



All Saints Catholic School SUSTAINABILITY PLAN

In association with Ottawa Biosphere Eco-City
Initiative

(Providing a voice for urban and rural sustainability in Ottawa)

Approved June 2012. Final version October 2012

What is Sustainability?

Sustainability is the ability of things to continue to exist. It applies to natural and human features. We use the earth's resources to meet our needs. But we also want to leave enough of the beauty and resources of nature for future generations to live healthy happy lives too. What we do matters.

What is this Sustainability Plan?

This sustainability plan looks at sustainability from the point of view of actions you can take. It lists important issues in Ottawa and Kanata, and suggests initiative or projects that could address them. The ideas came from students in your school. But as you read the plan, you may get new ideas on what you can do to address sustainability. Just write them down as you think of them. On the last page, the plan asks you to put down the issue and action you would like to take (from the plan or your own idea).

The first two pages of this plan talk about sustainability and a model to promote it (Biosphere Eco-City), as well as Kanata (where most of you live). Following that is a table of Priority Issues and Initiatives/Projects for sustainability. There are three kind of projects suggested: a) **School Projects**, b) **Student and Family Projects**, and c) **Neighbourhood Projects** that you could do with others. The plan uses three different colours and print styles to distinguish the three kinds. The last page helps you to decide your personal priorities for sustainability and to make a commitment for action. It then becomes your personal sustainability plan.

Biosphere Eco-City

The Biosphere Eco-City (BEC) is an urban-centred region, where people and organizations demonstrate how to make their city more sustainable through individual initiative, cooperation and sharing of information.

Biosphere means “sphere of life” and it is the outer shell of land, water and atmosphere that supports all life. Eco-City is an international movement for sustainable cities that began 25 years ago. The BEC model was pilot tested in Ottawa in 2009-2010 and this experiment developed into the Ottawa Biosphere Eco-City initiative (OBEC), which is discussed next.

A Biosphere Eco-City includes an urban core as well as the surrounding countryside. This is important because the urban and rural areas affect each other, and cooperation between them can do a lot of good.

BEC is a bottom-up approach to sustainability. It is based on the belief that the involvement of people is very important. Government plans are useful, but the actions of you, your friends and neighbours will make the most difference in determining whether Kanata (and Ottawa) will be sustainable.

OTTAWA BIOSPHERE ECO-CITY TOOLS

The Ottawa Biosphere Eco-City (OBEC) Initiative uses some tools to help people get involved in sustainability and to cooperate with each other:

- **Themes** – Think of sustainability in terms of your area of interest. Whether it is energy, food or waste etc, you can share ideas and activities with people who have the same interests. BEC's Themes of Sustainability are described in the left column of the table on page 3 of this plan. Issues may relate to more than one Theme.
- **Sustainability Plans** – This plan was developed by your school to give you ideas on how to address sustainability. But other schools or organizations may develop sustainability plans for their students, members, employees etc. Tell others about your plan.
- **Database of Projects** – Anyone with a sustainability project can send a summary to OBEC (www.obec-evbo.ca) to put on its Database. There viewers can read about them, get ideas and contact the people responsible. You can submit your projects too.
- **Demonstration Projects** – These show new ways of addressing sustainability. People can see how the projects were done and even copy parts that interest them.
- **Eco-City Council** – Stakeholders and volunteers meet to share ideas and to provide direction for making Ottawa sustainable.

All Saints and OBEC Partnership

In January 2012, volunteers from the Ottawa Biosphere Eco-City (OBEC) Initiative made a presentation on BEC to an assembly of Grade 7 students and their teachers at All Saints Catholic School. Students then worked in groups to develop ideas for issues and actions on sustainability. OBEC worked with Teacher, Mrs Gloade to turn the student ideas into a draft sustainability plan. Mrs Gload and Principal Mrs McDonald reviewed and approved the final draft.

The school wishes to thank OBEC volunteers Crystal, Jim, Kelsey, Leanne and Shaun for their assistance.

Sustainability Vision for All Saints

Students, staff and faculty at All Saints Catholic School will incorporate sustainability principles and practices into their work and lives. In so doing, they will continue to enjoy a healthy, sustainable environment that supports a high quality of life, now and for future generations.

Kanata's Natural and Human Characteristics

Located in the west end of Ottawa, just outside the Green Belt. Kanata has an area of 49,586 km sq and a population of over 100,000. It was built on former farmland and forests, and still contains some significant natural areas, including the South March Highlands - an area of high biodiversity. Much of the forested area within the urban boundary is slated for housing development in the near future.

Some of Kanata's residents work in the downtown core of the National Capital, but many are employed by local knowledge-based companies. Workers in these companies also come from the rest of Ottawa and points west, such as Carleton Place and Arnprior. Major access to Kanata is by the east-west Highway 417 (the Queensway) and there is good bus service to and within the community. Kanata continues to expand, particularly with residential and commercial development.

Kanata began in the 1960S when developer Bill Teron decided to create a model community. He already had an ability to build fine houses. But to make Kanata, Teron took many ideas from the new towns movement, exemplified in places such as Cadbury, England; Radburn, New Jersey or Tapiola, Finland.

The result was a small town with a good mix of owned and rental accomodation, natural landscaping, many parks, and pathways from residences to schools, shopping and public services. Kanata had a small golf course, a riding stable with riding trails into the countryside and a large "beaver pond" with walking trails into the woods. This idyllic setting attracted a number of high technology companies, and soon Kanata was known as "Silicon Valley North." The growth of light industry and research, as well as young people moving from nearby Ottawa, made Kanata grow very quickly.

The original Kanata is now known as the neighbourhood of Beaverbrook. In 1978, it was amalgamated with the older communities of Hazeldean, Glen Cairn and Rural March, and with the newer communities of Katimavik, Bridlewood, Marchwood-Lakeside, South March and Kanata Town Centre, to create the City of Kanata. This in turn was absorbed into an expanded City of Ottawa in 2001 (and is now called a community). The individual Kanata neighbourhoods have community associations which focus on communication, development and community spirit.



All Saint Catholic School

PRIORITIES & STRATEGIES FOR ACTION

Sustainability Theme	Priority Issues	Sustainability Initiatives/Projects
<p>Transportation (movement of goods and people)</p>	<ul style="list-style-type: none"> ○ Running out of oil & gas ○ Cars are not eco-friendly ○ Cut down on emissions ○ Speed causes accidents ○ Speed wastes gasoline ○ Driving to work ○ Driving students to school ○ Out of tune automobiles ○ Low efficiency vehicles ○ Long distance vacations 	<ul style="list-style-type: none"> ○ Create a bicycle & walking club ○ Consolidate busses to fill them ○ Use hybrid busses ○ Walk to school and other places ○ Bike to work, school, friends ○ Purchase electric or hybrid vehicle ○ Slow down/Stay below the speed limit ○ Leave in time so you don't rush ○ Carpool to school, work and sports ○ <i>Support electric busses</i> ○ <i>Create more pathways to get places</i> ○ <i>Build more and larger sidewalks</i> ○ <i>Develop bike rental system</i> ○ <i>Support a passenger rail system</i>
<p>Energy (for buildings, transportation, manufacturing and agriculture)</p>	<ul style="list-style-type: none"> ○ Use of non-renewable energy supplies ○ Energy use for lighting ○ Energy use for large appliances ○ Energy use for clothes dryer ○ Energy use for electronic devices ○ Energy use for home heating ○ Energy use for snow blowers ○ Energy use for air conditioning ○ Energy use for water heating ○ Energy use for car manufacture 	<ul style="list-style-type: none"> ○ Turn off lights one hour per day ○ Hold Hydro Ottawa presentation ○ Use energy efficient light bulbs ○ Use sensors to turn lights on/off ○ Turn off lights when leaving room ○ Use energy efficient appliances ○ Attend workshop on energy saving ○ Power down electronic devices after use ○ Use natural light through windows ○ Install skylights or roof windows ○ Install solar panels ○ Power down electronic devices after use ○ Re-insulate family home ○ Recycle waste heat in home



Sustainability Theme	Priority Issues	Sustainability Initiatives/Projects
<p>Design (built environment e.g. buildings & roads)</p>	<ul style="list-style-type: none"> ○ Make energy efficient homes look good ○ Products become obsolete ○ Benefit of plants in buildings ○ Need apartments for seniors ○ Need rooms for college/univ students ○ Stores use too much land 	<ul style="list-style-type: none"> ○ Install green roof on school ○ Install green wall in school ○ Create cool shapes with solar panels ○ Install green roof on house ○ Live in an eco-home ○ Grow house plants at home ○ Install solarium in house ○ Install college/univ rental unit in house ○ <i>Promote recyclable product designs</i> ○ <i>Limit area for retail use</i> ○ <i>Build fewer buildings</i> ○ <i>Re-use current buildings</i>
<p>Habitat (urban green spaces, rural environment and connections between them)</p>	<ul style="list-style-type: none"> ○ Need more green space ○ Polluted environment for animals ○ Loss of wild places for animals ○ Loss of habitat in South March Highlands ○ Need wildlife habitat in city ○ Need to protect biodiversity ○ Lack of knowledge of urban habitat ○ Endangered species in rural Kanata 	<ul style="list-style-type: none"> ○ Plant school nature area ○ Set up biodiversity monitoring plot ○ Take a guided nature walk ○ Plant trees/bushes/flowers at home ○ Plant butterfly garden at home ○ <i>Prevent pollution of habitats</i> ○ <i>Weekly clean up of green spaces</i> ○ <i>Stop development of natural areas</i> ○ <i>Plant trees on buildings</i> ○ <i>Protect South March Highlands</i> ○ <i>Create zoos and nature reserves</i>
<p>Food (farms & urban markets, heritage crops/animals, urban gardens)</p>	<ul style="list-style-type: none"> ○ People lack healthy food ○ Overuse of artificial fertilizer ○ Pollution affects farm animals ○ Need to protect agricultural biodiversity ○ Too many fast food restaurants ○ Lack of farm labourers ○ Loss of agricultural land ○ Loss of farms ○ Apartment dwellers need access to gardens ○ Reliance on long-distance food ○ Urban people unaware of food production 	<ul style="list-style-type: none"> ▲ Sell local apples in cafeteria ▲ Visit a local farm ▲ Develop sustainable food education ▲ Follow Paleo Diet ▲ Eat unprocessed food ▲ Give healthy food to the poor ▲ Buy organic food ▲ Ask stores for local & heritage food ▲ Grow food at home ▲ Buy local food ▲ Eat healthy meals ▲ Eat healthy, tasty snacks

Sustainability Theme	Priority Issues	Sustainability Initiatives/Projects
		<ul style="list-style-type: none"> ⤴ Buy heritage varieties of food ⤴ Grow heritage vegetables in garden ⤴ Buy at farmers market ⤴ <i>Send surplus food overseas</i> ⤴ <i>Bring city workers to farms</i> ⤴ <i>Create camps at farms</i> ⤴ <i>Demonstrate recycling of farm nutrients</i> ⤴ <i>Keep more land for farms</i> ⤴ <i>Develop community garden</i> ⤴ <i>Use local food for community events</i>
<p>Natural Capital (maintaining land, water, soil, natural materials)</p>	<ul style="list-style-type: none"> - Flooding from tree cutting in South March Highlands - Too many trees cut for paper - Loss of forests - Provision of clean water - Get rain water to soak into ground - Loss of trees creates flooding/erosion - Reduce water & chemicals on plants 	<ul style="list-style-type: none"> - Reduce paper use at school - Turn off taps – rinse in bowl or sink - Spend less time in shower - Flush toilet only when needed - Install low flush toilets - Collect rainwater for lawns/gardens - <i>Protect South March Highlands</i> - <i>Plant trees to replace cut ones</i> - <i>Put compost in forest to help trees</i> - <i>Save the woods</i> - <i>Educate people on importance of trees</i>
<p>Waste (processing of wastes, recycling, design, and conversion to energy)</p>	<ul style="list-style-type: none"> o Improper disposal of waste o Oil Spillage o Too much garbage o Garbage releases methane o Burning garbage pollutes air o Garbage dumps smell bad o Limited landfill capacity o Plastics pollute environment o Lack of awareness of household waste o Cheap consumer goods do not last o Unwanted items become waste o Used textbooks are discarded 	<ul style="list-style-type: none"> o Use green bins at school o Compost at school o Sale of used items to other students o Donate used textbooks to a mission o Donate used eyeglasses to a mission o Compost at home o Recycle batteries and toxic substances o Take time to sort garbage at home o Avoid individually wrapped items o Bring lunches in Tupperware o Use only recycled plastic o Avoid using plastic o Reuse paper at home o Buy less

Sustainability Theme	Priority Issues	Sustainability Initiatives/Projects
		<ul style="list-style-type: none"> ○ Buy only what you need ○ Donate unneeded items ○ Don't Litter ○ Pick up garbage ○ Use green, blue and black bins ○ Buy only what you need ○ Buy quality items that last ○ Buy used materials at the Re-Store ○ Build your own furniture ○ Put items by curb on "give away day" ○ <i>Make useful items from trash</i> ○ <i>Create a kids clean up program</i> ○ <i>Hold community garage sales</i> ○ <i>Hold more give-away days</i> ○ <i>Organize community clean-up days</i> ○ <i>Reduce land fill use</i> ○ <i>Burn garbage safely (Plasma System)</i> ○ <i>Recycle old cars</i> ○ <i>Pay for recyclable materials</i> ○ <i>Join Cleaning the Capital (spring)</i> ○ <i>Compost at community garden - see Food</i>
<p>Health (clean air and water, safety, tranquility, and needs of vulnerable groups)</p>	<ul style="list-style-type: none"> ○ Air pollution ○ Water pollution ○ Increase in asthma ○ High meat consumption ○ Overweight population ○ Inactive people ○ Lack of access to recreation ○ Pesticides/herbicides hurt children/pets ○ Handicapped/seniors need access to nature ○ Seniors need more time to cross streets ○ Lack of safety on pathways ○ Inappropriate activities in parks ○ Speeding jeopardizes safety 	<ul style="list-style-type: none"> ○ Stop smoking ○ Walk more ○ Work out regularly ○ Reduce use of sugar ○ Use natural house cleaners ○ Drive at or below speed limit ○ Don't burn garbage ○ Make lawns organic ○ <i>Raise money for recreation use</i> ○ <i>Build more recreational facilities</i> ○ <i>Ensure clean water supply</i> ○ <i>Raise money for recreation use</i> ○ <i>Build more recreational facilities</i> ○ <i>Make parks safe for children</i> ○ <i>Organize pathway safety patrols</i> ○ <i>Hire at-risk youth to build community facilities</i>

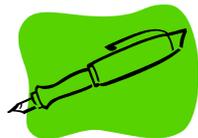
Sustainability Theme	Priority Issues	Sustainability Initiatives/Projects
Recreation (urban and rural recreation, including farm visits)	<ul style="list-style-type: none"> ○ Need for safe parks ○ Sedentary pastimes ○ Activity needs of seniors ○ Activity needs of handicapped ○ Need for children to experience nature ○ Recreational opportunities of waterways ○ Demonstrate sustainability in sports 	<ul style="list-style-type: none"> ○ "Green" a sports event ○ Bring seniors to school games ○ Start handicapped walks on track ○ Join a sport ○ Coach a sport ○ Family hikes in nature areas ○ Canoe, kayak, sail Ottawa's rivers ○ <i>Make sure parks are safe for children</i> ○ <i>Create children's garden in a park</i>
Sense of Place (feeling of belonging, sense of community)	<ul style="list-style-type: none"> ○ Sense of place is increased by knowledge ○ Ottawa has great nature & culture ○ Fairs bring people together ○ Parks need to be clean to be enjoyed 	<ul style="list-style-type: none"> ○ Create a Favourite Place Project ○ Care for God's world ○ Visit Ottawa's rural & urban places ○ Show friends your favourite place ○ Show visitors Ottawa's great places ○ Attend local fairs: Carp, Richmond ... ○ <i>Clean up parks</i> ○ <i>Organize a nature/culture tour</i>

Ottawa are doing to contribute to sustainability in Ottawa. When you develop or get involved in a project, OBEC would like you to share a summary of it with others on the website.

GET INVOLVED - YOUR PLAN FOR ACTION

This All Saints Sustainability Plan will now become your plan. It was meant to give you ideas on how to take action within your school at home, or in your neighbourhood. In the space below, you are invited to make your commitment to sustainability.

What issues from above most interest you? What actions could you take to address these issues? Try to pick issues in which you know you can make a difference.



The [Project Database](http://www.obec.evbo.ca) on the OBEC website (www.obec.evbo.ca) is a great tool to find out what other individuals and organizations in

Your priority sustainability issue(s):



Proposed action(s) that you can take:

Thank you for contributing to the sustainability of your school and your community.

All Saints Grade 7 students and teachers, and
Ottawa Biosphere Eco-City Council

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