

Energy Use: Making a World (or Two) of Difference by Jennifer Harwood

I'm a healthy eater.
I cook meals from scratch rather than depending on convenience foods. I regularly bus or bike to work. I consider myself to be careful with my use of resources. All in all, I like to think I'm living a sustainable lifestyle. But, I've just found out that if everyone on earth lived at my standard of living; it would take approximately 3.5 worlds to support us all. How depressing.

The good news is that my "ecological footprint" is smaller than the average Canadian's. If the entire human population lived at the standard of living of the average Canadian, we'd require 5 worlds to support us all. Hmmm, maybe that isn't such good news after all.

An ecological footprint is an illustrative means of measuring the impact that your personal lifestyle and standard of living has on the world's resources. A large part of our ecological footprint comes from the way we eat. This is because, consciously or unconsciously, we eat food that has travelled long distances to arrive at the supermarket. Personal transportation choices and energy use make up another significant portion of our ecological footprint. The extent to which you conserve energy by walking or biking, traveling by public transportation or carpooling (listed in order of preference), greatly affects your footprint. The energy efficiency of your vehicle and your home also matters, as well as energy conservation choices you make in your day-today life.

Research shows that approximately 1.8 hectares per person actually exist to provide food, energy and goods and services. This is essentially the sustainable "footprint" or carrying capacity for humans on earth. It doesn't account for population growth, or the resource needs of other species.

And it doesn't take into consideration how climate change will alter the ability of our earth's ecosystems to support us as we've become accustomed.

Removing Some of Our Footprint

What do I have to do to make progress toward reducing some of my footprint? The good news is that we don't have to take up permanent residence in our tents. Removing some of our footprint relates to becoming wiser users of energy resources.

Scouts Canada, in partnership with The Delphi Group, has developed an energy use audit for each section of Canadian Scouting, including leaders. The energy use audit is

The Leader's Climate Change Challenge:

Calculate your ecological footprint. Do you feel that your current lifestyle is pretty • good? Are you feeling brave? Find out what your ecological footprint is right now. Go to http://www.earthday.net/footprint/index.asp and follow the instructions. There will be a shoulder here to lean on when you get back...if you need it!

Now do something about it. Implement some of the suggestions on the eco-2. logical footprint calculator web site or the GHG saving suggestions mentioned above. Watch for the climate change program information and energy use audit in the August/September issue of Leader Magazine. Programs also will be made available on the web site. Use the programs to help your group earn the Climate Change Crest. Use the Energy Use Audit designed for Venturers, Rovers and leaders to evaluate your energy performance. Not only will you know you are doing something good for the planet; you'll also save money on your home and vehicle energy bills.

Tell us that you've taken the challenge. We'd love to hear more about your **3.** experience, what you learned or just that you've taken on the challenge. Contact Julian Celms at the National Office, jcelms@scouts.ca or by phone: 613-224-5131 extension 255.





part of the new climate change program and will be a requirement for all sections in attaining the new Climate Change Crest. The audit is a tool for investigating home energy use and transportation habits. Together, these form a large part of our ecological footprint. They also contribute the most toward greenhouse gas emissions. By reducing our ecological footprint in these areas, we also will reduce our contribution to climate change. Climate change will affect how well our earth is able to support our needs. Therefore, reducing climate change and our ecological footprint makes a lot of sense.

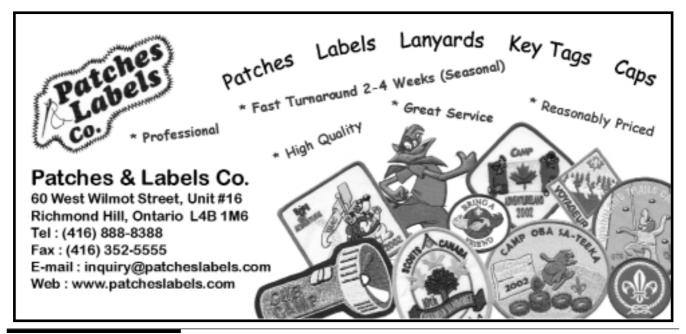
Canada is a big energy user. The average Canadian generates five tonnes of greenhouse gas emissions every year. This is partially due to our geography: we're a big, northern country that depends on heating our homes for much of the year. Our cities and towns are designed around personal vehicle transportation, rather than public transit or active transit (walking, etc.).

Our current patterns of energy use do have consequences. We're starting to see the effects that our level of energy use is having on the environment: more smog warnings, periodic blackouts, more kids with allergies, and the effects of global warming such as extreme weather and warmer temperatures.

Canada also is a big energy loser. We can go a long way in tightening our use of energy. In older homes in particular, energy loss can significantly increase a home energy bill. Some sources say that the average Canadian home could save up to \$500 per year on energy bills and reduce more than one tonne of GHGs purely through improved energy efficiency.

Reduce Your Greenhouse Gases by One Tonne

The Government of Canada has a program called the "One Tonne Chal-



lenge" – which challenges Canadians to reduce their personal emissions of greenhouse gases (or GHGs) by one tonne over a year. But what on earth is one tonne of GHGs? Individual Canadians produce an average of five tonnes of GHGs per year. Of that total, half is attributable to transportation. Home heating accounts for approximately 30%, and the remainder comes from water heating, appliances, lighting and space cooling.

Just how hard is it to reduce your GHG emissions by one tonne per year? Surprisingly, it's not that difficult. Clearly circumstances vary: not all Canadians can equally implement the same greenhouse gas reducing measures. The list below provides some common things you can do to reduce your own emissions by one tonne over the course of the next year. Not only that, you'll save a "tonne" of money doing them as well.

Strategy	Energy bill savings per year	Percentage of One Tonne Challenge fulfilled*
Install a programmable thermostat to automatically adjust the temperature of your home by 5° at night and when no one is home.	up to 10%	50%
Turn thermostat down two deg	rees.	5%
Improve the energy efficiency of your home. Conduct a full EnerGuide for Houses energy efficiency evaluation and implement all recommended changes.		ls 220%
Replace five standard light bulbs with energy efficient "compact florescent bulbs".	75% of energy use	10%
Add weather stripping around doors to stop drafts.	10% heat savings	5%
Hang clothes on a rack to dry instead of using the dryer	100% of dryer energy use	30%
Replace a refrigerator that is 10+ years old with an ENERGY STAR® brand one.	Average of \$40 per year	20%
Use gasoline enhanced with 10% ethanol.		10%
Choose to walk, take public transit or carpool 10% more often.	Varies depending on mode selec	ted 20 – 80%
Keep your vehicle maintained to manufacturer's maintenance schedule.		30%
Buy a 25% more fuel-efficient vehicle.	Average of \$360	100%
Reduce the amount of time you idle your car by 10 minutes a day.	Average of \$70 of fuel wasted per	year 25%
* To estimate average GHG reductions (in tonnes) each of these measures generate, divide each number by 100.		

Adapted from: The Government of Canada's One Tonne Challenge (www.climatechange.gc.ca/english/otc/)

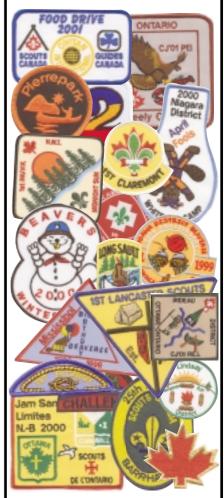
Canadä

Do your part in helping reduce climate change – you'll make a world (or two) of difference! $\dot{\wedge}$

- Jennifer Harwood works with The Delphi Group - a Canadian environmental consulting firm. The Scouts Canada Climate Change Education Action Program is funded by the Government of Canada's Climate Change Action Fund, Alcan Inc. and Nexen Inc.

solutions

embroidered & printed: emblems crests badges



no design fees minimum **25** pieces made in **Canada 15 day** delivery*

*The average order ships within 15 working days from final artwork approval. Some special orders may take longer.



Ebik Id Solutions Inc.

14 Terry Fox Drive Vankleek Hill, Ontario K0B 1R0 Canada

tel 613 678 6310 **fax** 613 678 3589 **800** 800 267 9385

ebikmail@ebik.ca

www.ebik.ca