

GHG Reduction Initiative - Canada

In a little grassy clearing on the side of Ribbon Creek Road, deep in the heart of Kananaskis Country, there's a little hostel that welcomes 2,000 guests every year. They come to play in this 4,000-km² outdoor playground in the foothills of the Canadian Rockies. There's a creek not far from the hostel, and elk, bears and coyote have been known to wander through the yard. There are mountain vistas and trails for days out here. Dans une petite clairière gazonnée le long de la route Ribbon Creek, en plein cœur de la région de Kananaskis, notre petite auberge accueille 2000 visiteurs par année. Ils viennent jouer dans un terrain de jeux extérieur de 4000 km² au pied des Rocheuses canadiennes. Non loin de l'auberge se trouve une petite baie, tandis que des élans (appelés orignaux au Canada), des ours et des coyotes ont été vus dans la cour arrière. Sans oublier les panoramas montagneux et les sentiers pour faire de la randonnée durant de longues journées!



It's little wonder, then, that HI-Kananaskis Wilderness Hostel cares a lot about the environment. But the hostel itself isn't as environmentally friendly as it could be and the building hasn't had a major upgrade in decades. With your support, Ce n'est pas étonnant que l'auberge HI-Kananaskis Wilderness soit si soucieuse de son environnement. Toutefois, l'auberge même n'est pas aussi écologique qu'elle le devrait et le bâtiment n'a pas été rénové depuis des décennies. Avec ton soutien, l'auberge the hostel can roll out a building upgrade project that will better align the building with the place it calls home.

When HI-Canada-Pacific Mountain Region audited the energy efficiency of its hostels a few years ago, HI-Kananaskis Wilderness Hostel had higher per guest greenhouse gas (GHG) emissions than any other hostel in the region. The major culprit is an aging roof made out of asphalt shingles that isn't well insulated. Much like humans lose head through their head, HI-Kananaskis loses a lot of heat through its roof, drastically reducing its energy efficiency.

So the hostel has a plan in place to reduce its GHG emissions and the first phase involves replacing the roof with better insulation and metal sheeting that will help keep the heat in. On completion of the roof installation, the project initiative will **reduce the hostel's annual GHG emissions by nearly 15,000 kilograms**. Over the projected 50 year live time of this investment, that represents **over 750 tonnes of GHG emissions avoided**.

By the time the project's second and third phases, which involve replacing the hostel's furnace and windows, are complete, the hostel's total GHG emissions will be down by almost two thirds.

This project will also significantly reduce the heating costs to operate this hostel. These savings will allow for more money to be invested into other sustainability projects. pourra entreprendre un projet pour rénover son bâtiment qui améliorerait ce que nous appelons notre maison

Quand HI-Canada Région du Pacifique et des Montagnes a fait vérifier l'efficacité énergétique de ses auberges il y a quelques années, l'auberge HI-Kananaskis Wilderness a obtenu un rapport Gaz à effet de serre (GES) par visiteur plus élevé que les autres auberges de la région. Le problème principal réside dans le toit vieillissant fait de bardeaux d'asphalte, qui n'est pas bien isolé. Tout comme les humains perdent leur chaleur par la tête, l'auberge HI-Kananaskis perd sa chaleur par son toit, ce qui réduit de façon draconienne son efficacité énergétique.

Alors l'auberge a mis en place un plan de réduction d'émissions de GES; sa première phase consiste à remplacer le toit par de meilleurs matériaux d'isolation et des toiles de métal qui conserveront la chaleur dans le bâtiment. Dès que l'installation du toit sera terminée, la réalisation du projet aura **réduit les émissions annuelles de GES de près de 15 000 kg**. Selon la durée de vie prévue de cet investissement, cela représente plus de **750 tonnes d'émissions de GES évitées**.

Quand les deuxième et troisième phases du projet seront complétées, soit de remplacer le système de chauffage de l'auberge et les fenêtres, les émissions de GES auront diminué de près des deux-tiers (66 %).

Ce projet réduira de façon significative les coûts de chauffage de l'auberge. Ces économies libéreront de l'argent qui pourra être investi dans d'autres projets durables.



Why we need help

While this hostel is certainly beautiful and offers a unique guest experience in the wilderness, it's not highly profitable. It does not generate adequate revenues to recapitalize itself. Hostels throughout the Association are experiencing severe cutbacks and cancelled capital reinvestment due to both the global recession and the strong Canadian dollar, which has negatively impacted international tourism levels. While in pre-recessionary years, the larger hostels generated adequate revenues to support the smaller hostels' capital projects; they are now challenged to stay on track with their own, often deferred, capital improvements. Given the competitive pressures these properties experience in the markets, this is a significant threat.

Given HI-Kananaskis' location in a wilderness parkland, this hostel needs this upgrade to truly reflect the values, educational and cultural experiences it is trying to pass on to its guests – that of respecting, experiencing and gently impacting the environment in which it stands.

Thank you for your support

Find out more about HI's other sustainability projects in Canada at <u>hihostels.ca/sustainability</u>

Pourquoi nous avons besoin de ton soutien

Bien que l'auberge soit assurément magnifique, tout en offrant une expérience exceptionnelle à ses visiteurs, elle n'est pas très rentable. En effet, ses revenus ne sont pas suffisants pour fournir de nouveau capital. Les auberges de l'Association subissent des restrictions budgétaires sévères et un réinvestissement du capital qui s'annule, en raison à la fois de la récession mondiale et de la force du dollar canadien qui a affecté les arrivées de touristes internationaux. Alors que durant les années avant la récession les plus grandes auberges généraient des revenus suffisants pour soutenir les projets de capitalisation des plus petites auberges, elles sont maintenant mises au défi de survivre avec leurs seuls revenus et se retrouvent souvent à reporter à plus tard les améliorations du capital. Compte tenu des contraintes économiques que ces propriétés subissent dans leurs marchés, cela représente une menace significative.

En raison de la localisation de l'auberge HI-Kananaskis dans un espace vert en pleine nature, cette auberge a besoin d'améliorer son bâtiment de manière à refléter les valeurs et les expériences éducatives et culturelles qu'elle tente de transmettre à ses visiteurs : celles de respecter l'environnement dans lequel se trouve l'auberge, en y vivant des expériences avec le moins d'impact possible.

Merci de ton soutien!

Pour connaître les autres projets durables des auberges HI au Canada, consulte le site <u>hihostels.ca/sustainability</u>



SUMMARY

Project Description: To reduce GHG emissions from HI Kananaskis by 2/3rds at the conclusion of a three phase project. Funding will be applied to Phase 1, a roof replacement and upgrade to increase thermal resistance (known as the resistance value or R-Value) and HVAC efficiency of the hostel.

Project Type: Energy Efficiency & Education in Sustainability

National Association: HI Canada

Project Location: HI Kananaskis

Estimation of number of reduced tonnes of CO2: The project will save at least 15 tonnes of $CO2_e$ per year, representing a reduction of approximately 30% of the total carbon footprint for the hostel per year. Over the projected 50 year live time of this investment, that represents over 750 tonnes of GHG emissions avoided.

Total Funds Requested: £ 25,000

Total Project Cost: £ 32,750

Annual £ saves and ROI (return of investment): Phase 1 provides a ROI in the twelfth year of the investment via savings in fuel costs. See below for more detail.



ANNEX 1

The Detail on How We're Doing This

We are going to use proven technology with guaranteed results and we're aiming at a CO2e emission source identified by the UN.

"....buildings also offer the greatest potential for achieving significant GHG emission reductions, at least cost, in developed and developing countries. Furthermore, energy consumption in buildings can be reduced by 30 to 80% using proven and commercially available technologies". <u>UN Environmental Programme http://www.unep.org/sbci/AboutSBCI/Background.asp</u>

That's right, we're replacing and upgrading the roof and insulation on this hostel building and that's why we need your help!

The HI-Kananaskis hostel was built in the 1970s and is a one-story building with a basement level, approximately 334 square metres. The structure sits on a concrete perimeter foundation with rigid foam insulation lining it. The building is a Panabode structure, which is a log home made from milled lumber that is 4" thick. Due to the interlocking-log, solid-wall design, the building's walls provide a superior insulation from the weather when compared to conventional frame-and-siding structures simply due to its thermal mass (the ability of a material to store heat.)

However, energy-efficiency was not part of the consideration during its construction back in the 1970s and consequently the roof and windows were very poorly engineered and heating system efficiencies were not very advanced. So, we undertook a more detailed assessment to prioritize actions and have prioritized three projects as part of a three-phase plan. The roof replacement is the first and most important phase

Phase 1: The roof is made up of asphalt shingles, ¾" 'buffalo board' insulation and 1 ½" thick cedar strips. We have had the roof's R-value estimated by a roofing professional at approximately R-3; in our climate zone, the recommended R-rating is R-40.

To estimate projected consumption and emission reductions, we used various efficiency calculators that take into consideration our building size, Heating Degree Days, current R-value and potential future R-value should upgrades be undertaken. Those results demonstrate that we can reasonably project estimated an annual reduction of GHG emissions of 14,817 kg and cost savings of about \$3600 CDN/year (see chart on the next page). This represents a 48% reduction in our annual propane use and a payback period of just over 12 years. This makes replacement of the roof the lead candidate for efficiency improvement at the property.

Phase 1 - roof replacement/ weathersealing														
		Propane		Costs			Savings					G	HG reductio	on
YEAR	Consumption (litres) w/o Project	Consumption (litres) with Project	\$/litre	Annual propane cost with project	Annual propane cost w/o project	Project capital costs	Annual savings	Cumm \$ savings	Savings less investment	↑ efficiency (%)	EF (g CO2e/ litre)	Annual (kg)	cumm (kg)	% annual
2013	20438	20438.1	\$0.36	\$7,358	\$7,358	\$50,000	\$0	\$0	-\$50,000		1,544	31,556		
2014	20438	10628	\$0.37	\$3,903	\$7,505		\$3,602	\$3,602	-\$46 <i>,</i> 398	48%	1,544	15,147	15,147	48%
2015	20438	10628	\$0.37	\$3,981	\$7,655		\$3,674	\$7,277	-\$42,723		1,544	15,147	30,294	
2016	20438	10628	\$0.38	\$4,060	\$7 <i>,</i> 808		\$3,748	\$11,025	-\$38,975		1,544	15,147	45,441	48%
2017	20438	10628	\$0.39	\$4,141	\$7 <i>,</i> 964		\$3,823	\$14,847	-\$35,153		1,544	15,147	60,588	
2018	20438	10628	\$0.40	\$4,224	\$8,124		\$3,899	\$18,747	-\$31,253		1,544	15,147	75,735	
2019	20438	10628	\$0.41	\$4,309	\$8,286		\$3,977	\$22,724	-\$27,276		1,544	15,147	90,882	48%
2020	20438	10628	\$0.41	\$4,395	\$8,452		\$4,057	\$26,781	-\$23,219		1,544	15,147	106,028	
2021	20438	10628	\$0.42	\$4,483	\$8,621		\$4,138	\$30,919	-\$19,081		1,544	15,147	121,175	48%
2022	20438	10628	\$0.43	\$4,572	\$8,793		\$4,221	\$35,139	-\$14,861		1,544	15,147	136,322	48%
2023	20438	10628	\$0.44	\$4,664	\$8,969		\$4,305	\$39,445	-\$10,555		1,544	15,147	151,469	48%
2024	20438	10628	\$0.45	\$4,757	\$9,148		\$4,391	\$43,836	-\$6,164		1,544	15,147	166,616	48%
2025	20438	10628	\$0.46	\$4,852	\$9,331		\$4,479	\$48,315	-\$1,685		1,544	15,147	181,763	48%
2026	20438	10628	\$0.47	\$4,949	\$9,518		\$4,569	\$52,884	\$2,884		1,544	15,147	196,910	48%

Here is the basic installation process:

- The most economical way to achieve an R-40 rating would be to strip the existing roof of its existing asphalt shingle cladding, strap the buffalo board and mount rigid insulating panels, then re-cover the roof in interlocking sheet metal. Installing interior insulation would require significant construction/finishing work, as there is no attic space into which insulation could be installed.
 Part of this installation would be to ensure detailed weather sealing of the building envelope's joints are undertaken, especially near the roofline, to maximize the results of this retrofit.
- This approach would result in a roof that has a 50-year guarantee. The insulation would remain protected and viable long after the 50 years, provided the new metal roof cladding is maintained and replaced as it reaches the end of its lifespan.
- Using the estimated savings of approximately \$3600 CDN/year and annual CO2e emission reductions of over 15 tonnes.



Phase two and three are beyond the scope of the HI-Sustainability Fund Competition, but we thought you might like to know about them:

Phase 2: The triple-furnace forced-air heating system is archaic and requires replacement, as it is operating at low (approx 65%) efficiency levels, as opposed to a modern high-efficiency furnace's 90%+ levels. Replacing these three furnaces represents a 25%-30% efficiency improvement and an 18-year ROI (Appendix F). This action has been assigned as Phase 2 of the reduction plan.

Phase 3: The windows, while inefficient, make up only 7% of the available wall space; replacing them represents a relatively minor improvement. While this upgrade would not be justifiable from an ROI perspective, when added to the significant savings provided by Phase 1 and Phase 2, windows will only delay full project payback by 2 years, moving the initiative's ROI to 16 years and as such has been included as Phase 3 of this project.

		Propane			Costs			Savings					GHG reduction		
	YEAR	Consumption (litres) w/o Project	Consumptio n (litres) with Project	\$/litre	Annual propane cost with project	Annual propane cost w/o project	Project capital costs	Annual savings	Cumm \$ savings	Savings less investment	个 efficiency (%)	EF (g CO2e/ litre)	Annual (kg)	cumm (kg)	% annual
Phase 1 - roof	2013	20438	20438.1	\$0.36	\$7,358	\$7,358	\$50,000	\$0	\$0	-\$50,000		1,544	31,556		
replacement/ weathersealing	2014	20438	10628	\$0.37	\$3,903	\$7,505		\$3,602	\$3,602	-\$46,398	48%	1,544	15,147	15,147	48%
Phase 2 -	2015	20438	10628	\$0.37	\$3,981	\$7,655	\$7,140	\$3,674	\$7,277	-\$49,863		1,544	15,147	30,294	
furnace	2016	20438	9671	\$0.38	\$3,695	\$7,808		\$4,113	\$11,390	-\$45,750	9%	1,544	16,624	46,918	53%
replacement	2017	20438	9671	\$0.39	\$3,769	\$7,964	\$7,420	\$4,196	\$15,586	-\$48,974		1,544	16,624	63,541	
with high	2018	20438	8801	\$0.40	\$3,498	\$8,124		\$4,625	\$20,211	-\$44,349	9%	1,544	17,968	81,509	
efficiency	2019	20438	8801	\$0.41	\$3,568	\$8,286	\$7,700	\$4,718	\$24,929	-\$47,331		1,544	17,968	99,477	57%
models	2020	20438	8009	\$0.41	\$3,312	\$8,452		\$5,140	\$30,069	-\$42,191	9%	1,544	19,191	118,667	
Phase 3 - windows	2021	20438	8009	\$0.42	\$3,378	\$8,621	\$9,120	\$5,243	\$35,311	-\$46,069		1,544	19,191	137,858	61%
	2022	20438	7889	\$0.43	\$3,394	\$8,793		\$5,399	\$40,711	-\$40,669	2%	1,544	19,376	157,234	61%
	2023	20438	7889	\$0.44	\$3,462	\$8,969		\$5,507	\$46,218	-\$35,162		1,544	19,376	176,610	61%
years remaining	2024	20438	7889	\$0.45	\$3,531	\$9,148		\$5,617	\$51,835	-\$29 <i>,</i> 545		1,544	19,376	195,986	61%
on financial	2025	20438	7889	\$0.46	\$3,602	\$9,331		\$5,730	\$57,565	-\$23,815		1,544	19,376	215,362	61%
investment (ROI)	2026	20438	7889	\$0.47	\$3,674	\$9,518		\$5,844	\$63,409	-\$17,971		1,544	19,376	234,738	61%
is realized	2027	20438	7889	\$0.48	\$3,747	\$9,708		\$5,961	\$69,370	-\$12,010		1,544	19,376	254,115	61%
is realized	2028	20438	7889	\$0.48	\$3,822	\$9,903		\$6,080	\$75,450	-\$5,930		1,544	19,376	273,491	61%
	2029	20438	7889	\$0.49	\$3,899	\$10,101		\$6,202	\$81,652	\$272		1,544	19,376	292,867	61%

The chart below five the full picture of the impact of all three phases together.



ANNEX 2

CONTRIBUTION OF THIS PROJECT ACTIVITY TO SUSTAINABLE DEVELOPMENT

- Like many organizations we continue to grow our expertise and knowledge in the areas of sustainability. The GHG Emission Reduction Initiative at HI-Kananaskis has the potential to be the greatest single GHG-reduction initiative we have undertaken so far, with a significant potential for reduction of GHG production at a property (ecological).
- In addition to reducing propane consumption and associated financial cost, the contributions to the **economical** component of sustainability will be to provide significant momentum to the implementation of a regionally sponsored Sustainability Fund:
 - Isolated initiatives currently in place at some individual hostels in the Pacific Mountain Region (e.g. collection box at front desk), can be combined and enhanced to channel collective effort (eg: via reservation software sustainability fee) towards larger projects with the potential for greater reductions in the region's environmental footprint.
 - Savings generated from Phase 1 of the HI-Kananaskis GHG Emission Reduction Initiative will assist in supporting future sustainable capital projects that will reduce the organization's environmental footprint.
- The contribution to the **social** component of this project will take the form of informative and educational messaging to our members, guests, employees and the local community. We use posters, websites, newsletters and media promotions to get the message out there.
- Examples of **ecological and social** initiatives we have undertaken in our organization to date are:
 - The **HI-Vancouver Jericho Beach's Earth Easy Project** is a partnership between HI-Vancouver Jericho Beach and the Jericho Stewardship Group. A group of volunteers meets the second Sunday of every month to remove invasive plants and to contribute new growth to the park by planting natural plants and shrubs donated, in part, by hostel guests.
 - HI-Vancouver Central organic waste recycling: Guests can get breakfast for free every morning at HI-Vancouver Central, and for over a year, all organic waste has been recycled as part of a pilot project with Vancouver Company Recycling Alternative who also handles the hostel's paper recycling. The hostel uses compostable paper plates and cups and recycled napkins as well. The project has allowed the hostel to divert a lot of recyclable waste that would have otherwise ended up in garbage bins.



- Solar power in the wilderness: HI-Rampart Creek Wilderness Hostel has installed solar panels, which means they could reduce their use of gasoline to power generators. Now the power of the sun generates electricity to run some lights, the internet and charge the occasional phone. Using solar power has eliminated two tonnes of CO₂ emissions each year. Many other wilderness hostels in the parks make use of solar power, too.
- The 'Educators In Residence' initiative of our Mountain Park properties, which impacts the 10 Wilderness Properties within the National Park areas of Banff, Jasper, Yoho and Kananaskis.
 - The human and natural heritage of the areas surrounding the hostels was documented and a 300-page bound book
 was published and copies left in the hostels so our guests about the undisturbed natural environment they found
 themselves in
 - Training was provided to the hostel resident managers as well as in partnership with the Parks Canada Interpretive Service to certify the hostel managers in Interpretation so as to better educate their guests about the area they found themselves in and specific Parks Canada messages regarding conservation
 - Signage/posters have been developed and are on display in these small hostels to further raise awareness among guests of the delicate nature of the Parks environment and ways they can contribute to minimizing their impact on the landscape and wildlife during their visit
 - Development of curriculum-based programming on the natural heritage of the Park areas for elementary- and high-school classes is ongoing
 - A series of interpretive displays have been designed and will be put on-site for both guests and the general public to enjoy once funding becomes available
- The **HI-Banff Alpine Centre's Waste Reduction Initiative**, which slashed the waste going to the landfill by 20% by redirecting recyclable or compostable materials that were finding their way into the waste stream.
 - The target was identified based on a Waste Stream Audit we completed in 2010 that indicated 29% of wastes going to the landfill were either recyclable or compostable
 - New waste collection stations were designed and relocated through the building based on the analysis of collection points from the Audit
 - Housekeeping practices were revised to deal with the increased amount of collection/waste separation required
 - Guest involvement was an integral part of the program, so permanent informational signage in the hostel, reuseable handouts to guests upon arrival, dedicated web pages and information on booking confirmation forms were put in place that outlined the project, the target and how they could help.



- We submitted the project for several environmental initiative award programs as well as submitted the information to the Calgary Journal, the nearby city's daily newspaper, as part of an article on 'green' hostels.
- The Eco-message program which creates lighthearted and informative messages that are currently delivered on posters (printed on card stock form 100% recycled paper) and can also be shared through e-newsletters and reservation confirmation emails. These eco-messages are derived from other Environmental Initiatives we have undertaken at our hostels in the past. Here are a few examples:
 - **Go with the Flow** Oh hi there. Did you know that fine porcelain throne you're sitting upon right now uses two times less water than a normal toilet? It's true. That means we're leaving about 100,000 litres of water in the wild every year. That's enough water to fill 52 dunk tanks. Don't worry, this isn't a dunk tank. Or is it? (HI-Victoria)
 - Shine on Out here, the sun isn't just for show; we use it to generate power to run our lights, the internet and to recharge the occasional phone. This means we avoid using 700 litres of diesel and save the mountain air from two tonnes of CO₂ emissions every year. So all these trees around us can breathe a little bit easier, and that makes us breathe easier. (HI-Rampart Creek)
 - **Sunshine:** We also use the sun's energy. The solar water heating system on our roof does just about half the job of the heating of hot water for your shower so we use 40% less fuel! As a result, every year we avoid consuming over 900 gigajoules of natural gas and save the environment from over 40 tonnes of CO_{2e}. That's the about the same amount of carbon sequestered annually by 9 acres of pine or fir forest. We think those trees have better things to worry about. (HI-Penticton)
 - Stay Warm By staying here, you're experiencing heat and hot water provided by a heat exchange system that captures heat from the community water treatment plant, delivering nearly 90% of our energy needs. Being tied into this system helps us to reduce our natural gas consumption <u>plus</u> we avoid emitting 120 tonnes of CO_{2e} every year. That's the equivalent of the amount of carbon sequestered by over 25 acres of pine or fir forest. We think that forest has other things to worry about. (HI-Whistler)

ENVIRONMENTAL IMPACTS

• On completion of the roof installation, the project initiative will **reduce the hostel's annual GHG emissions by over 15,000 kilograms**. Over the projected 50 year live time of this investment, that represents **over 750 tonnes of GHG emissions avoided**.



Additional examples of initiatives that profile the three elements of sustainability in the HI-Canada Network

- HI Québec, Auberge Internationale de Québec (AIQ) Project Wall, is a demonstration of a community collaboration between HI-Québec City and the Jacques Cartier Residential and Community Centre in Québec City. This isan ideal partnership with the Centre undertaking "mural projects" by young people in search of personal, social and/or professional growth and the Auberge de Québec is eager to get involved in the community by giving local young people a rewarding and enriching life/work experience. This project connects community (social) and ecologicalenergies in the following ways:
 - The "Project Wall", created by six young muralists (aged 18 to 30 years) and 3 trainers, depicts the artists' perceptions of the city of Quebec to convey them to travelers worldwide through a large mural.
 - In addition to being beneficial for these young artists and for all travelers who admire these works, this project has a positive impact on the presence of the hostel in its own neighborhood.
 - Exemplifying their ecological conscious, the artists used recycled paper for design models and sketches and plastic paint containers are reused for each completed project. Moreover, they highlighted in one of the murals the "Écolobus", a new and free electric bus service circulating in Old Quebec. Thismay inspire the travelers from the hostel to use this service.
 - A variety of Québecois cultural elements are illustrated on the walls of the hostel. For example, a coach symbolizes a means of transport long used in Québec. Also, you can see a group of young people on the Plains of Abraham celebrating St. Jean-Baptiste Day, National Day of Québec. The architecture of Old Québec, preserved from the time of New France, is also depicted (Old Québec is a UNESCO World Heritage Site). Winter scenes are also represented in the murals, showing (among other things) someone waiting for the bus while dreaming of a beautiful sunny beach. A sled dog, a Native American, scenes of daily life, and even the popular dish poutine are now to be found on the walls at the Auberge Internationale de Québec.



- HI-Rivière-du-Loup St-Lawrence Discovery Program is a multi-day hiking program in the Parc du Bic and along the Trans-Canada Trail, and is an excellent demonstration of a commitment to living and learning in ecological harmony with one's surroundings. The program's content is supervised by a biologist and introduces guests to the animal life and history of the region. The program emphasised self-propelled activities, on foot and by bike. Highlights include whale-watching in the St Lawrence River and seals-viewing at the Parc du Bic.
- **HI-Montréal**shows it can be a vibrant urban metropolis and still keep a rural heart beating by being a community drop off point, during the winter, for organic produce cultivated by a local farmer cooperative. People living near the hostel can pick up their fruits and vegetables right at the hostel. Hostel guests are given the opportunity to share in the bounty and to learn about this local entreprise. By supporting local business activity, the hostel demonstrates its commitment to the economicelements of sustainability and to sharing the lesson with guests.
- **HI-Bonavista** offers guests one of Canada's eastern-most experiences, ocean breezes and all. This hostel takes advantage of the coastal winds as a natural and renewable energy resource. The Skystream 3.7 wind turbine installed at this hostel results in a reduced carbon footprint and lower operating costs, as electrical power drawn from the grid is reduced. The windmill, standing at 50ft with three 6ft blades, is capable of producing up to 400 kilowatt hours of clean electricity per month. Any excess electricity produced goes back into the grid!

Striving to stay within the generating capacity of the wind turbine, energy efficient light bulbs are used throughout the hostel, solar lights are used outside and programmable thermostats have also been installed throughout the hostel. To encourage their guests to be a part of the hostel's efforts, and to inspire them to monitor energy consumption as they continue on their travels, signage has been created and is posted throughout hostel encouraging guests to conserve energy.

Click here to **VOTE** for this project