.2 United Kingdom – Sustainable Schools

The U.K. Sustainable Schools program is still in its infancy, with the "Year of Action" only having taken place in 2006–07. The program mandates targets that the government expects schools to achieve by 2020. The National Framework establishes a number of entry points or "doorways" through which schools can begin their policy development and planning process. These entry points include:

- o food and drink;
- o energy and water;
- o travel and traffic;
- o purchasing and waste;
- o buildings and grounds;
- o inclusion and participation;
- o local well-being; and
- o global dimension.

This Framework sets the "long-term expectation clarifying where the Government would like schools to be by the year 2020. Although every school will start from a different place, with different priorities and needs, all schools can take some immediate action to meet these targets" (U.K., nd).

An external view of the program suggests that the critical challenge will be in ensuring that schools do not simply use the new terminology of the national framework to report on what they are doing now, without any real effort to change:

However, there must be more to it than this, otherwise schools can just carry on doing what they do now. For example, there has to be a difference between, on the one hand, addressing each doorway through the curriculum (the easy bit), linking this with purposeful activities in the school and community with tangible pay-back through, for example, lower water bills (more difficult to do), and on the other to have all this lead to student capability to respond to the challenges everyone will face in sustainable development (the really hard part) (Scott, 2006).

It will be interesting to see whether the U.K. approach resolves a number of challenges identified in the Australian approach (in particular, the high transaction costs of the facilitation model and the related investments in work load and unpaid time of school administrators and staff in implementation). Also interesting to note is that the U.K. approach does not attempt a recognition and reward program.

2.1.3 Bourgogne, France – Agenda 21

On a much smaller scale, it is worth noting the initiative of the local authority in Bourgogne, France, to encourage 13 schools in the county to experiment with their own version of Agenda 21⁷ (http://www.cr-bourgogne.fr/). Further information on this program, including an assessment of progress, has not been located.

2.2 Independent certification, recognition and award programs

These are programs that have been established by independent organizations or by government departments outside of the education sector, that involve a process for establishing school policies, implementation plans and performance monitoring. A label or award is provided based on the school meeting certain criteria.

Several of these programs suggest the need for external assessment as part of a formal accreditation process. However, the Australian Sustainable Schools Initiative, in their independent assessment of the pilot projects, determined the following:

An accreditation process was trialed with one "lighthouse" school in NSW and it was found to be:

- o unduly and unrealistically time consuming;
- o costly and requiring a level of expertise (e.g., around legal issues) more suited to multi-million dollar companies than the school community;
- o out of keeping with standard approaches to ISO1400; and
- o the criteria and processes were difficult to understand and interpret.

Participants in the Sustainable Schools pilots said that:

⁷ Agenda 21 is the global action plan for sustainable development adopted by nations at the 1992 United Nations Conference on Environment and Development (UNCED; also known as the Earth Summit). In Europe, there has been a strong movement to establish "Local Agenda 21s" that serve a similar purpose, only based on local needs and priorities.

...schools do not place a high degree of importance on accreditation per se. This is because the idea of accreditation suggests an external review process that schools would consider onerous. What schools do want is some form of symbolic recognition of stages as they are achieved. This could be in the form of outside signage, or certificates for display (Larri, 2006).

2.2.1. Europe — Eco-Schools

The Eco-Schools Program is managed by the Foundation for Environmental Education (FEE), an umbrella organization, which brings together national NGOs, implements programs for environmental education, management and certification. NGOs members "work in close partnership with their national educational authorities and the FEE International Secretariat (Henderson & Tilbury, 2004, 13). Eco-Schools originated in Europe and the program is expanding to include countries in Africa, Asia and South America. Specifically, the Eco-Schools program incorporates seven elements for schools to adopt. Interestingly, the Eco-Schools program is based on the ISO 14001 process. Core themes are on energy, water, water minimization and climate change. Schools can also focus on other themes such as transport, healthy living, energy, water saving and school environment/biodiversity. FEE has an eco-certification scheme for good environmental practice called "green flag" (Pereira 2006). By 2006 there were over 14,000 registered schools and more than 5,000 with green flag certification (ibid).

Eco-Schools Web site: http://www.eco-schools.org/

2.2.2 Europe — SEED: School Development through Environmental Education

The SEED program takes a network building approach to policy development and programming in European schools. The facilitation of communications among schools is, for SEED, central to creating the enabling environment for schools to adopt Education for Sustainable Development policies and practices. SEED is proposing a new recognition program (the "ESD School") for schools that have chosen ESD as a central part of their mission and their educational path (Breitling *et al.*, 2005).

SEED is supported by ENSI (Environment and School Initiatives), a decentralized international network set up in 1986 under the umbrella of OECD's Centre for Educational Research & Innovation (CERI).

ENSI Web site: http://www.ensi.org

2.2.3 Belgium – COREN: Ecoles Pour Demain

The objective of COREN (Coordination Environnement) is to promote the engagement of schools in Belgium in a process of integration of the environment in school long term planning. Schools that complete the process receive the label "Ecole pour Demain."

The principles of the program are:

- The introduction of a flexible approach tailored to the priorities and resources of each school
- The establishment of a structured approach over time
- A search for consistency between educational discourse and practice on the ground

There are six phases in the labelling process:

Phase 1: The application form: the school signals its voluntary participation in the program.

Phase 2: The state of play: the school conducts an environmental audit.

Phase 3: The development of a charter for eco-management: this establishes the environmental and educational program that the school is committed to implement.

Phase 4: The implementation of actions: teachers and students implement their projects. The school is supported by COREN in implementation.

Phase 5:Assessment: it recognizes the efforts made by the school and identifies possible improvements for the next school year.

Phase 6: Awarding the label: if the school follows the process of assessment and achieves at least one goal of its charter, it will receive the label "Ecole pour Demain."

COREN Web site: http://www.coren.be/ecoledequalite)

2.2.4 Canada – Établissement Vert Brundtland

The Quebec-based "Établissements Verts Brundtland" or "Brundtland Green Schools" is a movement that was launched in Quebec in the early 1990s by the Centrale des syndicates du Québec (CSQ) and its partners. They provide a forum to discuss ideas, projects, successes and concerns related to education for a sustainable future (ESF).

They offer regional and national educational campaigns; provide pedagogical support for member schools; teacher release time for professional development and planning, meaningful projects for youths and adults, leadership and teaching material that fits into the school curriculum, among other things. EVB is considered to be as much of a movement as a certification or award program, with a current membership of over 800 schools. Nevertheless, schools must apply or renew their participation annually. In order to be considered an EVB, schools must organize a relevant ESF activity in their first year, no matter how small, and then continue to do so at a minimum once every three years after they first join. The school must commit to pursue actions that follow the "6Rs":

Reducing consumption of resources (e.g.,: using both sides of a sheet of paper)
Reusing things (e.g.,: creating toys and art from recycled material)
Recycling products (e.g.,: composting)
Rethinking our value systems (e.g.,: peaceful conflict resolution)
Restructuring our economic systems (e.g.,: fair trade)

Redistributing resources (e.g.,: organizing a flea market in order to help the needy)

EVB Web site: http://www.evb.csq.qc.net

2.2.5 New Zealand Enviroschools

The Enviroschools Foundation is a charitable trust that provides support and strategic direction for a New Zealand-wide environmental education program. The program has two major components:

- The Facilitated Enviroschools Programme where schools sign-up for a three-year process of environmental learning and action; as an enviroschool they gain access to an extensive resource kit and a trained facilitator.
- The Enviroschools Awards Scheme an incentive scheme for schools to become
 actively involved in environmental education through achieving bronze, silver and
 green/gold levels.

Enviroschools Web site: http://www.enviroschools.org.nz/aboutus.php

2.2.6 USA - Go Green Schools

In the United States, the Go Green Initiative was started by parents and according to the Go Green Web site, has become the nation's fastest growing fully comprehensive environmental action plan for schools. Since its inception in 2002, the Go Green Initiative has been endorsed by the National School Boards Association, National Recycling Coalition, adopted by numerous State PTA Boards, implemented in 37 states, along with schools in Europe and Africa. There are currently over one million students and teachers in registered Go Green Schools. While most participating schools are U.S.-based, there are four Canadian cities and towns listed with schools participating, namely in Harrison Hot Springs, B.C.; Spruce Grove and Strathmore in Alberta; and Toronto, Ontario. There are five principles, of which schools should implement three, to be labelled as a "Go Green School." These are:

- generate compost;
- recycle;
- educate;
- evaluate environmental impact; and
- nationalize principles of responsible paper consumption.

They are explained more fully in the *Go Green Planning Guide*: Go Green Web site: http://gogreeninitiative.org/PDF/PlanningGuide.pdf

2.2.7 USA – Healthy Schools awards and ENERGY STAR certifications

The U.S. EPA has several programs to promote healthy schools covering such topics as chemical use and management; design and construction; energy efficiency; indoor air quality; integrated pest management and waste and water management (U.S. EPA). See, for example,

the Children's Environmental Health Excellence Award (http://yosemite.epa.gov/ochp/ochpweb.nsf/content/CEH_Award.htm).

In addition there is an "ENERGY STAR" program for K–12 schools (http://www.energystar.gov/index.cfm?c=k12 schools.bus schoolsk12), which includes a suite of tools for auditing and managing energy. Earning the ENERGY STAR is evidence of an organization's commitment to reducing its impact on the environment. The ENERGY STAR indicates that the school building meets strict energy efficiency guidelines and is low in carbon emissions. http://www.energystar.gov/index.cfm?c=business.bus_bldgs. According to the ENERGY STAR Web site there are 857 ENERGY STAR labelled K–12 schools in the U.S.

U.S. Environmental Protection Agency Healthy School Environments Web site: http://www.epa.gov/schools/

2.3 Individual school district/school policy development

Finally, there is the home grown approach to policy development, in which individual districts choose to develop a policy that suits their immediate circumstances. Very little has been written about the drivers for school-district-level policy development on sustainability—whether districts are primarily reactive to specific issues (such as the need to deal with asbestos in school buildings) or whether champions of environment and sustainable development have taken a proactive approach with their school board, leading to the incorporation of sustainability into the mission, values, programming and management of the school district.

2.3.1 USA school district policies

A 2006 study on the physical school environment, school health policies and programs in the U.S. found that 35.4 per cent of districts had an indoor air quality management program; 35.3 per cent had school engine-idling reduction programs; most districts and schools had a policy or plan for managing hazardous wastes; 24.5 per cent of states required districts or schools to follow an integrated pest management program; and 13.4 per cent of districts had a policy to include green design when building new school buildings or renovating existing buildings (Everett Jones, Axelrad & Wattigney, 2007, 544).

2.3.2 Canadian school district policies

There has not been a study in Canada comparable to the U.S. study noted above. On initial exploration, school policies vary widely across Canada. A few school districts/boards in larger centres such as Calgary and Toronto have more comprehensive policies that cover the full spectrum of ESD: Curriculum; using the school itself as an ESD laboratory; facilities management; and promoting leadership on SD within the broader community. Others do not mention environmental values or management in their policy manuals at all.

Operational policies are made by school divisions/districts and organized in a policy manual. Most are similar following a standard template. For example, the Vancouver School Board uses the National School Boards Association template (http://www.nsba.org/). Relevant environment and sustainable development policies are found in these policy manuals, usually

in the "facilities development" section. Occasionally school boards address environmental/sustainable development principles and direction in their "vision, mission, guiding principles" section. Regardless, a majority of the policies sourced were general; it is assumed that more detailed instructions may be located in their procedures and operations manuals that are not readily accessible online.

As previously noted, we were able to find through an online search 93 policies across Canada that addressed environmental management and/or sustainable development to some extent. Out of these 93 policies, 37 per cent address both curriculum and facilities management and make efforts to have a more holistic approach to sustainable development issues.

In our search, we have found these policies tend to fall under eight main categories: curriculum; energy management; environmental management of facilities and grounds; chemicals and hazardous waste management; procurement and purchasing; waste management and recycling; transportation; and education for environment and sustainable development. We established the category "Education for Environment and Sustainable Development" for those policies that were more holistic in nature, considering mission, values, curriculum and facilities management within the single policy.

| Type of Policy | Number of Policies |
|---|--------------------|
| Curriculum | 3 |
| Energy Management | 12 |
| Environmental Management of Faculties and | 14 |
| Grounds | |
| Hazardous Waste Management | 12 |
| Procurement and Purchasing | 3 |
| Waste Management and Recycling | 9 |
| Transportation | 6 |
| Education for Environment and Sustainable | 34 |
| Development | |

Of those institutions that have put policies in place, few indicate that they have a regular monitoring and reporting process (see Appendix), so it is difficult to determine whether and how districts assess compliance and performance by individual schools.

A sample policy: Medicine Hat Alberta School District

STEWARDSHIP

Background

It is our responsibility as a district to demonstrate care and concern for our environment and the resources that are available to us.

Policy

All schools and departments will implement practices and programs that are consistent with a healthy and safe environment and with principles of sustainable and careful use of our resources.

Guidelines

- 1. Cooperation with public and private organizations and agencies that promote sustainability and practice the three "R's" (Reduce, Reuse, Recycle) and encourage Responsibility.
- 2. All departments and sites will endeavour to: conserve resources; reduce the use of consumable materials and resources; conserve energy; recycle; use recycled materials as a preferred option.

2.3.3 School district policies in Manitoba

Out of the 39 school divisions in Manitoba, less than a third have published online those policies that deal with environmental issues—and only four have a more holistic policy that encompasses long-term environmental goals through both curriculum and facilities management. The following table outlines the type of policies found online which are currently in place in K–12 schools in Manitoba:

| Curriculum | 1 |
|--|---|
| Energy Management | 3 |
| Environmental Management of Facilities and | 1 |
| Grounds | |
| Chemical and Hazardous Waste | 1 |
| Management | |
| Procurement and Purchasing | 2 |
| Waste Management and Recycling | 2 |
| Transportation | 3 |
| Education for Environment and Sustainable | 4 |
| Development | |

Although there is a noticeable lack of policies implemented at the school division-level, there does seem to be a real movement within many individual schools to promote strategies and

processes for creating more sustainable schools. For example, in Winnipeg, Manitoba *École* secondaire Sisler High School has started "Environmental Science and Sustainable Development," a project where grade 11 students will develop a unit designed to reduce the school's environmental footprint. Students will also investigate the potential reduction in electricity demand by the building by placing a wind turbine on the school. Many schoollevel environmental projects and initiatives have been supported by the Manitoba Department of Education, Citizenship and Youth (MECY); through the Manitoba Sustainable Development Innovation Fund; and through individual school fundraising and local community support. Access to information on school-level activities that have been funded by MECY and Manitoba Hydro can be found at the MECY Web site (http://www.edu.gov.mb.ca/k12/esd/grant/index.html); other activities have been supported by Manitoba Conservation's Sustainable Development Innovation Fund (http://www.gov.mb.ca/conservation/pollutionprevention/sdif/). A national survey of ESD activities at the school level is currently being conducted by Learning for a Sustainable Future; it is anticipated that a more comprehensive directory of school actions will be available in 2008.

Individual schools in Manitoba appear be taking their own initiative towards sustainable development and they do this in absence of a school district mandate or policy. These initiatives are either driven by the principal, teacher, students or a combination of the above and do not appear to require a district-level mandate to move forward.

This raises a number of interesting questions:

- First and foremost, is a district-level policy really necessary, if individual schools are empowered to undertake a range of sustainability initiatives? Are schools in Manitoba actually "leapfrogging" the policy-setting process and moving straight to action?
- In the absence of policy drivers, how are these actions being sustained over time? What happens if individual champions (principals, teachers, students) move elsewhere? If there are no operational policies in place that provide the commitment and guidelines for schools to act upon, what happens to the long-term sustainability of these initiatives?
- Without a district-level commitment, are some schools left behind if there are no internal champions (principals, teachers, students) to support sustainability initiatives?
- Where there are district-level commitments, have they translated into school actions? Or is there still a gap between policy and action?

Through our literature research we have found some of the barriers to implementing environmental policies at universities and colleges to be:

- non-acceptance of environmental sustainability as a guiding principle for operations;
- lack of designated staff, administrative mandate or process;
- time constraints on staff;
- financial cost; and

• high level of technical competencies needed for school operations (Strauss, 1996).

We believe some or all of these issues listed above would be the same for K-12 institutions. However, we need to further explore how school policy is developed in Manitoba and what barriers may exist to the development of environmental and sustainable development policies, if any. A survey and interview process should be conducted with relevant individuals, school board administrators, principals and teachers to assess their views of the relevance of district policy to the ability to act within their individual schools; what level of effort needs to be invested in creating the enabling policy environment, and whether there are other mechanisms such as certification and award programs that will serve a similar purpose to the district policy-setting process.

3.0 Checklist for Policy Development

As part of this initial exploration of school policy development, it was hoped that templates or models for policies would be located that schools in Manitoba and Canada might use to guide their own policy development process. However, we were unable to locate examples beyond the planning resources provided by the programs noted above. Only the California Integrated Waste Management Board has prepared a "Model Board of Education Waste Reduction Resolution and Environmental Purchasing Policy" (http://www.ciwmb.ca.gov/Schools/WasteReduce/Report2000/Appendices/ModelPolicy.htm). While interesting in the level of detail provided, even this model may be too cumbersome for the small- to medium-sized school districts to negotiate and implement.

A more thorough analysis of existing Canadian school policies will need to be carried out in order to determine whether a basic template for a school sustainable development policy might be possible. But, as discovered in Manitoba, an exploration of the role of policy in helping schools to plan for sustainable development will need to be considered first.

We anticipate that school districts will benefit from some guidance on the following:

- 1. Where no policies exist, should the school district:
 - a. Choose a full school planning approach comparable to New South Wales or the U.K.; or
 - b. Simply encourage individual schools to participate in a certification, recognition and award program, such as Éstablissements Vertes Brundtland or Eco-Schools; or
 - c. Develop a district-wide policy in-house, beginning with a general statement of principles; and, if they establish a general policy, do they also need to then insert more specific policies throughout existing management policy manuals?
- 2. Where some policies already exist, should the school district:

- a. Simply encourage individual schools to participate in a certification, recognition and award program, such as Establissements Vertes Brundtland or Eco-Schools; or
- b. Develop a general framework or statement of principles to put individual policies (on recycling, or anti-idling for example) into context; or
- c. Review gaps in their current policies, and add individual provisions for environment and sustainable development to existing policies on curriculum, facilities management, and so forth?

For school districts seeking to start from scratch or strengthen the existing policy framework, based on the literature and existing policies screened so far, administrators should consider the following as important steps in the policy development process:

- clear rationale for developing the policy;
- initial audits of school facilities (energy, waste, water, transportation, etc);
- identification and engagement of stakeholders in the policy;
- plan for implementation;
- commitment to involvement of students in implementation, through auditing processes, for example;
- communications about the policy with school and surrounding community (parents, suppliers, education tax payers, other stakeholders); and
- plan for monitoring and reporting on performance.

4.0 Questions Arising and Recommendations for Further Research

As noted at the beginning of this report, the academic and professional education literature yielded very little in the way of independent description, verification and analysis of school environment and sustainability policies and related programs. Apart from those state- and national-level programs that have been driven by government directives and policies, very little has been published that can help schools determine how to proceed with policy development. Whole school programs such as those developed in Australia show initial promise in leading to desirable outcomes in terms of student and community behaviours, values and attitudes; however, the transaction costs in terms of time and effort invested appear to be extremely high. In Canada, there is limited use of the certification, recognition and awards programs like Go Green Schools; perhaps because these types of certification schemes can be onerous and costly. Finally, the development of policies by individual school districts appears sporadic.

For school administrations to add to their existing (and complex) policy manuals a suite of policies focused on sustainability, a number of questions will need to be answered:

1. What is the relationship between school district policy and individual school actions?

- 2. What is the relationship between certification and award programs for individual schools and school district policy? Can these programs serve in place of district-wide policy development? Are they more effective if they supplement existing policy?
- 3. What are the key drivers for sustainability policy development at the district level: Government encouragement? International programs like the UN Decade? Community demand? Or simply a personal commitment on the part of the district superintendent and board that this should be done?
- 4. What are the most effective and efficient processes to develop the policy? Can a simple template be prepared that would serve to guide school districts in developing their own policies relevant to the particular characteristics and needs of their districts? Is a single umbrella policy sufficient, or do there need to be a number of adjustments to existing policies to incorporate sustainability considerations?
- 5. How are school district sustainability policies monitored? Are there measures for tracking outcomes of the policies, and what lessons can be learned for school boards in Manitoba and Canada?

Given Manitoba's position of leadership in Canada on the UN Decade for Education for Sustainable Development, and given the development of the Sustainable Education Academy (SedA) training program by Learning for a Sustainable Future and York University, we suggest that a more in-depth exploration of these questions be conducted in Manitoba, with a view to:

- providing guidance directly to Manitoba school districts;
- strengthening certification, recognition and award programs for schools that are currently under development by groups such as Resource Conservation Manitoba and Manitoba Hydro; and
- strengthening the SedA training on policy development for school district administrations.

References

Breiting, Søren; Mayer, Michela; Mogensen, Finn. (2005) Quality Criteria for ESD Schools: Guidelines to enhance the quality of Education for Sustainable Development (Austrian Federal Ministry of Education, Science and Culture). http://seed.schule.at/uploads/QC_eng_2web.pdf

Council of Ministries of Education Canada. Report to UNECE and UNESCO on Indicators of Education for Sustainable Development. (2006).

Enviroschools Foundation. Enviroschools [Web site] http://www.enviroschools.org.nz/

Foundation for Environmental Education. *Eco-Schools* [Web site] http://www.eco-schools.org/partners/partners.htm

Henderson, K. and Tilbury, D. (2004) "Whole-School Approaches to Sustainability: An international review of whole-school sustainability programs." Report Prepared by the Australian Research Institute in Education for Sustainability (ARIES) for the Australian Government Department of the Environment, Water, Heritage and the Arts. http://www.aries.mq.edu.au/pdf/international_review.pdf

Jones, Sherry Everett; Axelrad, Robert; Wattigney, Wendy A. "Healthy and Safe School Environment, Part II, Physical School Environment: Results from the School Health Policies and Programs Study 2006." *The Journal of School Health* 77 (October 8, 2007): 544–556(13).

Larri, Larraine. (2006) Comparative Assessment: Australian Sustainable Schools Initiative Pilot Programme in NSW and Victoria. Report prepared for the Department of the Environment and Heritage. (Commonwealth of Australia) http://www.environment.gov.au/education/publications/pubs/comparative.pdf

Mayer, Michela and Mogenson, Finn. Working with quality criteria at ESD schools [ppt]. Paper presented at CVU- VEST SEED [Environment and School Initiative] Conference (Esberg 2005). http://www.cvu-vest.dk/ cvuvest/documents/Forskning/SEED/EsbjergMayerPresentation.ppt

Pereira, Estela Goncalves. A future with zero CO₂ emissions: international Eco-Schools programme [ppt]. http://www.iclei-europe.org/fileadmin/user upload/Target Zero/Presentations/B4 PEREIRA pres.pdf

Preece, Christine. "Developing a school environmental policy." Physical & Health Education Journal. Gloucester: Summer 2004. Vol. 70, Iss. 2; pg. 13

Scott, William; Gough, Stephen; Reid, Alan. Researching Schools' Contributions to Sustainable Development: Perspectives on Environmental Education and Environmental Management. Paper

presented at the Annual Meeting of the American Educational Research Association (New Orleans, LA, April 24–28, 2000).

Scott, William. "Sustainable Schools: an initial appreciation and critique." Originally published in Head Teachers and Bursars Handbook for Sustainable Procurement (SCEMES Ltd. 2006). Reprinted at http://www.teachernet.gov.uk/ doc/11418/**Sustainable**%20**Schools**%20-%20appreciation%20and%20critique.pdf

Strauss, Benjamin H.. The Class of 2000 Report. Environmental Education, Practices and Activism on Campus. Nathan Cummings Foundation (1996).

U.K. Department of Education and Skills. "Sustainable Schools for Pupils, Communities and the Environment. Government Response to the Consultation on the Sustainable School Strategy." (2006) http://publications.teachernet.gov.uk/eOrderingDownload/Sustainable%20Schools%20Consultation%20Response.pdf

U.K. Department for Children, Schools and Families. Sustainable Schools National Framework.

http://www.teachernet.gov.uk/sustainableschools/upload/Sustainable Schools doorways.pdf

Appendix: Canadian school district sustainable development policies accessible online

| Province | School Division/District | Type(s) of environmental policy | Monitoring | Reporting |
|----------|--------------------------|---------------------------------|--|----------------|
| Alberta | Calgary | sustainable development | has ecoTeam to guide sustainable development activities | |
| Alberta | Ft. McMurray | procurement | | |
| Alberta | Ft. McMurray | waste management | | |
| Alberta | Ft. McMurray | energy | | |
| Alberta | Ft. McMurray | minimize environmental impact | environmental audits | annual reports |
| Alberta | Ft. McMurray | hazardous waste | | |
| Alberta | Grande Prairie | energy | monitoring system of energy utilization. | |
| Alberta | Medicine Hat | sustainable development | | |
| Alberta | Medicine Hat | waste management | | |
| Alberta | Medicine Hat | energy | | |
| Alberta | Medicine Hat | procurement | | |
| Alberta | Parkland | energy | regularly monitored and reported on to the Board and all participants note: Spruce Grove HS is listed as a Go | |
| | | | Green certified | |

| | | | school | |
|-----------|------------------------|---------------------------------|-----------------------------|--------------------|
| | | | | |
| | | | | |
| | | | | |
| Alls anta | Ohio ankin Edwa | and discussion and all | | |
| Alberta | Chinook's Edge | environmental protection policy | | |
| | | protection policy | | |
| | | | | |
| | | | | |
| Alberta | Fort McMurray Catholic | chemical management | | |
| | Schools | | | |
| | | | | |
| | | | | |
| Alberta | Fort McMurray Catholic | anaray managament | our orinton don't | annual |
| Alberta | Schools | energy management | superintendent business and | progress |
| | | | finance monitors | reports |
| | | | progress | |
| | | | | |
| B.C. | Abbotsford | toxic materials | | |
| | | | | |
| B.C. | Abbotsford | procurement | | |
| B.C. | Central Okanagan | integrated pest | monitoring of sites | annual |
| | | management | Siles | report to Board |
| B.C. | Comox Valley | minimize environmental | | 200.0 |
| | • | impact | | |
| B.C. | Cowichan Valley | integrated pest | | |
| B.C. | Fraser Cascade | management procurement | note: Harrison | |
| Б.С. | Fraser Cascade | procurement | Hot Springs | |
| | | | school listed as a | |
| | | | certified Go | |
| | | | Green school | |
| | | | | |

| B.C. | Fraser Cascade | waste management | |
|------|--------------------------|--------------------------------|-----------------------------------|
| B.C. | Fraser Cascade | energy | |
| B.C. | Greater Victoria | procurement | |
| B.C. | Greater Victoria | waste management | |
| B.C. | Greater Victoria | energy | |
| B.C. | Greater Victoria | minimize environmental impact | |
| B.C. | Greater Victoria | integrated pest management | regular monitoring of sites |
| B.C. | Gulf Islands | procurement | |
| B.C. | Gulf Islands | waste management | |
| B.C. | Gulf Islands | energy | |
| B.C. | Gulf Islands | integrated pest management | |
| B.C. | Kamloops/Thompson | waste management | |
| B.C. | Langley | toxic materials | |
| B.C. | Langley | waste management | |
| B.C. | Maple Ridge-Pitt Meadows | energy | periodic energy audits |
| B.C. | Nanaimo-Ladysmith | waste management | |
| B.C. | Okanagan Skaha | waste management | |
| B.C. | Peace River North | waste management | |
| B.C. | Peace River South | procurement | |
| B.C. | Qualicum | waste management and recycling | |
| B.C. | Quesnel | energy | |
| B.C. | Quesnel | idle-free zones | |
| B.C. | Richmond | minimize environmental impact | |
| B.C. | Saanich | procurement | |

| B.C. | Surrey | waste management | | |
|----------|---------------------------------------|--|---|--|
| B.C. | Vancouver | pesticides | | |
| B.C. | Vancouver | waste management | | |
| B.C. | Vernon | integrated pest management | | |
| B.C. | Gulf Islands School District: 64 | pest management | | |
| B.C. | Abbotsford | waste management | | |
| B.C. | Nanaimo-Ladysmith | procurement | | |
| B.C. | Abbotsford | environmental conservation | | report the results of significant programs implemented under this policy to the Board of School Trustees |
| Manitoba | Beautiful Plains School Division | Idle-free zones | | |
| Manitoba | Kelsey School Division | purchasing procedures | | |
| Manitoba | Pembina Trails School Division | environmental and safety program; audits and educational philosophy/mission | | |
| Manitoba | Pine Creek School Division | educational goals | | |
| Manitoba | Portage la Prairie School Division | energy conservation and school bus idling procedures | employees share the responsibility for the implementation, monitoring and | |

| | | | evaluation of the energy conservation program | |
|-------------|--|---|---|-------------------------------------|
| Manitoba | Seine River | Instructional goals | | |
| Manitoba | Southwest Horizon School Division | the environment | | |
| Manitoba | St. James Assiniboine School Division | energy conservation policy | monitors energy savings from conservation initiatives | tracks and tables the results |
| Manitoba | Swan Valley School Division | the environment within division | | |
| Manitoba | Turtle Mountain | recycling | | |
| Manitoba | Winnipeg School Division | purchasing authority (DJA) and purchasing procedures (DJF) | | |
| Nova Scotia | Nova Scotia Halifax Regional School Board | safe, secure and healthy schools (general principles) | | |
| Nova Scotia | Nova Scotia South Shore Regional School Board | walking distance to schools policy #290 and waste management policy #895 | | |
| Nova Scotia | Nova Scotia Strait Regional School Board | waste management | green team established at each school to promote, oversee and monitor recycling programs and communicate with Board staff | |
| Nova Scotia | NS Annapolis Valley Regional School Board | vehicle idling | | |

| Nova Scotia | NS Chignecto – Central Regional School Board | environment: building maintenance and repair | | |
|-------------|---|--|--|------------------|
| Ontario | Ontario NE | procurement | | |
| Ontario | Ottawa Carleton | energy | updating and assessing the performance of the energy plan every three years | |
| Ontario | Ottawa Carleton | waste management | | |
| Ontario | Ottawa Carleton | hazardous waste | | |
| Ontario | Rainbow | sustainable development | | |
| Ontario | Rainbow | resource efficiency | | |
| Ontario | Toronto District SB | sustainable development | | |
| Ontario | Toronto District SB | waste management | | annual report |
| Ontario | Algonquin Lakeshore Catholic School District | environmental protection/earth stewardship | | |
| Ontario | Hamilton Wentworth Catholic Schools Board | environmental practices | Annual reviews on the progress of environmental practices shall be conducted by school environmental representatives and the Board's environmental committee | |
| Ontario | Dufferin Peel Catholic District School Board | environmental | | |
| Ontario | Greater Essex Country District School Board | environmental | | |
| Ontario | Hamilton Wentworth District School Board | environmental policy | monitored through a | |

| | | | System Environment Committee | |
|---------|--|--|--|---|
| Ontario | Huron Perth Ridge District School Board | environmental stewardship | | |
| Ontario | Kawartha Pine Ridge District School Board | environment and energy | | |
| Ontario | Durham Catholic District School Board | environmental protection and conservation | | |
| Ontario | Greater Essex Country District | environmental stewardship | | |
| Ontario | Hamilton Wentworth District School Board | school management, environment policy | | |
| Ontario | Keewatin-Patricia District School Board | facilities and equipment | site monitoring and evaluation | annual report |
| Ontario | Lakehead District School Board | energy management | evaluation of the efficiency of energy management | |
| Ontario | Lakehead District School Board | Environmental policy | | |
| Ontario | Ottawa Carlton District School Board | environment action, energy management and environmental education | volunteer staff representative from each school who will monitor the school's environmental action initiatives | provide all stakeholders with periodic reports on the successes of the school initiatives reviewing |
| Ontario | Peel District School Board | environmental health and safety | | |
| Ontario | Peterborough Catholic School Board | environmental initiatives | | |
| Ontario | Simcoe Country District School Board | environmental policy | | |
| Ontario | Toronto Catholic School | weed control and | | |

| | Board | environmental practice – waste management and purchasing | |
|----------------------|--|---|--|
| Ontario | Toronto District School Board | environment | monitoring, documenting, reporting and recognizing results |
| Ontario | Upper Canada District School Board | environment | appropriate superintendents to monitor |
| Ontario | Waterloo Region District School Board | environmental values | |
| Prince Edward Island | Eastern School District | poverty intervention | |
| Prince Edward Island | Western School District | healthy environment | |
| Prince Edward Island | Western School District | statement of beliefs | |
| Quebec | Commission Scolaire New Frontiers | board vision and mission | |
| Saskatchewan | Good Spirit School Division | environmental consideration | |
| Saskatchewan | Christ the Teacher Catholic Schools | environmental stewardship, chemical and hazardous management | |