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Canada's Climate Change voluntary challenge & registry inc.

Champion News

The Official Newsletter of
Canada's Climate Change Voluntary Challenge and Registry Inc. (VCR Inc.)

Annual Survey Response High

COMPAS, a Canadian research firm, was commissioned in late 2000 to conduct VCR Inc.'s Third Annual Survey to measure stakeholder awareness and satisfaction with the activities of Canada's Climate Change Voluntary Challenge and Registry Incorporated (VCR Inc.). The survey is a follow-up to ones undertaken in February-March 1999 and December 1999.

Two versions of the questionnaire were developed: a short version for use with senior executive stakeholders, and a longer version for use with the technical contact person in stakeholder organizations. The survey was administered using a combined methodology that included an on-line version of the survey, fax, and email. In total, 846 surveys were mailed out in October: 386 to technical stakeholders and 460 to executive stakeholders. In total, 255 surveys were completed on-line (106), by fax (111), and by email (38). This represents an overall response rate of 30%, a high response rate and most identical to the response rate of previous surveys.

An executive summary of the survey will be published in VCR Inc.'s Annual Report to be tabled at VCR's Council of Champions meeting and Leadership Awards ceremony to be held in Hull on March 1, 2001.

Vapour Recovery & Gas Compression Reduces GHG Emissions At Northstar

Marion Lake, Alberta. In 1998, Northstar Energy Corporation implemented two initiatives to reduce greenhouse gas (GHG) emissions. At their Marion Lake site, the company installed a vapour recovery unit (VRU) to collect solution gas from the battery facility tank farm, and redirected it to a flare. They also added a booster gas compressor to collect solution gas that had previously been flared from the treaters. With this innovation, treater gas was compressed, conserved and sold through the Nova Gas Transmission System. The two actions combined have reduced greenhouse gas (GHG) emissions from the Halkirk 7-31-37-17W4, Marion Lake Oil Battery by about three kilotonnes (kt) per year. Northstar's actions demonstrate what simple, cost-effective changes could also do at other large oil battery facilities. In fact, the same technology could likely be used in a variety of similar operations.

Solution gas mixture is composed primarily of methane, a potent GHG. Before the VRU was hooked up, solution gas emissions from the tank farm had simply been vented to the atmosphere. At the Marion Lake Oil Battery, the gas was previously being vented at an average rate of 750 (0.75×10^3) cubic metres (m^3) per day, which can add up to large quantities of GHG emissions over time. With the new system in place, solution gas is redirected to a flare that reduces methane (CH_4) to carbon dioxide (CO_2) and steam. CO_2 is 21 times less harmful than methane in terms of its global warming potential. In addition to reducing the GHG-related impacts of the gases, the VRU virtually eliminates unpleasant odours. The VRU uses very little power, and Northstar calculated that powering the equipment with electricity further helped to reduce fuel consumption.

In addition to the VRU system, Northstar installed a gas booster compressor at the battery to reduce GHG emissions from the treaters. Previously, the treater solution gas was directed straight to the flare for burning where the CO_2 produced by the high volume of flaring was contributing significantly to the facility's GHG emissions. With the electric booster compressor now in place, the gas is captured, compressed and sold for re-use through the NOVA transmission system. The sales provide additional revenue that the company expects to offset for the cost of both upgrades in less than five years.

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VCR Inc. Mission Statement

"To provide the means for promoting, assessing and recognizing the effectiveness of the voluntary approach in addressing climate change."

Together, the two installations have reduced GHG emissions from venting and flaring by about 5.2 kt per year, while generating a new revenue stream from the sale of 'recovered' natural gas. Field personnel brought the initiatives to the attention of the company's operations managers, as part of Northstar's corporate GHG emissions reduction program. After assessing the financial aspects of the proposals, Northstar authorized its engineering department to implement both emission reduction upgrades.

Northstar's cost-effective efforts to reduce GHG emissions are helping to meet its corporate goal of protecting the environment and adding value to the company. The company experienced no difficulties or barriers in implementing the project, although they did undertake studies to determine the potential impacts and feasibility of the actions before going ahead with the changes.

Northstar's Greenhouse Gas Emission Reduction Policy

One of the key principles of Northstar Energy Corporation's environmental policy is "to strive towards the reduction of emissions and wastes". Through participation in the Voluntary Challenge and Registry Inc. (VCR Inc), Northstar has committed to improve its operational efficiency in an effort to reduce greenhouse gas emissions. In 1999, the company's efforts were recognized as a Gold Level Reporter by VCR Inc.

Another outstanding aspect of Northstar's GHG reduction program is the fact that in 1998, by implementing 20 different projects in the field, the company reduced its overall GHG emissions by 55,812 tonnes of carbon dioxide equivalent. These gains represented a 4.7% decrease in GHGs with only a 0.8% drop in production.

Organizations can register with VCR Inc. online at: **www.vcr-mvr.ca**

Economic Costs and Benefits

Northstar Energy Corporation paid approximately $220,000 to install the new equipment for this project. Revenue generated from the sale of gas recovered from the booster compressor helped reduce the payback period of the project, with the saleable gas flowing at about 3,000 m^3 per day. The Vapour Recovery Unit (VRU) does not generate revenue, and was installed simply to reduce greenhouse gases and odours. The simple payback period is less than five years. The two upgrades were financed as a specific internal capital expense to Northstar Energy Corporation, without any external funding or support.

Climate Protection Benefits

By installing the VRU and booster compressor at its Halkirk Battery, Northstar reduced its net greenhouse gas (GHG) emissions from venting and flaring by some 5.2 kilotonnes per year (kt/yr). But since the equipment is operated by electricity, the power needed results in the production of some additional GHGs. While the power needed to operate the Vapour Recovery Unit is quite low, operating the booster compressor uses a higher-than-average amount of electricity, since the recovered gas must be transported to the Nova system.

Because Alberta uses a great deal of GHG-intensive coal to generate its electricity, about 2.2 kt of GHG emissions are produced as a result of the need to power Northstar's booster compressor. Even allowing for the increased electricity production needed to power its gas recovery equipment, however, Northstar still achieved a net decrease in GHG emissions of at least three kilotonnes per year.

Story courtesy of The Pembina Institute:
www.climatechangesolutions.com

Edmonton Hospital Awarded Gold For Decreasing Greenhouse Gases

Capital Health's University of Alberta Hospital has been awarded the Gold-level Reporter designation by Canada's Climate Change Voluntary Challenge and Registry (VCR Inc.). The Edmonton Hospital received the award for having reduced its total 1999 greenhouse gas emissions to eight per cent below the total in 1996, or by 6,204 tonnes of CO_2 equivalent.

The data is contained in the Hospital's annual Progress Report on greenhouse emissions, submitted recently to VCR Inc. for evaluation where it received 92 out of 100 points. The Gold designation has only been awarded to one other hospital in Canada, the Glenrose Rehabilitation Hospital and Energy Center – also operated by Edmonton's Capital Health Authority.

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"We are responding to public concern about greenhouse gas emissions with continued investment to improve the energy efficiency of our operations," said Dean Olmstead, Director, Facilities Management of the Hospital. "I believe most of the credit for this award has to go to Doug Dunn, our Manager of Building Operations, and his team."

As a result of the Hospital's voluntary initiatives, 1999 emissions of carbon dioxide and other greenhouse gases decreased through more efficient use and consumption of energy. At the end of 1999, 81,356 gigajoules of energy had been saved over the figure of 590,358 gigajoules of energy at the end of 1996.

"Voluntary action tends to be more economically efficient than imposed solutions, and we see the Voluntary Challenge and Registry as a valuable means to encourage effective action," Olmstead added.

"We have seen a dramatic increase in the number of health services organizations taking up the challenge to reduce their GHG emissions. We are pleased to have the opportunity to recognize one of the leaders in this initiative," says Robert Flemington, President of VCR Inc.

The Voluntary Challenge and Registry was established as a key element of Canada's National Action Program on Climate Change. VCR Inc. is a not-for-profit, partnership between the private sector and governments across Canada. Its purpose is to encourage organizations from all sectors of Canada's economy to provide greater accountability for greenhouse (GHG) generation and reduction voluntarily.

The Challenge Registry component of VCR Inc. records the actions planned and executed by organizations providing the opportunity to exchange information and to share best practices. It is intended to serve as a way of demonstrating and recording the contributions made by registrants to the overall national GHG emission reductions. More than 750 organizations have registered voluntary Action Plans with VCR Inc. 75% of the opportunity for businesses and governments to reduce GHG emissions is represented within the Challenge Registry.

Greenhouse gases are those generated into the atmosphere during everyday economic activity by all sectors of our economy, and include: carbon dioxide, nitrogen oxide, methane, hydro-fluorocarbons, perfluorocarbons and sulphur hexafluoride. They are widely believed to contribute to global warming and climatic changes.

The full Progress Report is available on VCR Inc.'s website at: **www.vcr-mvr.ca**

Challenge Registry Update

We continue to work to establish linkages between the Challenge Registry and various initiatives across Canada. In the past month, we have interfaced with the Association of Canadian Community Colleges, the Alberta Food Processors Association, Climate Change Central in Alberta, CP Rail, and the Northwest Territories. Since our inception as a stand-alone organization three years ago, we have more than doubled the number of linkages and partnerships from 21 to 45.

Huge Volume Received

Between November 1, 1999 and October 31, 2000, nearly 250 reports representing over 400 organizations were registered in the VCR Inc. Challenge Registry. (The Canadian Chemical Producers' Association, the Federation of Canadian Municipalities, the Railway Association of Canada, and the New Brunswick Community College each submitted roll-up reports representing many individual registrants.) Amazingly, 25% of the reports registered during this 12-month period were received during the month of October. Each report was individually evaluated against the Champion-Level Reporting Checklist and reporters can view their own results through the password-protected On-Line Registry in the VCR Inc. web site. From the nearly 250 reports registered, 131 earned Champion Level Reporter Status, including 62 Gold, 47 Silver, and 22 Bronze.

Each of the reports received between November 1, 1999 and October 31, 2000 was automatically considered for 2000 Sector Leadership Awards. A Judging Panel was selected from the VCR Inc. Technical Advisory Committee in October. During the first two weeks of November, the VCR Inc. registry analyst screened over 200 reports and selected approximately 50 reports representing virtually every sector of the economy.

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Meetings/Events

(that involve VCR Inc.)

Wednesday, January 24, 2001
Mississauga, Ontario
(Dupont Offices)
Champions In Action Coordinating Committee Meeting

Wednesday and Thursday January 24 and 25, 2001
Vancouver, BC
GERT Technical Committee Meeting

Thursday, February 1, 2001
Ottawa, Ontario
Clean Air Canada Incorporated Technical Advisory Committee (CACI TAC)

Thursday to Saturday February 8 to 10, 2001
Ottawa, Ontario
First Annual Sustainable Communities Conference and Trade Show

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Welcome to Our Newest Registrants!!

We would like to extend a very warm welcome to the following companies and organizations that have recently joined VCR Inc.'s Challenge Registry:

- Atomic Energy of Canada Limited (AECL)
- Boundary School Division No. 16
- Edmonton Regional Airports Authority
- EMCO Building Products
- Famous Players Inc.
- Fort Garry School Division No. 5
- Huntsman Tioxide
- North West Catholic School Division No. 16
- Pembina Hills Regional Division No. 7
- Rainbow District School Board
- Reagens Canada Limited
- Saint Mary's University
- SGT 2000 inc.
- Windsor Essex Catholic District School Board
- Winnipeg Technical College
- Witco Canada Inc.

"Sound Bites"

1) The Glenrose Rehabilitation Hospital in Toronto installed a smaller, more efficient air compressor that saves 97,500-kilowatt hours of electricity annually. This is equivalent to 97.5 tons/year of CO_2 equivalent GHG emissions.

2) Labatt Breweries introduced energy and water management into its environmental stewardship program in 1993. Its employees have succeeded in reducing total energy usage (electricity, natural gas and fuel oil) by 25.2% per unit of production to the end of December, 1997. During the period 1993 until the end of 1997, Labatt's operations have reduced water usage rate per unit of production by 33.3%.

3) Interface Flooring Systems Canada Inc. – with some seventy employees based in Belleville, Ontario – has achieved some of the company's most astonishing results and is led by Mr. Rahumathulla Marikkar, the Director of Environment and Technology. In 2000, VCR Inc. recognized Mr. Marikkar and awarded him a Leadership Award for Inidvidual Leadership.

Under Mr. Marikkar's direction, Interface Canada saved $3 million over two years through a variety of waste elimination achievements including the following:

- waste going to landfill was reduced by 90% from 474 to 39 tons;
- energy consumption per unit production was reduced by over 70%;
- zero effluent was achieved through an average of 120, 000 gallons of warm water to the sewers per month;
- material consumption per unit product was reduced by over 15%;
- carpet life was extended and its performance enhanced through redesigning processes;
- 25% of the plant's total electrical consumption is now used from certified green sources; and
- a comprehensive employee awareness program resulted in savings of hundreds of dollars per year.

4) Dow Chemical Canada Inc. (Dow Canada) recently carried out a variety of projects in a number of areas to reduce GHG emissions and to improve overall energy efficiency. Voluntary emission reductions, which included GHGs, CFCs and HCFCs, have resulted in an over 50 per cent reduction since 1990. In the same period, Dow Canada's energy-efficiency initiatives and co-generation have "avoided" an estimated 12,800,000 tons of CO_2 emissions.

Champion News is published bi-monthly by VCR Inc. We welcome articles with logos, news items and pertinent website addresses, and would be pleased to provide contributors with by-lines should they wish to write their own success story articles. Editor: **Michael Reilley**, VCR Inc., (613) 565-5151 (ext. 224); **mreilley@vcr-mvr.ca**

Meetings/Events

(that involve VCR Inc.)

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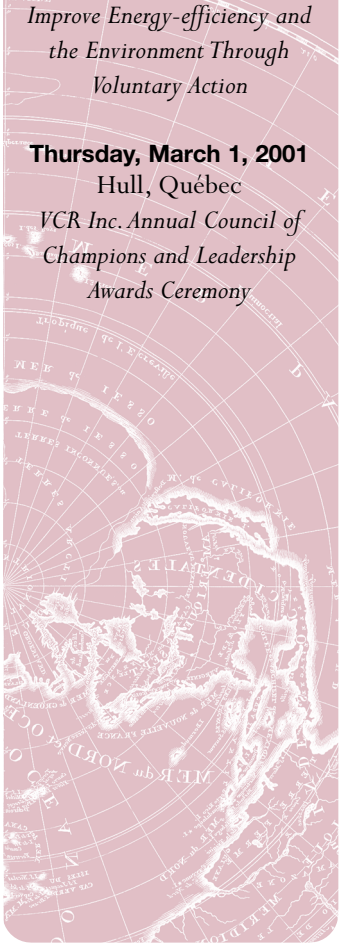
Saturday, February 10, 2001
Ottawa, Ontario
Speaking to the Canadian School Boards Association

Thursday, February 22, 2001
Washington, DC
IEA Workshop on Government-Industry Cooperation to Improve Energy-efficiency and the Environment Through Voluntary Action

Thursday, March 1, 2001
Hull, Québec
VCR Inc. Annual Council of Champions and Leadership Awards Ceremony



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