

Speaking Notes

**Address by Frank Came, Executive Director, BC Environmental Industry Association, to the Meeting of Connecting Environmental Professionals
Wednesday, January 30, 2008 SFU Harbour Centre**

Current Trends in the Environmental Industry

The announcement for this meeting, noted I would be sharing with you some current trends in the environmental industry, what capacities and skills are needed in today's hottest environmental businesses, the scope and opportunities on the Canadian scene, and what lessons I have learned during my "varied career" in the environmental field.

That is a very tall order indeed and I have to admit, it is something of a challenge for me to be speaking to a group of environmental professionals about where the industry is going, what skills are in demand, where are the opportunities. If anything, I should be asking you for the answers to these questions – because you are living in that world and have chosen to make the environment industry your field of endeavour.

I am not an environmental expert, nor would I pretend to be one. What I can do, perhaps, is to highlight some observations from my exposure to trends and ideas that have surfaced over the past decade from my work with the GLOBE Foundation of Canada – and more specifically from my work as the Editor of GLOBE-Net – the on-line guide to the business of the environment, to which I know you are all subscribers.

More recently, I have had the honour to work closely with real environmental experts and professionals such as you by virtue of my duties as the part-time Executive director of the British Columbia Environment Industry Association.

And I shall take a moment throughout my talk to put in a plug for both the GLOBE Foundation and the BC Environment Industry Association – namely to bring you up to date on some of the things we are doing that may be of interest.

First – let's start with a basic question – What is the Environment Industry?

Statistics Canada defines the industry, namely as consisting of businesses producing goods and services that measure, prevent, limit or correct environmental damage (both natural or by human activity), to water, air and soil, or which deal with problems of waste, noise reduction and ecosystems protection.

Technologies that reduce material inputs and energy consumption or recover useful by-products are also considered environmental sector offerings.

Based on this definition, StatsCan reports that 8500 Canadian firms (mostly small enterprises) earned \$18.5 billion from sales of environmental goods and environmental services in 2004 (the latest year reported), an increase of almost 17 percent compared to 2002.

In truth, the environment industry is much larger and broader than this rather narrow definition and so are the opportunities associated with it.

The latest Labour Market Survey report by **Eco-Canada** notes 3.2 percent of Canada's workforce in Canada is engaged in environment related work (either in full or in part), representing over 503,000 workers.

The highest proportion of environment-related employees is in Waste Management and Remediation, Agriculture, Forestry, Fishing and Hunting, and in the Professional, Scientific and Technical Services.

That same survey notes that approximately 10.1 percent of organizations across Canada have one or more environmental employees.

Top industries employing environmental employees are Public Administration, Mining and Oil and Gas, and Waste Management and Remediation.

A couple of other interesting points arising from that survey that may give cause for optimism among you are that:

- 54 percent of the environmental employees in management positions are likely to be 45 years of age or older compared to the national average of 44 percent;
- The proportion of women in the environmental workforce is 37 percent, which is lower than those employed in the Canadian labour force (47 percent);

From these brief facts we can say that younger professional such as you can look forward to managerial positions in the rapidly expanding environment industry and there is a gender imbalance that needs to be corrected.

If I may, I will stay with the work of Eco-Canada, because their work has thrown some light on another dimension of employment and career opportunities within the sector – namely what motivates the environmental worker – i.e. what turns you on (or off).

ECO Canada's report, *Characteristics of Canadian Environmental Practitioners*, notes that the demand for environmental employees is on the rise and the most critical human resource obstacles companies will have to deal with is how to retain capable employees.

Key facts from study are:

- Workers with environmental skill-sets have a broader range of career options and are increasingly in demand by sectors with growing environmental issues who have begun to address their need for environmental expertise.
- Similarly, traditional environmental employers have to compete with both existing industry rivals as well as other industry sectors for the pool of skilled environmental workers
- They are looking for alternative sources of labour via immigrants and underutilized segments of the Canadian population, i.e. First Nations workers or from the immigrant community.

And as to what turns the environmental professional on (or off), the study notes:

- **Advocates for Change** - Over half (56%) of practitioners claimed that a desire to improve the environment was the primary factor influencing their decision to work in the environmental field.
- **Higher Education** - The majority of practitioners (97%) possess a post-secondary degree or diploma, compared to 44% of the national labour force; and many (35%) indicated that continuing education throughout their careers is important to them.
- **Overall Job Satisfaction** - Job satisfaction among environmental practitioners is high—72% report being very satisfied with their employment. Factors affecting satisfaction include co-worker relationships, learning on the job, and working conditions.
- **High Turnover Rate** - The high turnover rate in the environmental field is forecasted to continue over the next five years. Practitioners blamed unrewarding jobs, lack of opportunities for career advancement, and dissatisfaction with salary and job security as the key reasons for turnover.

You are the best judges of the accuracy of these findings – which basically say that job satisfaction and a sense of purpose means a great deal to you.

It also means that if your present employment does not provide the conditions that provides this, then you have a better than average chance to find other employment options.

I can attest from my discussions with many CEO's and managers in the companies that are members of the BC Environment Industry Association, they are constantly on the look out for new talent.

Everyday I get notices or inquiries from companies or other contacts looking for good prospects.

Let's bring the discussion closer to home – what's happening in BC?

The B.C. environmental industry sector (traditionally defined) includes over 1,300 companies with revenues close to \$2 billion.

The main components of the sector are environmental construction, recycling, and solid and hazardous waste management, consulting services, water and wastewater goods and services, renewable energy, air pollution and noise control, analytical services, and green building and sustainable urban planning.

The largest are environmental construction, recycling, and solid waste management, but these are not export focused.

The export oriented sub-sector in BC is relatively small and consists of two very distinct, but interdependent, areas:

- A predominantly high technology component ("technology component"), producing goods and services in a growing and evolving industry.
- An environment-related consulting engineering, R&D and related services component ("engineering services component").

In British Columbia and elsewhere in Canada, the environmental sector is undergoing a process of re-orientation and renewal.

The waning focus on pollution prevention at source not only is decreasing the demand for traditional and often more expensive end-of-pipe pollution control technologies, it is spurring more energy-efficient and cleaner technologies for application in the primary resource, manufacturing, energy and service sectors.

Climate change and the search for more energy efficient technologies to reduce greenhouse gas (GHG) emissions is forcing the sector to redefine itself and to form new alliances and partnerships with governments and academia focused more broadly on sustainability.

The drivers of the transformation process are as diverse as the client base of the industry itself.

Changing environmental management practices in the private sector, new approaches to public policy making with respect to environmental protection, and shifting economic forces globally are helping to reshape the sector.

The sector is now much more closely linked to organizations involved in sustainable community development; green building design and construction; energy efficiency and eco-industrial networking; sustainable urban infrastructure; and sustainable resource management.

A telling testament to this change in perspective is evident in this quote from a recent speech by a senior retail industry executive:

“It is important for all of us to understand that there are a number of issues facing the world that will profoundly affect our lives and our company. I am talking to you about issues like international trade, climate change, water shortages, social and economic inequities, infrastructure and foreign oil.”

This person went on to say:

“Leadership is not about looking over your shoulder and living in the past. It is about looking over the horizon and envisioning the future.” “What began 27 months ago as a commitment from the top of our company, is now a commitment from the heart of our company.”

You will recognize this statement, of course as coming from an address given by Lee Scott, CEO and President of Wal-Mart Stores, Inc. on January 23, 2008.

To back up this statement, Scott went on to outline how Wal-Mart planned to:

- Work with suppliers to make the most energy intensive products in Wal-Mart stores anywhere in the world, 25% more energy efficient within three years;
- Launch a major, retail-industry effort to improve social, ethical and environmental standards in the supplier factories that the company sources from;
- Explore opportunities to use the Wal-Mart network of retail outlets as the basis for alternate energy delivery to consumers;
- And many other commitments related to reducing health care costs, employing ethical product standards, and ensuring that employees and customers are treated better, etc.

You may ask, what does this have to do with career opportunities within the environmental business sector?

The answer is simply this – Scott’s statements are a reflection of a profound and I believe irreversible shift in perspective about the role of ‘the environment’ in the conduct of what we would consider how to do business in today’s world.

The shift is reflected in many sectors has been called many things – Corporate Social Responsibility (or simply Corporate Responsibility); Green Business;

Sustainable Purchasing; Sustainable Management; Ethical Business; Sustainable Investing, and so on.

Whatever it is called – it is a reflection that the boundaries of ‘environmentalism’ – to use a very broad term have expanded to encompass and change the practices and processes of the mainstream business community.

The sustainable management of resources, and the protection (and restoration, when necessary) of the natural environment through changes in public policy and corporate behavior, such as advocated by Lee Scott and others – and which 20 years ago would have been branded as heresy - are now recognized as the cornerstones of responsible business.

As we noted in a GLOBE-Net article not too long ago, forward thinking corporations that stepped ahead of the pack to make environmental factors part of their core business strategies used to be the exception to the norm.

Yet many have gone on to become the leaders of their respective sectors, both in terms of environmental sustainability and long term profitability.

As the links between environmental leadership and positive financial returns become clearer, more mainstream companies are incorporating sustainability principles into their long term business plans, and are changing the global marketplace in the process.

GE launched its ‘ecomagination’ initiative in 2005, committing to double spending on environmental technologies and to launch products and services to provide consumers with clean air and water.

In doing so, the company expects to double its revenue from environmental technologies to at least \$20 billion in 2010, through products such as wind turbines, solar panels, water desalination equipment, and energy efficient appliances.

GE’s CEO Jeff Immelt made it clear at that time that the move was not a public relations exercise. “We think green means green,” he said. “This is a time period where environmental improvement is going to lead toward profitability. This is not a hobby to make people feel good.”

A number of leading Canadian corporations are pursuing similar policies and strategies within their sectors. ALCAN, Royal Bank of Canada, Encana, VanCity, and Suncor are examples that come to mind.

Along with RBC, Nexen Inc. and Transcanada Corporation were recently cited in the list of the world’s top 100 Sustainable Companies released last week at the World Economic Forum in Davos Switzerland by Corporate Knights Magazine.

Both companies specialize in international oil and natural gas energy production with sustainability as a guiding principle.

What this means for you is that the playing field for your skills, your insights, your passions has suddenly become much larger.

Corporations large and small will be looking to you for guidance on how to become more sustainable, how to engage and keep high talent employees such as you, how to attract customers that are becoming much more careful in their choices of consumer products, in the investments they make and in the lifestyles they choose within which to raise their children.

At the GLOBE Foundation we explored these issues first hand with **EPIC** - the first Sustainable Living Expo last year. EPIC was a first in Canada, bringing together consumers and suppliers of green products and services spanning a wide array of lifestyle sectors, including food, fashion, home design, personal transportation, travel, investing, recycling and communications, all designed to leave a softer footprint on the earth.

We'll be doing another EPIC event in April – be sure to be there!

By the way EPIC stands for “Ethical, Progressive, and Intelligent Consumer”

So coming back to my “billing” as the source of wisdom on what capacities and skills are needed in today's hottest environmental businesses

I can only state the obvious with respect to British Columbia:

***Areas of Expected Growth in the
Environmental Business Sector***

Alternative energy systems and associated technologies

- Including fuel cells, clean fuel technologies, small scale hydro and biomass co-generation systems

Urban Environmental management systems including:

- Contaminated site remediation and Brownfield reclamation;
- Green building design, technologies and products;
- Planning for Sustainable communities and integrated environmental solutions; and
- Urban environmental management systems.

Water/wastewater technologies, services and solutions

We have solid strengths in these areas.

Not only are these important for British Columbia, an increasingly urbanized world is looking to us for innovative technologies and sustainability solutions to very complex environmental, ecological and sustainability problems.

The experience of a number of BC high technology firms shows that small firms can become larger and world leaders in their niches with the right combination of technology, financing, and market development support.

Sonic Environmental, Ballard Power, Xantrex, Nexterra Energy, Westport Innovations, and Carmanah Technologies are companies that come to mind.

Growing concern over climate change has prompted the emergence of new industries serving both domestic and international markets capable of delivering fully functional, integrated solutions to environmental challenges.

An Aegis Management Consulting report for Industry Canada suggests that Canadian companies have their best opportunities in developing countries, including China in the areas of Water/wastewater goods and services, Air pollution control, Environmental monitoring and instrumentation, Clean technologies, Renewable energy, Environmental consulting, as well as Solid Waste Management and Potable Water Supply Systems and Retrofits.

I do not want to leave you with the impression that Canada in general and BC in particular can meet the environmental or clean energy technology needs of burgeoning economies such as China and India.

The hard reality is that high technology is a global industry and the global supply chain rules and nowhere is this more evident than in the environmental technologies industry.

The global environmental market, especially for specialized machinery and equipment is vast and steadily growing – over \$1 Trillion per annum

How does Canada fare in this market for environmental machinery and equipment?

The short answer is that we are not faring very well although we are getting better.

In fact, we have a major trading deficit with the rest of the world (mainly the United States) in terms of environmental goods and services – in the order of \$3 - \$4 billion annually.

In British Columbia, that trade deficit amounted to over \$500 million in 2006.

But we are not powerless. Canada's competitive advantage lies in its strong science and technology capability to improve energy production productivity, sequester green house gas emissions, and to grow real output through a strengthened energy value chain.

Strong opportunities and challenges are evident in renewable energies including small scale hydro, solar, wind power, bio-energy and hydrogen fuel cell technologies, and climate change adaptation and mitigation.

We also have a great deal to offer in terms of sustainable urban design, green building, eco-restoration and natural resource management. And the world will be coming to British Columbia over the next two years to see what we have to offer.

I am referring to the 2010 Winter Olympics of course, and all that relates to mounting the first truly sustainable Olympic Games.

The GLOBE Foundation is working closely with VANOC and other key players to assist in this challenge and I hope soon to be able to outline more in terms of what we are planning.

Now for the commercial!

I have brought with me literature on the upcoming GLOBE 2008 Conference and Trade Fair – to which I know you will all want to take part in.

I have also some Complementary Passes to the GLOBE 2008 Trade Fair – a \$35 value, which you should pass along to your friends and clients.

The GLOBE Series of trade fairs and conferences on the business of the environment has become Canada's leading window on the highly competitive and rapidly expanding global environmental market.

Every two years more than 10,000 people participate in these events and this year we are already sold out in terms of exhibit spaces and almost over subscribed in terms of conference delegate sessions. We have more than two dozen national delegations coming from the over 75 countries that routinely participate in GLOBE.

The GLOBE Series has more than anything positioned Vancouver as a leading centre for the business of the environment. Who would have imagined that the birthplace of Greenpeace has become ground zero for the business of the environment?

Do plan to attend!

I have also brought some literature on the British Columbia Environment Industry Association – which many of you may have heard of, though I'm sure many have not.

The GLOBE Foundation has been working with BCEIA for the past two years to build up its membership and program activities – and we have undertaken a number of activities that may be of interest to you.

We have just completed a task in partnership with the Ministry of Environment to prepare a series of education products to raise awareness of the Compliance Requirements for the Generation, Transportation and Processing of Hazardous Wastes.

This week we shall be launching a new website that deals with this subject.

We are about to launch a 'voluntary audit' program for Hazardous Waste processing facilities to help them to remain or become more compliant with Ministry regulations for the management of hazardous wastes.

We have undertaken a series of workshops on sustainable business opportunities associated with the 2010 Games.

We have also organized or participated in missions to Mexico (EnviroPro0, Paris (Poullutec), and Hong Kong (Eco-Expo Asia) to spread the word about our environmental business capabilities and needs.

We will be organizing a mission to Beijing later this year in partnership with the British Columbia Government and the BC Technology Industry Association as part of the promotional effort surrounding the 2008 Olympic Games in China.

We are always on the look out for help, ideas, information and willing hands, so if you would like to join the Association – please feel free to contact me.

We believe that British Columbia can be a world leader in environmental management and sustainability solutions, and both the GLOBE Foundation and BCEIA are dedicating a great deal of energy to turn this vision into reality.

But that can only happen if you – the true environmental professionals of this province – make it happen.

You are the key to our success.

The opportunities are there.

The future is what you make it.

So God Speed and Good Luck.

Thank you.