



Government of Canada

The National Battlefields  
Commission

Gouvernement du Canada

Commission des champs  
de bataille nationaux

# Sustainable Development Policy

of the National Battlefields Commission



November 2010

**The National Battlefields Commission / Commission des champs de bataille nationaux /**  
390, de Bernières Avenue, Québec (Québec) G1R 2L7

Canada

“Whereas it is desirable in the public interest to acquire and preserve the great historic battlefields at Quebec, restoring so far as possible their principal features, so as to make them a National Park (...).»

*(Preamble, NBC's Constitutive Law, March 1908)*

«The physical grounds of the NBC constitute one of the most important historic sites in Canada. Commonly known as the Plains of Abraham, the site is the largest urban park in Quebec City and one of the most prestigious parks in the world. The NBC strikes a balance between the Plains of Abraham's historic significance and its mission as an urban park. The NBC's objectives are the preservation of the park as a legacy for future generations and also as of development so that the present generations can enjoy the park and learn more about the key events in Canadian history associated with the site. »

*(Statement of mission, Performance report, March 2010).*

## *Sustainable Development... Because It Is in Our Nature*

---

The Incorporating Act of 1908 was already very clear on the will of the legislator to ensure the establishment and protection of the site. Over the last century, the mission statements adopted by the Commission over the years were all heading in the same direction, to embody an unfailing willingness to preserve this unique heritage for the benefit of future generations.

All the architects and managers of this unique city park have always had the same concern; to leave to those who would follow them a place of memory worthy of the site they had taken charge of in their own time.

This is still what drives the team of the NBC in 2010. And it is by taking note of the increasingly complex issues of protection and development respectful of the people and places that the Commission decided to adopt a sustainable development policy that harmoniously paves the way for this type of action.

Many things have been accomplished but many remain to be done. It is the fate of any organization that has to manage living matter because, then, nothing is definitely settled, everything is in movement and evolving. The stakes become clearer, technologies evolve, priorities adapt to new knowledge and sensibilities.

The NBC gives itself the means of its ambition, to become a model of sustainable development by adopting a road map which, starting from the place it has come to, specifies the direction where it is headed so that the Battlefields Park can remain throughout the years and the generations, a perfectly preserved heritage site.

This policy is driven by the following principles:

- The approach proceeds from a social and institutional commitment on the part of the NBC;
- Its aim is to spur the adherence of both staff and users, as well as the appropriation by all of a coherent and efficient action plan;
- It covers the entire spectrum of environmental issues as well as the related management issues.

Residual materials, transport, energy, water, purchases, installations, consumption and management practices, everything that could have an impact on the Park's condition and development is treated by means of the plan's seven priorities, their related objectives and, naturally, the actions that will ensue. Finally, these priorities fall into the following three groups:

- Relations with users and visitors;
- Protection and development of the park;
- Internal administrative management.



**Summary of the National Battlefields Commission  
Sustainable Development Policy**

<b>Priority 1- Promote Information, Awareness, Education, Innovation and Collaboration in the Matter of Sustainable Development .....</b>	<b>5</b>
Context.....	5
Objectives .....	5
Actions .....	5
<b>B. PROTECTION AND DEVELOPMENT OF THE PARK .....</b>	<b>6</b>
<b>Priority 2 – Improve the Management of Residual Material According to the 3R Principle (Reduce, Reuse, Recycle) .....</b>	<b>6</b>
Context.....	6
Objectives .....	6
Actions .....	6
<b>Priority 3 - Reduce the Impacts of the Transport and Emission of Greenhouse Gases (GHG)...</b>	<b>7</b>
Context.....	7
Objectives .....	7
Actions .....	7
<b>Priority 4 – Integrate the Concept of Sustainability Into Landscaping and Ground Maintenance .....</b>	<b>8</b>
Context.....	8
Objectives .....	8
Actions .....	8
<b>C. INTERNAL ADMINISTRATIVE MANAGEMENT .....</b>	<b>8</b>
<b>Priority 5 - Consume Responsibly .....</b>	<b>8</b>
Context.....	8
Objective.....	9
Actions .....	9
<b>Priority 6 - Reduce Building Energy Consumption and Its Impact on Greenhouse Gases (GHG) .....</b>	<b>10</b>
Context.....	10
Objectives .....	10
Actions .....	10
<b>Priority 7 – Manage Water Responsibly .....</b>	<b>11</b>
Context.....	11
Objectives .....	11
Actions .....	11
<b>Appendix.....</b>	<b>12</b>
<b>Summary Table of NBC Action Plan .....</b>	<b>12</b>

## A. RELATIONS WITH USERS AND EMPLOYEES

---

### ***Priority 1- Promote Information, Awareness, Education, Innovation and Collaboration in the Matter of Sustainable Development***

#### Context

The success of a sustainable development action plan rests on the involvement of all those involved in its implementation. It is essential that the park's employees and users be well informed, that they understand the issues of sustainable development and can exchange views on the subject.

#### Objectives

- Ensure the staff's adherence to the sustainable development orientations and actions, as well as to the NBC orientations and action plan.
- Promote collaboration and innovation with users and subcontractors in the field of sustainable development and environmental management.

#### Actions

- Call on the sustainable development committee so as to exchange views and ensure the follow-up of the sustainable development approach.
- Develop and implement a communication strategy for sustainable development actions in order to:
  - Inform and raise awareness of responsible behaviours among visitors and users;
  - Inform and raise the awareness of visitors concerning innovations and good sustainable landscaping practises to protect the natural heritage;
  - Develop the sustainable development concept in NBC activities, products and services;
  - Work in conjunction with users for a better complementarity of sustainable development actions;
  - Promote sustainable development initiatives with visitors and users;
  - Use the optimum internal and external communication tools to promote sustainable development within the NBC.
- Perform and circulate the performance assessments of the sustainable development action plan in the departmental performance report (DPR).
- Be on the lookout for the various environmental regulations pertinent to the organization and communicate them to stakeholders.
- Set up information exchange mechanisms on the new environmental regulations.

## B. PROTECTION AND DEVELOPMENT OF THE PARK

---

### ***Priority 2 – Improve the Management of Residual Material According to the 3R Principle (Reduce, Reuse, Recycle)***

#### Context

Concerned with reducing its environmental impact and aware of the importance of sound residual material management, the NBC strives to reduce its environmental impact by putting into effect the 3R principle. In concrete terms it means rethinking needs so as to reduce the production of residual material at its source, reuse the material as much as possible, recycle the material usually considered as tail-end residual material, and recycle organic material by composting.

#### Objectives

- Manage residual material efficiently according to the 3R principle (Reduce, Reuse, Recycle).
- Raise the awareness of residual material management among users and visitors.
- Implement a hazardous material management system.

#### Actions

##### Reduce Resource Consumption

- Put in place an eco-friendly paper management program involving the use of recycled paper for current use.
- Extend printing on both sides of the page for all documents produced by the NBC.

##### Recycle and Exploit Residual Material

- Make an inventory of residual material found on the NBC site. It would help identify the potential of recyclable material (type and quantity) and target the facilities that best meet NBC needs.
- Review and put in place an effective and exemplary residual and recyclable material collection.
- Provide all NBC garbage cans with recycling bins (recycling site) in order to offer a recycling option at every opportunity. (If the recycling bin is not in the same place as the garbage can the user will not make the effort of moving to sort these materials).
- Provide clear and precise identification for all recycling bins (pictogram for recyclable material such as bottles, cans, paper, etc.).
- Accompany this procedure with a recycling awareness campaign.
- Raise the clerical staff's awareness of the recovery of all recyclable material.
- Continue and encourage the composting program on the NBC site;
- Include special conditions in construction and renovation projects to help maximize the recycling of material.

- Ensure the adequate management of unused and outdated property.
- Put in place or improve the hazardous material management system (HMMS), namely through the recycling of paints, batteries, lighting fixtures, etc.
- Make sure to inform the stakeholders of the hazardous material management system.
- Develop and communicate to the stakeholders an environmental emergency procedure (example: what to do in the event of an oil spill).
- Include conditions regarding the disposal of waste, recyclable residual material and hazardous residual material in the appendix of contracts and agreements between the Commission and its partners (events).

### ***Priority 3 - Reduce the Impacts of the Transport and Emission of Greenhouse Gases (GHG)***

#### Context

Transport is the activity sector that contributes the most to GHG emissions in Québec and here, like in the rest of Canada, emissions in this sector have increased significantly since 1997. It is therefore a major issue for the entire society. As an urban park, the NBC must set an example.

#### Objectives

- Continue improving the environmental performance of the NBC vehicle fleet and motor equipment.
- Reduce greenhouse gas emissions resulting from NBC activities.

#### Actions

- When purchasing new motor vehicles and motor equipment, select the vehicles and equipment that are the least harmful to the environment.
- When replacing carts, encourage the purchase of electric vehicles when possible.
- Reduce the average annual fuel consumption.
- Calculate the quantity of GHG emitted by NBC vehicles every year.
- Promote the use of electric vehicles to collect recyclable materials.
- Analyze the relevance and feasibility of using alternate fuel (biodiesel) for the park's vehicles.
- Optimize the staff's movements during routine tasks.
- Continue raising awareness in order to avoid idling (switch off the motor when vehicle is at a standstill).
- Provide infrastructures promoting bicycle use in movements (stands, bicycle lanes, etc.).
- Participate in research projects aimed at reducing the negative impacts of atmospheric pollution (example: impact of the plain forest on GHG reduction, air quality, etc.).
- Eliminate hanging baskets that must be watered by truck.
- Study the feasibility and relevance of adopting an incentive program inciting employees to use public transport.
- Review the park's traffic plan in order to reduce the impacts of the means of transport.

## ***Priority 4 – Integrate the Concept of Sustainability into Landscaping and Ground Maintenance***

### Context

One of the primary missions of an urban park is to protect and preserve the natural heritage. In the last few years, the NBC has integrated certain sustainable development criteria in the architecture of its landscape and environment. In addition to being beneficial for flora and fauna diversity, this concept also helps reduce greenhouse gas emissions and atmospheric pollution, in addition to noise pollution.

### Objectives

- A. Encourage native biodiversity on the site. “Natural ecosystems” are models of sustainability because they manage to withstand the test of time and are better adapted to meet unpredictable environmental conditions.
- B. Adopt the best horticultural and arboricultural environmental practices.
- C. Raise awareness and inform visitors on urban flora and fauna.
- D. Support and protect our urban forest.

### Actions

- Favour selective grass cutting in appropriate areas.
- Select suitable plant species according to their role and their use.
- Put in place information panels concerning urban flora and fauna.
- Ensure and maintain, in a sustainable manner, the regeneration and growth of the urban forest of the park by:
  - replacing felled trees with the better adapted species;
  - pruning;
  - mulching of saplings.
- Minimize the use of chemical fertilizers.
- Continue the Integrated Pest Management Program:
  - Ensure control of invasive and toxic species (poison-ivy);
  - Perform follow-ups of the urban forest health status (Dutch elm disease).

## **C. INTERNAL ADMINISTRATIVE MANAGEMENT**

---

### ***Priority 5 - Consume Responsibly***

#### Context

Considering the abundance and diversity of consumer products, there is a need for points of reference so as to make enlightened and responsible decisions when purchasing goods and services. The NBC is subject to the federal government market policy and must comply with this



specific framework in selecting purchases. However, when purchases fall below a determined amount, the buying process does not bind the service staff responsible for the government procurement policy. It is up to everyone to define their buying criteria and the possibility of selecting eco-friendly products. The Department of Public Works and Government Services of Canada has developed a range of on-line tools for federal employees on environmentally sound procurement:

<http://www.tpsgc-pwgsc.gc.ca/ecologisation-greening/achats-procurement/trousse-toolkit/outils-tools-eng.html>

### Objective

- Integrate sustainable development criteria into the goods and services procurement process and during bids.

### Actions

- Train the persons in charge of supplies in the notions of responsible buying.
- Integrate sustainable development criteria into procurement and bids:
  - Encourage the purchase of eco-friendly, health oriented biodegradable cleaning and renovation products;
  - Encourage the purchase of ecological building materials, especially regarding paints, glues and solvents.
- Develop an awareness-raising guide on responsible buying intended for all NBC buyers (what is responsible buying, what criteria should be considered, etc.).
- Offer NBC promotional material that meets sustainable development criteria.
- Raise awareness of responsible buying among suppliers and subcontractors.
- Integrate into subcontracts responsible consumption criteria consistent with the NBC sustainable development policy.

## ***Priority 6 - Reduce Building Energy Consumption and Its Impact on Greenhouse Gases (GHG)***

### Context

Sound environmental management inevitably proceeds from a wise use of energy. For several years the NBC has sought to optimize energy management and introduce environmental criteria in its choice of energy supplies by using environment friendly fuels.

### Objectives

- Improve the environmental performance of all infrastructures to significantly reduce the NBC environmental imprint.
- Apply energy-saving measures in these infrastructures by encouraging behaviour changes and promoting the purchase of more energy efficient equipment.

### Actions

- Optimize energy-saving measures through energy monitoring systems (heating of buildings, of greenhouses, lighting, etc.).
- Ensure the upkeep and preventive maintenance of energy systems.
- Analyze energy consumption periodically.
- Raise the staff's awareness of energy-saving measures.
- Generalize the *hibernation* or switching off functions of all personal computers or other electronic equipment to save energy during idling periods (Regarding computers, the result is as effective as completely switching off, according to Hydro-Québec).
- When equipment is being replaced, preferably chose eco-friendly and approved *Energy Star* equipment. Analyze the possibility of replacing the light components of NBC lampposts with a more efficient energy-saving system.
- When there are new constructions and renovations:
  - Promote energy efficient projects;
  - Integrate new renewable energy sources.
- Establish a strategic framework to integrate new practices leading to the construction of sustainable buildings, such as those determined by the certification program *Leadership in Energy and Environmental Design* (LEED).
- Continue trying to reduce the use of oil fuel as an energy source.

## ***Priority 7 – Manage Water Responsibly***

### **Context**

The abundance of the water supplies in the province of Québec contributes to the illusion that this is an unlimited resource, as shown by the waste apparent in residential, industrial and commercial energy use. To correct this situation it is important to raise the public's awareness of the value of water for health, economy and the environment. Aware of the importance of this resource, the NBC implements various measures aimed at reducing the loss and wasting of water.

### **Objectives**

- E. Continue its efforts to reduce the use of drinking water to water the plants (landscaping and greenhouses).
- F. Continue its efforts to raise park users' awareness.
- G. When designing landscaping, outdoor spaces and buildings, promote the direct retention of rain water in the ground.

### **Actions**

- Ensure the follow-up and maintenance of irrigation systems according to climatic conditions.
- Install faucets with a stop mechanism (electric eye) and low pressure and high-performance sanitary appliances in buildings under renovation and in new buildings.
- Gradually eliminate all equipment making continuous use of aqueduct water (urinal).
- Ensure the maintenance of water fixtures.
- Raise the staff's awareness of the responsible use of water in landscaping or for vehicle maintenance.
- Implement strategies for recovering rainwater (direct the water towards landscaping).
- Gradually eliminate bottled water.
- Facilitate the park users' access to drinking water.

**Appendix**  
**Summary Table of the NBC Action Plan**

**A. RELATIONS WITH USERS AND EMPLOYEES**

Priorities and Actions	Schedule			Persons in charge
	2011	2012	2013	
<b>Priority 1</b>				
<b>Promote Information, Awareness, Education, Innovation and Collaboration in the Matter of Sustainable Development</b>				
Make use of the sustainable development committee to exchange views and ensure follow-up of sustainable development process.	X	X	X	
Develop and implement a communication strategy of sustainable development actions in order to:				
- Inform visitors and users and raise their awareness of responsible behaviours;	X	X	X	
- Inform visitors and raise their awareness of innovations and good practices of sustainable landscaping for the protection of the natural heritage;	X	X	X	
- Emphasize the sustainable development concept in NBC activities, products and services;	X	X	X	
- Work in conjunction with park users for a better complementarity of sustainable development actions;	X	X	X	
- Promote sustainable development initiatives with visitors and users;	X	X	X	
- Use internal and external communication tools optimally to promote sustainable development at the NBC.	X	X	X	
Perform and circulate a performance assessment of the sustainable development action plan in the departmental assessment report (DAR).	X	X	X	
Be on the lookout for the various environmental regulations applicable to the organization and communicate them to the stakeholders.	X	X	X	
Set up information exchange mechanisms regarding new environmental regulations.		X		

## B. PROTECTION AND DEVELOPMENT OF THE PARK

Priorities and Actions	Schedule			Persons in charge
	2011	2012	2013	
<b>Priority 2</b>				
<b>Improve Residual Matter Management According to the 3R Principle (Reduce, Reuse, Recycle)</b>				
<b>For a cutback in resource consumption</b>				
Introduce environmentally sound paper management, including the usage of recycled paper for regular use.	X			
Generalize the use of printing on both sides of the page for all documents produced by the NBC.	X			
<b>For the recycling and exploitation of residual materials</b>				
Perform an inventory of residual materials found on the NBC site. This would help identify potential recyclable materials (type and quantity) and target the installations that would best meet NBC needs.	X			
Review and put in place a high-performance and exemplary residual and recyclable material recovery system.		X		
Provide all NBC garbage cans with recycling bins (recycling sites) to offer the recycling option every time the opportunity arises. (If the recycling bin is not in the same location as the garbage cans the user will not make the effort to move in order to sort these materials).		X		
Identify clearly and simply all recycling bins (pictogram of recyclable material such as bottles, cans, paper, etc.).		X		
Accompany this approach with a recycling awareness campaign.		X		
Raise the clerical staff's awareness of the recovery of all recyclable materials.	X			
Continue and promote the composting program on the NBC site.	X	X	X	
Include special conditions in building and renovation projects to help maximize the recycling of materials.		X		
Ensure proper management of unused and outdated equipment.			X	
Put in place or improve the hazardous material management system (HMMS), namely through the recycling of paints, batteries, lighting fixtures, etc.		X		
Make sure to inform stakeholders of the hazardous material management system.		X		
Develop and communicate to stakeholders an environmental emergency procedure (example: what to do in the event of an oil spill).		X		
Include the conditions related to the disposal of waste, recyclable residual material and hazardous residual material in the appendix of contracts and agreements between the Commission and its partners (events).		X		

## B. PROTECTION AND DEVELOPMENT OF THE PARK

Priorities and Actions	Schedule			Persons in charge
	2011	2012	2013	
<b>Priority 3</b>				
<b>Reduce the Impacts of Transport and Greenhouse Gas (GHG) Emissions</b>				
When purchasing motor vehicles and motor equipment, purchase the ones that are the least harmful to the environment.	X	X	X	
When replacing carts, select electric vehicles when possible	X	X	X	
Reduce the average annual fuel consumption.	X	X	X	
Calculate the quantity of GHG emitted yearly by NBC vehicles.		X	X	
Favour the use of electrical vehicles for collecting recyclable materials.		X	X	
Analyze the relevance and feasibility of using replacement fuels (biodiesel) for cars.		X		
Optimize the staff's movements in their daily tasks.	X	X	X	
Continue raising awareness to avoid idling (switch off the motor when vehicle is at a standstill).	X	X	X	
Offer infrastructures promoting the use of bicycles during movements (stands, bicycle lanes, etc.).			X	
Participate in research projects aimed at reducing the negative impacts of atmospheric pollution (example: impact of the plain forest on GHG reduction, air quality, etc.).	X	X	X	
Eliminate hanging baskets that must be watered by truck.	X			
Study the feasibility and relevance of adopting an incentive program inciting employees to use public transport.	X			
Review the park's traffic plan in order to reduce the impacts of the means of transport.		X		

## B. PROTECTION AND DEVELOPMENT OF THE PARK

Priorities and Actions	Schedule			Persons in charge
	2011	2012	2013	
<b>Priority 4 Integrate the Concept of Sustainability Into Landscaping and Ground Maintenance</b>				
Favour selective grass cutting in appropriate areas.	X			
Select the most suitable plant species according to their role and their use.	X	X	X	
Put in place information panels concerning urban flora and fauna.		X		
Ensure and maintain in a sustainable manner the regeneration and growth of the urban forest of the park by:				
- replacing felled trees with the better adapted species;	X	X	X	
- pruning;	X	X	X	
- mulching of saplings.	X	X	X	
Minimize the use of chemical fertilizers.	X	X	X	
Continue the Integrated Pest Management Program:				
- ensure control of invasive and toxic species (poison-ivy);	X	X	X	
- perform follow-ups on the health status of the urban forest (Dutch elm disease).	X	X	X	

### C. INTERNAL ADMINISTRATIVE MANAGEMENT

Priorities and Actions	Schedule			Persons in charge
	2011	2012	2013	
<b>Priority 5 Consume Responsibly</b>				
Train procurement officials in responsible buying notions.	X			
Integrate sustainable development criteria at the level of procurement and bids:	X			
- Favour the purchase of environmentally sound health oriented biodegradable cleaning products;	X	X	X	
- Favour the purchase of environmentally sound renovation and building materials, especially with regard to paints, glues and solvents.	X	X	X	
Develop an awareness-raising guide on responsible buying intended for all NBC buyers (what is responsible buying, what criteria should be considered, etc.).		X		
Integrate sustainable development criteria into the bids.		X		
Offer NBC promotional material that meets sustainable development criteria.		X		
Raise awareness of responsible buying among suppliers and subcontractors.	X	X	X	
Include, in subcontracts, responsible consumption criteria consistent with the NBC sustainable development policy.	X	X	X	



### C. INTERNAL ADMINISTRATIVE MANAGEMENT

Priorities and Actions	Schedule			Persons in charge
	2011	2012	2013	
<b>Priority 6 Reduce the Energy Consumption of Buildings</b>				
Optimize energy saving measures with consumption control systems (heating of buildings, of greenhouses, lighting, etc.).	X	X	X	
Ensure the upkeep and preventive maintenance of energy systems.	X	X	X	
Analyze energy consumption periodically.	X	X	X	
Raise awareness of energy-saving measures among staff.	X	X	X	
Generalize the <i>hibernation</i> or switching off function of all personal computers and other electronic devices to reduce energy consumption during idling periods. (Regarding computers, the result is as effective as completely switching off, according to Hydro-Québec).	X			
When equipment is being replaced, favour eco-friendly and approved <i>Energy Star</i> equipment	X	X	X	
Replace the light components of NBC lampposts with a more energy-saving system.	X	X	X	
During new constructions and renovations:				
- Favour energy efficient projects;	X	X	X	
- Integrate renewable energy sources.	X	X	X	
Introduce a strategic framework to integrate new practices for the construction of sustainable buildings (example: develop assessment tools and criteria that contribute to sustainable construction such as those determined by the <i>Leadership in Energy and Environmental Design</i> certification program (LEED)).			X	
Continue the efforts aimed at reducing the use of oil as an energy source.	X	X	X	

**C. INTERNAL ADMINISTRATIVE MANAGEMENT**

Priorities and Actions	Schedule			Persons in charge
	2011	2012	2013	
<b>Priority 7 Manage Water Responsibly</b>				
Ensure the follow-up and maintenance of irrigation systems according to climatic conditions.	X			
Install faucets with a stop mechanism (electric eye) and high-performance, low pressure bathroom fixtures in buildings under renovation and in new buildings.	X	X	X	
Gradually eliminate all equipment making continuous use of aqueduct water (urinal).	X	X	X	
Maintain water fixtures.	X	X	X	
Raise the staff's awareness of responsible water consumption for landscaping and vehicle maintenance.	X	X	X	
Implement rainwater recovery strategies (direct water towards landscaping)		X		
Gradually eliminate bottled water.		X	X	
Facilitate the park users' access to drinking water.		X	X	