



Buy green: 10 products that will make your school more environmentally friendly



*Use less - choose best!
Complete the cycle with 100%
post-consumer recycled paper*

ecoSCHOOLS.ca

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BUY GREEN

10 Products that will make your school more environmentally friendly

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Introduction

"Buying green" is becoming widely accepted as another way we can reduce our environmental impact. If we're doing it at home, why not at school too?

What is "buying green"?

Green purchasing involves buying "products or services that have a lesser effect on human health and the environment when compared with competing products or services that serve the same purpose."¹ Purchasing and Distribution Services (PDS) has a steadily growing stock of green products that everyone should know about. This guide describes 10 of these products.

Power in numbers

Think of multiplying the environmental efforts a single school can make by our total of 558 schools — that's a simple way of recognizing that all together we can have a noticeably smaller impact on the Earth through the choices we make!

PLEASE NOTE

All information contained in this guide is accurate at the time of printing, but is subject to change.

¹ Definition taken from Executive Order 13101, *Greening the Government through Waste Prevention, Recycling and Federal Acquisition*. September 14, 1998. Quoted in Pollution Probe's *Environmental Concepts and Tools*, 1.



Purchasing and Distribution Services Honoured with Top Prize

In August TDSB's Purchasing and Distribution Services (PDS) Department received the National Purchasing Institute's 2007 Achievement of Excellence Award. This award for high levels of professionalism and dedication in the field recognizes sound business processes across several domains. These processes include controls, performance measurement, customer satisfaction and involvement, commitment to the environment, business ethics, transparency and market openness, and promoting collaborative ventures to increase efficiencies and reduce costs.

Purchasing and Distribution Services is part of TDSB's Business Services Department, and is comprised of professional buying and support staff, an efficient warehouse that offers quality products to schools and administrative sites, and a customer service team providing one-on-one support to schools and central administrative staff. For more information, visit the PDS website.

PDS is going green

EcoSchools is pleased to partner with PDS to produce this short guide that highlights ten green products, many of which have been available to our schools for some time. Other products are recent additions needing wider exposure. All new green products are first discussed with key stakeholders who make up the several Customer Committees comprised of widely representative staff groups. The Customer Committees' work is facilitated by PDS staff, with school pilots of products often a part of the process.

As part of its commitment, PDS staff continue to look for safer and environmentally friendlier options. Information included here may change over time.

What's in a name? Eco-labelling unpacked

In the several catalogues that list goods and services for schools, different sectors have adopted different labels for certifying “greenness”:



- ▼ The **Energy Star** logo is the international symbol of energy efficiency. Energy Star-rated appliances and office equipment are among the best energy-savers on the market.



- ▼ The **FSC** logo means that the forest your copy paper comes from has been assessed by the Forest Stewardship Council, using strict environmental and social standards. This involves not only the certification of forest management practices, but also the processing of the wood until it reaches the consumer.



- ▼ The **EcoLogo** is the symbol indicating that a product or service has met the guidelines of Canada's Environmental Choice program. EcoLogo products or services improve energy efficiency, reduce hazardous by-products, use recycled materials or the product itself can be re-used.²

QUESTIONS

about TDSB Purchasing and Distribution Services?

Visit their web site at <http://tdsbweb/_site/ViewItem.asp?siteid=61&menuid=61&pageid=61>

² Guidelines are developed in consultation with industry, environmental groups, universities, and independent technical and scientific advisors. Agreements granting use of the Eco-Logo are renewed annually and continued compliance with the guideline is monitored.

Frequent Purchasing Decisions

CLASSROOM • OFFICE SUPPLIES



Copy Paper

Paper use represents one of the largest impacts that TDSB schools and offices have on the environment.

DID YOU KNOW? ←

The Board uses approximately 56,000 cases of 8 1/2 x 11" photocopier paper annually in serving our 280,000 students in 558 schools.

While the best action we can take is to REDUCE our overall paper use, we still need a lot of paper. Our Purchasing Department provides two choices — Forest Stewardship Council (FSC) certified paper and 100% recycled paper.

- ◆ **Cascades' 100% recycled paper** is made entirely of waste papers captured in recycling programs. The waste paper, sometimes called "post-consumer waste," is de-inked, re-pulped, and made into new paper. Paper made from 100% post-consumer waste diverts paper from landfill. And no trees are cut!
- ◆ **Domtar's Earth Choice FSC-certified paper** comes from Forest Stewardship Council certified forests. These forests must meet the internationally developed principles and criteria for forest management. These 10 principles and 57 criteria address legal issues, Aboriginal rights, labour rights, multiple benefits, and environmental impacts surrounding forest management³.

Distribution Centre (DC) Ordering information (cost per 5000 sheets)

- | | | | |
|----------------------------|------------------|--------------|----------|
| ◆ 100% post-consumer waste | DC #5901 8.5x11" | white, plain | \$46.77* |
| ◆ FSC-certified | DC # 638 8.5x11" | white, plain | \$35.99* |

* Prices shown are subject to change and include all taxes and delivery to your site.

Frequent Purchasing Decisions

CLASSROOM • OFFICE SUPPLIES



Toner Cartridges for computer printers

Remanufactured toner cartridges are the green choice here. Empty cartridges contain many components that are in perfect condition, needing only cleaning, replacing small parts, and refilling them with ink. By buying remanufactured cartridges you are diverting those non-biodegradable plastic cartridges from landfill and reducing the amount of energy, waste, and raw materials that would otherwise be used to produce brand new cartridges. And you'll save money!

The chart below is a small sample of the price list for toner cartridges. For the complete list, go to <http://tdsbweb/webdocuments/purchasing/docs/Toner%20&%20Ink%20Supplies.xls>.

Please note: The "remanufactured cartridges" column presently sits at the far right of the actual website list, not as shown below. (Most, but not all, cartridges have a remanufactured cartridge option.)

Printer	Colour	YIELD	Remanufactured		Original Equipment Manufacturer	
			Part #	Price	Part #	PRICE
HP 1200, 1220 - Laserjet	Black	3,500	9395-0-WB	\$49.11	C7115X	\$75.09
HP 1300 - Laserjet	Black	4,000	93115-0-WB	\$61.24	Q2613X	\$87.35
HP1320 - Laserjet	Black	6,000	93134-0	\$68.73	Q5949X	\$133.20

Ordering information: The cartridges in the price list have a "selectable line" on the contract. Should you require an item not listed on this price list, please contact the vendor directly and use the "assorted toner line" found at the top of the contract. We recommend that you choose the high yield option, if available, for best value.

Frequent Purchasing Decisions

CARETAKING SUPPLIES



Cleaners Ordered by caretaking staff

Cleaning schools is going green! The Patriot 2 General Purpose Cleaner was successfully piloted at 12 schools last year. Now Patriot 3 Neutral Cleaner and Patriot 1 Glass Cleaner have been added to the catalogue. A new EcoLogo certified toilet bowl cleaner that also removes calcium, lime and rust has also been successfully tested at 12 schools and is now available to order.

Why are these choices important? Traditional cleaners typically contain toxic and non-biodegradable substances which drain down sinks, and after a short sojourn in Toronto's sewage system, end up in Toronto's rivers and Lake Ontario, adding to the chemical mix of water pollutants.

• DID YOU KNOW? ←

Our caretakers use over 60,000 litres of general purpose and neutral cleaners, 10,000 litres of glass cleaner, and almost 8000 litres of toilet bowl cleaner each year in cleaning our 558 schools and administrative sites. Choosing environmentally sound cleaners lessens our schools' impact on the water quality of our city.

■ ORDERING INFORMATION

	SAP Contract number	Quantity	Price
Patriot 1 Glass Cleaner	Flexo4600004107	(4x4L)	\$19.50
Patriot 2 General Purpose Cleaner	Flexo4600004107.	(4x4L)	\$22.40
Patriot 3 Neutral Cleaner	Flexo4600004107	(4x4L)	\$22.50
DFC 23 Calcium Lime & Rust Remover	Mister Chemical4600004062	(12x1L)	\$35.28

Frequent Purchasing Decisions

CARETAKING SUPPLIES



Bathroom Tissue Ordered by caretaking staff

No need to choose here! Instead of buying bathroom tissue made from virgin fibre, where it takes a cord of wood (4ftx4ftx8ft) to make every 2000 rolls⁴, the TDSB now purchases only bathroom tissue made of 100% recycled fibres. By buying the product made from paper collected in blue boxes, we have "closed the recycling loop"!

DID YOU KNOW? ←

At the TDSB we go through a total of about 816,000 rolls of 100% recycled fibre bathroom tissue per year — that equals a lot of trees that are not being cut down to supply our bathroom tissue needs!

We are saving forests, and thus preserving ecosystems that provide habitat for species.

■ ORDERING INFORMATION (cost per case of 48)

◆ Bathroom tissue (1 ply)	Mister Chemical contract	4600004062	\$20.41
◆ Bathroom tissue (2 ply)	Mister Chemical contract	4600004062	\$19.42

⁴ Source: www.toiletpaperworld.com

Frequent Purchasing Decisions

CARETAKING SUPPLIES • GENERAL CLASSROOM USE



Paper Towels

Here again, no need to choose! All paper towels for classrooms and washrooms (available on contract for caretakers) and from the Distribution Centre (for classroom use) are made from 100% recycled fibres.

By using towels made from 100% recycled paper fibre we are saving a lot of trees! And the dollar cost is comparable to towels made from virgin fibre.

• DID YOU KNOW? ←

The Board uses approximately 16,000 cases of kraft single-fold towels (16x250 ft), 4400 cases of kraft 8" rolls (12x350ft), and 6600 cases of kraft 8" rolls (24x205ft) annually. *That adds up to 31,840 kilometres of paper towels every year – equal to crossing Canada over six times.*

Can we reduce our use? If everyone used 1 towel less per day for the 188 days of the school year, we could reduce that ribbon of paper towels by 15,700 kilometres.

At present, paper towels cannot be recycled and must instead be sent to landfill. Using only the amount we really need will help reduce our environmental impact.

■ ORDERING INFORMATION

Caretaking Contract

◆ Kraft single-fold towels (16x250sh)	Mister Chemical 4600004062	\$13.60
◆ Kraft 8" rolls (12x350ft)	Mister Chemical 4600004062	\$17.05
◆ Kraft 8" rolls (24x205ft)	Mister Chemical 4600004062	\$17.59

DC Catalogue (for classroom use)

◆ Kraft single-fold towels (250 sheets/pkg)	DC #4911	\$1.18
◆ Kraft 8" rolls (350ft/roll)	DC #5221	\$1.87

Infrequent Purchasing Decisions

When purchasing products that will last for years, it makes sense to do some longer-term thinking before buying!

Total cost of ownership

Our Purchasing Department focuses on what is called "total cost of ownership" (TCO):

$$\text{TCO} = \text{purchase price} + \text{operating and disposal costs}$$

What you pay for an item is small when compared to the cost of operating it over time. For example, while there may be an immediate saving of a couple hundred dollars to the school that buys a refrigerator that is not Energy Star-rated, its greater electricity consumption will eat away that initial saving. And when the product no longer works, there are disposal costs as well.

Why wouldn't people automatically buy the energy-saving machine? Probably short-term thinking accounts for a lot of our choices. And because individual schools pay only for the refrigerator and not its monthly electricity bill, it's easy for the school to lose sight of the larger long-term costs, which are both economic and environmental.

Province Announces Tax Exemption on Energy Star Appliances

On July 20, 2007, the Government of Ontario announced a point-of-sale exemption of the 8% Provincial Sales Tax paid on Energy Star compliant household appliances. The one year exemption ends July 20, 2008 and applies to refrigerators, clothes washers, freezers, dehumidifiers, and room air conditioners. A variety of Energy Star compliant appliances are illustrated in the TDSB Appliance Catalogue. Contract terms for eligible Energy Star logo appliances on our contract with the Brick (SAP #4600003342) have been adjusted accordingly. For further information please visit our web site <http://tdsbweb/ >Purchasing> Catalogues>Appliances>.

Infrequent Purchasing Decisions

CARETAKING SUPPLIES



Light Bulbs Compact fluorescent (CFLs)

A range of Energy Star rated compact fluorescent light bulbs have just been made available to caretakers. And since a CFL lasts on average ten years longer than a standard incandescent lamp, light bulbs move from the list of "frequent" to "infrequent" purchases— saves time, saves money, protects the environment!

Facility Services is now offering to subsidize the cost of compact fluorescent bulbs for your school by 100%.

For more information, contact Richard Christie at 416.394.7495.

■ ORDERING INFORMATION Paul Wolf Electric SAP Contract 4600001781

13W Comp Fluor super mini twist 2pkg	(2/pkg)	\$5.00
Lamp Fluor Comp Med Base 65 Watt 5000k	Each	\$32.50
Lamp Fluor Comp 20W CF20EL/830/MED LL	Each	\$9.00
Lamp Fluor Comp 15W 3000K EL CF15EL/830/MED LL	Each	\$9.00
Lamp Fluor Comp Twin Tb 13W 2700K D CF13DD/826	Each	\$3.66
Lamp Fluor Compact 13W 2700K S CF13DS/827	Each	\$2.16
Lamp Fluor Comp Twin Tb 26W 2700K D CF26DD/827	Each	\$4.52
Lamp Fluor Comp Twin Tube 26W 4100K D CF26DD/841	Each	\$4.84
Lamp Fluor Compact 5W 2700K S CF5DS/827	Each	\$2.16
Lamp Fluor Compact 7W 2700K S CF7DS/827	Each	\$2.16
Lamp Fluor Compact 9W 2700K S CF9DS/827	Each	\$2.16
Lamp Fluor Comp Twin Tb 18W 4100K D CF18DD/841	Each	\$4.84
Lamp Fluor Compact 23W 3000K EI CF23EL/830/MED	(6/case)	\$54.00
Lamp Fluor Compact 13W 2700K S/E CF13DS/E/827	Each	\$3.32
Lamp Fluor Compact 13W 4100K S CF13DS/841	Each	\$2.16
Lamp Fluor Comp Twin Tb 18W 2700K D CF18DD/827	Each	\$4.52
Lamp Fluor Comp Twin Tb 13W 2700K D/E CF13DD/E/827	Each	\$5.15
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Fl Lamp Fluor Comp Twin Tb 26W3500K D CF26DD/835	Each	\$4.84
Lamp Fluor Comp Twin Tb 26W 2700K D/E CF26DD/E/841	Each	\$4.84

Infrequent Purchasing Decisions

CLASSROOM • OFFICE SUPPLIES



Computer Monitors

Two kinds of monitors — CRT and LCD — are currently available through the TDSB contract.

The older CRT (cathode ray tube) monitor was shown in a 2005 study to have greater environmental impact in 18 of 20 categories.⁵

The LCD or liquid crystal display monitor, in keeping with its slim appearance, consumes only 1/3 as much energy as the same size CRT monitor.

The trade-off: save a lot of energy with an LCD monitor, use up to 75% less desk space, get a brighter, flicker-free screen with perfect geometry that is virtually glare-free (thus reducing eye strain) — or use more energy with a CRT monitor and be able to view a slightly crisper image from any angle.

Better total cost of ownership — LCDs have twice the lifespan, use one-third the electricity and produce minimal heat output compared to similar-sized CRT monitors.

DID YOU KNOW? ←

We are buying smarter! In the 2006/2007 school year, 6402 new computer monitors were ordered by TDSB schools and IT Services as part of the Classroom Technology Migration Initiative (CTMI) project. 6271 were 17" LCD monitors, while only 131 17" CRT monitors were ordered.

Infrequent Purchasing Decisions

CLASSROOM • OFFICE SUPPLIES

Computer Monitors cont'd

How can we reduce our energy use? By paying \$53 more up front for a 17" LCD monitor, each year your school will use fewer kWhs, save in electricity costs, and produce fewer greenhouse gases.

■ ORDERING INFORMATION

All LCD flat panel monitors come with sound bar.

Part number	Vendor	Contract #	Monitor only	With computer purchase
17" LCD 320-4957	Dell Canada	4600001703	\$249	\$181
19" LCD 320-4426	Dell Canada	4600001703	\$310	\$295
20" LCD320-4687	Dell Canada	4600001703	\$523	\$508

Infrequent Purchasing Decisions



Appliances

Out with the old, in with the new — and for good reason!

Modern appliances use much less energy than older appliances because of improvements in design. The numbers are really surprising. The following chart indicates the average annual energy consumption (kWh) of three major appliances:⁶

Appliance	1984	2004 Standard	2007 Energy Star
Refrigerator (18 Cu Ft.)	1,457 kWh	465 kWh	406 kWh
Dishwasher	1,213 kWh	457 kWh	340 kWh
Clothes washer	1,243 kWh	573 kWh	142 kWh

The data suggest two strategies for conserving energy.

Strategy 1:

Reduce Our energy use is contributing to climate change. It makes sense to shift priorities and reduce energy use wherever we can. School staff are asked to discuss how many appliances are really needed.

Strategy 2:

Replace Once we would have applauded keeping something as long as it still worked. Today the cost of operating an old appliance calls for a change in behaviour. The "second price tag" — the cost of operating that old clunker — has an economic and environmental cost to be avoided as soon as possible. The difference between old and new translates into significant greenhouse gas reductions.⁷

⁶ www.energycanada.ca/PDF/Residential/householdappliancesequipment-e.pdf

⁷ Natural Resources Canada, EnerGuide Appliance Directory 2007. Available at <http://oee.nrcan.gc.ca/publications/infosource/pub/appliances/2007/index.cfm>.

Infrequent Purchasing Decisions

APPLIANCES



Refrigerators

Teachers are busy people, and when energy was cheap and we didn't fully understand the link between energy use and climate change, it seemed reasonable to have several fridges to reduce steps taken, especially in schools that are very large or very spread out.

But consider the greenhouse gas reductions (kWh per year) that result from a single upgrade³:

Old Refrigerator (kWh per year)	=	1067.0
New Energy Star Refrigerator (kWh per year)	=	407.0
Difference in Consumption (kWh per year)	=	660.0
Reduced Consumption Over Lifespan of New Refrigerator (kWh per year)	=	13200.0
Equivalent CO₂ Reductions (tonnes)	=	9.3

Today, the average school has about 10 refrigerators, with some having over 30 refrigerators — most of which are empty, old, or both. Clearly, these numbers matter. They ask us to weigh convenience against the need for energy conservation.

DID YOU KNOW?

Altogether at the TDSB we have approximately 5000 refrigerators.

In the 2006/2007 school year 98 new refrigerators 14.4 cubic feet or larger were ordered from the TDSB contract, all of which were Energy Star rated.

Infrequent Purchasing Decisions

APPLIANCES

Refrigerators cont'd

■ **ORDERING INFORMATION** for Energy Star rated refrigerators
(bought at The Brick)

	SAP	Contract Material	Price
18 cu ft , frost-free, no shelf in freezer, 2 wire shelves, meat keeper, 2 veggie crispers, 29.75"Wx31.75"Dx66.26"H Right hinge	4600003342	200001864	\$680
18 cu ft , frost-free, no shelf in freezer, 2 wire shelves, meat keeper, 2 veggie crispers, 29.75"Wx31.75"Dx66.26"H Left hinge	4600003342	200007341	\$700
14.4 cu ft , frost free, no shelf in freezer, full width crisper and recessed handle, 60.13"Hx31.13"Wx28"D (less handle) Right hinge	4600003342	20007340	\$499
14.4 cu ft , frost free, no shelf in freezer, full width crisper and recessed handle, 60.13"Hx31.13"Wx28"D (less handle) Left hinge	4600003342	20007340	\$499
18 cu ft , white, all fridge (no freezer), auto-cycle defrost, 4 adjustable wire shelves, 2 crispers, 1 deli drawer, 30"Wx29.5"Dx66.5"H	4600003342	20003293	\$617

Infrequent Purchasing Decisions

APPLIANCES



Dishwashers

Just like refrigerators, today's dishwashers are 62 per cent more energy-efficient than they were in 1984. A 1990 dishwasher uses more than twice as much electricity as a new model. Improved design means that dishwashers now require less hot water. The air-dry cycle also saves energy.

An impressive 76% of the dishwashers purchased by schools in the 2006/2007 school year were Energy Star rated.

■ **ORDERING INFORMATION for Energy Star rated dishwashers**
(bought at The Brick)

	SAP	Contract Material	Price
Built-in , GE, 3 level wash, 5 cycles, 12 options	4600003342	200002992	\$275
Portable , Nautilus GE, 3 level wash, 5 cycles, 22 options, 11 touch pads	4600003342	200001214	\$410
Built-in , GE MAX, Hi-temp wash/boost/water heat, extra hot wash	4600003342	200006823	\$450

Infrequent Purchasing Decisions

APPLIANCES



Clothes Washers

As with dishwashers, improved design has contributed to greater energy efficiency. Today's clothes washer uses less than half the electricity a 1990 model uses. Front loading washers extract more water from the clothes, shortening drying times as well. And the development of high-performing cold water detergents challenges the idea that only energy-guzzling hot water can get fabrics clean!

In the 2006/2007 school year 17 new clothes washers were purchased through our TDSB contract; only 2 of these purchases were Energy Star rated.

ORDERING INFORMATION for Energy Star rated clothes washer
(bought at The Brick)

Clothes Washer

Front-loading, 3.1 cu ft, 5 cycles.

SAP 4600003342, Contract Material 200009733, Cost \$663



Summing up...

What steps can we take toward sustainability?

Your frequent purchasing decisions

Schools need an adequate supply of copy paper, toner cartridges for computer printers, cleaners, bathroom tissue, and paper towels.

The question is simple: can the amount we use of any of these products be reduced? The answer may be complex. Communicating about any change in the way the school runs takes time and energy. Start small!

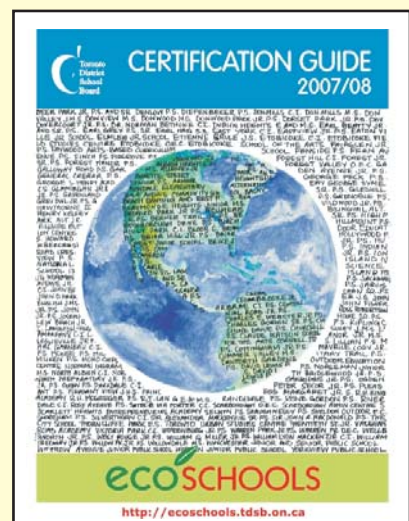
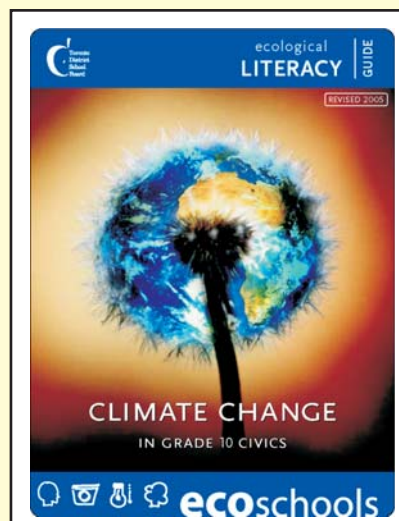
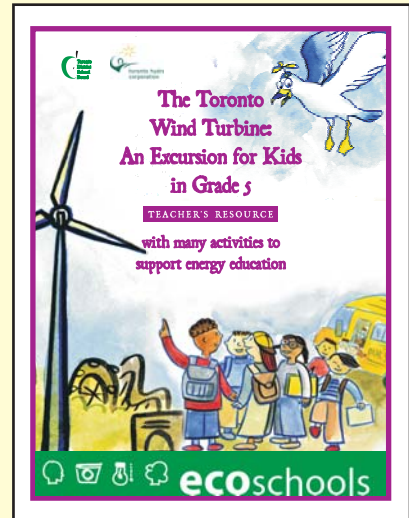
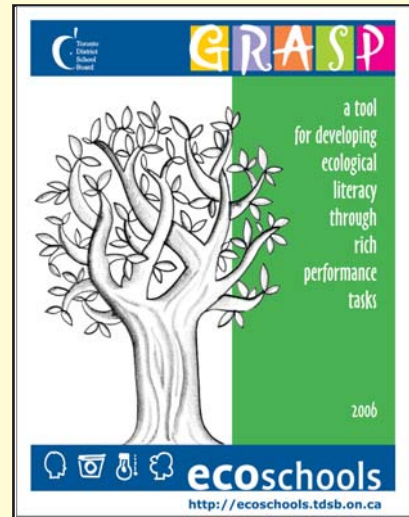
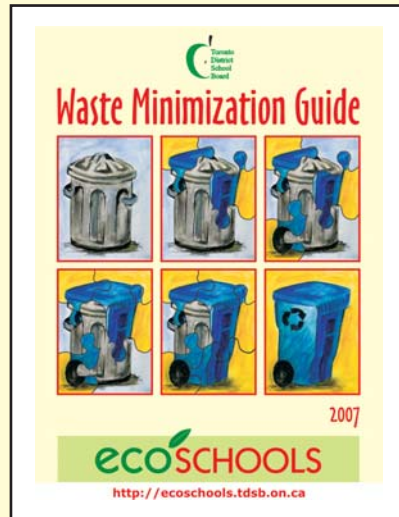
Your infrequent purchasing decisions

As equipment becomes obsolete, or as new requests are made, it is important to ask this question: Is the equipment really needed, and if it is, what is the most energy efficient choice available?

How do you communicate to your school community about "shopping green"?

- ◆ Bring it up at a meeting of your staff or EcoTeam. With your frequent purchasing decisions in particular, see if you can discover one or more actions that everyone can agree to try out.
- ◆ Let students, staff and parents know in your newsletter when your school makes a green purchasing decision.
- ◆ Engage in the EcoSchool certification process to communicate your school's commitment to environmental issues in general, and green purchasing in particular.

DOWNLOAD



For these and other EcoSchools resources, go to ecoschools.ca