BUSINESS

CLIMATE CHANGE

THE GLOBE AND MAIL

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sources, utilizing electric vehicles,

car-sharing and placing company loca-

tions close to public transport hubs.

Flexible work arrangements can also

mean less commuting and reduced

Buildings - which represent 12 per cent of greenhouse gas emissions -

can also benefit from clean technology

solutions, says Ms. Bak. "The private

sector can make choices about which

kind of buildings to locate businesses

emissions.

SECTION BCC

Earth Day: every day

Making environmental engagement an ongoing team effort of individuals, businesses, organizations and government

arth Day presents an opportunity to highlight the commitments of individuals, communities, companies and countries to advance environmental sustainability. But how to convey a sense of the myriad efforts and initiatives under way in Canada? By collecting - and displaying - the signatures of Canadians on a giant flag unveiled for Earth Week.

"We've engaged people across the country to sign the pledge to make every day Earth Day and to reduce their carbon footprint," says Deb Doncaster, president of Earth Day Canada. It's a tried-and-true method for delivering the message, she explains. In 1992, the Canadian Earth Day flag – which was as big as a stadium – was displayed at the Earth Summit where the first agreement on climate change was signed. It's time to again express the collective desire to lead on the environmental agenda, Ms. Doncaster believes.

Last year, Earth Day Canada focused its messaging on transportation - a significant contributor to carbon emission - by asking people to "clean their commute," says Ms. Doncaster.

Céline Bak, president of Analytica Advisors, the think tank that compiles the yearly Canadian Clean Technology Industry Report, says curbing greenhouse gas emissions in transportation has to be a team effort. The private sector, for example, can establish strategies for reducing emissions, which may include converting to cleaner fuel



"By planting 25,000 trees for Earth Day and every day, we'll reach the target of 35 million trees – one for every Canadian - by 2020."

Deb Doncaster





Earth Day Canada encourages Canadians of all walks of life to sign the pledge to reduce their carbon footprint and help restore our forests. SUPPLIED

a big difference," says Ms. Bak. And a greater integration of clean technology into all resource sectors as well as infrastructure and manufacturing has the potential to improve not only their environmental footprint but also

overall performance. Greater support from companies, government, organizations and individuals for the development and implementation of clean technology could have a significant impact, says Ms. Bak, since the sector advances environmental objectives and also has the potential to achieve sustainable economic growth.

Ms. Doncaster says interest in environmental actions tends to be heightened on Earth Day, and she sees the occasion as a "gateway for environmental engagement.'

Earth Day Canada will highlight tree planting this year. "Many countries, companies and individuals are making a renewed commitment to restore global forests," explains Ms. Doncaster.

The global network of Earth Day organizations has launched a campaign to plant 7.8 billion trees - one for every

person on the planet - by 2020, in support of the New York Declaration on Forests, which aims to curb natural forest loss as well as rebuild global forests.

Canada's contribution will receive a boost from the #Rooting4Trees campaign - a partnership of Earth Day Canada and Tree Canada. "By planting 25,000 trees for Earth Day and every day, we'll reach the target of 35 million by 2020." says Ms. Doncaster.

She is encouraging Canadians to keep up their efforts year-round and believes that partnerships with the corporate sector, including companies like Kruger Products, help Earth Day Canada to amplify the message to reach citizens of all walks of life. "There is a role for every sector of society: individuals, corporations, nonprofit organizations and government to do their parts for environmental sustainability."

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TAKING ACTION

From developing low-carbon energy systems to embracing environmentally responsible practices, Canadian organizations are proving that going green can be done – and it's good business

TRANSPORTATION

In shifting transportation systems away from non-renewable and emitting fuel sources, clean electricity can play a large role, suggests Jacob Irving, president of the Canadian Hydropower Association (CHA).

Demand for electric vehicles is growing across the country, but can they be powered by clean, renewable energy? A CHA study says the answer is yes, according to Mr. Irving. "We found that Canada has more than enough undeveloped hydroelectricity potential to power our entire current light-duty fleet, if it was electric.'

Mr. Irving suggests two steps for decarbonizing the economy. First, increase the electrification of the energy system; second, ensure the electricity comes from clean, renewable sources. It's a message he shares with the Canadian Council of Renewable Energy, which includes wind, solar and marine energy providers, he says. "Currently, the majority of Canada's energy comes from fossil fuels, such as natural gas, coal and

Electricity still represents less than a third of the energy used in Canada,

60 per cent of electricity coming from hydropower – and it has the potential

to more than double that capacity. Realizing half of Canada's undeveloped hydropower potential could, in theory, fuel the entire domestic fleet of light-duty vehicles, plus a quarter of the light-duty vehicles in the U.S., if they were all plug-in electrics, says Mr. Irving. "This demonstrates that North America has the renewable power sources to proceed towards electrifying vehicles with confidence, which can substantially reduce greenhouse gas emissions and air pollution."

ENERGY

Canada's climate change commitments mean less reliance on fossil fuels, and the shift isn't always easy. "But it can be done," says Jeff Lyash, president and CEO of Ontario Power Generation (OPG).

"In 2003, OPG embarked on the largest climate change initiative in North America – to stop burning coal to make electricity," says Mr. Lyash. "We reached this significant milestone in 2014, and today, the power we genof renewable power."

Closing Ontario's coal stations was equivalent to removing seven million cars from the road, says Mr. Lyash. "As part of this transition, OPG converted its Atikokan Generating Station in northwest Ontario from coal to biomass, making it the largest 100 per cent biomass-fuelled station on the continent.

"In addition to preserving dozens of jobs, Atikokan's conversion to biomass spurred a mini-revival of the area's flagging forestry industry," he adds. A second station in Thunder Bay was the next to be converted, and now runs on advanced (waterproof) biomass. Both plants provide energy when needed to meet peak electricity demands

OPG operates a diverse fleet, which includes 65 hydroelectric stations, two nuclear stations and one dual-fuelled oil/natural gas station (for peak elec-

tricity requirements). "To ensure the company continues to produce safe, clean, reliable, lowcost electricity, OPG is now preparing to refurbish its Darlington Nuclear Generating Station in Clarington, extending its life span for 30 more years,"

says Mr. Irving. Canada's electricity system is already very clean, with over We're also Ontario's largest generator whe best performing nuclear stations products. In Canada, we've reduced in the world. It powers roughly two million Ontario homes and businesses and is more than 99 per cent free of greenhouse gas emissions."

RESOURCES

The benefits of going green can go beyond environmental impact to affect a company's bottom line. For Kruger Products, embracing sustainable practices not only helped to gain revenues by tapping into consumer demands for green products, it also contributed to cost savings from reduced energy, water and packaging use, says Steven Sage, vice president of sustainability and innovation for the Canadian manufacturer of tissue products that include Cashmere and

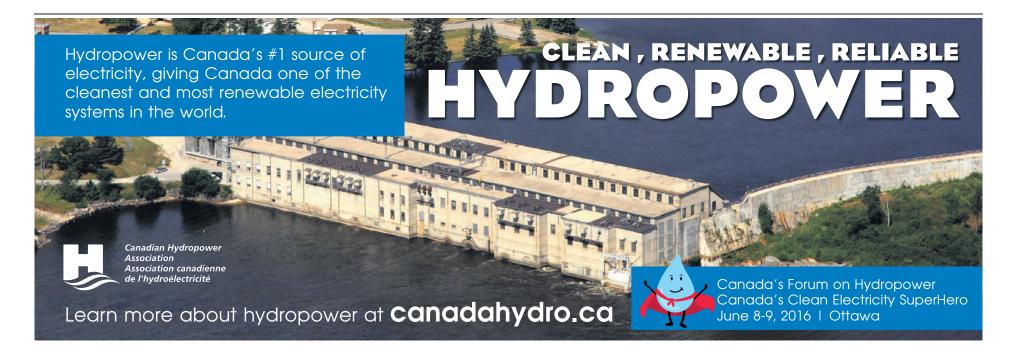
"As a company, we recognize that sustainability is good business," says Mr. Sage. Over the last five years, Kruger has achieved a number of milestones, he explains. "We were the first Canadian tissue company to gain Forest Stewardship Council (FSC) certification for our fibre, allowing us to offer one of North America's largest our energy footprint by 11 per cent and our greenhouse gas emissions by 25 per cent."

Not only has the company decreased water consumption by 18 per cent and packaging by 13.5 per cent in that period, it's also mindful about using the natural resource at the heart of its business: wood. "By being FSC-certified, we are an advocate for responsible forestry," says Mr. Sage. "And 30 per cent of our fibre comes from post-consumer recycled paper."

By using recycled material, Kruger saves the equivalent of 1.7 million trees annually, says Mr. Sage. He adds that as a partner of Earth Day Canada, Mr. Sage would like the message that Kruger has internalized – to pay attention to the environmental impact, find practical day-to-day solutions and support environmentally friendly practices and products - to be considered by all Canadians.

INSIDE

Finance team key to integrating climate change considerations into business strategy. BCC 2



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BUSINESS CLIMATE CHANGE

CTDATECY

Bracing for climate change? Include the finance team



By Gordon Beal, CPA, CA

hat do an insurance firm, a utility company and national retailer have in common? They've all had their sustainability and finance teams collaborate to help them adapt to climate change.

Taking a cross-functional approach – combining business and accounting skills with sustainability expertise – is paying off for Guelph, Ontario-based The Co-operators, Hamilton-based Horizon Utilities Corporation and Vancouver-based MEC. They're among a growing number of organizations that see climate change as inextricably tied to business.

It's no wonder. Climate change is expected to cost Canada's economy \$5-billion per year by 2020, increasing to an estimated \$21-billion to \$43-billion per year by 2050, according to the National Roundtable on the Environment and the Economy.

More incidents of extreme weather and other climate changes can translate into unavailable resources or materials, disrupted construction or logistics, increased or unpredictable energy costs, and office closures and absent employees. A cross-functional approach can reduce the costs associated with climate change and increase competitiveness.

But taking that action requires datadriven strategies. And that's where the so-called numbers experts are playing a rather new and important role. Team members who have traditionally ensured businesses' financial survival are bringing their expertise to this emerging issue, continuing to help create more resilient organizations.

At the leadership level, business and accounting professionals can integrate climate change considerations into

organizational strategy and embed adaptation into business functions and processes. At other levels, they can support a business case by showing financial vulnerability, estimate the costs and benefits of alternative solutions, support the creation of new products and services, develop metrics and other indicators to measure performance, and establish appropriate systems and internal controls to measure the metrics.

At The Co-operators, business professionals ensure the company makes sound, financially disciplined decisions as it addresses client needs. At MEC, they routinely collaborate with the sustainability, operations and buying groups to improve sales and adapt to supply chain issues. And at Horizon Utilities, their skills in data control and analysis allow for better assessment of how more intense storms, increased precipitation and temperature shifts will affect future budgets.

Peter Vallieres, CPA, CA, director, financial reporting and accounting at Horizon Utilities, says that accountants "assume a leadership role in adapting the organization to climate risk. Their perspective on numbers is critically helpful with risk avoidance and risk management."

Following the 2013 catastrophic floods in Alberta, The Co-operators put a renewed emphasis on managing climate change risks. The challenge, however, was to provide adequate coverage for clients at a price that would be affordable while preserving the organization's financial strength. George Hardy, CPA, CA, vice-president, personal lines and underwriting, worked with numerous internal contributors to champion the project. He chaired the committee that developed a new product, including the firm's approach to pricing and its estimated return on equity and investment.

Retailer MEC is anticipating different customer preferences in a changing climate. For example, if winters continue to be warmer and shorter, should MEC stop selling cross-country ski gear, or stock it for a shorter period of time? Finance director Doug Wong, CPA,



Understanding the implications of climate change is important for all businesses, including retailers like MEC, and CPA Canada offers guidance that can help companies and finance professionals respond to the challenge. ISTOCKPHOTO.COM

CGA, has incorporated weather tracking into the company's new systems, such as inventory management. Now, Mr. Wong explains, "we can track the weather and mirror this against our sales to make medium- to long-term decisions about how to manage our inventory and supply chain."

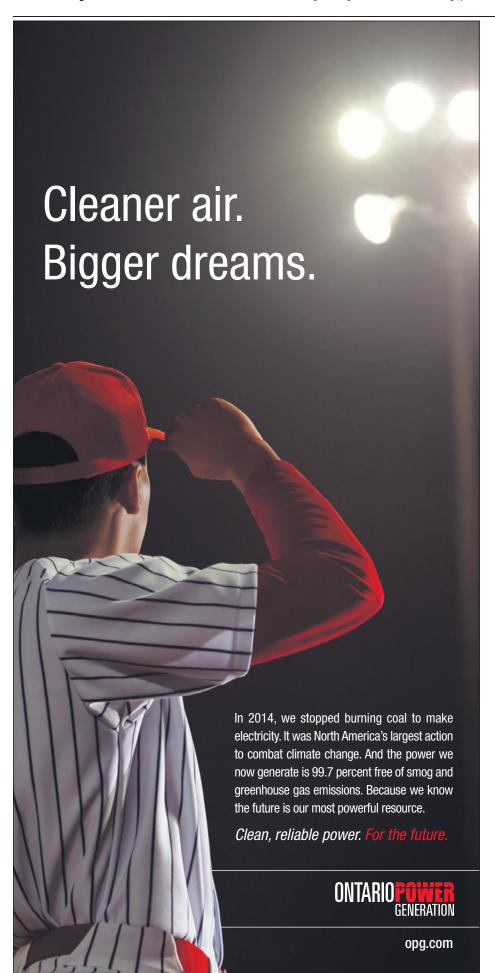
Chartered Professional Accountants of Canada (CPA Canada) and Natural Resources Canada have partnered in a multi-year project to help businesses and other organizations better understand and adapt to the implications of climate change. The initiative is supported by the Network for Business Sustainability. The primary goal: ensuring that Canada's business and accounting professionals are even

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better positioned in the future to assist organizations across all sectors of the economy.

What will make it successful? More finance professionals must recognize this as an area where their skills are badly needed, and commit to honing and expanding those skills. CPA Canada is stepping up to assist. And when constructing their response to climate change, more organizations need to tap into the finance function, sooner rather than later.

Gordon Beal is vice-president of research, guidance and support with CPA Canada, which represents more than 200,000 business and accounting professionals in Canada and globally.





Kruger

CPAS HELP BUSINESSES WEATHER CLIMATE CHANGE.

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