

## Rovers Climate Change Crest Requirements



In 2000, the world's business and government leaders voted that climate change was the top challenge facing the world (2000 World Economic Forum, Davos, Switzerland). The science behind climate change and approach to dealing with it continue to be debated. However, forward-thinking individuals say that the issue is here to stay and will affect how we live and do business.

By earning the Climate Change Crest you have the opportunity to shape your life and your world by understanding and addressing climate change. How will it affect you now and in the future? How can you think strategically about what climate change might mean in your future profession? How can you influence the people around you to think outside of the box to address and cope with climate change?

### Requirements

#### 1. Take stock:

- a) The average Canadian emits about 5 tonnes of greenhouse gases a year. At standard temperature and pressure, that volume of gas would fill five average-sized, two-storey, three-bedroom houses! Figure out how many greenhouse gases you emit per year at:  
<http://www.climatechange.gc.ca/onetonne/calculator/english/>
- b) Discuss with your Rover crew how the location and type of home you live in, your transportation choices, the activities you are involved in, the purchases you make, the values of the companies you support in your day to day activities or through purchases, etc. have an impact on climate change and the environment.

2. **Make and implement a plan to reduce your contribution to the problem by one tonne.** Climate change reminds us again that we are not living sustainably. Twenty five percent of Canada's greenhouse gas (GHG) emissions come from the daily activities of ordinary Canadians. Canada has committed to reducing greenhouse gas emissions by 240 megatonnes. This won't stop climate change, but it will make a good first step towards reducing it. Do your part by reducing your GHG emissions by 1 tonne.

#### *Tips to help you meet your goal:*

The calculator that you used above will provide you with some options to consider to help you reduce your emissions by 1 tonne. Keep track of your achievements with the on-line calculator. You can also consider these suggestions:

- If you are a typical Canadian, your transportation choices account for half of your GHG emissions. Reducing your GHG emissions through more sustainable transportation will bring you a long way toward fulfilling the crest requirements. To do this, determine how you can become a more sustainable commuter. Commit to reducing your trips by car where you are a single occupant in favour of active transit (biking, walking, in-line skating, etc.), public transit or carpooling.
- Energy use in the home is the other main area of individual GHG emissions. The calculator will have a number of suggestions and ways you could reduce your home's energy use – everything from installing energy efficient lightbulbs to improving insulation to upgrading major appliances to ENERGY STAR® rated ones. Which of these could you commit to implementing? With the approval or assistance of your parents or the building owner, implement energy saving measures, retrofits or replacements.



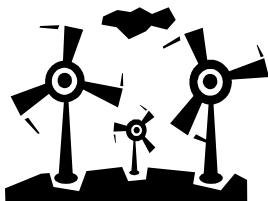
- The final critical category to reduce your emissions is what might be called “lifestyle” choices. For instance:
  - Reduce the energy impact of your food consumption. Eating locally grown produce, purchasing items with less packaging, reducing your meat consumption, choosing organics, signing up with a grocery distribution company, etc. all play a role in reducing energy and other environmental inputs.
  - Make sure your recyclables are really recyclable. Municipalities which offer recycling services do not accept everything that goes into a blue box. Learn exactly which grades of materials that they accept (for example, there are 7 grades of plastic, some of which your municipality will collect because they have market potential). You may be able to find this information out at: <http://www.earth911.org/master.asp?s=ls&a=Recycle&cat=1&serviceid=>. Purchase items with less packaging, using material that you know will be recycled by your municipality.
  - Finding ways to conserve water makes sense for a lot of environmental reasons, including climate change. This is because energy is used to treat, pump and distribute water to your home. Find ways to capture rainwater with a rain barrel; use a container to collect water running through your tap as you wait for it to heat up and use it for other purposes; look for ways to conserve water during cooking, bathing and cleaning; reduce the water you use in your garden by planting drought resistant plants and practicing water efficient landscaping, etc.



3. **Undertake one project of your choice that shows your innovation and leadership in addressing and coping with climate change.** Investigate how climate change will affect one issue of interest to you. There may be one area in particular (i.e. enhanced recycling programs) that your community needs to address in order to reduce their impact on climate change. Conduct some research on the current thinking around how to address or cope with climate change in your chosen issue area. Learn to think outside of the box and develop innovative thinking to overcome the obstacles. Present your findings and what you did to address the problem to your Rover crew. Here are some ideas to get you thinking on...

#### **...reducing barriers:**

- Did you encounter barriers in developing your plan to reduce your GHG emissions by 1 tonne? Maybe your municipality does not offer a recycling program or it is not user-friendly; maybe there are few or no safe biking routes to promote active transportation; maybe municipal development plans are promoting urban sprawl and car use rather than sustainable communities and rapid transit. Become a voice of advocacy and challenge your leaders, businesses and community members to make changes toward sustainability.
- In the future, we will have to reduce our dependency on fossil fuels. “Green energy” – less environmentally polluting and renewable energy – is making progress in Canada, but there are many barriers to its rapid uptake. Research the barriers and see if you can identify ways in which your municipality could increase the popularity and access of green power for corporate and individual use.

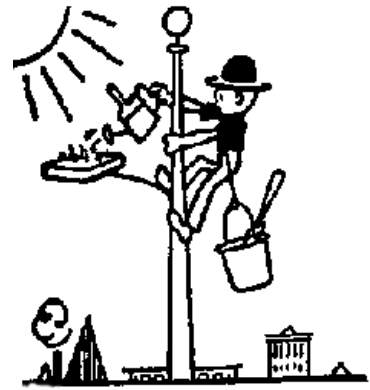


#### **...reducing emissions:**

- Start a campaign to help the people in your community learn about climate change and make a commitment to reduce their GHG emissions.
- Investigate the potential of rooftop gardens to reduce energy use and greenhouse gas at your college, university or another community building. Research the potential and options, and present it to the building owners. The following sites will help you to get started: <http://www.greenroofs.ca/grhcc/> and

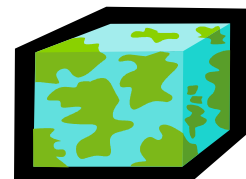
<http://www.cityfarmer.org/rooftop59.html>. Make sure the connection between rooftop gardens and reducing GHGs as well as other environmental and social benefits are included in your presentation.

- Learn about energy use in your meeting space and how it can be reduced. Develop some ideas for the building owners along with product recommendations. See if you can volunteer to help to implement the plan, and be sure to investigate possible government grants to help with financing.
- Research government grant programs available to homeowners or corporations. Promote them within the community or to select building owners as options to consider – be sure to promote energy, money and greenhouse gas savings they could facilitate. A good place to start is <http://oee.nrcan.gc.ca/houses-maisons/english/homeowners/grant/grant.cfm?PrintView=N&Text=N> and <http://oee.nrcan.gc.ca/english/programs/index.cfm>.



### ***...aligning your future career with your environmental values:***

- Investigate the implications of climate change on your career of choice. How will it affect your area of business, what are the current strategies being taken to include climate change into strategic planning and thinking in your field? You may be able to undertake this initiative as part of an assignment at your university or college. Some examples of this type of thinking include: alternative architecture like that in the Earth Ship, energy efficient system modelling, renewable energy technologies, nanotechnology, advanced materials, public awareness and green policies, industrial ecology, green economics, natural capitalism, neo-urbanism planning, organic architecture, alternative vehicle design and fuel systems, change management of public attitudes and behaviour relative to the environment, biomimicry, etc. Let organizations that are thinking “outside the box” inspire you. Check out:
  - The Rocky Mountain Institute (<http://www.rmi.org/>);
  - McDonough Braungart Design Chemistry (<http://www.mbdcd.com>);
  - Earth Ship ([www.earthship.org](http://www.earthship.org));
  - The Frank Lloyd Wright Foundation for architecture (<http://www.franklloydwright.org/index.cfm?section=home&action=home>).
- Consider entering Natural Resource Canada's competition for great new climate change ideas. For more information, go to: <http://www.oee.nrcan.gc.ca/ambassadors/home.cfm?PrintView=N&Text=N>.
- Research new thinking on home design for energy efficiency. A place to begin is: [www.earthship.org](http://www.earthship.org). Volunteer to help with construction or testing (as an intern) of these new building designs.
- Developing countries will suffer the most from climate change, even though developed countries have contributed much to the problem. Volunteer with an organization that works on energy efficiency, greenhouse gas reduction, and/or climate change adaptation projects overseas and learn more about some of the challenges and solutions. Examples of possible organizations to contact include:
  - Engineers Without Borders (<http://www.ewb.ca>);
  - CUSO ([http://www.cuso.org/english\\_home.htm](http://www.cuso.org/english_home.htm));
  - The Canadian Nature Federation (<http://www.cnf.ca/>);
  - IUCN (<http://www.iucn.org/>);
  - The Association of Universities and Colleges in Canada (<http://www.aucc.ca/>);
  - Visit your college or university's career counselling office to find out about other opportunities.



***...raising public awareness:***

- Plan a renewable energy fair/education and awareness campaign. Invite technology developers to display their technological ideas with potential to reduce air pollution and greenhouse gases on campus or another public place.
- Find a business that uses renewable energy in your community and interview the owners to find out why they made the decision, how they went about implementing the technology, what impact it has on their operations, and what lessons they've learned. Write an article for your city, school or community paper to profile this company and their leadership.
- Take a tour of a renewable energy or alternative fuel plant. Interview the plant owners or managers to learn more about the technology, how it works, what its potential is, what the barriers are to getting it on the market, and how the technology could be used in your community or at your university/college. Write an article for the school, city or community paper on the subject.
- Create a "Climate Change Time Capsule". Research the possible climate change impacts that your province or region could face. The following site is a good place to start:  
[http://www.climatechange.gc.ca/english/issues/how\\_will/regional.shtml](http://www.climatechange.gc.ca/english/issues/how_will/regional.shtml).

Be sure to interview local insurance companies about the types of extreme weather events they've documented over the past 10 years and the trends in these events. From this information, make educated projections about how these potential impacts could affect your city in terms of weather, water availability and quality, infrastructure, health, etc. Prepare a summary of what you expect to happen and present it to city officials. Seal this information in a container and store a copy with city officials and Scouts Canada to be opened by Rovers in the future.

**CONGRATULATIONS!**  
**YOU HAVE COMPLETED THE ROVER**  
**CLIMATE CHANGE CREST REQUIREMENTS!**



**Get your Crest from the nearest ScoutShop.**

