

Esquimalt High School Sustainability Assessment (EHSSA)

2006-2007

The EHSSA was completed at Esquimalt High School by many of the 2006-2007 members of ESCAPE (Esquimalt Students Caring About Peace and the Environment). Thanks to Emily Menzies of the Sierra Youth Coalition for all her help and mentoring and to EHS Teacher-Librarian and ESCAPE teacher-sponsor Geoff Orme.

The HSSAF (High School Sustainability Assessment Framework) was written by Nicolas Parent with the help of Aqueela Nanji, Emma Banks, Dreamseed and Sierra Youth Coalition, 2006 edition. This document is the adapted version of the original ©*CSAF* document written by Lindsay Cole, which was conceived for College and University campuses. This document focuses on assisting high school campuses to move forward with their sustainability initiatives. The authors of these two documents encourage the broad use of this document for research, learning, teaching, and other non-profit uses, and hopes that users are respectful in recognizing and referencing the ideas herein. The authors retain the sole right to use this research product for consulting and other potentially for-profit uses.

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Chapter 1: Introduction

Welcome to the Esquimalt High School Sustainability Assessment of 2006-2007, the product of Sustainable Schools Project of the Sierra Youth Coalition and many hours of hard work on the part of ESCAPE members. This document is a compilation of parts of the HSSAF working document, the findings of ESCAPE members as they completed the assessment, and ESCAPE details and resources.

What is sustainability?

In 1987, the United Nations Brundtland Report, titled *Our Common Future*, defined sustainable development as meeting “the needs of the present without compromising the ability of future generations to meet their own needs”. Since then, the general understanding of sustainability has grown to emphasize three key components: 1) ecological integrity, 2) social equity, and 3) economic prosperity.

The Sierra Youth Coalition Sustainable Schools Project integrates the three spheres of sustainability in its work in Canadian educational institutions, emphasizing a triple bottom-line approach to the operation of educational institutions including the environment, social, and economic spheres.

Why does it matter if schools are sustainable?

1) Canadian schools are very important in communities. Parents, teachers, and the surrounding communities care deeply about their schools and are often involved in their events. Incorporating concepts of sustainability into the schools would allow entire communities to partake in positive action towards a more sustainable society.

2) Evidently, schools are the grounds for the leaders of tomorrow. Schools nurture, educate, and train the next generation of Canadian citizens. If we can begin teaching and empowering youth to make changes in their daily lives, exploring the complexities of environmental responsibility, social justice, and economic incentives, we can inspire them to make positive change in the future.

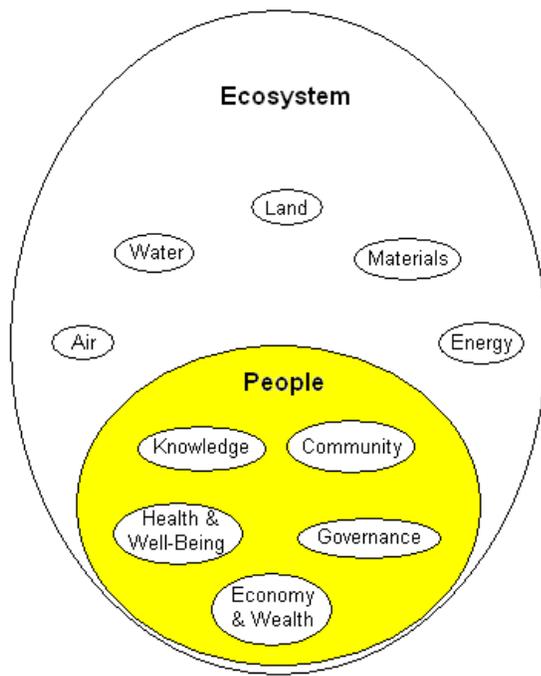
3) To varying extents across Canada, high schools, like households, make decisions concerning their consumption of resources, purchasing practices, and waste emissions. By changing the nature of their operations, Canadian high schools can effect real change on impacts such as their ecological footprint. We challenge young and old alike to make the link between daily operations and their socio-economic and environmental effects.

The High School Campus Sustainability Assessment Framework (HSSAF)

The High School Sustainability Assessment Framework is the working document of the Sustainable High Schools Pilot Project being implemented by the Sierra Youth Coalition. This innovative and dynamic initiative aims to transform Canadian high schools into models of sustainability, engaging students, teachers, and staff as leaders in the movement for environmental and social equity. The HSSAF document was written to help high schools achieve social/environmental

goals and to give schools a better look at the regions that they must put more effort in order that they become “sustainable”.

The original campus sustainability assessment framework (CSAF) was written by Lindsay Cole as a master’s thesis. It was created to further the university/college campus sustainability work being done by the Sierra Youth Coalition. The HSSAF, however, was conceived for high school sustainability assessment. The HSSAF employs a participatory action research (PAR) where many different levels of people – such as students, teachers, administration, etc. – can get involved. These frameworks use indicators which mathematically gauge school sustainability in ten major areas (these are described below). The original CSAF is composed of 169 indicators, but since high schools are less complex institutions, the HSSAF is comprised of fewer indicators. (This assessment includes 21 but more have subsequently been added.)



The HSSAF Sustainability Model

This figure represents the model employed by the HSSAF to assist in assessing schools and the space they occupy in the world. The people system lies within the ecosystem, representing its supporting function. Each of these systems must be healthy in order for the whole system to be healthy. Within each of these systems, there are five sub-systems, representing the main sustainability issues in high schools. Each sub-system has its own series of indicators which work toward school sustainability.

About the Sierra Youth Coalition

The Sierra Youth Coalition is Canada’s largest youth environmental organization. It is a national, diverse, non-profit organization, run by youth for youth, and it serves as the youth arm of the Sierra Club of Canada. The Sierra Youth Coalition was formed in 1996 with a vision of involving Canadian youth in pressing environmental issues. Since then, it has grown into a national youth environmental coalition with members and volunteers across all regions of Canada, and local groups operating out of schools, universities, and communities across the country*.

* Sierra Youth Coalition is the agent of the Sierra Club of Canada Foundation, a registered charitable organization with the Canada Revenue Agency (registered charitable number 11914 9789 RR0001). The mission of the Sierra Club of Canada Foundation is to advance the preservation and protection of the natural environment with charitable resources.

About ESCAPE

ESCAPE (Esquimalt Students Caring About Peace and the Environment) is Esquimalt High School's environmental and human rights activism club. Each year, ESCAPE takes on a variety of projects, including Buy Nothing Day food giveaways and clothing swaps, Remembrance Day peace presentations, Waste Weigh-Ins, International Women's Day musical marches, and various Earth Day endeavours. ESCAPE is a registered group member of international human rights group Amnesty International, and, since 2004, has hosted Write for Rights, an annual letter-writing extravaganza in honour of Human Rights Day (December 10th). ESCAPE grew to include more than twenty-five students in 2006-2007, and is always seeking new activism ideas and talent! ESCAPE traditionally meets one lunchtime a week in the Art Room. For more information, please contact Mr. Orme or esq.escape@gmail.com.

The EHSSA (Esquimalt High School Sustainability Assessment)



ESCAPE's involvement with the HSSAF began in Spring 2006, when four members and teacher-sponsor Geoff Orme and colleague Terry Loeppky attended the Dreamseed Action Gathering held March 30-April 2, 2006 at Victoria High School. Hosted by the Sierra Youth Coalition (SYC) and the Dreamseed Collective, which was formed following the August 2005 SYC Making Waves Youth Action Gathering, Dreamseed introduced these staff and students to the HSSAF process. After a weekend spent learning about the HSSAF and the accompanying Sustainable High Schools program, hearing what action other schools were taking on sustainability issues, and enjoying amazing food, the HSSAF was brought back to the larger ESCAPE group at Esquimalt High School. ESCAPE agreed to become one of the first schools in the country to implement the HSSAF and gained approval and support from staff and administration.

Over the summer, ESCAPE members Maggie Knight and Kira Page thoroughly read the HSSAF document and kept in touch with SYC Sustainable High Schools coordinator Emily Menzies, who was working to finalize the HSSAF.

In the 2006-2007 school year, ESCAPE undertook the evaluation of the various indicators (whose number during the course of the year swelled from 24 to 30) in addition to their normal tasks and events. Maggie Knight, Kira Page, and Emily Mumford took part in SYC Sustainable High Schools Steering Committee conference calls and Maggie kept in touch with Emily Menzies, who came to speak to ESCAPE on October 24th. On January 6th, Emily Menzies met with Maggie Knight and other ESCAPE members to discuss HSSAF progress and to help out with questions that had come up so far.

Challenges during the assessment process included dealing with different versions of the HSSAF document, working without the appendices for much of the year, and general overwork and overcommitment of many ESCAPE members. While the HSSAF was mentioned in nearly every set of weekly minutes, progress sometimes seemed slow and organization difficult as stressed-out ESCAPE members were forced to hand off their indicators to others. However, it should be noted that the evaluation of many indicators was easier than expected.

ESCAPE put on a big push to evaluate all indicators not requiring surveys of students by Earth Week 2007 and saw great progress. The initial draft of this EHSSA document was submitted to administration on May 24th, 2007.

EHSSA Contributors

Chapter 1: Introduction – Maggie Knight, Sierra Youth Coalition HSSAF Toolkit
Chapter 2: Health & Well-Being – Artour Sogomonian
Chapter 3: Community – Kira Page
Chapter 4: Knowledge – Monique Auger, Daniel Bild-Enkin, Maggie Knight, Amanda Slade
Chapter 5: Governance – Robyn Chatwin-Davies, Jesse Robertson
Chapter 6: Economy & Wealth – Daniel Bild-Enkin, Dayle Larson
Chapter 7: Water – Britney Allen, Daniel Bild-Enkin, Maggie Knight, Allison Weick
Chapter 8: Materials – Jesse Robertson
Chapter 9: Air – Robyn Chatwin-Davies
Chapter 10: Energy – Emily Mumford, Artour Sogomonian
Chapter 11: Land – Kira Page, Jesse Robertson

HSSAF Multistakeholder form – Allison Weick
HSSAF Log – Robyn Chatwin-Davies, Maggie Knight
Document formatting and compilation – Maggie Knight
Editors – Maggie Knight, Kira Page
Assistant Editors – Daniel Bild-Enkin, Julia Hostetler, Rose Jang
Survey Preparation – Rose Jang, Maggie Knight, Kira Page, Jesse Robertson

ESCAPE would like to thank the following people for their support and cooperation:

Mr. Geoff Orme (ESCAPE Teacher-Sponsor)
Ms. Emily Menzies (Sierra Youth Coalition Sustainable High Schools Coordinator)
Mr. Glenn Brenan (School District 61 Facilities Manager)
Mrs. Deborah Courville (Principal)
Mr. Boland (Vice-Principal)
Mr. Burden (Vice-Principal)
Ms. Laroche (Accounts Clerk)
Mr. Jensen (Head Custodian)
Mr. Fraser (Cafeteria Head)
Mrs. Brierley (Counsellor)
Ms. Bell (Educational Assistant)
Ms. Gail McGraw (Study Hall)

A Note on Definitions and Formatting

“SCM” stands for “school community member” – in this case, students and staff. The number of SCMs in 2005-2006 and the number used in this assessment is 875 (800 students and 75 staff).

Each section includes numerical evaluation of an indicator and the answers to some discussion questions concerning that indicator. When appropriate, notes and advice on the method of calculation and/or who should be contacted regarding the indicator are provided to make the process more transparent and to make reassessment in subsequent years easier for ESCAPE members. With the exception of each indicator’s *Notes & Advice* section, indicator information input by ESCAPE is in **bold** text, while the original framework is in plain text.

Some indicators have not been evaluated due to lack of data. ESCAPE hopes to evaluate these indicators during the 2007-2008 school year.

Chapter 2: Health & Well-Being

Issues: A healthy and happy school is a very important factor of sustainability, but can be quite hard to monitor and evaluate. These two indicators work towards protecting the school community and to ensure proper working conditions for students and faculty.

Indicators and Benchmarks:

No.	Indicator	Measurement Units	Short-Term Benchmarks	Long-Term Goal
HW-1	Incidents of Assault	Total annual number of reported incidents of rape, sexual assault, racism, physical assault, homophobia, and other similar events divided by the total number of SCM's; multiply by 1000 (2/875)(1000) = 2.29	Not yet set.	Zero per 1000 SCM's
HW-2	Sick days	Total annual number of sick days taken by SCM's, divided by the total FTE student members See below.	Not yet set.	Zero

HW-1

1. Where are physical and verbal incidents of assault reported at school?

Physical and verbal assaults can be reported to a teacher, counsellor, or administrator at our school. If reported to a teacher, he or she will inform a counsellor and direct the students there. Once the counsellor is informed of the assault, they will inform the administration team of the incident and appropriate action will be taken.

2. How many physical or verbal assaults were reported during the last fiscal or academic year you are considering?

During the period we are considering (September 15, 2006 to April 13, 2007), there were two reports of physical assault. Numbers of reported sexual assault and rape are not tallied and are not available to students, partially due to confidentiality.

3. Are the reported incidents a good indication of reality? If not, what is the estimate of assaults that go unreported each year?

For some categories of assault, the numbers obtained are a good indication of reality. Students of different races, backgrounds and nationalities were asked if they felt offended or discriminated at the school, and the great majority said that they were not offended or discriminated at the school. Through Friends of Dorothy, the school's gay-straight alliance club, we were informed that students of different sexualities and sexual preferences did not feel discriminated against at the school. This suggests that there are no incidents of homophobia at the school, and very few – if any – incidents of racism.

Notes & Advice:

The number of physical assaults is quite reasonable. The school was informed of two incidents of physical assault involving Esquimalt High School students. We believe that it is very probable that a few more incidents go unreported each year. Even though numbers for sexual assault and rape are kept confidential, we were told that the numbers would be very low, if there are any cases at all.

Who to talk to: Principals and Vice-Principals, Counsellors (including First Nations Counsellors), Study Hall staff, students

HW-2

1. Are there any physical health care services at your school?

There are two fully certified first aid attendants at the school. If at any point during the day a student does not feel well and feels s/he needs medical attention, a first aid attendant would be the first person the student sees in the medical room.

2. How many FTE certified health care professionals are available?

One certified health care professional is available at the school. This person is also a full-time teacher at the school. A school nurse is appointed to the school by the local health authority, but the nurse is usually at the school only to organize vaccination days and for giving sexual education lectures.

3. How many full sick days did campus faculty and staff take in the fiscal or academic year you are considering?

To the best of our examination, there was an average of 39 excused absences taken by students out of an average of 236 daily absences (this total number shows 236 students were absent for at least one out of four classes in a day). The reason for an unexcused absence could be a field trip, leaving early due to sickness, absence for a medical appointment, not attending class, etc. As for school staff, this number is unavailable as the school principal does not tally sick days. Teachers may be absent for various reasons, such as maternity leave, workshops, field trips, sickness, etc.

Notes & Advice:

Method of Calculation:

These numbers were taken from statistics provided by the school. Two days a month from September 15, 2006 to April 13, 2007 were selected and analyzed. The days were also different days of the week. The school system separates absences into classes missed, with 4 classes a day. An average of 236 students (not classes) missed at least one class in a day. Of these, an average of 39 students' absences were excused, meaning that the students were either away sick or away for an appointment.

An absence is classified as 'excused' once a parent or guardian calls the school or writes a note letting the school know that there is a legitimate excuse for the child's absence. The school records show an average of 7 students being absent from school all day (missing all of their classes), perhaps indicating that the student was sick but a parent or guardian did not, for whatever reason, call the school to inform it of the student's absence.

Therefore, accurate numbers are hard to access. The figures available provided an approximate, but close, assessment of sick days at Esquimalt High School.

Chapter 3: Community

Issues: Community is one of the most important aspects of sustainability. A healthy community is one where people are active, involved and help each other. Signs of a healthy community can be seen in behaviour and in the general feeling that people have towards the community (in this case, the school institution). Also, sustainability within school community involves having diversity in programs, courses and activities.

Indicators and Benchmarks:

No.	Indicator	Measurement Units	Short-Term Benchmarks	Long-Term Goal
C-1	Volunteerism	Total annual number of SCMs who volunteer at least 2 hours per week divided by the total number of SCMs, and multiplied by 100. Volunteering can be with one, or several different groups working on any issues but must be based on campus. Organizations actively working against the concepts of sustainability (i.e. racial discrimination, waste of resources, etc.) shall not be included, and double counting of people should be avoided. Cannot be determined until survey has been completed.	At least 30% Not yet set.	100% Not yet set.
C-2	Sense of Community	Total annual number of SCMs who feel a very strong sense of belonging, attachment to, confidence in, and engagement in your school community according to survey results, divided by the total number of survey respondents; multiply by 100. Cannot be determined until survey has been completed.	At least 75% Not yet set.	100% Not yet set.

C-1

Core Questions:

1. How many volunteer based groups are there in your school? Of these, how many actively work against the principles of sustainability?

Eighteen groups, one of which works actively against sustainability: Interact, ESCAPE, EYCI, Improvisation Club, Behind the Lens, Creative Writing Club, Political Club, Seaquarium, First Nations Council, Library

Pages, Internet-Radio Club, Extreme Art Club, Community Garden Club, Leaves of Light, Friends of Dorothy, Meditation Club, Chess Club, Automotive Club.

2. How many SCM's volunteer at least 2 hours per week with volunteer based school groups?

This question cannot be answered until a survey has been completed.

3. How much money was given to volunteer based groups this year?

\$3260 was given by the PAC (Parent Advisory Council) to volunteer based groups this year. An additional \$1800 was given to the Musical Theatre Program; however, the participants receive credits for participating in the school play. Leadership also received \$1048, though students in this program also receive school credit for their community service.

2006-2007 (Approved November 8, 2006)

Leaves of Light (literary publication)	\$500
Improv Team	\$350
Behind the Lens	\$360
Creative Writing Club	\$350
ESCAPE	\$350
Interact	\$250
Political Club	\$350
Sea Aquarium	\$400
First Nations Council	\$350
TOTAL: \$3260	

Leadership	\$1048
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Musical Theatre	\$1800
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TOTAL including Leadership and Musical Theatre: \$6108

Additionally, the Athletics department received \$5000 money from the PAC for uniforms, equipment, tournament registration, and travel.

Supplementary Questions:

1. Does your school promote volunteerism with groups inside your school?

Many of the volunteer based groups in the school have high profiles and are actively supported by administration and staff. Volunteer opportunities are recommended by the counsellors and promoted by the administration on a regular basis.

2. Are students, as well as teachers, encouraged to do volunteer work?

Though many opportunities could use some more promotion, both staff and students have ample opportunities to volunteer and are often encouraged to do so. Options range from computer science to biology to social justice & school dances. However, it is important to note that many of the volunteer based groups are dominated by the 4C students and it would be beneficial to achieve a more diverse array of participants.

3. How are funds for volunteer based groups raised (grants, etc.)?

Funds are raised in a variety of manners, depending on the club or group. Many clubs apply to the PAC for funding at the beginning of each school year and receive some or all of their funding that way. Others do this in combination with bottle drives, bake sales, and other fundraisers. Often, for specific events, volunteer-based

groups will apply to businesses and individuals in the larger community for financial aid. Some EHS groups have obtained funding from various philanthropic organizations (for instance, Friends of Dorothy received a grant from Healthy Schools in 2003-04, ESCAPE is being mentored by the Sierra Youth Coalition Sustainable High Schools project team, which has gained financial support from the United Way, and Interact receives financial support from Rotary International).

C-2 – Not calculated since EHS does not have an elected student government.

Chapter 4: Knowledge

Issues: Knowledge greatly affects the receptiveness to and the ability to successfully take part in sustainability initiatives. This section aims at improving the school's knowledge flow on the topic of sustainability in order to improve environmental and social consciousness. It is important to acknowledge how much people know about sustainability before taking action, since this will help avoid confusion or alienation.

Indicators and Benchmarks:

No.	Indicator	Measurement Units	Short-Term Benchmarks	Long-Term Goal
K-1	Sustainability Literacy Survey	Average percent improvement on a sustainability literacy survey between first semester and last semester of attending that high school. *Note: use calculator provided in Appendix Cannot be determined until survey has been completed.	40% - 49% improvement in scores Not yet set.	50% or greater improvement in scores Not yet set.
K-2	Courses with Sustainability Content	Total number of courses that have "substantial sustainability content," divided by total number of courses; multiply by 100. (42)/(167) = 25.1% (tentative number)	At least 25% Not yet set.	75% Not yet set.

K-1

Supplementary Questions:

1. Are any other surveys conducted in your school regarding understanding of/or habits toward sustainability? Are the results publicly available?

A satisfaction survey is conducted annually by the Ministry of Education. The results of this survey can be obtained. Every year (usually in May or June) a student survey is conducted by administration. In 2006-2007, Mr. Burden (Vice Principal) was in charge of the survey's implementation and collation.

Notes and Advice:

It should be possible to have some (if not all) survey questions incorporated into the administration's annual survey. If this is not possible, other opportunities include talking to junior math classes (there is often a unit about sample populations and percentages). It is important to keep an exact record of what questions are asked so that the process can be repeatable. In order for the Sustainability Literacy Survey to be effective, it must be targeted at entering grade nines (in September) and departing grade twelves (in June).

K-2

Core Questions:

1. How many courses include substantial sustainability content?

3. How many students are enrolled in the sustainability content courses?

42 courses dedicate some time to human or ecosystem well-being. It has not yet been determined if this content is worth 20% or not.

First Nations Leadership 9, First Nations Leadership 11 – 0 students

First Nations Studies 12 – 12 students

First Nations Outdoor Education 11 – 31 students (15-20 of whom regularly attend)

Leadership 9 – 9 students

Leadership 10 – 23 students

Leadership 11 – 12 students

Leadership 12 – 12 students

Planning 10 – 177 students

Family Studies 11 – 3 students

Family Studies 12 – 19 students

Physical Education 9 – Boys: 73; Girls: 66; Total: 139 students

Physical Education 10 – Boys: 105; Girls: 80; Total: 185 students

Physical Education 11 – 38 students

Physical Education 12 – 51 students

Athletic Leadership 10 – 32 students

Athletic Leadership 11 – 35 students

Athletic Leadership 12 – 26 students

Strength and Conditioning 11 – 15 students

Science 9 – 88 students

Science 9C – 44 students

Science 10 – 144 students

Science 10C – 52 students

Biology 11 – 62 students

Biology 11C – 13 students

Biology 12 – 31 students

Biology 12C – 4 students

Earth Science 11 – 38 students

Social Studies 9 – 103 students

Social Studies 9C – 27 students

Sciences Humaines 9 – 12 students

Social Studies 9A – 16 students

Social Studies 10 – 126 students

Social Studies 10C – 25 students

Sciences Humaines 10 – 15 students

Social Studies 11 – 161 students

Women's Studies 11 – 30 students

Geography 12 – 26 students

Challenge – 120 students (approximate number)

PE Assistants – 5 students

Law 12 – 20 students

Psychology 11 – 51 students

TOTAL: 2038 (If divided by 4 classes per day, = 510 FT students. It should be noted

that this includes Challenge as a course, as well as courses outside the timetable.) It should also be noted that First Nations Studies was not offered this year (instead, Mr. Conibear and Ms. Tomasino are running the “Stay Connected” program) and that there was some fluctuation in enrolment numbers for Leadership. “C” denotes the Challenge Program, while “A” denotes “adapted”.

2, What is the total number of courses offered in the academic year you are considering?
167 courses are being considered (this includes considering different grade levels of the same subject as different courses).

4. How many students graduated in the academic year you are considering?

171

Supplementary Questions:

1. How many courses include substantially unsustainable content?

Not yet assessed.

Notes & Advice:

Method of Calculation:

This indicator was determined by looking through the coursebook. In future, each teacher could be talked to about whether their courses contain sustainability content in order to gain more specific information. This can be difficult since there is often debate over what constitutes “sustainability content”.

Course enrollment numbers were time-consuming to obtain, as the computer system totals class numbers instead of course numbers and is not always cooperative.

Who to talk to: Counsellors (for course enrollment numbers), individual teachers.

Developing Recommendations:

The possibility of Esquimalt developing the province’s first Sustainability Academy is one which ESCAPE finds very exciting!

Chapter 5: Governance

Issues: Proper governance of group initiatives and group projects is a key element in sustainability. With help, support and consent from staff, it is much easier to achieve a sustainable school way of life. Communication between student groups is also very important for effective sustainability initiatives.

Indicators and Benchmarks:

No.	Indicator	Measurement Units	Short-Term Benchmarks	Long-Term Goal
G-1	School Staffing for Sustainability	Total number of FTE staff responsible for the management of sustainability issues, divided by the total number of issues; multiply by 100. Note: if one staff person is responsible for more than one of these issues, they should only be counted once. 291%	Not yet set.	Not yet set.
G-2	Reporting of Student Government Working Groups	Total number of active working groups reporting directly to the student council president, a vice-president, or the board of directors divided by the total number of active working groups; multiply by 100 0% (N/A)	At least 50% Not yet set. (N/A)	100% Not yet set. (N/A)

G-1

Core Questions:

1. How many FTE managing positions are there for the list of issues?

31

Supplementary Questions:

1. What is the total number of staff working in the areas listed (both full- and part-time)?

33

Notes & Advice:

Method of Calculation:

This indicator requires you to find how many FTE staff members are responsible for 11 different sustainability issues. Upon consultation with Mrs. Courville (Principal), it was determined that the following people are responsible for these issues:

1. Resource Conservation/Efficiency – Administration, School Custodian, District

2. Sustainability in Facilities Management – Administration, School Custodian, District
3. Equity (*definition of which was unclear*) - Principal
4. Environmental Health and Safety - Vice Principal (Mr. Burden), District
5. Transportation Demand Management - Vice Principal (Mr. Boland), District
6. Wellness - Administration, Counsellors, Staff, Students
7. Community – Administration, Leadership, Staff
8. Ethical and Environmentally sound Purchasing - Principal, Department Head Committee
9. Ethical and Environmentally-Sound Investment - District
10. Sustainability in Teaching and Education - Administration, Department Head Committee
11. High Level Administrator for school-wide Sustainability Issues - Administration, Staff Committee, Leadership

So as to determine the amount of FTE staff that was, the following assumptions were made:

- Administration = 3 FTE
- Counsellors = 6 FTE (3 full-time school counsellors, 1 full-time Family and Youth counsellor, 2 part-time Family and Youth counsellors, 1 First Nations counsellor)
- Department head committee = 12 FTE
- Staff committee = 8 FTE
- Leadership = 2 FTE
- Custodial Head = 1 FTE
- We decided to ignore the “all staff”, since while they are involved in these issues, they are not involved in the management of these issues.

The total number of FTE staff involved is therefore 32. That number divided by 11 and multiplied by 100, gives 291%.

G-2

Core Questions:

1. What is the reporting process for the committee to the executive members of the student government, if any?

We have no Student Council, multi-stakeholder Planning Committees, or Board of Directors. Consequently, we have zero clubs that report to these nonexistent student bodies.

There is no student government. All clubs interact individually with school administration and staff. It should be noted that there is a large overlap between the membership of ESCAPE and Interact, but relatively little between the membership of these clubs and Leadership.

Notes & Advice:

Developing Recommendations:

Better communication between clubs and Leadership in order to avoid scheduling and fundraising conflicts (e.g. school dance and 30 Hour Fast, Stephen Lewis Foundation fundraisers) would be beneficial for all involved. The suggestion of a communal calendar was made but never implemented.

Chapter 6: Economy & Wealth

Issues: Teacher pension plans, which make up a big part of institutional investments, often invest in companies that impede global sustainability. Also, campuses are purchasing more and more from big corporate stores, which are again, not necessarily good for society or the environment. These indicators promote ethical and environmentally sound investments and purchases.

Indicators and Benchmarks:

No.	Indicator	Measurement Units	Short-Term Benchmarks	Long-Term Goal
EW-1	Ethically and Environmentally Sound Teacher Pension Plan Investments	Total annual dollars invested by teacher pension plans in ethical and environmentally responsible companies, divided by the total annual invested dollars. Investments held for less than one full year should be prorated according to length of investment (i.e. a \$100,000 investment made for only 3 months would be worth \$100,000 x 0.25 years = \$25,000.) Approximately 3%	At least 20% Not yet set.	100% Not yet set.
EW-2	Locally Purchased Goods and Services	Total annual dollars spent in locally provided, harvested, produced and/or manufacture goods and services divided by the total annual dollars spent on goods and services; multiply by 100. "Local" means within a 200 kilometre radius of your school. Approximately 5% (\$1000) of cafeteria purchases are local.	At least 75% Not yet set.	100% Not yet set.

EW-1

Core Questions:

1. What is the investment policy of the teacher pension plan? Does it include any socially responsible or local investing criteria?

The investment policy is "To fulfill the trust the Partners have placed on us by efficiently meeting or exceeding the pension promise made to plan members." It does not include any socially responsible or local investing material.

Supplementary Questions:

1. How are funds invested? Are investment firms hired to manage the funds? If so, what are the names of the firms?

As can be seen from the Teachers Pension Plan 2005 report very little (approximately 3%) of the investment portfolio is ethical. Of the top ten Canadian equities three are transport or energy related (Suncor Energy Inc, Petro-Canada, Canadian National railway). Petro-Canada however has been active in protecting Canadian Boreal Forests and thus is considered an ethical investment. The rest of the investments are banks or other financial organizations, who are themselves probably investing in energy companies (CIBC, Royal Bank, and Bank of Montreal are all considered ethical investments as they have implemented or are implementing climate risk assessments in lending processes). Investing in United States and International equities follow the same pattern. Investment is managed by the Foyston, Gordon & Payne Balance Fund, whose website (<http://www.foyston.com/aboutus/philosophy.aspx>) states, “We believe that excess investment returns are achieved by taking a long-term, value-oriented approach to investments based upon detailed, fundamental research. When considering investments, our primary concern is to select quality companies that are priced conservatively.”

2. Which companies are being invested in?

Of the top ten Canadian equities three are transport or energy related (Suncor Energy Inc, Petro-Canada, Canadian National Railway). Petro-Canada however has been active in protecting Canadian Boreal Forests and thus is considered an ethical investment. The rest of the investments are banks or other financial organizations, who are themselves probably investing in energy companies (CIBC, Royal Bank, and Bank of Montreal are all considered ethical investments as they have implemented or are implementing climate risk assessments in lending processes). Investing in United States and International equities follow the same pattern. The short term benchmark of at least 20 percent of the investment is thus very far away.

Notes & Advice:

It is possible to have an economically viable and ethical investment portfolio. It is not possible when the sole mission statement of the company investing is “To fulfill the trust the Partners have placed on us by efficiently meeting or exceeding the pension promise made to plan members.” This is a difficult matter to take action on, since it is dealt with at a much higher level than most students can influence. However, the Sierra Youth Coalition has been conducting a project in the last few years that aims to change pension plan investment policies. They have a toolkit (available on request) that could be very helpful in taking action on this issue.

Sources:

The Ethical Fund Company - <http://www.ethicalfunds.com/rrsp2007/>

Teachers Pension Plan Annual Report 2005 - http://www.pensionsbc.ca/pls/portal/docs/PAGE/PENCORPCONTENT/TPPPAGE/PUBLICATIONS/ANNUALREPORTS/TPP_AR_2005.PDF

EW-2

Core Questions

1. Are purchases centrally administered or decentralized?

ESQ BREW - Esq Brew is currently 90% decentralized.

CAFETERIA - The cafeteria at Esquimalt High school is decentralized in the purchases of food and other small products, but is centralized in the purchases of larger equipment.

SCHOOL - The school as a whole is 80% centralized, which is a recent change; the school use to be near 100% decentralized.

2. Is there a purchasing policy that places preference on local purchases?

ESQ BREW - There is currently no purchasing policy, but emphasis is put on purchasing environmentally friendly products.

CAFETERIA - There is a purchasing policy in the cafeteria that emphasizes local purchases and organics. However, Mr. Fraser is currently not happy with this policy and is improving it. Mr. Fraser currently estimates that 5% of purchases are local and he is currently working to improve that number. He hopes to get local and organic food soon.

SCHOOL – There is policy in place in the school, which puts the emphasis on purchasing from local suppliers as much as possible, for all goods and services.

3. How much does the institution spend on goods and services each year?

ESQ BREW – It has been estimated that Esq Brew will spend approximately \$2000 on goods this year. No services have been required.

CAFETERIA – It was estimated that the cafeteria spends approximately \$20,000 on goods and services per annum.

SCHOOL – It was estimated that the school spends approximately \$40,000 on goods and services per annum.

Supplementary Questions:

1. What criteria are used when making purchasing decisions?

ESQ BREW – The main factor in purchasing is cost; however, Esq Brew has ensured that all cups purchased are biodegradable paper, and no longer purchases Styrofoam or plastic cups. In addition, Esq Brew, as much as possible, tries to make environmental purchases (ex. Napkins made from recycled paper).

CAFETERIA - Several factors are taken into consideration when it comes to purchasing in the cafeteria. The biggest factor, however, is quantity since this reduces waste and cost. The secondary factor is ensuring that purchasing is local.

SCHOOL – In the school as a whole the main factor is not cost-based, but rather on the warranty of the product and the service provided by the company.

Chapter 7: Water

Issues: Water consumption is yet another big issue in sustainability. Even though water costs in Canada are relatively low, it is very important to keep in mind that this is not the case everywhere in the world. It is important to reduce water uses in order to help other communities to have access to potable water. There are many different systems that can help the school improve water use practices.

Indicators and Benchmarks:

No.	Indicator	Measurement Units	Short-Term Benchmarks	Long-Term Goal
W-1	Potable Water Consumed	Total annual volume of potable water consumed by your school for all uses (in litres), divided by the total number of SCM's. Outdoors: 5336L per SCM Indoors: 3685L per SCM <i>Note: This is equivalent to 46.5L per SCM per school day (27.5L outdoors, 19.0L indoors).</i>	Not yet set.	As little as possible Not yet set.
W-2	Efficiency of Fixtures	Total number of new water fixtures installed annually that are of highest possible water efficiency rating for that year, divided by the total number of new fixtures installed in that year, multiply by 100. N/A (see below)	At least 50% Not yet set.	100% Not yet set.

W-1

Core Questions:

1. Who maintains water consumption records for your school?

Water consumption records are managed by the school district.

2. At what spatial scale is water consumption recorded (eg. For the entire school, etc.)?

Water consumption is recorded in two sections: the main school meter (inside), and the irrigation system for the playing fields (outside).

3. At what temporal scale is water consumption recorded (e.g. monthly, annually, etc.)?

Bills are issued by the City of Victoria every four months, or three times annually.

4. How many years of information are available?

Seven years.

5. What figure will be used for the school's annual water consumption?

The figure used in this assessment comes from the 2005-2006 and 2006-2007 years. (see specific method of calculation below).

Supplementary Questions:

1. Does your school currently have a water management plan or strategy? Is water conservation recognized as a priority under such a plan? Why or why not?

The school does not currently have a water management plan or strategy.

2. Who supplies water to your school (e.g. municipality, region)?

Water is supplied by the City of Victoria.

3. How are the water supplies to be priced in your school (e.g. pay-per-use or at a flat rate)?

There is a service fee of \$80.35 (per billing period) for playing field irrigation and \$151.20 (per billing period) for the main water supply in addition to a unit cost per cubic foot. Over the period considered (February 16, 2005-October 15, 2006), the unit cost rose from \$1.47/CF to \$1.64/CF.

Notes & Advice:

Water consumption information can be obtained through School District 61 Facilities Manager Glenn Brenan. He noted that recent upgrades to the kitchen's water-cooled freezer systems may not be reflected in this data since the billing period is very wide. He also noted that, according to the CRD, Esquimalt High's water consumption per capita is significantly below the average as compared to similar use buildings.

Method of Calculation:

Billing data was obtained in four-month periods beginning February 16, 2006 and ending February 13, 2007. The total usage was divided by the number of SCMs and converted into litres.

Billing Date	Volume (m ³)		Total
	Indoors	Outdoors	
13-Feb-07	1025	0	
30-Oct-06	1124	4165	
01-Jun-06	1076	504	
	<hr/> 3225	<hr/> 4669	7895

Indoors: $(3225/875) \times 1000 = 3685.71L$ Outdoors: $(4669/875) \times 1000 = 5336.00L$

To calculate the daily usage, the above numbers were divided by 194, the number of school days in a school year.

W-2

Core Questions:

1. How many new water fixtures were installed during the previous year?

0

2. What proportion of new water fixtures installed during the previous year possessed the highest possible efficiency rating?

N/A

Supplementary Questions:

1. Is your school's water consumption metered?

Yes. Meter information can be obtained from the School District 61 Facilities Manager.

2. Is wastewater metered at your school?

No.

Chapter 8: Materials

Issues: Paper consumption in institutions has an immense impact on the environment. Schools also generate large amounts of solid waste.

Indicators and Benchmarks:

No.	Indicator	Measurement Units	Short-Term Benchmarks	Long-Term Goal
M-1	Paper Consumption	Total pieces of paper (of all types) purchased by the campus each year, divided by the total number of SCMs. 1834 sheets per SCM	Not yet set.	Approach Zero Not yet set.
M-2	Solid Waste Reduction	Percent of waste reduced par capita over previous years' waste production. Data not available. (see below)	0% to 5% change Not yet set.	Positive Percent Change Not yet set.

M-1

Core Questions

1. How is paper purchased in your school? Is it all done through one person, or do they have another purchasing system.

1. Ms. Larochelle (the accounts clerk) places orders through a school board program, which in turn places orders through Monk Office Supply Ltd.

2. How much paper did your school purchase in the previous school year?

1, 604,992 sheets (photo copy paper and art room paper combined).

Supplementary Question

1. What kinds of paper reduction methods are currently in use at your school? Is there encouragement of electronic communications, double-sided copying and printing, minimization of in-school mail outs, or others?

Staff members must report use of photocopier. Excessive paper consumption is watched for and the perpetrator(s) may be asked to change the practice. Teachers are encouraged to sign up for announcements via email. The new printer in the library prints double-sided.

Notes & Advice

Method of Calculation:

Standard Photo Copy Paper (2005/2006) Approx. 1,600,000 sheets; \$9000 spent, 8 orders

Standard Photo Copy Paper (2004/05) Approx. 1,800,000 sheets; \$9930 spent, 9 orders

Standard Photo Copy Paper (2003/2004) Approx. 1,600,000 sheets; \$8500 spent, 8 orders

Note: There are approximately 20 cases per order and 10,000 sheets per case.

Art Room Paper (2005/2006) 4992 sheets

9 x 12: 3456 sheets

12 x 18: 1152 sheets

18 x 24: 384 sheets

Total (Art and Photo Copy) for 2005-2006: 1,604,992 sheets

1,604,992 sheets divided by 875 SCMs = 1834 sheets

Note: This includes only paper purchased by the school and therefore does not take student-purchased paper into account.

Who to contact: Ms. Laroche, Ms. Reid.

M-2

Core Questions:

1. Has your school ever done a waste audit? (If so, get a copy of the results). **Yes, of a sort. In honour of Waste Reduction Week 2006 (October 16-22), ESCAPE worked with Mr. Fraser in the cafeteria and several classes to do a “Waste Weigh-In”. Students sorted 35kg of “garbage” into recyclables, compostables, and returnables (according to Mr. Fraser’s new waste management program). Please note that percentages are by weight.**

raw food	8425g	24.07%
cooked food and paper towel	7580g	21.66%
soft plastics	6940g	19.83%
hard plastics	3290g	9.40%
aluminum	650g	1.86%
Styrofoam	76g	0.22%
cardboard and paper	7035g	20.10%
returnables	735g	2.10%
landfill waste (actual garbage)	266g	0.76%

RESULT: 34.7kg, or over 99%, did not need to go to the landfill.

Students can recycle, return, or compost most of their waste in the eight special bins located in the cafeteria. There is some hope of expanding this program to other areas of the school. There is a bin in the library for batteries needing to be recycled.

2. How much solid waste (in kg) did your school produce in the last school year?

Cannot be calculated.

3. How is solid waste managed at your school? Who is responsible for collection, disposal, recycling, waste reduction, billing, and for contracting waste disposal/removal companies?

Waste Management is the company responsible for the collection, disposal, billing, etc. of solid waste. Mr. Jensen (head custodian) oversees waste management and collects the returnables, the money from which goes into a student activity fund.

4. How much money did your school spend on waste removal last year?

Waste removal is paid for at the district level.

Supplementary Questions:

1. Does your school have a waste management policy that encourages reduction?

Cameron Fraser (Cafeteria Head) is working to enhance the school’s waste management system. (see waste audit details above) Recently, ESCAPE has worked with administration and Mr. Jensen to educate students about what materials go in already existing waste containers (blue boxes, brown boxes, etc.).

Notes & Advice:

Mr. Jensen, the school’s waste removal service, and the Hartland dump were contacted but none were able to provide the necessary numbers since volume is not measured but rather a flat fee paid.

Chapter 9: Air

Issues: Indoor air quality has emerged in recent years as an issue of concern since poor air quality may result in respiratory illness. Older buildings tend to have poor ventilation, mould and certain pollutants.

Indicators and Benchmarks:

No.	Indicator	Measurement Units	Short-Term Benchmarks	Long-Term Goal
A-1	Asbestos and Mould	Total square meters of indoor spaces contaminated with asbestos and mould, divided by the total indoor square meters; multiply by 100. 0%	(20% or less) N/A	0%
A-2	Chemical Free Cleaning	Total square meters of indoor space always cleaned using a chemical free system, divided by the total interior square meters; multiply by 100 No noxious chemicals are used in cleaning.	(At least 50%) N/A	100%

Notes & Advice:

Mr. Jensen was consulted and provided the above information. Air ducts and vents are cleaned regularly and thoroughly.

Chapter 10: Energy

Issues: These indicators measure how efficient the school concerning energy. It measures energy consumed in buildings and its greenhouse gas emissions. They will also help measure the reduction rate of energy consumption at your school.

Indicators and Benchmarks:

No.	Indicator	Measurement Units	Short-Term Benchmarks	Long-Term Goal
E-1	Greenhouse Gas Emissions: Buildings	Total energy (of all types) consumed (in GJ) each year for heating, cooling, ventilation, and electrical systems, converted into GHG equivalent (tones), and divided by total square meters of interior built space. Note: energy used for outdoor uses (lighting, signage, etc.) should be included in the energy use calculation, but will still be assessed relative to square meters of interior space. **calculation pending square meters of interior space value, GHG conversion factor(s)**	Tones GHG/square meter Not yet set.	Tones GHG/square meter Not yet set.
E-2	Reduction in Energy Consumption	Total change in energy consumption in GJ for buildings in current year over previous year. *Note: use calculator provided in Appendix Not yet assessed.	0%-5% change. (i.e. no more than 5% increase) Not yet set.	Positive percent change (i.e. reduction made) Not yet set.

E-1

Core Questions:

1. How much energy (in GJ) did buildings, including HVAC&R and electrical systems consume?
 2. What fuel types, and in what volumes provided this energy?
- 3652 GJ of natural gas and 427889 Kwh of electricity were consumed by the school in 2006.**

Supplementary Questions:

1. Does your school have any building energy retrofit programs in place that are working towards greater energy efficiency?
- A lighting retrofit was performed in the school within the last two years.**

E-2 – This indicator has not yet been assessed.

Core Questions:

1. How many GJ of energy were consumed in the previous year?

Supplementary Questions:

1. Does your school run any greenhouse gas reduction campaigns urging your school community members to change their behaviours?
2. Does your school encourage tele- and video conferencing rather than air and vehicle travel to participate in meetings and conference?

Chapter 11: Land

Issues: Land is an important part of sustainability in terms of human and ecosystem well-being. Greenspace that is well managed creates healthy soils and natural systems. However, certain poisons (like pesticides) that are used to make our lawns, gardens and flower beds “look nice” can create negative effects to the ecosystems health, and therefore, affecting human health.

Indicators and Benchmarks:

No.	Indicator	Measurement Units	Short-Term Benchmarks	Long-Term Goal
L-1	Managed Greenspace	Total hectares of managed greenspace, divided by the total greenspace (both managed and natural, including everything that is not built or that is permeable) at your school; multiply by 100. Note: the percent of total greenspace that is “natural” can also be found here by subtracting the result of this indicator from 100. 100%	N/A	100% (Please note that this indicator is under review in the revised version of the HSSAF.)
L-2	Pesticides	Total volume of solid and liquid pesticides (including both plant and animal poisons of all types) used annually (in litres), divided by the total hectares of managed greenspace. Zero	N/A	Zero
L-3	Native Plants	Total number of native plants installed (number of individual plants) annually in managed greenspaces, divided by the total number of plants, installed in that year; multiply by 100. Cannot be assessed due to lack of data.	At least 50% Not yet set.	100% Not yet set.

Key Questions:

L-1

Core Questions:

1. How much of your schools land area consists of managed greenspace? How much consists of natural areas? What is the total area of managed greenspace and natural areas combined?

The total green space at our school is roughly 33,397 m². For the purposes at hand it is all we need. The entire school, with the exception of the inner courtyard is managed by a company called Grounds, which is hired by the school district. The courtyard is maintained by Margo Bell and Mr. Sprigg's students, except for the kitchen herb garden maintained by Mr. Fraser. This means that 100% of our total green space is managed.

Notes & Advice:

Method of Calculation:

This figure was found through a combination of Google Earth and rusty math, so it may need to be revisited.

L-2

Core Questions:

1. How much pesticide was used for exterior purposes in the year being considered?

None.

Supplementary Questions:

1. Does your school have a policy promoting alternatives to using chemical pesticides?

This indicator was easy to assess. Grounds already has a 'no-pesticide' policy in place in regards to our school management. As for the courtyard, neither Ms. Bell and Mr. Fraser use pesticides.

L-3

Core Questions:

1. How many plants were installed in the school year being considered? How many of these were native plants?

Supplementary Questions:

2. Does your school have a policy promoting the use of native plants on campus?

This indicator cannot be fully assessed as neither Grounds, nor Ms. Bell keep records of plants installed at our school. Grounds does not install plants often, unless they are replacing damaged ones. They do not have a policy leaning towards native plants but prefer plants which do not require much maintenance, and which need little, if any, watering. The inner courtyard does not lean particularly to native plants either. Here plants are planted mostly on the basis of what looks good aesthetically, with the exception of Mr. Fraser's herb garden.