CURRENTS

WESTERN CANADA'S ECONOMIC BULLETIN

GLOBAL OUTLOOK

Low oil prices hurting recovery

CANADA WEST FOUNDATION → MAY 2015



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GLOBAL OUTLOOK



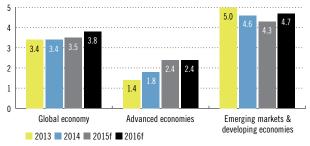
Oil price hangover dampens recovery

The global economic recovery is like the party that just can't get started.

Continuing low oil prices around the world have moderated expectations for global economic growth for the remainder of 2015. The World Bank, IMF and other organizations had anticipated a recovery by the second half of this year, but several leading economies remain burdened with legacies from the global financial crisis. Elements contributing to the lifeless global economy are low interest rates, falling commodity prices and lacklustre consumer demand.

The World Bank projects that the world economy will grow by 3.5% in 2015, essentially the same as last year's rate of 3.4%. Although the slight growth is attributed to the collapse of oil prices, it is still not enough to offset other negative factors such as lower investment, economic stagnation in Europe and Japan, market volatility and geopolitical events.

WORLD ANNUAL GROWTH RATES



Source: International Monetary Fund, April 2015

U.S. economy expected to edge up

Next door, the U.S. economy is sending out mixed signals, leading most analysts to conclude that this will be another year of modest growth. Employment rose 1.7% in March over the same period last year. This is in spite of a surprising modest growth in employment of 126,000 jobs in March compared to the average monthly employment growth of 269,000 over the last 12 months. The unemployment rate in March declined to 5.5%. While the employment numbers are improving, the number of U.S. citizens who want a job has grown from a year ago.

New home sales in the U.S. rose 7.8% from January to February of this year. New housing starts, however, are showing a bumpier ride with a year-over-year decline of 2.5% from March 2014 to March 2015. In spite of the year-over-year decline, starts actually increased between February and March of this year by 2.0%. The inventory of vacant properties in the U.S. is declining and resale home prices are slowly trending upwards.



The Conference Board of Canada reported improved U.S. consumer confidence in March largely attributable to increased consumer expectations. Even though weaker oil prices have given consumers a break, they still see economic conditions in a gloomy light. A general decline in retail sales, automobile sales and food services suggest consumers are not yet ready to spend.

What happens next with the U.S. recovery will be influenced by the Federal Reserve meeting in June. Will the Reserve increase interest rates or leave them where they are for now? Much depends on whether the employment numbers keep pace with the forecast and whether inflation holds steady as consumer demand increases.

Canada to see slower growth

Canada's economy is forecast to grow by 1.8% in the second quarter of 2015 after a dismal first quarter of less than 1.0% growth. Low oil prices are affecting all areas of the economy.

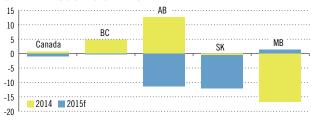
The drop in employment reported in the first quarter reflected the slowdown in the energy sector and its supply chain. An oil price recovery is not expected in the near term and there are conflicting views on when prices can be expected to recover. Other sectors not directly affected by oil prices are more optimistic; some see that a weaker Canadian dollar will support increased sales, especially in the U.S.

In response to almost no growth in the first quarter, the Bank of Canada chose to leave the overnight bank rate at 0.75%. Market watchers expect the Bank will not raise interest rates until Spring 2016. This will provide some breathing room for consumers with high-debt loads and could encourage business investment.

The Canadian dollar is not expected to strengthen any time soon. The dollar could experience even further downward pressure if the U.S. Federal Reserve starts raising interest rates later this year.

Canada's housing market, however, will benefit from low interest rates, although conditions will vary by province. Positive housing market growth is expected in Ontario, British Columbia, Manitoba and Quebec, while the housing markets in Alberta, Saskatchewan and Atlantic Canada are expected to decline.

CANADA HOUSING STARTS



Canada Mortgage and Housing Corporation Housing Market Outlook – Q1 2015

WESTERN COMMENTARY



Western provinces need to align tactics to cut emissions

Closer collaboration among Canada's energyproducing provinces could help Canada get back on track with its goals to reduce harmful greenhouse gas (GHG) emissions.

Fully 91% of Canada's GHG emissions come from five provinces: British Columbia, Alberta, Saskatchewan, Ontario and Quebec. The four western provinces produce 59% of Canadian GHG emissions. No western province has decreased its GHG emissions since 1990 and only British Columbia has decreased its emissions from 2005 to 2013.

This poses a challenge for Canada as it prepares for the United Nations Climate Change Conference in November. According to Environment Canada's 2013 annual inventory, greenhouse gas emissions actually increased 1.5% in 2013 over the year. This trends puts in doubt the country's ability to meet its 2009 commitment to reduce GHG emissions targets by 17% from 2005 levels by 2020.

While the federal government has a role to play in setting GHG emissions reduction policy, the provinces have been taking the lead. When the Canadian premiers met in April to discuss a Canadian energy strategy and actions to address climate change, they agreed the provinces should work together to create greater consistency among their policies.

Governments can use three types of policy tools to reduce emissions: regulations, subsidies and carbon pricing on emissions.

So far, each province has been following its own policy path. Ontario, for example, announced in April it would be joining Quebec and California in a cap-and-trade system to reduce greenhouse gas emissions, with details to come within six months. When Ontario's cap-and-trade is introduced, 62% of the Canadian population will be covered under a greenhouse gas regulation.

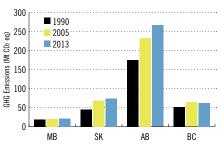
In western Canada, however, each province follows its own path, creating inconsistency across the provinces:

- → British Columbia implemented a carbon tax in 2008. Carbon is priced at \$30 per tonne of carbon dioxide equivalent (CO₂e). This applies to about 70% of B.C.'s GHG emissions.
- → Alberta initiated regulations that cover a defined set of emitters in 2007. This includes a \$15 per tonne price on CO₂e.
- → Saskatchewan enacted legislation but not regulations. Instead, it invested in carbon sequestration technology for coal-fired electricity generation.
- → Manitoba introduced energy efficiency measures, a \$10 per tonne of CO₂e tax on coal-fired generation emissions and further investment in renewable energy resources.

A report from Canada's Ecofiscal Commission makes a strong case for carbon pricing being the most cost-effective policy. It argues that carbon pricing becomes a function of the market and emitters have the flexibility to reduce emissions using the abatement methods best suited to their business. Carbon pricing policies create stronger incentives for innovation than do regulatory approaches, the report argues.

A one-size-fits-all carbon policy may not be the best solution for the provinces but a common carbon price across all provinces would provide consistency for businesses and the public.

EMISSIONS BY WESTERN PROVINCES IN 1990, 2005 & 2013



Source: National Inventory Report, Part 3, Environment Canada

CURRENTS EVOLVES WITH THE TIMES

FROM THE EDITOR

The West is evolving rapidly and we're updating CURRENTS to keep pace. Starting with this edition, we are providing themed coverage on issues affecting the economy in the four western provinces. This edition examines how each province is responding to the challenge of greenhouse gas reduction and related initiatives.

Over the last few months, we've watched as Canada and the provinces prepare for the United Nations Climate Change meeting in Paris late this year. Canada's recent federal budget mentioned the environment only in passing without any specific reference to policy initiatives. At the most recent Council of the Federation, however, provincial premiers discussed developing a national energy strategy and actions to address climate change. Provinces are stepping up to take action to reduce greenhouse gas emissions and western provinces are developing technology that could help large emitters, like China, to turn things around.

Also, check out our western provinces economic snapshot page on the back cover.

We hope you enjoy this edition of CURRENTS.

Comments are welcome at: communication@cwf.ca



BRITISH COLUMBIA



Congestion remedy tax ignites Metro Vancouver



Metro Vancouver residents are being asked if they are willing pay an extra half per cent in sales tax on the promise that the money will be used to make it easier to get around. The raging debate has raised pointed questions about how much citizens trust governments to use money prudently.

The Mayor's Council on Regional Transportation in Metro Vancouver has put forward a vision for regional transportation investments that include \$7.5 billion in new capital spending. The council proposes raising about one-third of the cost through the sales tax hike – which would bring the levy up to 7.5% – and Metro Vancouver residents are being asked to vote on the proposal by May 29.

Supporters of the No side say they distrust TransLink, the regional transportation authority, to manage the funds appropriately, that accountability would be an issue.

"TransLink has wasted too much of our money to be trusted with any more of it," states the website http://www.notranslinktax.ca/, created by a coalition of citizens, small business owners and activities. "Like pouring water into a leaky bucket, we know what will happen to money entrusted to TransLink: much of it will be wasted."

Advocates of the Metro Vancouver Congestion Improvement Tax responded by proposing annual public audits, overseen by business magnate Jim Pattison, to ensure the money is invested wisely. The Yes side includes labour, business, students and environmental leaders.

There are also other critics, who say the plan is not 21^{st} century enough. With services like Uber and Car2go, we are experiencing novel ways to commute and won't need to build large infrastructure projects, they argue.

These, and other services like them, will help to reduce congestion by taking cars off the road but they may not be able to move large volumes of people around the region who need to get to work.

The one thing most everyone agrees on is the cost of congestion in Metro Vancouver. It is estimated that vehicle crashes and wasted time in traffic cost the region about \$500 million per year. This is

projected to grow to \$1 billion per year in 2045 if no improvements are made to transportation infrastructure.

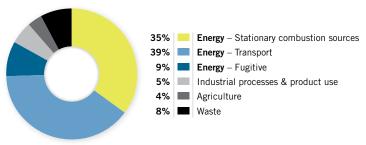
New transportation infrastructure will lower congestion, making it easier for residents to move around the region and reducing time spent in transit. It is also expected to save about 200 lives and prevent about 4,000 serious injuries annually.

Advocates for the plan point that, as most of British Columbia's greenhouse gas emissions are transportation related, easing congestion will help to resist increases in the carbon footprint. The region is expected to grow by more than one million people and 600,000 new jobs by 2040.

Importantly, improved transportation will enhance the economic competitiveness of the region, increasing travel efficiency for commercial and trade-related vehicles. The Port of Vancouver is a key to moving import and export goods across the country. Congestion affects access to and from the port and increases transportation costs for business which are then passed on to consumers. More reliable travel will encourage residents to consider broader employment opportunities across the region.

The Mayor's Council proposal is one of those big bets for the future but has also become a lightning rod for taxpayer discontent. Current polls put the No in the lead, but no one is confidently predicting the outcome of the vote.

BRITISH COLUMBIA, MT CO₂ EQUIVALENT (2013)



Source: National Inventory Report, Part 3, Environment Canada



VEHICLE CRASHES & WASTED TIME
IN TRAFFIC COST THE REGION ABOUT

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ALBERTA



Alberta faces challenge of greener path to growth



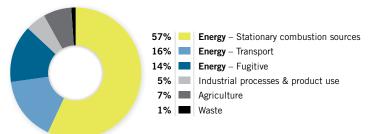
Alberta faces a vexing challenge – find a way to grow its economy while also reducing emissions of greenhouse gases.

Even with the impact of recent declines in oil prices, the province leads the country in GHG emissions thanks in large part to its production of bitumen from the oil sands. The oil sands represent almost 27% of provincial GHG emissions and its coal-fired electricity generation, another 18%. According to Environment Canada's most recent national inventory, emissions in Alberta have increased 53% since 1990, putting it past Ontario as the largest emitting province in the country.

Alberta began its assault on emissions when it implemented the Alberta Specified Gas Emitters Regulation (SGER) in 2007, which included carbon pricing. Under the program, regulated emitters producing more than 100,000 tonnes of carbon dioxide equivalent (CO₂e) annually, are required to reduce their emissions intensity (emissions per unit of output) relative to a stated baseline of 12%. After 2030, GHG emissions from Alberta's coal-fired electricity generation is expected to reduce drastically as older generating units are taken offline in accordance with federally imposed regulations.

Emitters can choose among different options under the regulations to achieve their emissions goal. They can trade permits with other regulated emitters, purchase credits for other emissions reductions within Alberta, or contribute to the Climate Change and Emissions

ALBERTA, MT CO₂ EQUIVALENT (2013)



Source: National Inventory Report, Part 3, Environment Canada

Management Corporation (CCEMC), a technology fund at a cost of \$15 per tonne of carbon dioxide equivalent (CO₂e). Over the five years it has been in business, CCEMC has funded 87 projects which are expected to reduce GHG emissions by 10.2 megatonnes before commercialization. Commercial development could drive much more substantial reductions.

Even this carbon price, however, has not been enough to incent further reductions in GHG emissions in Alberta. Expansion of oil sands development in northern Alberta has led to an increase in emissions in recent years.

The economy has suffered, however, as resource companies in Alberta have not been able to build pipelines to transport bitumen to new markets. This has forced them to rely on more costly alternatives, such as transportation by rail.

Businesses, and many in the public, fear that the province's economic growth will be halted if emissions regulations are expanded to more emitters and if the carbon tax is increased further. Instead, the province is seeking a system that reduces significant amounts of GHGs using a regulatory approach while enabling economic growth.

The cap-and-trade system is a market-based approach that provides economic incentives for reducing emissions. Such a system makes little sense in places that are growing industries, like British Columbia (liquefied natural gas) and Alberta (oil sands).

Although a carbon tax makes more sense in such places, it is not clear that a revenue-neutral carbon tax (one in which the tax levied is offset by tax reductions elsewhere) will actually change consumer behaviour. The most realistic answer for Alberta may be to increase its emissions intensity requirements and price, while finding a way to link with cap-and-trade systems in Quebec and Ontario.

Industry appears ready to accept reasonable regulations. The province now needs a government willing to make moves bold enough to cause its environmental critics to reconsider their opposition.

With files from Trevor McI end



CCEMC HAS FUNDED 87 PROJECTS WHICH ARE EXPECTED TO REDUCE GHG EMISSIONS BY

BEFORE COMMERCIALIZATION.

SASKATCHEWAN



Carbon storage could work around the world

With almost half of Saskatchewan's energy generation from coal-fired generation facilities, the province has been forced to take a different approach than its neighbours to reducing greenhouse gas emissions.

Instead of a carbon tax or cap-and-trade system, Saskatchewan has focused on a technological solution that it also hopes to export.

Saskatchewan's *Management and Reduction of Greenhouse Gases Act* of 2009 is similar in content to Alberta's law, which sets emission targets and allows corporations to make compliance payments. Unlike Alberta, however, Saskatchewan has not put rules in place to enforce the act.

Instead, SaskPower – the province's power generation utility – has pursued a technological solution, investing in a clean coal demonstration and storage project near Estevan in the southeast corner of the province. The Boundary Dam Integrated Carbon Capture and Storage Demonstration Project represents the largest capital investment undertaken in SaskPower's history. Total costs since the project began in 2011 are close to \$1.5 billion, including \$240 million from the Government of Canada.

Carbon capture equipment was retrofitted on the coal-fired plant, which has been operating since 1959. It is the world's first commercial-scale, lignite-fired power plant equipped with carbon capture and storage technology.

Since the carbon capture project began operating on Oct. 2, 2014, approximately 135,000 tonnes of carbon dioxide (CO_2) has been captured. The plant capacity goal of one million tonnes of CO_2 will be reached this year.

The project is meant to be partially self-sustaining. Coal-fired emissions from plant operations are turned into liquefied carbon dioxide, which will then be sold to Alberta-based Cenovus Energy for use in its enhanced oil recovery (EOR) process in the nearby Weyburn Oil Field.

Any liquid not used by Cenovus will be pumped to SaskPower's Aquistore CO₂ storage site, 3.4 kilometres underground in a deep saline formation. The carbon stored at Aquistore will be monitored to ensure it is a safe and workable solution to storing emissions.

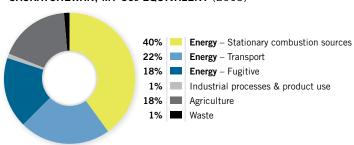
The Petroleum Technology Research Centre (PTRC) manages the research and monitoring associated with the storage of CO_2 at the site, which is regulated by the Saskatchewan Ministry of the Environment. As much as 350,000 tonnes of CO_2 will be stored over the life of the project.

SaskPower expects to show that the technologies associated with the carbon capture and storage can be applied to any large, industrial greenhouse gas emitter anywhere around the world. With China's rapid and recent construction of coal-fired electrical generating plants, the market potential is vast.



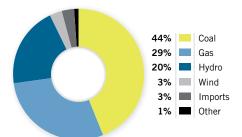
Photo credit: SaskPower

SASKATCHEWAN, MT CO₂ EQUIVALENT (2013)



Source: National Inventory Report, Part 3, Environment Canada

SASKATCHEWAN'S SOURCES OF POWER (2014)



Source: SaskPower

MANITOBA



Province gambles on hydro expansion

Manitoba's vast hydroelectric capacity makes the province the lowest greenhouse gas emitter of the four western provinces. But taxpayers worry that the province's bold plan to sell even more of its lowemissions product to nearby jurisdictions is too big a financial gamble.

Manitoba Hydro has long had a vision of building even more hydroelectric generating and transmission capacity. This new infrastructure would help satisfy future demand and increase the reliability of the system to reduce vulnerability to major climate or other events.

Mostly, though, the province hopes to gain access to export markets, where the ensuing revenue would offset the infrastructure investments by selling even more of its surplus power.

Exports already amount to nearly one-third of the utility's revenues. According to Manitoba Hydro, export sales have generated \$5.2 billion in revenue since 2005 and are forecast to total \$16 billion by 2035. With export sales of \$439 million in 2014, 89% came from U.S. clients and 11% from Canadian customers.

Clients include Saskatchewan's SaskPower, Great River Energy of Minnesota), Xcel Energy (representing eight states) Minnesota Power and Wisconsin Power.

Capital costs for approved projects are estimated at almost \$8 billion. These include the 695 MW Keevask Project on the Lower Nelson River, with an in-service date of 2019, as well as the 750 MW Manitoba-Minnesota Transmission Project, expected to be completed by 2020.

Two other projects were rejected by the Public Utilities Board -1.485 MW Conawapa Project and 185 MW north-south transmission project. The PUB determined the long-term forecasts provided by Manitoba Hydro were too uncertain for either.



Even so, Manitoba Hydro is expanding the capacity of its transmission system at a revised cost of \$4.7 billion. The Bipole III transmission project will extend 1,475 kilometres from the Lower Nelson River in northern Manitoba to the west side of Winnipeg. When finished in 2018, Bipole III will improve reliability to the system. About 70% of the province's hydroelectric generating capacity is delivered by Bipole I and II transmission lines, which share a transmission corridor from northern Manitoba.

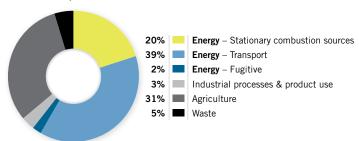
But the projects are not without controversy. Manitoba Hydro crews working on the Bipole III project in the north have encountered resistance from First Nation communities who feel consultations concerning access to land along the route have been inadequate. Further south, landowners have objected to the change in the route for the Manitoba-Minnesota transmission line. The planned route requires expropriations where growing communities are located.

Underlying Manitobans' concerns about the projects are the additional costs that will lead to increased hydro rates and even whether the demand for electricity will be there when the projects are finished. Lacklustre economic growth has softened energy demand from the local ratepayer base as well as in export markets.

Manitoba's U.S. clients are benefitting from low natural gas prices. With natural gas now readily available in the U.S., prices are likely to stay low for the foreseeable future, competing against electricity exports from Manitoba.

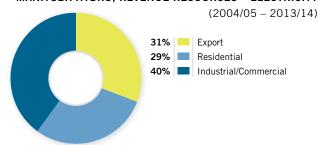
Alternative customers, such as Alberta's oil sands producers, could benefit from a clean energy source. While a possibility, it would require another major capital investment to construct a western transmission line from northern Manitoba to northern Alberta, Manitobans will want to be assured that such a massive capital investment will guarantee revenue well into the future.





Source: National Inventory Report, Part 3, Environment Canada

MANITOBA HYDRO. REVENUE RESOURCES - ELECTRICITY



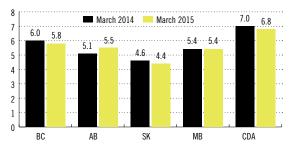
Source: Manitoba Hydro

THE WEST'S ECONOMIC BAROMETER

EDITOR'S NOTE: Welcome to this new feature in CURRENTS. Each edition, we'll provide a snapshot of the four western provinces' economic status. We use familiar indicators to measure the percentage change over the most recent 12-month period for which data is available. These indicators show how the western economy is shifting in response to low oil prices and a slowing economy.

UNEMPLOYMENT RATE

The change in the unemployment rate from March 2014 to March 2015 was most noticeable in Alberta where it increased from 5.1% to 5.5%. Both British Columbia and Saskatchewan experienced a slight decrease in the unemployment rate, with no change in Manitoba's rate of 5.4% over the year.

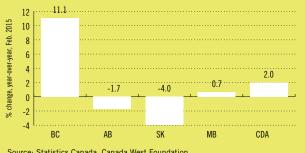


Source: Statistics Canada, Canada West Foundation

RETAIL SALES



Retail sales in British Columbia increased 11.1% over the 12-month period from February 2014 to February 2015. In Alberta and Saskatchewan, retail sales have declined over this period by 1.7% and 4.0% respectively, while Manitoba consumers have increased their retail spending by just 0.7% - close to the Canadian average.



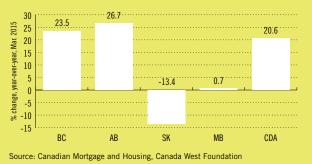
Source: Statistics Canada, Canada West Foundation

HOUSING STARTS



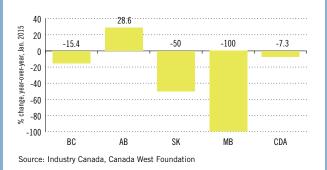


Optimism dies hard in Alberta. The province increased housing starts from March 2014 to March 2015 by 26.7%. B.C. was close behind, with an increase in starts of 23.5%. Housing starts in the other two provinces have gone into retreat, with Saskatchewan down 13.4% and Manitoba only up by 0.7% for the period.



BUSINESS BANKRUPTCIES

An increased number of Albertans experienced bankruptcy over the January 2014 to January 2015 period than those in the other three western provinces. The 29% increase in business bankruptcies in Alberta suggests businesses supplying the energy sector are feeling the effects of low oil prices.



Except where noted otherwise, content for this edition of CURRENTS is written by Canada West Foundation Senior Economist Janice Plumstead

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