Copy Paper

# What are the key green issues?

- Energy Consumption: The production of one tonne of paper made of virgin tree fibre uses 12,564 kWh, which is only a little more than the amount of energy used by an average Canadian household in a year. Paper manufacturing is the 3<sup>rd</sup> largest user of fossil fuels worldwide.
- Waste: Paper accounts for 1/3 of all the waste in Canada. 45 percent of the paper printed in offices ends up in the garbage bin by the end of the day.
- Resource Consumption and GHG Emissions: 50 percent of the trees that are cut down go to making paper. Nearly 4 billion trees or 35 percent of the total trees cut around the world are used for paper production. Approximately 324 litres of water is used to produce 1 kg of paper.
- Pollutants and Toxins: Conventional copy paper is bleached using chlorine, which can result in harmful chemicals such as dioxins and furans, known to cause cancer in humans. 228 million pounds of toxic chemicals are released into the environment each year from the production of office paper.

Copy paper is a type of fine paper used for copying and office printing with laser and inkjet printers and typically comes in standard sizes of letter, legal, and ledger/tabloid. It is one of the most commonly used office products, and the average North American office worker uses about 10,000 sheets of paper each year. The common weight of copy paper, called basis weight, is 20 lb. for 500 sheets, and the standard degree of paper brightness is 92.



## How does green copy paper advance Government's strategic priorities?

### Reducing Carbon Emissions and Air Pollutants

By using recycled paper, the amount of GHG emissions associated with harvesting of trees is reduced. By using 30 percent post consumer waste (PCW) recycled paper, over 10 percent of total GHG emissions over the whole paper life cycle from the harvesting of wood to paper disposal are saved. Using 100 percent PCW recycled paper reduces total GHG emissions by 38 percent.

Additionally, each tree removes one metric tonne of carbon dioxide from the atmosphere per year.

#### Reducing Resource Consumption

Recycled paper saves trees, water and energy consumed through the manufacturing of nonrecycled paper products (e.g. one metric tonne of recycled paper saves about 19 trees, 29,000 litres of water, 175 litres of oil, and 4,500 kilowatt hours of electricity).

#### Reducing Unnecessary Waste

Although a significant amount of paper products are recycled in Canada, these items still make up about 34 percent of solid waste in our landfills — requesting or purchasing recycled paper will promote markets for secondary materials in alignment with the objectives of the Multi-Material Stewardship Board (MMSB).

#### ✓ Improving Water Quality

Unbleached paper diminishes or eliminates the use of chlorine, which then reduces potential hazards from the manufacturing and handling of chemicals, emissions during production, and effluent afterwards.

### Myth Buster

Today, recycled copy paper is of equal quality to non-recycled paper and works well in printers and copiers.

Recommended	Why is it important?	How do I know I am getting it?	
Copy paper shall be made of at least 30 percent post consumer waste (PCW) recycled content	Paper with a 30 percent recycled content rate is a minimum recommendation because it will foster progress on saving resources, energy and emissions. It is also readily available in the market place, and there are commonly recognized labels in use to verify these claims.	Paper is certified by one of the following two internationally recognized environmental certifications:         ECOLOGO™: gives you assurance that paper has been thoroughly evaluated for its lifecycle environmental impacts, including an efficient use of fibre through the use of recycled content, lower solid waste volumes, and a reduced amount of energy use.         Green Seal:       gives you assurance on performance requirements and environmental health requirements such as recovered and post-consumer material, reduced chlorinated bleaching, and reduced toxicity in packaging.	
Copy paper must be sourced from sustainably harvested wood	Sustainable forest management addresses key environmental forest values — from water quality and biodiversity to harvesting and regeneration.	Paper is certified by one of the following internationally recognized forest certifications, which gives you assurance about the environmentally friendly management of forests as a source for paper.SUSTAINABLE FORESTRY INITIATIVEForest Stewardship Council (FSC) Sustainable Forestry Initiative (SFI)Canadian Standards Association (CSA) Group Sustainable Forest Management System (SFM) standard	
Paper is process- chlorine free (PCF)	It is a safer way to whiten paper as it contains recycled content produced without elemental chlorine or chlorine derivatives, although one or more fibre components may have originally been bleached with chlorine or chlorine derivatives.	Paper is certified with the PCF {Processed Chlorine Free} Trademarks by <u>Chlorine Free Products Association</u> . This assures you that it has been manufactured free of chlorine chemistry.	
Cartons and corrugated packaging materials must be made of at least 30 percent PCW content	Recyclable packaging reduces the amount of waste, toxics, energy and GHG emissions.	Paper-based packaging is certified by one of the following two internationally recognized environmental certifications: <u>ECOLOGO</u> <sup>™</sup> <u>Green Seal</u>	
Consolidate product delivery	By consolidating the product delivery schedule, e.g. from every day to once a week with an optimized route plan, fuel emissions can be reduced.	Engage the supplier and ask for a consolidated delivery schedule.	



### What else could I look for?

In addition to the minimum recommended criteria outlined above, there are stronger green attributes you can look for when making your purchasing decision.

Recommended	Why is it important?	How do I know I am getting it?
Copy paper made of 50 percent – 100 percent post consumer waste (PCW) recycled content	Copy paper at these levels of PWC will save more resources, energy and emissions. However, at these levels we start to see some price increases.	Paper is certified by one of these environmental certifications: <u>ECOLOGO</u> <sup>™</sup> <u>Forest Stewardship Council (FSC)</u> <u>Sustainable Forestry Initiative (SFI)</u> <u>Green Seal</u>
Made from alternative fibres	Non-wood fibres such as wheat straw, bamboo grass, and hemp are rapidly renewable resources that can contribute to more environmentally sound fibre blends. E.g. copy paper made with 80 percent wheat straw waste and 20 percent FSC certified wood fibre is one of the most environmentally sustainable paper types currently available in North America, using less energy and producing less GHG emissions over its lifecycle than conventional non- and recycled wood fibre based paper. By using these wood substitutes, the number of trees harvested for paper every year can be significantly reduced.	Ask your supplier for non-wood paper alternatives.
Lowest basis weight	The heavier the paper, the more resources are consumed and the more expensive it is. By selecting a lighter weight paper the cost to the environment will be reduced, as will the purchasing price. The basis weight of paper is the designated fixed weight of 500 sheets measured in pounds and sheet size. Standard basis weight is 20 lbs. Avoid using heavier paper and if possible, source paper lighter than 20 lbs.	Basis weight is always specified. Ask your supplier for lighter alternatives.

- American Forest and Paper Association
- Environment Canada
- <u>Xerox Study</u>
- www.ecology.com/2011/09/10/paper-chase
- Environment Canada

- Research Report: Comparative Life Cycle Study of Step Forward Paper<sup>™</sup>
- www.readyrecycles.com/recyclingfacts.htm

