

# What Do York Students Think About Climate Change?

Report on Results of Our Carbon Offsetting Survey



July, 2008



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Institute for Research and Innovation in Sustainability (IRIS)

York University

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Please contact [irisinfo@yorku.ca](mailto:irisinfo@yorku.ca) to obtain further information and an electronic copy of this report. Please do not cite this report without the permission of the authors. Financial support for this survey came from York's Graduate Assistantship Programme, the Research at York Undergraduate Programme, and a grant from Petro-Canada for support of sustainability research activities – thank you to all. We also thank Steve Glassman for providing us with printed educational materials, York's Office of Research Ethics for their assistance, all of those Course Instructors who informed their students about the survey, and Melissa Leithwood, Dominika Czerwinska and FES students for their help with the survey.

## Executive Summary

Earlier this year a group of us at IRIS began surveying the York student community about their opinions on climate change and carbon offsetting. The online Carbon Offset survey was the result of the exciting and precedent setting carbon offsetting initiative for course kits launched between the York University Bookstore and Zerofootprint.

In all, around 500 student members of the York community, representing all of the University's diverse faculties, were surveyed. This represented about 1% of the York student community, and we were satisfied that this would give us a reliable picture of the range of opinions.

Members of the York community, like Canadians as a whole, are concerned about the environment and acknowledge that responsibility is shared by all.

The survey yielded three major findings. In response to the question asking who should take the most responsibility for acting on climate change issues: government, industry, individuals, institutions, or "we all have equal responsibility", we were quite surprised to find that most respondents said that everyone must share responsibility for acting. This seems to signal a shift in which all segments of society are seen as having a responsibility for doing something about the complex issue of climate change. Our finding was in line with one result from a recent Harris-Decima poll on the New Environmentalism. In response to a question about whether industry or individuals were the most responsible for addressing climate change, the majority stated that both are equally responsible.

Secondly, York students are willing to pay significantly more for environmentally friendly products or services. Our survey first asked, "are you willing to pay more", and if so, how much more? A large majority of respondents were willing to pay more, and to pay a significant percentage more. Generally, the results were similar for all surveyed faculties and disciplines. The views of respondents from the Faculty of Environmental Studies did not inflate this finding.

The third significant finding was that a majority of the York community surveyed would like to see investment in environmental initiatives at the local level in renewable energy or energy conservation projects. While respondents could select all three investment choices: renewable energy, energy conservation, and tree planting, renewable energy was the most popular choice. Interest in local offsetting initiatives was high, with the Toronto area having the highest support.

The survey results will assist the development of future climate change and sustainability initiatives at York University.

## Introduction

The rationale for this survey rose out of the recent York University initiative, in which course kits from the bookstore were made carbon neutral. The university has partnered with Zerofootprint, a Toronto-based not-for-profit that assists organizations in purchasing carbon offsets by investing in renewable energy initiatives, tree planting, and other green initiatives. IRIS has been instrumental at York University in getting this initiative off the ground. The precedent-setting nature of the change in university policy was the reason for our decision to survey the York University community about their understanding and feelings about carbon offsetting. Furthermore, York University is an institution that prioritizes sustainability in both its interdisciplinary research approach and commitments to applied environmental stewardship.

When discussing issues of this complexity we found that there is a lot of terminology and jargon that needs to be explained. According to Zerofootprint:

The idea of offsetting is to counterbalance the environmental effects of your actions in order to ensure a healthier environment. For example, car travel releases climate-changing CO<sub>2</sub> into the atmosphere. When you offset your driving, you ensure that an equal amount of CO<sub>2</sub> is taken back out or that an equal amount of CO<sub>2</sub> is being prevented from being released in to the atmosphere. This means that your driving will be "carbon neutral." [www.zerofootprint.net](http://www.zerofootprint.net) 2008.

*Carbon Footprint* - The total amount of greenhouse gas emissions produced directly or indirectly to support human activities measured in tonnes of carbon dioxide equivalent over a specified period of time. (<http://timeforchange.org/what-is-a-carbon-footprint-definition>). Since in addition to energy, we use many other resources, ecologists also use the broader idea of the "*Ecological Footprint*". All energy ultimately comes from the sun, and is converted by photosynthesis to plants, and this is where fossil fuels come from. Ecologists like to think of the carbon and ecological footprint in terms of the area of natural habitat (forest etc.) that is needed to produce the energy and resources that one person requires to live their particular lifestyle. The World Wildlife Fund's biennial Living Planet Report gives an accessible explanation of the ecological footprint approach. ([http://www.panda.org/news\\_facts/publications/living\\_planet\\_report/lp\\_2006/index.cfm](http://www.panda.org/news_facts/publications/living_planet_report/lp_2006/index.cfm))

*Carbon Offsets* - These are emission reduction credits that ensure less greenhouse gases are released into the atmosphere than would otherwise occur. They are measured as an expression of carbon dioxide equivalent. Carbon offsets have become the preferred market mechanism for organizations to reduce their carbon footprint. Carbon trading is now a prominent feature of international climate agreements. ([http://www.davidsuzuki.org/Climate\\_Change/What\\_You\\_Can\\_Do/carbon\\_offsets.asp](http://www.davidsuzuki.org/Climate_Change/What_You_Can_Do/carbon_offsets.asp))

*Carbon Neutral* - Refers to bringing your individual or organizational carbon emissions to a level of net zero by using carbon offsets.

The Carbon Offset survey was run from early January to the beginning of May 2008. IRIS used several approaches in order to reach a wide and diverse segment of the York University community in the survey. After receiving ethics approval to conduct the survey, IRIS set up a table in Central Square and Vari Hall for a total of six days. During this time IRIS staff and volunteers worked to get as many students as possible to do the online survey. IRIS had an information poster at the table explaining the impact of paper production in terms of carbon emissions and defining the terminology around carbon offsetting. Although the response was not as large as we originally hoped in terms of absolute numbers, those students that participated did so enthusiastically. Many students were unaware of these initiatives or of any other York sustainability project. This led IRIS to work with YorkW!se to advertise the carbon offset initiative campus wide.

In addition to these days of tabling, we placed information about this initiative and a link to the survey on the IRIS website as well as our Facebook group (IRIS @ York U). Word of mouth as well as information posters were utilized in publicizing this survey. IRIS also approached the directors of several first year courses in varying disciplines with a request to speak to their classes about the survey and to post information on their course websites explaining this initiative and encouraging survey participation.

After all of these efforts we reached a survey response level of 519. Depending on which figures are used for estimating the number of students at York University, this represents approximately one percent of the York population. We viewed this as giving a representative sample of the York community.

## Summary of Survey Results

A copy of the full survey and results are given in Appendix A.

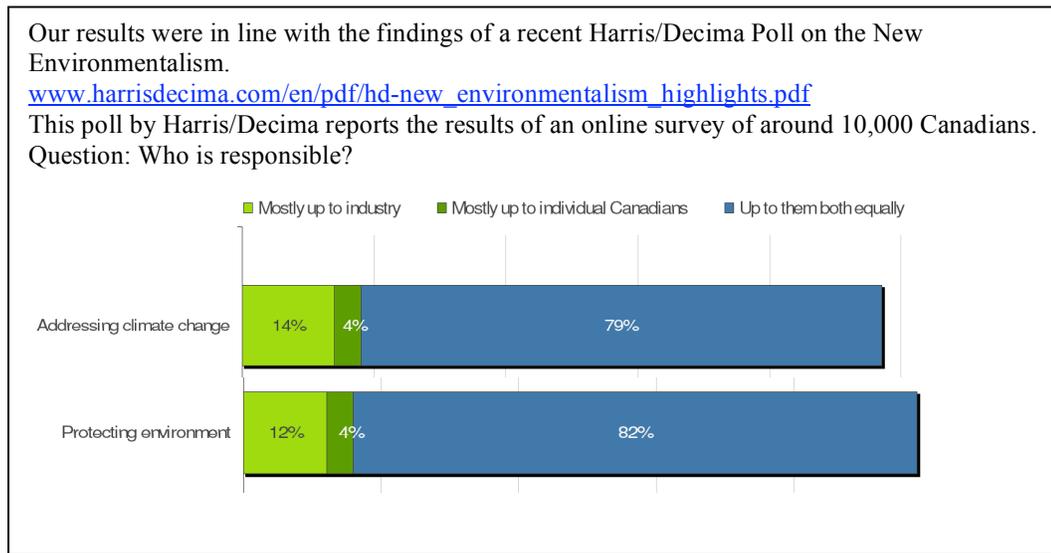
### Breakdown of Responses by Department/Faculty:

Faculty/Department	Totals
Unknown	13
Staff	25
Faculty of Arts	163
Atkinson	35
Faculty of Education	4
Faculty of Environmental Studies	72
Faculty of Fine Arts	15
Glendon	2
Faculty of Health	78
Osgoode Hall	5
Schulich School of Business	22
Faculty of Science and Engineering	85
	Total=519

The diversity of disciplines and faculties within the York community is high and was reflected among the survey participants. This contributed to the rich and interesting results of the survey. However, the low inclusion of Glendon students was clearly a reflection of our not physically going to the campus and this should be an aspect of future surveys of this sort. Likewise, Education and Osgoode Hall students might need to be sought out in specific locations.

The survey began from a very general perspective in order to contextualize the issue. The first question asked whether or not people are concerned about climate change. Not surprisingly, 95% of respondents were concerned about this issue. A common question raised by participants was about the connection between climate change, paper production, and carbon offsetting. Aside from using these survey results as a means to advocate for further environmental initiatives at York based on student opinions, we were also able to educate survey participants. We found that most students were not aware of the impact that the production of course kits has on the environment. The information poster we provided explained that deforestation contributes to 25% of the climate change problem, and up to 75% in some developing countries. Calculations done by Zerofootprint for York University determined the amount of carbon dioxide emitted by the production of course kits. York produces 75,000 course kits a year. If these books are produced using 100% virgin paper, the result is 131.5 tonnes of carbon dioxide emissions. With 30% post-consumer recycled paper, this amount of books results in 116.9 tonnes of emissions. To put this into context, one tonne of carbon dioxide is equivalent to running the average North American home for sixty days.

The survey then shifted from general to practical questions. It is one thing to be concerned about climate change and another to know what the individual can do about the problem. The third question asked who should have the most responsibility for taking action on climate change issues. The possible answers were government, industry, individuals, institutions, and everyone has equal responsibility. Despite government having the second highest proportion of responses at 17.1%, surprisingly 66.9% of respondents chose the response that “everyone has equal responsibility”, which we inferred as meaning that people recognize the complexity of the climate change debate and understand that all segments of society should make a concerted effort to do their part to make a difference.



In terms of the knowledge-related questions regarding the definitions and understanding of terms like carbon footprint and carbon offsetting, the results varied by faculty. (*See Appendix for raw data*). When the responses were broken down into groups by specific disciplines we found that some groups of students were more knowledgeable than others about the issues. In the following table, the responses of members of the Faculty of Environmental Studies to question four are presented. The responses to questions five and six are presented with FES students in a separate group.

FES Respondents	Yes I have heard and know what it means	I have heard but don't know what it means
4) Before today, have you heard the term carbon footprint, and were you aware of what it meant?	97.2%	2.8%

	Yes	No
<i>5) Have you ever calculated your carbon footprint?</i>		
<b>FES Respondents</b>	55.6%	44.4%
<b>All Other Faculties/Departments Except FES</b>	22.2%	77.8%
<i>6) Do you know what carbon offsetting is?</i>		
<b>FES Respondents</b>	87.5%	12.5%
<b>All Other Faculties/Departments Except FES</b>	48.6%	51.4%

The above table illustrates the difference in responses to questions five and six between the 72 respondents from FES and all other students. More Environmental Studies students had an understanding of these terms compared with the rest of the participants. This was to be expected and indicated that students in other disciplines will need further information about these issues and their terminology. However, it should be noted that we were not able to separate out students in Biology, Geography and Chemistry, who are all educated in their courses about these terms and issues.

The next set of questions provided some interesting results about the willingness of students to pay more for environmentally friendly products or services. For the total sample population, the majority would pay in the range of 5 to 10% more for an environmentally friendly product. Almost 50% of respondents said that they would pay this amount more to ensure the sustainability of a product or service. When the environmental studies students were excluded from the sample, the results were not much different in terms of willingness to incur a personal cost.

For question eight, the Environmental Studies students were only 1% more likely to say “yes” to the purchase of environmentally friendly products or services regardless of cost. As for what additional percentage they were willing to pay, 83.3% of the environmental studies respondents were in the 5% to 10% percent or more than 10% range, as opposed to 69.6% of the total respondents.

In response to the specific question about where members of the York community would like to see offset money being invested, the highest percentage of students chose renewable energy projects. The lowest percentage chose tree planting, suggesting that the average person has some hesitation about the methodology surrounding the validity of carbon sequestration in trees. Carbon offsetting is by no means an exact science and the debate surrounding whether or not planting trees will make much of a difference to climate change is a fierce one. During the survey, IRIS made it clear to respondents that this is by no means a perfect solution to the climate change issue and that the science is not exact. The question of what services should be invested in illustrates this reality, and should be recognized in future initiatives by York University.

Another set of questions examined where the respondents would like to see these carbon offset projects take place. More than half said they would prefer the money to go to local

projects, with 30.7% preferring the Toronto area. Of the 18.4% of respondents who said York University, 84% answered “yes” to preferring money to go to local projects. However, a significant number responded that location did not matter; hence resulting in about half saying Ontario or Canada would suffice.

The final series of questions were aimed at gauging what respondents think York should be doing differently with respect to these issues and what other campus services might undertake carbon offset initiatives. The York services listed for selection were all-encompassing and covered all segments of University operations. Fifty percent of respondents indicated that all services at York should make an effort to move towards being carbon neutral. In addition, 79.1% would like carbon offsetting to be mandatory for these services.

The last few questions asked about views on how York should engage and inform the University community about its environmental initiatives. Over 80% of respondents would like to hear about York investments, predominantly from the website. The vast majority of respondents, 82.8%, believe that York does not do enough to improve campus sustainability.

Given that one of the aims of the YorkW!se campaign is to increase campus stewardship by increasing awareness of sustainability initiatives at the University, IRIS asked the York community if they had heard of YorkW!se and were aware of this goal. (<http://www.yorku.ca/yorkwise/>). A slight majority of all those surveyed (51.7%), had never heard of YorkW!se and 63.0% were not aware that campus sustainability was a priority for York University.

## **Conclusion**

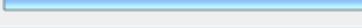
We hope that the results of this survey will continue to be used as an educational tool, not just for those taking part in the survey, but those who will be viewing the results, including colleagues in the administration who are responsible for the management of York University. We found that many of those surveyed within the University community felt that York is not doing enough to meet its commitments to the goals of environmental sustainability, but that they want action. Clearly, education is needed to build awareness. Furthermore, the marketing and communication of sustainability initiatives did not appear to be reaching far enough to be having the significant impact needed to engage the community. This survey was not intended to provide an unquestioning endorsement of the notion of simply carbon offsetting all aspects of activity at York University, but was, rather, an effort to broaden the conversation about how the York community can engage in more effective sustainability education that helps to change patterns of consumption within the York community at all levels – from the individual to the institution. The results of this survey provide some hard data about the kinds of changes that the members of the York community would like to see. We hope that those of you who did not do the survey will agree with those surveyed that we must continue to move forward on turning institutional intentions and priorities into effective action.

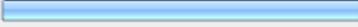
# Appendix A

## Carbon Offsetting

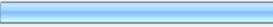
1. Please tell us your department or discipline at York?		
		Response Count
		520
	<i>answered question</i>	520
	<i>skipped question</i>	0

2. Are you concerned about Climate Change?			
		Response Percent	Response Count
Yes		95.2%	495
No		4.8%	25
	<i>answered question</i>		520
	<i>skipped question</i>		0

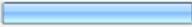
3. Who should take the bulk of the responsibility for acting on climate change issues?			
		Response Percent	Response Count
Government		17.1%	89
Industry		9.0%	47
Individuals		5.6%	29
Institutions		1.3%	7
Everyone has equal responsibility		66.9%	348
	<i>answered question</i>		520
	<i>skipped question</i>		0

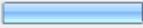
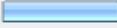
4. Before today, have you heard the term carbon footprint, and were you aware of what it meant?			
		Response Percent	Response Count
Yes I have heard and know what it means		65.9%	342
I have heard, but don't know what it means		25.6%	133
I have never heard this term. *Carbon footprint is your individual carbon emissions impact; measured in units of carbon dioxide		8.5%	44
<i>answered question</i>			519
<i>skipped question</i>			1

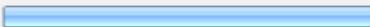
5. Have you ever calculated your carbon footprint?			
		Response Percent	Response Count
Yes		27.0%	140
No		73.0%	379
<i>answered question</i>			519
<i>skipped question</i>			1

6. Do you know what carbon offsetting is?			
		Response Percent	Response Count
Yes		49.1%	254
No (Carbon offsetting is a mechanism that reduces your overall emissions by supporting green initiatives)		50.9%	263
<i>answered question</i>			517
<i>skipped question</i>			3

7. Have you ever purchased carbon offsets?			
		Response Percent	Response Count
Yes		16.4%	85
No		83.6%	434
<i>answered question</i>			519
<i>skipped question</i>			1

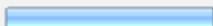
8. Would you purchase environmentally friendly products, regardless of cost?			
		Response Percent	Response Count
Yes		65.2%	339
No		34.8%	181
<i>answered question</i>			520
<i>skipped question</i>			0

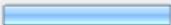
9. What additional percentage would you pay to ensure a product or service is environmentally friendly?			
		Response Percent	Response Count
Nothing		4.8%	24
less than 5%		25.6%	128
5% to 10%		48.6%	243
more than 10%		21.0%	105
<i>answered question</i>			500
<i>skipped question</i>			20

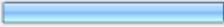
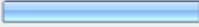
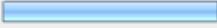
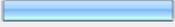
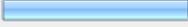
10. Do you think the production of York University coursekits has a carbon footprint?			
		Response Percent	Response Count
Yes		67.6%	344
No		7.5%	38
Don't know		25.0%	127
<i>answered question</i>			509
<i>skipped question</i>			11

11. Are you willing to pay the approximate 10 cents that it costs to make an individual coursekit have a zero footprint?			
		Response Percent	Response Count
Yes		83.9%	427
No		16.1%	82
<i>answered question</i>			509
<i>skipped question</i>			11

12. What type of carbon offset projects would you like to see this money going to? (Choose all that apply)			
		Response Percent	Response Count
Renewable energy		72.4%	367
Energy conservation		62.3%	316
Tree planting		50.7%	257
<i>answered question</i>			507
<i>skipped question</i>			13

13. Would you prefer this money to go to local projects?			
		Response Percent	Response Count
Yes		55.1%	281
No		6.9%	35
Doesn't matter		38.0%	194
<i>answered question</i>			510
<i>skipped question</i>			10

14. If so, how local?			
		Response Percent	Response Count
York University		18.4%	75
Toronto		30.7%	125
Ontario		23.6%	96
Canada		27.3%	111
<i>answered question</i>			407
<i>skipped question</i>			113

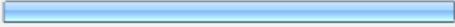
15. What other services at York would you like to see introduce carbon offsets, in order to become carbon neutral? (choose all that apply)			
		Response Percent	Response Count
Choose all		50.4%	247
food services		32.7%	160
all printing services		40.4%	198
utilities consumption		33.9%	166
water usage		35.7%	175
waste management		39.2%	192
building construction/renovation		31.0%	152
public transit		33.9%	166
private transit		28.8%	141
<i>answered question</i>			<b>490</b>
<i>skipped question</i>			<b>30</b>

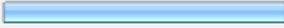
16. Should carbon offsetting be mandatory for any of these services?			
		Response Percent	Response Count
Yes		79.1%	389
No		20.9%	103
<i>answered question</i>			<b>492</b>
<i>skipped question</i>			<b>28</b>

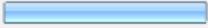
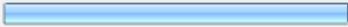
17. If so, which ones? (check any that apply)			
		Response Percent	Response Count
Choose all		45.0%	187
food services		24.5%	102
all printing services		34.4%	143
utilities consumption		31.5%	131
water usage		29.1%	121
waste management		35.1%	146
building construction/renovation		26.9%	112
public transit		27.2%	113
private transit		24.3%	101
<b>answered question</b>			<b>416</b>
<b>skipped question</b>			<b>104</b>

18. Do you want to hear about York investments in offset projects?			
		Response Percent	Response Count
Yes		83.1%	412
No		16.9%	84
<b>answered question</b>			<b>496</b>
<b>skipped question</b>			<b>24</b>

19. If so, how? (Choose your favourite)			
		Response Percent	Response Count
list serves		11.7%	51
York's website		51.8%	226
York media and newspapers		25.2%	110
a published sustainability document		11.2%	49
<b>answered question</b>			<b>436</b>
<b>skipped question</b>			<b>84</b>

20. Does York do enough to improve the sustainability of its campus?			Response Percent	Response Count
Yes			17.2%	85
No			82.8%	410
			<i>answered question</i>	495
			<i>skipped question</i>	25

21. Have you ever heard of YorkW!se?			Response Percent	Response Count
Yes			48.3%	239
No			51.7%	256
			<i>answered question</i>	495
			<i>skipped question</i>	25

22. If yes, did you know that one aim of YorkW!se is to improve campus sustainability and the environment?			Response Percent	Response Count
Yes			37.0%	158
No			63.0%	269
			<i>answered question</i>	427
			<i>skipped question</i>	93

## Appendix B

# YORKWISE

## Course Kits now part of carbon offset program

Printing is a carbon intensive process in which carbon emissions result from the manufacture and transportation of paper, the printing process itself, and the transportation of finished books. The amount of greenhouse gases emitted depends on the source of fibres in the paper; paper mill practices; and print technology. In order to green our course kits, we use Canadian papers and responsible printing practices. York University is contributing approximately 10 cents per kit for a tree planting or other local project in partnership with Zerofootprint™, to 'offset' or reduce a comparable amount of carbon emissions. This allows our course kit production to be an environmentally sound process generating a net carbon footprint of zero.

### About Course Kits

Course kits are customized publications which contain selected readings for your specific course. Your instructors select materials which may be hard to find elsewhere, materials that are out of print, and materials that may span a wide range of published and unpublished sources. Printing Services and the York Bookstore ensure that copyright holders' rights are respected.

Every effort is made to produce kits efficiently to keep costs down. Course kits are printed right on campus. Kits are produced 'on demand' in order to reduce waste, and are replenished at the bookstore every 24 to 48 hours.

York's Printing Services is a member of a group that is working with publishers to decrease royalty costs. Publishers have increased royalty costs up to 100% in the last five years

You can order course kits online or pick them up at the Bookstore.

[www.yorku.ca/printing/coursekits](http://www.yorku.ca/printing/coursekits)

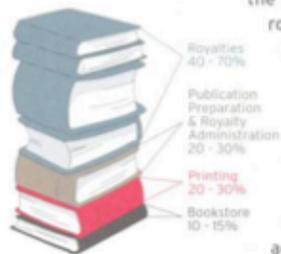
### Yorkwise

Yorkwise is a university-wide initiative to promote sustainability and quality of life on campus. Together we can all benefit from a better campus.

[www.yorku.ca/yorkwise](http://www.yorku.ca/yorkwise)

### Cost of a Course Kit

A typical Course kit has a mixture of public domain (royalty free) and copyrighted material. Royalties are based on the number of pages used from the original and the royalty page rate. Course kits are created to provide high value to students, while reimbursing writers for their work. The price of a course kit is determined by the printing and copyright costs. A substantial portion goes to writers and publishers as reimbursement for the use of their intellectual property. 40% to 70% of the cost of an average course kit goes to royalty payments to the author of the book, magazine and journal, or newspaper publisher. Web site content is subject to copyright and these costs are also included. Printing costs are quite low, and all work is done right on campus. The course kit is prepared by Printing Services staff, who are efficient in scanning, digitizing, and accounting for royalty payments.



## Appendix C

Wednesday, April 02, 2008

Y-File Headline News      Step by step, York reduces its carbon footprint

York University is the first Canadian postsecondary institution to make its course kits part of a carbon offset program. Now each one of the thousands of course kits created annually by the York University Bookstore is "carbon neutral".

This means that kits are produced using environmentally responsible printing practices that include incorporating locally produced papers manufactured using sound forestry practices and increased recycled fibre content. York is also contributing approximately 10 cents per kit to the not-for-profit organization Zerofootprint, to purchase local renewable energy and support other projects such as tree planting. When factored together, the changes effectively bring the net carbon footprint of each course kit to zero, making the course kit program carbon neutral.

"While the best footprint is no footprint," says Steve Glassman, director of the York University Bookstore, Mailing & Printing Services, "making the course kit production at York carbon neutral is a very important step forward for the University.

"The University is leading the way in Canada in this area. Making the course kits carbon neutral is just the beginning of a University-wide effort to reduce its carbon footprint," says Glassman. "Furthermore, students will not pay a cent more for carbon neutral course kits as the University will contribute the funds to offset the carbon produced by the production of the course kits to Zerofootprint."

Working with Glassman on the project is York biology Professor Dawn Bazely. Annette Dubreuil (MBA '07), a graduate of the Schulich School of Business, and MBA student Alexis Morgan, created the business case for a carbon offset program at the University.

York, says Dubreuil, is the only Canadian postsecondary institution beginning to institutionalize a carbon offset program. "Creating this program is the first step in evolving a mechanism that will allow other business processes within the University to be carbon offset," explains Dubreuil. "Other universities have created links on Web sites to show you where you can go to offset your carbon footprint, but it is a complicated and challenging process to incorporate the idea of being carbon neutral into their financial, administrative, legal and purchasing processes."

The term "carbon neutral" was the New Oxford American Dictionary's Word of the Year in 2006, highlighting its importance in global warming. It is brought about by balancing the amount of carbon released with the amount of carbon offset. By purchasing carbon offsets, York University is able to mitigate some of the carbon produced that can not be

avoided, says Glassman. While carbon offsets and renewable energy certificates do not actually remove carbon from the atmosphere, they prevent further carbon emissions from a particular activity or process by supporting renewable energy, research and other activities that reduce carbon production.

Course kits, that provide access to course material, are used by students and are an essential part of the University's teaching environment. Developed by the University's professors, the content of each kit is customized to a particular course and may include the course syllabus, original material, course and lab notes, review questions, journal articles, chapters from books, or even an out-of-print book. The kits are produced through quick copying and are spiral bound, usually with a durable cover.

The idea to create carbon neutral course kits started with Bazely, who is also the director of the York Institute for Research & Innovation in Sustainability (IRIS), a University-wide interdisciplinary centre dedicated towards the pursuit of multifaceted approaches to the contemporary challenges of sustainability. "It was Professor Bazely's idea," says Glassman. "She contacted me a little over two years ago and after some fundamental points were sorted out, we set out to establish what the impact on global warming of printing York's course kits was and to review the production processes we use at the York University Bookstore.

"We then looked into different organizations who could help us offset the impact on the environment of what we do to produce these course kits and settled on the Canadian organization Zerofootprint," says Glassman. "Zerofootprint follows international standards and ensures that every dollar they receive to offset so many tonnes of carbon emitted into the atmosphere is spent on local green initiatives."

The carbon footprint of course kits was calculated by Zerofootprint according to how the paper is made, the percentage of recycled content in the paper, the processes used by the paper mill and the transportation of the paper to York University. Glassman and Bazely then examined the impact of the actual printing process. "We came up with pennies per course kit that would offset the environmental damage imposed by the production of the kits."

"The course kit program is an example for the University," says Glassman. "We do about 2,000 titles per year for various courses. Some courses may have only 20 or 30 students enrolled in them; others have upwards of 500 students. There is quite a substantial volume. The cost runs anywhere from \$60 to more than \$100 per kit, most of which is related to copyright fees for the material reprinted in each kit. For example, the carbon offset contribution is 10 cents for every \$110 course kit."

The next step is a University-wide carbon offset survey. Dubreuil and her colleagues at IRIS are currently conducting an online survey to gauge student attitudes to carbon offset programs. "The survey asks students if they know what a carbon footprint is and what carbon offsetting involves. We are asking them if they want an expanded carbon offset program at the University. The survey also measures the attitudes of students," says

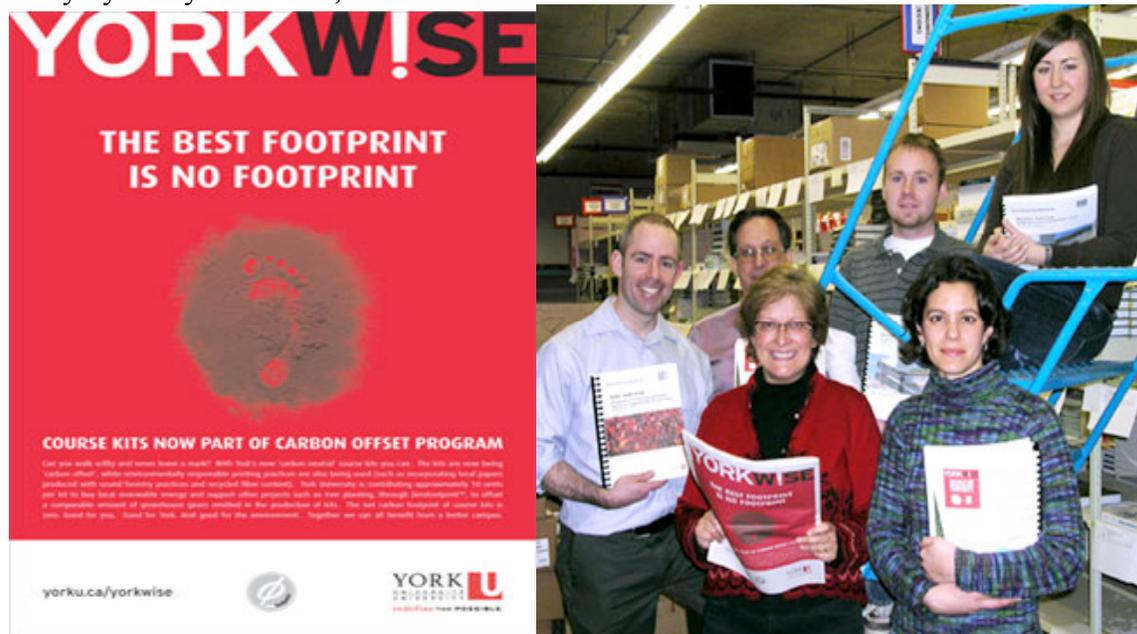
Dubreuil. "Are they willing to pay more for various goods and how much more? Some of the people we have spoken to have expressed a concern. They don't necessarily have the vocabulary. Many students want more information and have an interest."

To facilitate students' knowledge, the back of each course kit contains an information page to tell students about carbon offsetting. The program falls under the umbrella of the Yorkwise program, a University-wide initiative to reduce York's ecological footprint and improve life on the University's Keele and Glendon campuses.

Visit the IRIS Web site for more information on the carbon offset survey and sustainability research currently underway at York. To learn more about York's efforts to reduce its ecological footprint, visit the Yorkwise Web site.

The York community can keep informed on sustainability through the new IRIS blog. Input is welcome.

Story by Jenny Pitt-Clark, YFile editor.



Right: York's carbon offset crew. From the left, front row, Alexis Morgan, Professor Dawn Bazely and Annette Dubreuil. Back row, from left, Steve Glassman, MES student Tony Morris and IRIS coordinator Melissa Leithwood (MES '07).