

# **Should Canada trump its carbon reduction plans?**

CITIZENS' CLIMATE LOBBY EDITORIAL PACKET: January 18, 2017 Contact: Cathy Orlando, National Director, cathy@citizensclimatelobby.org 705-929-4043

SUDBURY ON: On Friday, January 20, the United States ushers in a new President and administration that vow to scale back efforts to reduce greenhouse gas emissions. Given Canada's economic reliance on the U.S., questions have been raised regarding Canada's recent plans to reduce emissions, including its national rising fee on carbon, scheduled to begin in 2018.

If Canada places a rising fee on carbon, and the U.S. does not, will not Canadian industries uproot to its neighbour to avoid the tax?

While at first blush it appears that Canada's climate plans may be compromised as a result of the recent U.S. election, there is a compelling economic case for Canada to stay the course and indeed exceed its Paris climate commitments.

## "The trend toward clean energy is irreversible"

This case is articulated by outgoing President Barrack Obama who writes in the <u>January 9, 2017</u> <u>issue of Science</u>: "The business case for clean energy is growing, and the trend toward a cleaner power sector <u>can be sustained regardless of near-term federal policies</u>." (Emphasis ours.)

The President points to the millions of jobs created due to energy-efficiency products and services to date, the rapid decline in the price of renewable energy - making it cost competitive with fossil fuels in many markets - and the dangers associated with losing global market share on clean energy innovations.

"I believe the trend toward clean energy is irreversible," he wrote.

This analysis is backed by a number of agencies, including the <u>World Economic Forum</u> (WEF), <u>Policy Horizons Canada</u>, <u>Deutsch Bank</u>, and the <u>International Renewable Energy Agency</u>.

In December 2016, WEF states in its <u>Renewable Infrastructure Investment Handbook</u> that "renewable energy technology, especially solar and wind, has made exponential gains in efficiency in recent years, enough to achieve economic competitiveness and, in an increasing number of cases, grid parity."

WEF also noted that historic inhibitors to investments in renewable infrastructure – such as size and risk – have shifted in the past five years as a result of global efforts to decarbonize within the century.

In a <u>2016 paper</u>, Policy Horizons Canada – a government foresight and knowledge organization – predicts "significant disruptions in energy over the next 10-15 years," so much so that it advises against public investment in the fossil fuel sector.

Policy Horizons Canada provides several insights in its report. The most notable is the rapid decline in the price of renewable-based electricity, which it predicts will become cheaper than fossil fuel generation in the next two to three years in most markets. It warns that "oil could lose its commodity status."

Oil companies are already feeling the impact of affordable renewable energy. On January 4, <u>The Independent reported</u> that a record number of UK-based oil and gas companies became insolvent in 2016. Thierry Lepercq, the head of research at France's Engie, the world's largest private power production company, warns "that the growth in renewable energy could push the cost of oil down to as low as \$10 in less than ten years."

#### What does this mean for Canada?

Now that the clean energy train has left the station, can Canada afford to follow the U.S. if it decides to jump off? As it stands Canada is struggling to catch up, and facing a possible \$10 barrel of oil in just ten years' time, the need for strong leadership in clean energy development has never been more urgent.

This urgency was voiced recently by U.S. Secretary of State John Kerry who said: "No nation will do well if it sits on the sidelines, handicapping its new businesses from reaping the benefit of the cleantech explosion."

Until recently, Canada's clean tech companies were collectively punching above their weight globally. It is now losing global market share.

Citing figures from Analytica Advisors' 2016 <u>Canadian Clean Technology Industry Report</u>, Sustainable Development Technology Canada and Cycle Capital Management <u>recently reported</u>: "Overall, between 2005 and 2014, global trade in clean technology exports doubled, growing at a CAGR [Calculate Compound Annual Growth] of eight percent and Canada's market share of manufactured environmental good declined by 41 percent from 2.2 percent to 1.3 percent. Among the top 24 exporters, Canada's ranking fell from 14th to 19th."

Sustainable Development Technology Canada <u>notes</u> "that Canada has lagged behind the United States on a per capita basis in both venture capital and debt financing, both critical components in helping companies innovate, scale up their operations and commercialize their technologies."

According to Jon Dogterom, the Managing Director of Cleantech Venture Services at MaRS Discovery District in Toronto, Canada's climate action plan will play a significant role in fostering this sector.

"The good news is the federal government, provinces and territories are all at the same table working to unlock the sector's immense potential, not just at home but abroad," he wrote in a <u>Toronto Staroped</u>, printed on January 6. "After months of extensive consultation with citizens, businesses, local governments and civil society, we now have a national climate plan that places strategic importance on the health of our country's cleantech sector."

Despite these opportunities and challenges, when Trump was elected president of the United States, some Canadian news pundits questioned the direction of Canada's climate change plans.

"We cannot afford to continue business as usual," said Cathy Orlando, National Manager of Citizens' Climate Lobby Canada. "It is imperative that we move away from the false assumption that taking action on climate change will undermine the Canadian economy. Climate action is directly associated with helping to fast track Canada's transition to a clean energy economy. The opportunities for

economic growth and diversification, quality job development and a clean environment are tremendous. These opportunities are particularly important for those provinces hit hardest by the decline in the fossil fuel sector."

## U.S. states are not taking Trump lying down

States such as California – the sixth largest economy in the world – and U.S. cities understand the potential and need to lead on cleantech development and implementation, and are committed to their full-steam-ahead approach to transitioning to clean energy economies.

In late December, California Governor, Jerry Brown and other state legislators <u>said</u> that they would sidestep the U.S. government and work directly with other nations and subnational governments to advance the state's aggressive emissions reduction policies in order to reach its reduction target of 40 percent below 1990 levels by 2030.

In November, former New York City mayor and clean energy advocate, Michael Bloomberg <u>said</u> that U.S. cities would continue to enact climate policies no matter what Trump and his appointees did.

In a talk hosted by the China General Chamber of Commerce and reported in the New York Times, Bloomberg added:

"The U.S.'s success in fighting climate change has never been primarily dependent on Washington. Bear in mind: Over the past decade, Congress has not passed a single bill that takes direct aim at climate change. Yet at the same time, the U.S. has led the world in reducing emissions.

"That progress has been driven by cities, businesses and citizens — and none of them are letting up now. Just the opposite: All are looking for ways to expand their efforts. Mayors and local leaders around the country are determined to keep pushing ahead on climate change."

A sea change from Republican congresspeople and senators on Capitol Hill regarding climate policies may also be close at hand. Citizens' Climate Lobby (CCL) volunteers have met with lawmakers since 2009, and have <u>noticed significant changes</u> in attitudes towards its policy – a revenue neutral carbon tax called carbon fee and dividend – within the last three years.

In 2014, the ratio of Republican offices that showed clear and genuine interest in CCL's policy to those that were combative or uninterested were 3 to 1. In 2016 that ratio jumped to 10 to 1. These offices remained committed even after the U.S. presidential election when CCL volunteers lobbied in Washington.

CCL U.S.A. has also helped forge the bipartisan <u>Climate Solutions Caucus</u>, which comprises 20 Republican and Democrat US House of Representatives to explore policy options that address the impacts, causes, and challenges of climate change.

## Protecting Canadian companies. Enter border tax adjustments

Concerns have been raised regarding the impact of a rising national carbon fee on Canadian industries that are carbon intensive and trade exposed, pointing to the problem of leakage – when companies move to jurisdictions without an equivalent price on carbon. To remedy this problem, Canada can implement a border tax adjustment.

To equal the playing field, border tax adjustments are applied to goods imported from countries that do not price carbon. This adjustment would discourage businesses from relocating to where they can

emit more CO2, and encourage other nations to adopt an equivalent price on carbon to avoid the adjustment.

To put our trading partners at ease, Canada could impose a date in the future, perhaps three years down the road, into which border tax adjustments would be imposed.

Border tax adjustments are approved by the World Trade Organization (WTO) and the General Agreement on Tariffs and Trade (GATT).

An example of a border adjustment is the one codified in U.S. law (26 CFR52.4682-3) since the Montreal Protocol went into effect on January 1, 1990. It covers ozone–depleting substances.

A border tax adjustment is WTO-legal if it does not discriminate against goods from other countries relative to goods produced domestically. Even if the border adjustment were discriminatory, GATT allows for discriminatory border adjustments for environmental purposes.

## The window to avert dangerous climate change is narrowing

James Hansen et al. "Young People's Burden: Requirement of Negative CO<sub>2</sub> Emissions." Manuscript submitted to *Earth System Dynamics Discussions* for review. October 4, 2016. Page 5.

If the world does not begin aggressive reductions in greenhouse gas emissions (GHG), Dr. James Hansen, one of the world's most esteemed climate scientists, warns that global warming will surpass the 1.5C target set at the 2015 Paris climate conference by 2040 and a sail past 2C by the late 2060s.

The danger posed by this scenario is that such warming could trigger dangerous and unstoppable feedback effects from Arctic melting. These include ice sheets – which reflect heat back to space - disappearing, and greenhouse gas releases from melting permafrost and seabed methane hydrates. As explained in a recent KAIROS Canada Briefing Paper, these stores are "vastly more than all the carbon that human activity has caused to be released into the atmosphere since the Industrial Revolution."

According to Hansen and colleagues in a <u>recent paper</u>, "Young People's Burden", dangerous climate change can be avoided if the world reduces greenhouse gas emissions by six percent per year starting in 2016, and removing carbon dioxide from the atmosphere, ideally through agro-ecological farming practices.

If we fail to take effective action on climate change, a child born this year will likely experience rapid global warming and its devastating effects when they are in their 50s or older.

According to Hansen and his colleagues: "Continued high fossil fuel emissions unarguably sentences young people to either a massive, possibly implausible cleanup or growing deleterious climate impacts or both, scenarios that should provide both incentive and obligation for governments to alter energy policies without further delay."

If Canada delays action on climate change because of the United States, it will paint itself into a costly corner.

Canada's Ecofiscal Commission <u>warned in November 2016</u>: "....Policy delay is still costly: waiting for the United States to catch up will only increase the cost of achieving deep emissions reductions at some point further down the road. In the absence of Canadian carbon-pricing policy, we'd be likely to continue investing in carbon-intensive infrastructure, making it difficult and more expensive to change

course later. Gradually and predictably phasing-in a carbon price now is much better for Canada's competitiveness than shocking the economy with sudden, aggressive policy later."

## How an effective carbon price can help Canada be a clean tech leader

In 2018, Canada's National Carbon Pricing plan goes into effect. The plan sets a minimum national price on carbon, starting at \$10 per carbon tonne and rising to \$50 per tonne by 2022. The federal government will impose the rising fee on any province without its own carbon pricing mechanism and return the revenue back to that province.

In order to send an effective market signal to shift to clean energy alternatives and help Canada meet is emissions reduction goals, the fee must continue to rise beyond 2022.

An example of the impact of a rising fee on carbon is B.C.'s carbon tax, which rose by \$5 per carbon tonne from 2008 to 2012 when it was capped at \$30. A five year assessment demonstrated that the tax was successful in reducing fuel use and greenhouse gas emissions, without harming the province's economy. The province slightly outperformed the rest of the country during that time period. According to a report by Sustainable Prosperity (now called Smart Prosperity Institute), B.C.'s fuel consumption per person fell every year from 2008 to 2012, declining by 17.4 per cent overall. It fell 18.8 percent more than in the rest of Canada.

Unfortunately, B.C.'s greenhouse gas emissions have been on the rise due to the capped fee, which has stopped sending a compelling message to reduce emissions, and the growth in the province's liquefied natural gas sector, which the tax currently does not cover.

The federal government has yet to provide clarity on the comprehensiveness of its proposed national minimum rising fee. A fee applied at the wellhead and point of import in all provinces will most effectively reduce Canada's greenhouse gas emissions and send an economy-wide signal to invest in cleantech alternatives. A fee on some sectors and not others defeats its purpose, burdens some industries and not others and will undermine Canada's climate commitments.

A steadily rising fee will require that revenue be returned to Canadians to protect those with low and middle incomes.

A 2014 U.S. study by <u>Regional Economic Models, Inc.</u> examined the impact of a steadily-rising fee on carbon with revenue returned to households in the United States. Among other findings, the study shows that, after 20 years, a fee on carbon dioxide rising \$10 per ton each year would reduce greenhouse gas emissions 52 percent while adding 2.8 million jobs to the economy.

# Conclusion - keep calm and carry on

When it's a choice between business as usual and committing to a national climate and clean growth plan, Canadians overwhelmingly choose the latter. In a <u>recent poll</u> conducted by Abacus Data at the request of Clean Energy Canada, 70 percent of Canadians want the country to "shift its energy use as quickly as possible to cleaner, lower-carbon sources of energy and away from fossil fuels."

As <u>Canada's Ecofiscal Commission</u> pointed out in a blog on November 11: "Smart, well-designed carbon pricing that addresses competitiveness concerns still makes economic and environmental sense," adding "for now, keep calm, and carry on."

With both economic and environmental incentives, backed by strong public support, keeping calm and carrying on in spite of the current U.S. landscape is sound advice.

#### Other resources:

When CO2 Goes to Geneva Taxing Carbon Across Borders — Without Violating WTO Obligations, Maria Panezi

https://www.cigionline.org/publications/when-co2-goes-geneva-taxing-carbon-across-borders-without-violating-wto-obligations

Canada well on its way to a renewable-energy future, Christopher Barrington-Leigh <a href="http://www.theglobeandmail.com/report-on-business/rob-commentary/canada-well-on-its-way-to-a-renewable-energy-future/article33424984/">http://www.theglobeandmail.com/report-on-business/rob-commentary/canada-well-on-its-way-to-a-renewable-energy-future/article33424984/</a>

The cost of carbon pricing in Ontario and Alberta, Nicholas Rivers
<a href="http://www.macleans.ca/economy/economicanalysis/what-carbon-prices-in-alberta-and-ontario-will-cost-the-average-household-and-why/">http://www.macleans.ca/economy/economicanalysis/what-carbon-prices-in-alberta-and-ontario-will-cost-the-average-household-and-why/</a>

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