

# The Sustainable High Schools Kit

A Guide to Improving the  
Social and Ecological Well-Being  
of Your School



From the Sierra Youth Coalition and  
The Sierra Club BC Education Program



### **About This Kit**

The 2007 edition of the original **High School Sustainability Assessment Framework** (HSSAF) was written by Nicolas Parent with input from Aqueela Nanji, Emma Banks, participants in the Sustainable High Schools Symposium, members of the Sustainable High Schools Steering Committee and Sustainable Campuses Project staff Kerri Klein, Shari Hayne and Anjali Helferty.

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**And the countless volunteers, students and teachers who have contributed to the development and success of the SHS project!**



# Introduction

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Welcome to the **Sustainable High Schools Kit**, a joint effort of the Sierra Youth Coalition and the Sierra Club of Canada, BC Chapter Education Program!

This Kit is designed to support high schools involved in the **Sustainable High Schools (SHS) Project**. This innovative and dynamic program was created to help members of high school communities work together to envision, assess and take action to improve their school's level of sustainability. It empowers students with the resources and skills to work with their school staff to LEAD successful classroom projects, policy creation, and infrastructure upgrades.



SHS aims to help youth generate greater social equity, ecological integrity and economic vitality in our communities by transforming Canadian high schools into models of sustainability.

## What Is In This Kit?

- 1 → The **Sustainable High Schools Story**: where it came from and what it's all about
  - 2 → How to get involved in the **SHS Project**
  - 3 → A guide to **Taking Action**
  - 4 → **Detailed Indicators and Calculators** to assess your school's sustainability
  - 5 → **Appendices** with further resources and tools to help you measure and improve your school's level of ecological and social well-being
-

## About the Sierra Youth Coalition



The **Sierra Youth Coalition** (SYC) is a national, diverse non-profit organization, run by youth for youth. We formed as the youth branch of the Sierra Club of Canada in 1996 with a vision of involving Canadian youth in pressing environmental issues. Since then, we have grown into a national youth environmental coalition with members, volunteers and local groups operating out of schools, universities, and communities across the country.

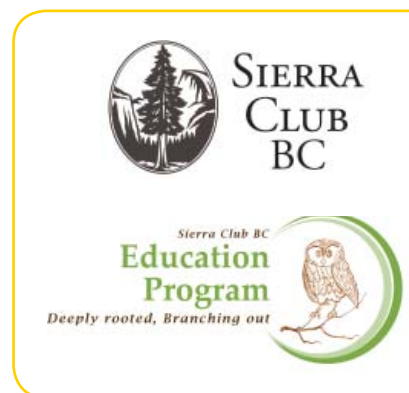
Through our successful national Sustainable Campuses Project, SYC has worked with over 45 post-secondary campuses, providing students with resources, research, networking and national coordination for campus sustainability across Canada. Our Community Youth Action Project has meanwhile enabled us to empower high school youth to build awareness, community and leadership skills for environmental and social justice through camps, events and skills-building workshops. We are delighted to bring the strengths of these two programs together in the Sustainable High Schools Project.

To join or learn more about SYC, please visit our website at [www.syc-cjs.org](http://www.syc-cjs.org).

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## About the Sierra Club BC Education Program

Created in 1998 in response to teacher requests for environmental education materials, our **Education Program** has grown into one of B.C.'s most effective Environmental Education providers. We know that a sustainable future relies on teaching today's youth about ecological processes and about our interactions with the environment. We want young people to take stewardship action towards environmental issues but we want such action to be grounded in sound knowledge.



Since our inception, over 65,000 students from Kindergarten to Grade 12 have participated in our interactive classroom programs. Today, we provide in-class programs to more than 10,000 students a year, investigating key ecological concepts, environmental issues, and stewardship solutions. We strive to connect B.C. teachers to learning resources such as curriculum guidebooks, Professional Development workshops, and monthly e-newsletters, setting a high standard for inspiring environmental action in our classrooms and communities.

For more information on our Education Program please visit [www.sierraclub.bc.ca/education](http://www.sierraclub.bc.ca/education).

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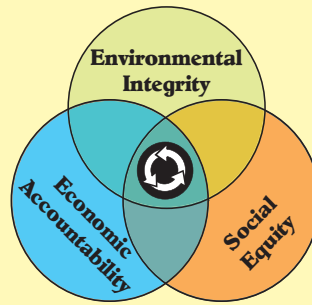


# What is Sustainability?

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 a balanced integration of three key components:

- 1 → Ecological integrity
- 2 → Social equity
- 3 → Economic prosperity

The Sustainable High Schools Project integrates the three spheres of sustainability by encouraging a triple bottom-line approach to the decision making and operation of educational institutions.



## A Sustainable High School...

Is a centre of education that inspires its members to consider the ecological and ethical implications of their daily routines. Sustainable schools are models of innovation – acting upon their local and global responsibilities to ensure the health and well-being of their communities.

## How Sustainable are Canadian Schools?

No one knows! We do not currently measure the state of sustainability in high schools. However, we can assume that most schools have to cope with bullying, send organic waste to the landfill, and could probably save money by using their heating more efficiently. When viewed through the SHS framework, most schools are already making some great progress – but are also capable of significant improvement.

## Why Does It Matter If Schools Are Sustainable?

Every high school is an economic unit which consumes resources, buys products, and emits waste. By challenging schools to make the links between daily choices and their effects, we can make real change on a large scale possible...

Many different people care deeply about the social conditions, environmental impact and/or economic viability of their schools and would like to see change, but feel limited in their capacity to act or make a difference.

Canadian schools are the foundations of our society. Schools nurture, educate, and train the next generation of Canadian citizens and leaders; behaviours learned there will be carried on into every home and workplace of the future.





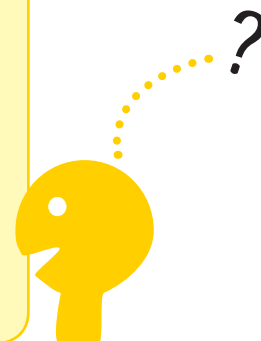
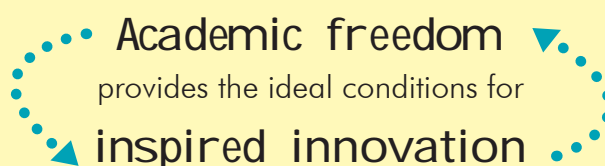
## What Makes High School (Un)Sustainable?

The Sierra Youth Coalition Sustainable Schools Symposium was held from April 1 to 2, 2006 in Victoria. It brought together a group of 25 student and teacher representatives from around Southern Vancouver Island and Vancouver, and they were asked to put together a list of the things that they loved about their schools as well as those that needed some work.

what i love	what i dislike
<ul style="list-style-type: none"> <li>• <b>learning!</b></li> <li>• great <b>energy</b> and <b>acceptance</b> between students, staff &amp; teachers</li> <li>• feeling of <b>equality</b></li> <li>• <b>recreational</b> opportunities</li> <li>• opportunity to have school, facilities, room to do stuff, <b>creativity</b> all in one place</li> <li>• <b>diversity!</b> Potential to interact with diverse groups, brings diverse people together</li> <li>• <b>interacting</b> with other people</li> <li>• lots of different groups/clubs interested in different issues</li> <li>• <b>cooperation</b> between school clubs</li> <li>• having <b>resources</b> and help to accomplish our goals</li> <li>• smaller schools more <b>connected</b></li> <li>• clubs in big schools have more <b>people to involve</b> in activities</li> <li>• having <b>connection</b> with other schools and students through programs like sports</li> <li>• welcoming, <b>supportive</b> community, parent involvement, participation in actual education</li> <li>• incorporating sense of community, educational tools, more people that can help, mentor and support</li> <li>• need more connection with like-minded students from other schools</li> </ul>	<ul style="list-style-type: none"> <li>• <b>not enough time</b>, want to be able to take more courses</li> <li>• <b>misplaced priorities</b> of people: not paying attention to relevant things like sustainability</li> <li>• <b>wasted energy</b> and time on administrative dogma, filling out forms... (planning 10), adults telling you to do things that seem meaningless</li> <li>• <b>people feel obliged</b> to volunteer instead of really wanting to</li> <li>• <b>need better communication</b> in a big school; things that student council advertises a lot are stupid, and cool things aren't advertised</li> <li>• <b>competition</b> between groups, stress between leadership class and clubs</li> <li>• <b>paper waste</b>: paper towel, no composting, not enough recycling, too much litter</li> <li>• <b>obsessed with cleanliness</b></li> <li>• the <b>physical environment</b>: bad air, central heating vs. individual rooms: too hot or too cold – can't control (therefore waste) the heat; needs plants, more water fountains; learning environment is flat and inhibiting</li> <li>• <b>food waste!!</b> no compost; need food growing programs, healthier food in vending machines and cafeteria</li> <li>• automatic flushing urinals – <b>water waste</b> – school knows there is a problem, but won't do anything if solution is not in their face</li> <li>• general <b>apathy</b>, people use stereotypes, mocking, bullying, labelling us as hippies/environmentalists</li> <li>• <b>advertising</b></li> <li>• <b>need more connection</b> between subjects, learn about hands-on practical issues, not just exams, lots of pressure by gov't. through standardized tests</li> <li>• (as alternative educator) <b>hard to connect</b> with schools, very challenging – if teachers are pushed to their limit just with curricular responsibilities it's hard to do more</li> </ul>

## School Sustainability

A **sustainable school community** acts upon its local and global responsibilities to protect and enhance the health and well-being of all humans and ecosystems. It actively engages the knowledge of the school community to address the ecological and social challenges faced both today and many years from now.



## Why Should I Get Involved?

Youth today are often portrayed as lazy, troublemakers, silly or apathetic. At best, we are seen to excel in sports, tests, and hold down a \$6 per hour job – at worst, to skip school, do drugs, and throw our future down the drain. Yet there must be something more than this picture of escapism, indulgence, emptiness. There is!

We don't always hear about it, but youth are constantly doing amazing things across Canada and around the world. WE are realizing our power, our choices, and our options – we are taking responsibility for the consequences of our own choices and actions, and are taking a leadership role in our communities. Each one of us is unique, with different experiences, passions, and concerns, but we don't have to accept the world as it is, whether it's given to us on a silver platter or seems to be closing in around us. By choosing to inform ourselves and to get involved, we are helping to evolve past the carbon age and create the kind of world we want to live in.

### Success Story: Pearson College's Passion for Food... and Food Security!

Students at Lester B. Pearson World College share a passion for food and food security! They created a social enterprise based on the common passion of their particular community - as a world college, they have students who are experts in cooking food from all over the world. They put together a recipe book that honours all of their cultures, and sell it to fundraise for student initiatives.



## Sustainability Is For YOUTh!

As youth, we have the most to gain and lose when it comes to working for a sustainable future. First among the many threats to the lifestyle we take for granted, the spectre of climate change demands we take action. Scientists believe that we have a twenty-year window to make the move to a sustainable lifestyle or we will be stuck with having to adapt to a climate that the Earth hasn't experienced in over 350,000 years.

It is our generation, the people in high school right now, who will have to deal with the realities and consequences of our current unsustainable practices. We face huge challenges, and we see many of them in our schools – waste, lack of connection, injustice, and short-sightedness. Yet we also have the greatest power to create change; we have the knowledge, the technology, the wealth and the conviction to make real change. We haven't yet committed ourselves to our path – most of us don't have mortgages, kids, or careers – we are not yet invested in an unsustainable lifestyle. As adolescents, we are figuring out what the world is about, who we are, and where we fit in.

We are perfectly placed to be the people who can see the challenges clearly, face them without fear, and learn to work together to solve them. It will be our decisions on what to study, where to live, who to work for, what to buy, and who to vote for – in short our choice of who we want to be and what we want to do with our lives – that will make all the difference.

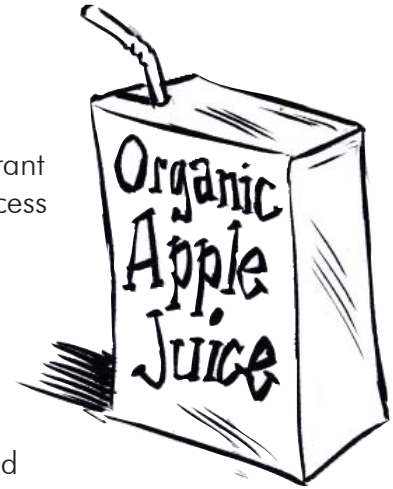


**The question is, what kind of a difference do you want to make?**

## What Can I Do?

By participating in the **SHS Project**, you can help create a vibrant national network of high schools that are sharing tips, success stories and lessons learned while pursuing sustainability!

One of our major lessons in the movement for sustainability is the critical importance of **taking action** in ways that combine what you really like to do with something you really want to change. We've included resources on how to foster sustainable behaviour change and how to plan and implement school-wide projects in this guide because:



- If you only do fun or easy things, you won't necessarily make the world a better place... you might even be making it more unsustainable without knowing it.
- If you only focus on trying to save the world, you might burn yourself out or get discouraged. In the long run you'll create less change than if you did something that was personally gratifying, and therefore more personally sustainable.
- If you do things that you like in order to make the world a better place, you'll make a positive difference while making friends, building skills, and gaining experience that will help you earn a sustainable livelihood and create a resilient community in which to live. Others who enjoy or care about the same things will want to help you, making it easier to accomplish your goals (and more fun and rewarding).



### Success Story: Adam's Bio-Diesel-Fueled Band Tour

Adam Iredale, Grey and Ryan Boeur created a plan at the Youth Action Gathering in 2005 to bring people together through their passion for music and concern about climate change. Their idea became Dreamseed, a 3 day event with diversity of youth and featured tons of local bands, open mic, and an info fair that included fun, interactive workshops on how to reduce GHGs. Adam was then able to convince his band, The Gruff, to tour Canada in a van converted to biodiesel. Using recycled vegetable oil from restaurants along the way, they saved over \$3,000 in gas and hugely reduced their CO<sub>2</sub> emissions.



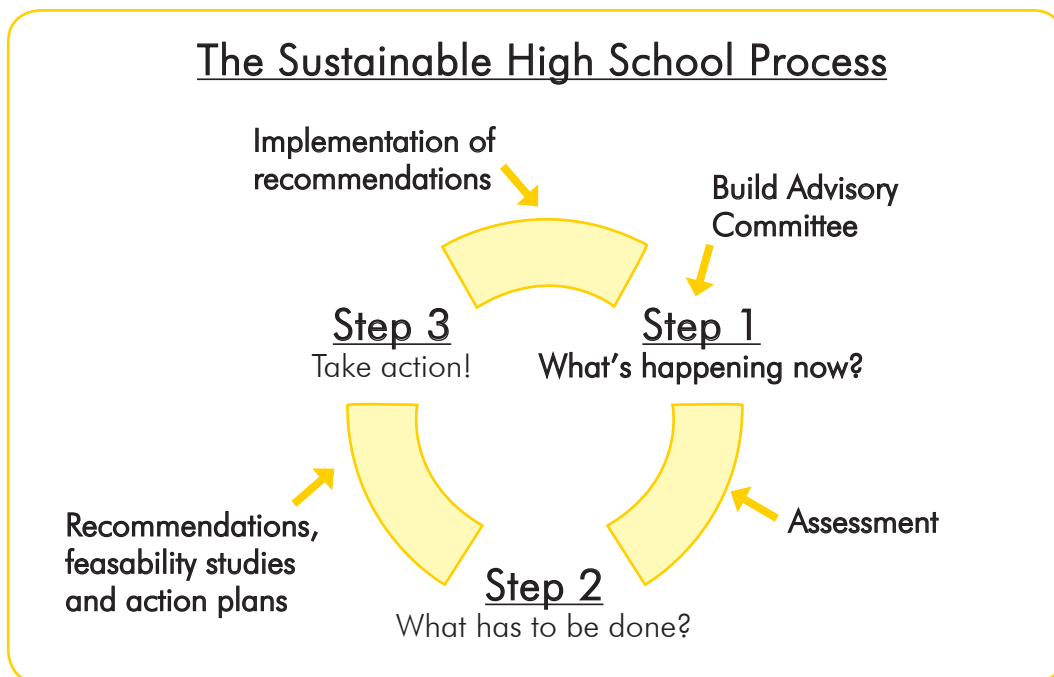
# Section 1

## The Sustainable High Schools Project

### What is it?

The SHS Project is based around something called the **High School Sustainability Assessment Framework** (HSSAF). This framework provides a balanced approach to measure indicators of progress in high school sustainability, involving your high school in three important steps during your sustainability assessment.

- Step ① Establish a **Sustainability Advisory Committee**. Work with other student leaders, teachers & administrators to envision and create the kind of school you'd all like to be a part of.
- Step ② Complete the **Sustainability Assessment**. Use 30 "Sustainability Indicators" (measuring everything from bullying to water use) to calculate the sustainability of your school.
- Step ③ Start **Action Planning**. Create fun and meaningful projects and policies to improve your school's sustainability!



**We provide schools with:**

- High School Sustainability Assessment Framework and the SHS Kit
- Interactive, curriculum-linked presentations for classes and clubs
- Online resources, mentorship and peer support with a national network of like-minded youth

## Where Did SHS Come From?



SYC's Sustainable Campuses Project has supported over 45 universities and colleges working for sustainability with conferences, mentors and the Campus Sustainability Assessment Framework over the past eight years.

In the fall of 2005, three SYC members, Nik Parent, Emma Banks, and Aqueela Nanj learned about the project, and frustrated with the unsustainable way their high schools were run, asked SYC staff to help them adapt the Sustainable Campuses project to make it available for use in high schools. Working together via phone and email

for over a year, we presented what we had come up with to about 25 BC students, teachers and parents at SYC's Sustainable High Schools Symposium in April 2006. The participants got super excited about the project!



*They formed the basis of the current Youth Steering Committee of the Sustainable High Schools BC pilot project, working together to strategize how to make it work in their schools and across the province.*

SYC partnered with the Sierra Club BC Chapter's Education Program to launch the BC pilot project in five schools in January 2007. This project was expanded in 2008 to include 19 schools.



## Why Does SHS Exist?

Just like post-secondary students, high school youth wanted a way to improve the state of the communities where they spend most of their time: their schools! We have found that students across Canada are experiencing the same problems:

- Youth are finding it difficult to be taken seriously or to communicate with teachers, administration, parents and peers about environmental/social issues;
- There is no place to share and evaluate successful strategies for change;
- Youth need resources, tools, contacts, and advice to make long lasting change;
- Youth leaders need a tool to help get the entire school community involved.

As with the Sustainable Campuses project, we hope the SHS project will grow to be a national movement for school sustainability.

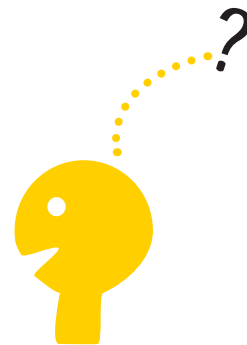
### Key Terms

#### Indicator

A measuring rod of our current state.

#### Curriculum-linked

Programming that ties directly to provincial prescribed learning outcomes for a high school course.



## Next up

Find out more about the tool we've created to help solve each of these challenges! The Sustainable High Schools Process details why you would:

- 1 → Build a **Sustainability Advisory Committee**
- 2 → Complete a **Sustainability Assessment** ... and the best part...
- 3 → Create an **Action Plan** for projects to increase sustainability at your school!



# The Sustainable High Schools Process

1

## Step 1 Building Your Sustainability Advisory Committee

Bring diverse members of your high school community together to guide the improvement of your school's sustainability.

### Working With the Community

**Sustainability is a collaborative process...**

- Being inclusive of all school community members creates a cooperative and respectful foundation to identify and strive towards common goals.
- Real sustainability requires ongoing commitment and active, equitable group participation.
- To create lasting positive change, sustainability projects need buy-in from:
  - People making decisions. (administrators, politicians)
  - People implementing decisions. (teachers, staff)
  - People who are affected by the decisions made. (students)

### Why Is Collaboration Important For Sustainability?

Working with people, understanding different perspectives, and balancing each against the other is very important for creative problem solving and engaging a critical mass of high school community members to work together for change. This is a challenging and rewarding process!

#### Success Story: GNS collaborates to create a collective vision for conservation!

Junior and Senior students, staff and parents at **Glenlyon Norfolk School** held the first school-wide sustainability forum to share their results from the SHS Take Action Class Challenge and create a Spring to Fall plan to model sustainability when they host schools from around the world at the Round Square 2008 conference. GNS classes reduced CO2 emissions by over 12,000 Kg, water consumption by over 60,000 Litres and shifted over \$4,000 to a sustainable and just economy. Small groups involving 100 people identified common priorities for change: local and ethical sourcing and production of all cafeteria food, making GNS a bottled-water free zone, encouraging alternative transportation, and reducing waste, water and energy consumption. They shared project ideas GNS could take on in the next month, year and five years and 21 students, 7 staff and 7 parents of all ages joined their multi-stakeholder "Sustainability Advisory Committee" to coordinate the planning and implementation of these initiatives.

By inviting and including representatives of all **stakeholders** (people with a vested interest in a particular community, decision or policy) to participate, it is much more likely that your project will succeed.

- Bringing diverse people together who share something in common (a desire for sustainability!) builds a resilient and respectful community.
- Any one group acting in isolation from others will be less successful than a community working together.
- Long-term projects need buy-in from authority figures as well as people or groups affected by the decisions.
- You need a process where stakeholders can have input into the decisions which will impact them. This will also help create greater commitment from each stakeholder.

## Different High School Community Members Have Different Perspectives



### **Students**

- Only at the school for 4 years
- Want to see change....now!
- Often do not have decision-making authority
- Sometimes are not taken seriously
- May feel like they have to be at school, but would rather not be

### **Teachers, Staff and Administration**

- All are very busy, possibly overworked
- Environmental/social solutions are often seen as expensive or difficult
- May seek such solutions but are trumped by demands of course curriculum, lack of support and other various factors
- May not consult very much with students and each other
- May lack a common vision of school that includes environmental and social values
- Experienced and invested in current systems and the status quo

### **Goal of a Sustainability Advisory Committee**

An organized and representative body that can develop, guide and direct the sustainability initiatives of the high school community. This committee ensures the ongoing success of the project by recruiting new members each year and orienting them to the project. This ensures that despite students graduating or staff retiring, the project will have active, informed leadership from year to year.



## Who Should Be Involved?

- Students at large
- Student government
- Clubs: Environmental/Social Justice/Global Issues, etc.
- Classes: Leadership, Geography, Sciences, Social Studies, Math, etc.
- Teachers
- Staff (Custodians, cafeteria staff, secretaries, etc.)
- Administrators (Principal, Vice Principal)
- Parent Advisory Committees
- School Board members
- Others? This can include parents, trustees, alumni, chaplain, coaches, and many others

For more detailed information to set up your Sustainability Advisory Committee, please refer to **Appendix 2: Building Your Sustainability Advisory Committee**.

## 2

### Step 2 Assessing School Sustainability with the High school Sustainability Assessment Framework

Understand which aspects of your high school do or do not need improvement by measuring indicators of sustainability in each of the HSSAF's 10 categories. This gives you a quick but comprehensive picture of what and how you are doing.

## Why Bother Measuring and Researching?

**What we measure matters!** We make decisions based on what we know, whether what we “know” is impressions, values or hard facts. In our society, we often measure our wealth and well-being in terms of money and possessions, even though without good health, supportive relationships, and the knowledge and ability to shape our lives we would not find much happiness or fulfillment. Without clean air and water, renewable ecological resources, and a stable climate we will have none of the above.

School administrators often know very well how the school is doing in terms of money and grades, but without a way of measuring how well the school is doing socially or ecologically, it can be hard for them to make decisions that uphold these important values as well.

## “You Can’t Manage What You Can’t Measure!”

- Governments, institutions, companies, and individuals tend to define their wealth by how much money they have.
- We know that there are many valuable things that increase our well-being – knowledge, health, culture, clean water, biodiversity, predictable climate – and some of these things do not have a price tag.
- Probably everyone knows how much money they have in bank... but do you know how many greenhouse gases you emitted today?



### Key Terms

#### **Benchmark**

Vision of where we want to be (i.e. 100% renewable energy, no bullying, etc.).

#### **Assessment**

Where we are now.

#### **Indicator**

A measuring rod of our current state.



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### Why are assessments important?

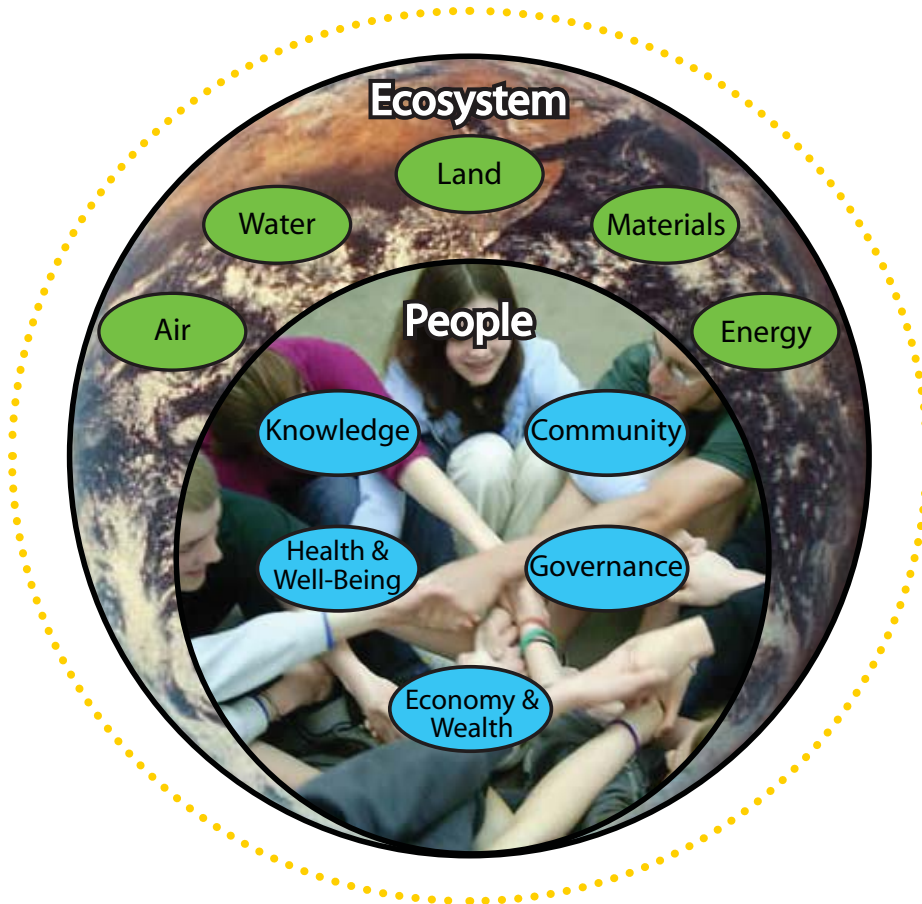
- We need to have a starting point to address important issues.
- Regular assessments enable us to monitor progress overtime.
- Assessments allow us to compare results between schools using common language.
- We can learn from measured success and challenges.
- Assessments engage the community in the process of measuring and improving the school.

#### Success Story: SMUS Energy Audit Powers Energy Conservation

Once **Saint Michael’s University School** completed an energy audit, they used the results to identify which electrical appliances could be upgraded or unplugged - including all the mini fridges in each residence, as they discovered they were running all year long to just keep a couple cans of pop cold. SMUS replaced lights and water fixtures, and knows exactly how much money and resources they are saving thanks to their assessment.

## The Sustainable High Schools Project HSSAF Indicators

Sustainability lies in the ongoing interdependent connection between all the members of our ecological and human communities. The complexity of such dynamic relationships is really hard to measure, understand and act upon! By identifying major issues of high school sustainability and calculating quantifiable indicators of these issues, we can get a quick but comprehensive picture of how we are doing.



There are charts on the next two pages. The first one shows the Community Indicators (i.e. people-related issues) and the second shows Ecological Indicators (i.e. not just people). There are more details on the hows and whys of each of them later in the HSSAF (page 14), but for now you can get a sense of the range of sustainability issues you can measure through the SHS Project.



## High School Sustainability Assessment Framework: Community Indicators

Area	Indicator		Method of Calculation (*note: SCMs = School Community Members)
Health & Well-Being	HW-1	Incidents of Assault	Total annual number of reported incidents of verbal, physical, emotional, mental and sexual abuse, divided by the total number of SCMs.
	HW-2	Sick days	Total annual number of sick days taken by SCMs, divided by the total SCMs.
	HW-3	Substance Abuse	Total number of SCMs who use alcohol, cigarettes, marijuana or other addictive substances once a week or more according to survey results, divided by total survey respondents.
	HW-4	Physical Activity	Total number of SCMs who are physically active according to Canada's Healthy Living Strategy, divided by the total number of survey respondents.
	HW-5	Nutrition	Total sales of "junk" food (products with high sugar, fat, salt, caffeine or low nutrient content as defined by the Canadian Food Guide to Healthy Eating) divided by total food sales.
Community	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. Double counting of people should be avoided.
	C-2	Sense of Community	Total number of SCMs who feel a very strong sense of belonging, confidence, and engagement in your school community according to survey results, divided by total respondents.
Knowledge	K-1	Sustainability Literacy	Average percent improvement on a sustainability literacy survey between first semester and last semester of attending high school.
	K-2	Sustainability in Course Content	Total number of courses that have "substantial sustainability content," divided by total number of courses.
Governance	G-1	School Staffing for Sustainability	Total number of staff responsible for the management of the issues below, divided by total number of listed issues. Each staff member should be counted once, even if responsible for more issues.  <ol style="list-style-type: none"> <li>1. Resource Efficiency: Energy, Water and Waste</li> <li>2. Sustainability in Facilities Management</li> <li>3. Equity and Anti-oppression</li> <li>4. Environmental Health and Safety</li> <li>5. Transportation Demand &amp; Management</li> <li>6. Wellness</li> <li>7. Community (in and beyond school)</li> <li>8. Ethical and Ecological Purchasing</li> <li>9. Ethical and Ecological Investment</li> <li>10. Sustainability in Teaching and Education</li> <li>11. High Level Administrator for School-wide Sustainability</li> </ol>
	G-2	Student Government Working Groups	Total number of active clubs or working groups reporting directly to the student council, Sustainability Advisory Committee, or the board of directors divided by the total number of groups/clubs.
Economy & Wealth	EW-1	Ethical & Ecological Investing	Total annual dollars invested (for example by teacher pension plans) in ethical and environmentally responsible companies, divided by the total annual invested dollars.
	EW-1b	Ethical & Ecological Purchasing	Total annual dollars spent on goods, services and infrastructure investments, (for example on team uniforms, food services, portable classrooms) purchased from ethical and environmentally responsible companies, divided by the total annual dollars spent.
	EW-2	Locally Purchased Goods & Services	Total annual dollars spent on locally (within 200km) provided, harvested, or manufactured goods and services divided by the total dollars spent on goods and services.

## High School Sustainability Assessment Framework: Ecological Indicators

Area	Indicator		Method of Calculation (*note: SCMs = School Community Members)
Water	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 School Community Members (SCM's).
	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.
	W-3	Pollution	Total volume of non-biodegradable and toxic cleaners and other fluids disposed of into water system, divided by total number of SCMs.
	W-4	Drinking Water Quality	Percent of classrooms that are less than 20 meters from a source of free water that meets or exceeds Guidelines for Canadian Drinking Water Quality.
Materials	M-1	Paper Consumption	Total pieces of paper (of all types) purchased by the school each year, divided by the total number of SCMs.
	M-1b	Enviro-Friendly Paper Consumption	Calculate percentage of environmentally-friendly paper purchased by dividing quantity of non-chlorine bleached, recycled, tree-free paper by total paper purchased.
	M-2	Solid Waste Reduction	Percent of waste reduced per capita over previous years' waste production.
Air	A-1	Lead, Asbestos and Mould	Total square meters of indoor spaces contaminated with lead, asbestos and mould, divided by the total indoor square meters.
	A-3	Greenhouse Gas emissions: Transportation	Total tonnes of GHGs emitted during the year as a result of transportation by SCMs to and from school, divided by total number of SCMs. Extrapolate from averaged survey results from 2 separate weeks in the year, one during a cold month (below 5°C) and one during a warm month (above 5°C).
Energy	E-1	Greenhouse Gas Emissions: Buildings	Total energy (of all types) consumed (in GJ) annually for heating, cooling, ventilation, and electrical systems, converted into GHG equivalent (tonnes), and divided by total square meters of interior built space. Note: energy used in outdoor uses (lighting, signage, etc.) should not be included in calculation, but still assessed relative to interior space.
	E-2	Reduction in Energy Consumption	Total change in energy consumption in GJ for buildings in current year over previous year.
	E-3	Renewable Energy Source	Energy consumed that comes from renewable sources divided by total energy consumed.
	E-4	Appliance Efficiency	Total number of appliances with high Energy Star efficiency rating divided by total number of appliances.
Land	L-1b	Green space	Total hectares of permeable green space, divided by the total school grounds (greyspace, managed and natural green space, including all built or non-permeable spaces) at your school.
	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 green space.
	L-3b	Native Plant Cover	Total square metres of native plants growing in managed green spaces, divided by total area of managed green space. Use quadrants and field guide to identify and estimate native plant cover.



### 3

#### Step 3 Take Action

Action visioning, planning and mapping. Use your passion and knowledge to improve your school's sustainability through creating fun and meaningful projects.

### Be the Change You'd Love To See in Your World!

Once your class, club, or Sustainability Advisory Committee has calculated your school's level of sustainability through the HSSAF assessment, you'll have the facts you need to know which aspects of your school are sustainable and which are not. You may have learned about things you are concerned about, things you would like to change or things that may be threatened and you want to save. You can do this by learning how to plan a classroom project or school-wide event, creating a school policy, or asking the school board to upgrade your school's infrastructure. The Sustainable High Schools Project offers several sets of resources to help you, your class, your club, your Sustainability Advisory Committee or your whole school or school district to Take Action! See Appendix III for taking action by changing behaviour on an individual level and Appendix IV for an Action Planning Package that will help you work with others to plan group projects. We are always coming up with new tools which you can check out at [www.sustainablehighschools.ca](http://www.sustainablehighschools.ca)



#### ...▶ A. Action Visioning

What do you want to change, and how can you have fun while you be that change?

##### 1. Identify your passions

- What do you like to do?
- What do you love?
- What are you good at?
- What makes you feel good?

## 2. Identify your concerns

- What is happening in your school that you do not like?
- What do you think would make life in your school/family/community/ecosystem better?
- What do you think is not right or fair in the your school or the world right now?

## 3. Identify possible project ideas that you'd like to do because they combine what you enjoy doing with an action that will address one of your concerns.

### For example

- Music/Art + Racism = Hold a multi-cultural concert & art show to celebrate your school's diversity.
- Playing basketball + Nothing for kids to do after school (except drugs and bullying) = Host a 3-on-3 basketball tournament every Wednesday after school.
- Writing + Torture of political prisoners = Start a monthly Amnesty International letter-writing club.
- Camping + Clear-cut logging of old growth forest = Organize a camping trip to a threatened forest with your friends, then take photos and give a presentation to your class on the need to use recycled paper.
- Watching movies + climate change = Host a film festival with movies such as Oil on Ice, Inconvenient Truth, and End of Suburbia.

## 4. Find out what other people are interested in.

- Do they share your passions & concerns?
- Ask your friends and classmates or find out if there are any school clubs or community groups that you could join or support. Maybe they haven't thought of your idea before or could really use your energy to build on an existing project.

## ...▶ B. Action Planning

Pick a project idea to develop and focus on.

Make sure it's **Fun** & **Real**: it needs to be realistic & make a real difference.

The best projects are **DAFT**!

- It will make a **Difference** in your life AND community – however you want to define “community” (ecosystem, family, school, city, world, etc.).
- It's **Achievable**: you can conceivably do it, once you break it down. There is no point planning to climb Mount Everest if you don't know how to walk yet – keep Everest in sight, but start off with the hill in your backyard first. You will learn the skills you need and be motivated by your success to tackle bigger projects next.
- It's **Fun**! If you enjoy it, you'll stick with it; if others enjoy it, they'll help you make it happen.
- It's **Targeted**. Make sure you know what you are trying to achieve, how you will achieve it and why.

“We're going to \_\_\_\_\_ so that \_\_\_\_\_.”

### Planning the 5 W's

Once you have chosen your project and are sure it's **DAFT**, brainstorm:

What?

why?

where?

When?

Who?

- **What do you want to do?** Now is the time to dream big, think about the possibilities, and make connections with other events/groups/campaigns already happening.
- **Why do you want to do it?** Think of all the reasons why this is a good project – for you, your family, your friends, your community, the world... If you know exactly why you are doing your project, it will be easier to keep the project going and to convince others to get involved and support you.
- **Where is your project going to take place?** Where would be the best place to reach the people you need to affect the change you want to see to see change happen? On the internet? At your school? In front of the Parliament building? On T.V.?
- **When is your project going to start and finish?** Think of a timeline that will allow you to develop your project, spread the word, gain support, make it happen, and celebrate! Evaluate with the other folks involved (share feedback, success stories and lessons learned so that you can make it even better next time), and tell people about it so that others can learn from and be inspired by what you did.
- **Who do you want/need to be involved?** Volunteers, mentors, funders, the public, etc.

## •••▶ C. Action Mapping

Now that you know how to make your project a success, create a map to help make it happen.

### 1. Discussion

**What is a map?**

- A map is a visual picture of a place, idea, path.

**What are they used for?**

- Maps help us get from one point to another.

**What do they show?**

- Maps show barriers (like mountains & rivers) and ways to get around or past them (like passes or bridges).

**What do they look like?**

- Maps often use symbols, colours, numbers, labels, lines, etc. to store or convey information.

**How can making a map help us?**

- Maps help you prepare for and avoid potential challenges before you even start your project.

### 2. How to make a useful map

Once you have completed visioning and planning your project, it's time to get it down on paper.

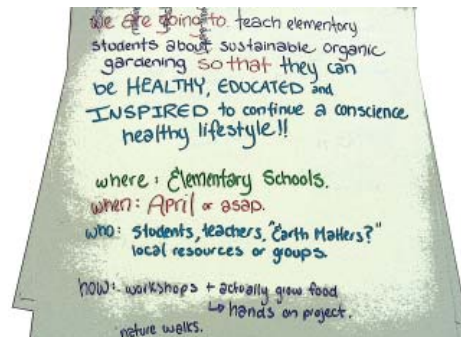
- ➊ Get everyone involved in mapping the project to gather around a big piece of paper, and make sure everyone has a couple of colourful markers. Have the 5 W's of your action plan handy so you do not forget any aspect of your project.
- ➋ Discuss the things you want your map to show, such as important dates and deadlines, tasks you will need to accomplish, who is going to do what, barriers you may face, and actions you will take to overcome such challenges.
- ➌ Get creating! As ideas are suggested, draw them on the map, using symbols, words, different colours, labels etc to brainstorm how you are going to get where you want to go from where you are now. Make sure everyone is involved, and have fun!
- ➍ Check it over to see if anything is missing, and ask your mentors for feedback.





### 3. How to use your map

- **Keep it handy!** Post it where you will see it and refer back to it to keep you on track.
- **Hold regular meetings** where each person involved reports what they have done and what they are going to do next. Make sure to check off what you've done and celebrate overcoming any major hurdles.
- **Don't give up!** Challenges will come up, and to overcome them, you will need to use creativity, be resourceful and get the support of people who can help you out. There are tons of great guides, manuals and handbooks out there too, such as **SYC's Group Kit** and others in the **Resources** section of this Kit. The **Sustainable High Schools** website at [www.sustainablehighschools.ca](http://www.sustainablehighschools.ca) has most of the best ones available online to download.
- Use your map to write a **report/article/zine/guide** when you are done so you can teach and inspire others with the story of how you did it!



## Next up

What we've all been waiting for – the **High School Sustainability Assessment Framework** (HSSAF)!

Now that you understand the SHS project and know how to:

- 1 → Build a **Sustainability Advisory Committee**
- 2 → Complete a **Sustainability Assessment**
- 3 → **Take Action** both personally and by creating action plans for projects to increase sustainability at your school

... you are ready for a more detailed look at how to calculate each indicator in the HSSAF, the central tool of the project. There is a page or two for each indicator with ideas for discussion, key questions and tips on how to measure it that you can print or photocopy and give to each person working on it.