

## Carbon Reduction Program for the Office

“If the biosphere is wrecked, it will not be done by those who couldn’t give a damn about it, as they now belong to a diminishing minority. It will be destroyed by nice, well-meaning, cosmopolitan people who accept the case for cutting emissions, but who won’t change by one iota the way they live.”

George Monbiot, *The Guardian* (UK)

### Overview

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**Introduction** This outlines a program for reducing carbon emissions in the office workplace.

We are all aware that carbon dioxide emissions have doubled since 1950 and are causing significant climate change. By reducing carbon emissions, we can each begin to address the issue and join the growing movement for sustainable practices in all areas of our personal and professional lives.

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**Summary** This document outlines the following areas, in an overall approach, to reducing carbon emissions in the office:

- the actions already taken by most offices
- short-term actions that readily build on the actions already taken, and
- medium- and long-term actions.

*Note:* This third set of actions is based on the Natural Step Framework for Sustainability devised by The Natural Step, an international non-profit organization.

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**Monitoring committee** Any office implementing a carbon reduction program should establish a small coordinating and monitoring committee as soon as possible.

#### *Committee Responsibilities*

This committee will engage the staff in the whole process of

- finalizing this program
  - overseeing the implementation of the short-term proposals, and
  - coordinating the Natural Step Framework which will produce a longer-term plan of action.
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## Overview, Continued

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### Publicizing the program

Publicize the program and communicate all on-going measures to

- staff members
  - network partners – at home and overseas
  - all levels of government, and
  - organizations working on the environment and climate change.
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### In this document

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## Actions Already Taken

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### Summary

We can all feel encouraged by steps which have already been taken by the staff. These important steps include

- recycling paper and blue box items
  - printing documents on both sides of paper, as much as possible
  - reusing paper printed on one side
  - isolating green garbage
  - avoiding disposable cups, plates, and plastic cutlery
  - using trains for work-related travel when possible, and
  - using public transit, bikes, or walking to and from the office
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### Conclusion

These are all significant practices, which

- require commitment by everyone
  - are a clear sign of our desire to live in a more sustainable way, and
  - are evidence that staff may well be willing to take further steps.
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# Short-Term Action Plan

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## Introduction

In the short-term, the office could easily build on the steps already taken, by

- looking at various areas of the work of the organization, and
- adopting some additional practices.

These short-term actions would

- comprise an agreed-upon framework for carbon-reduction measures, and
- build on what is already being done within a more organized, specific, and deliberate program.

You might call these easy steps the low-hanging fruit –pick them first!

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## What's included

The short-term actions take in the following areas:

### *Inside the Office*

- computers
- office equipment
- paper
- waste management
- lighting
- meetings

### *Outside the Office*

- staff commuting
- work-related services
- office building

Each of these areas is detailed below.

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## Computers

Take these actions in dealing with computers:

- Use the power management features that enable the monitor to automatically power down after a specified period of inactivity, saving significant energy.

*Did you know?* If all computers in the U.S. used this feature, it would be like removing 1.5 million cars from the road!

- Turn off computers and monitors at night or when away from the office for several hours.
  - Buy low-energy LED computer monitors when replacing equipment.
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## Short-Term Action Plan, Continued

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### Office equipment

Take these actions in dealing with office equipment:

- Switch off printers, photocopiers, coffee-makers, etc. when not in use. Have “switch me off!” stickers on equipment as reminders.
- Use energy-efficient modes on equipment if available.
- Turn the thermostat down on the refrigerator by 1 degree – it will make a difference.
- Clean the condenser coil in the refrigerator.

*Did you know?* Cleaning the fridge condenser coil can improve the efficiency of the fridge by one third.

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### Paper

Take these actions in dealing with paper:

- Ensure we are using 100% post-consumer paper in the photocopier and printers, as well as any publications.
  - Re-use unwanted single-sided documents.
  - Maximize use of email for electronic communication and shared documents.
  - Re-use envelopes that are still presentable  
*Re-Use Sticker:* Perhaps add a sticker to the envelope to show the next recipient it’s been re-used.
  - Eliminate unnecessary photocopying.
  - Reuse packaging for shipping.
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### Waste management

Most offices already do the right things:

- use blue and grey boxes and green bin
- do not use paper plates or cups, etc.

#### *Further Actions*

- Recognize these steps that have already been taken.
  - Review methods to ensure the systems are simple to use.
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## Short-Term Action Plan, Continued

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### Lighting

Take these actions in dealing with lighting:

- Use compact fluorescent light bulbs as they use a quarter the energy of standard bulbs.  
*Did you know?* If every household in the U.S. replaced just one light bulb, it would
    - prevent more than 13 billion pounds of carbon dioxide from entering the atmosphere, and
    - be the same as taking one million cars off the road for a year!
  - Turn off lights when rooms are not being used.
  - Consider installing motion sensors to automatically turn room lights on and off based on use.
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### Meetings

Take these actions in dealing with meetings:

- Don't hand out unnecessary copies of documentation. Make extras as needed.
  - Encourage the use of public transportation to attend the meeting.
  - If plane travel is unavoidable, buy carbon offsets from renewable energy and energy efficiency projects.
  - Consider more tele-conferencing and video-conferencing.
  - Avoid using paper cups or plates for refreshments
  - Buy organic food for participants.  
*Did you know?* Chemical pesticides used on plants
    - kill off micro-organisms that keep carbon in the soil
    - cause the release of carbon into the atmosphere as carbon dioxide, and
    - leaves the soil infertile and dependent on chemical fertilizers.
  - Buy locally-grown food to reduce the distance that it is transported.
  - Offer more plant-based food, because intensive animal rearing produces a lot of methane.  
*Did you know?* One kg of beef creates half a kilogram of methane, equivalent to more than 10 kg of carbon dioxide.
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## Short-Term Action Plan, Continued

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### Staff commuting

Take these actions to encourage green commuting among staff:

- Offer transit passes to employees or a subsidy.
  - Provide a bike rack and a secure spot for bikes.
  - Encourage car-pooling.  
*Did you know?* A car emits as much carbon dioxide as an entire house!
  - Encourage those who need to drive to keep their cars tuned up – this simple step improves fuel efficiency by half.
  - Remind drivers to slow down, not to race car engines and eliminate unnecessary idling. These steps all reduce burning of gas.
  - Allow workers to telecommute.
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### Work-related services

Take these actions with your suppliers and partners:

- Tell suppliers about your actions
  - Ask suppliers to use
    - less packaging when delivering to you, and
    - only recyclable packaging.
  - Use bicycle couriers in the city.
  - Continue to request 100% post-consumer paper for outside printing jobs.
  - Make the environment and not just price a factor when purchasing.
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### Office building

General recommendations on your office building would be included in a medium to long-term plan, since most offices not have much control over their current location.

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## Medium and Long-Term Action Plan

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### Recommendation

Follow the helpful Natural Step Framework for Sustainability for medium- and long-term action plans.

#### *Rationale*

The Natural Step Framework provides a way for organizations to

- set realistic goals, and
  - map out a series of steps that will eventually lead to sustainability.
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### What is The Natural Step?

The Natural Step is an international non-profit organization helping organizations achieve their sustainability goals. The Natural Step

- was founded in 1989 in Sweden
- has offices in 11 countries, and
- has received numerous awards for its work on sustainability.

#### *The Natural Step Canada*

The Natural Step Canada

- has developed a results-based education and training program with supporting tools and materials
- educates and supports organizations in using their Framework to create a more sustainable society, and
- has offices in Ottawa.

Their website is [www.naturalstep.ca](http://www.naturalstep.ca).

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### The Natural Step Framework

The Natural Step Framework is a methodology for organizational planning. It is based on recognizing that what happens in one part of a system affects every other part. It functions like this:

- Understand the broader system within which problems occur and the principles governing success within that system.
  - Develop a practical set of design criteria based on the governing principles within the system.
  - Use the criteria to direct social, environmental, and economic actions that help resolve environmental, social, and economic issues.
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## Medium and Long-Term Action Plan, Continued

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### Framework stages

Below are the stages of The Natural Framework.

Stage	Description
A Awareness	Align the organization around a common understanding of the situation.
B Baseline Mapping	<ul style="list-style-type: none"><li>• Analyze current operations.</li><li>• Map out the flows of raw materials and energy.</li></ul>
C Clear Vision	<ul style="list-style-type: none"><li>• Create a vision statement.</li><li>• List measures that may take us from where we are now to where we could be in the future – whether or not they are realistic in the short-term.</li></ul>
D Down for Action	<ul style="list-style-type: none"><li>• Prioritize and manage our opportunities.</li><li>• Prioritize the measures that would move us closer to sustainability.</li></ul>

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