

Message

From: Rebecca Chen [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=0CDA792CODED4BF48B5F5EB190C5EA51-REBECCA CHE]
Sent: 2018-04-12 11:03:27 AM
To: Simon Zhang [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=3f293b2300524a9babd5abfeef83386d-Simon Zhang]; Joyce Poon [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=3093c75378834fd195c6a07d2c0aded1-Joyce Poon]; Chuck Farmer [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=aa83ad66edf341b4a48c3f852b674355-Chuck Farmer]; Bashir Bhana [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=f7ca92bb3384495d95f56b96eed74290-Bashir Bhan]
Subject: RE: Today's News - Wednesday, April 11, 2018

Some ROI analysis from an individual household bases was done on residential electrification (heat pump adoption). The analysis will be revised based on more updated information, such as information from GreenON team, and the escalated Ontario Fair Hydro Plan price trend after 2026.

Same analysis for Commercial and Industrial sector was not conducted.

Regards,
Rebecca

From: Simon Zhang
Sent: April 11, 2018 4:05 PM
To: Joyce Poon; Chuck Farmer; Bashir Bhana; Rebecca Chen
Subject: RE: Today's News - Wednesday, April 11, 2018

The study looks at electrification impacts from perspectives of energy, economy, environment, etc. We have some high level emission reduction and cost information of key electrification end-uses.

Space heating: a recent study from MaRS's Advanced Energy Centre estimates that an air source heat pump can reduce 1.7 – 2.6 tonnes CO₂e annually, at a cost about \$300 per tonne over its life.

Electric vehicle: a typical EV in Ontario avoids about 3.4 tonne CO₂e each year. It is more complicated to compare EV cost with its counterpart ICE, as there are so many make/model/trim and some of them have e-mode only (e.g. Tesla). Government incentives can be an indicator here, which Ontario spent over \$150 million since 2010. It ends up approximately \$300 per tonne, similar to heat pump.

Regards,

Simon

From: Joyce Poon
Sent: April 11, 2018 10:19 AM
To: Chuck Farmer; Bashir Bhana; Rebecca Chen; Simon Zhang
Subject: RE: Today's News - Wednesday, April 11, 2018

We have the various cost and emission implications for OPO cases with higher load usage due to electrification but it is looking at purely the cost to the electricity system and does not quantify the benefits from an economy perspective. The EPRI report is clearly taking a far broader economy perspective.

From: Chuck Farmer
Sent: April 11, 2018 8:44 AM
To: Bashir Bhana; Rebecca Chen; Simon Zhang; Joyce Poon
Subject: RE: Today's News - Wednesday, April 11, 2018

To what extent have we looked at potential cost benefits of targeted electrification?

Chuck Farmer
416-969-6414

From: Bashir Bhana
Sent: April 11, 2018 8:11 AM
To: Rebecca Chen; Simon Zhang
Cc: Chuck Farmer
Subject: Fw: Today's News - Wednesday, April 11, 2018

Fyi - The EPRI report mentioned below may be something of interest to you.

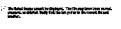
Bashir Bhana, P.Eng.
Manager, Resource Integration |
Planning, Acquisition, Operations | IESO

Sent from my BlackBerry

From: John.Cannella@ieso.ca
Sent: April 11, 2018 6:28 AM
To:
Subject: Today's News - Wednesday, April 11, 2018



Today's News

powered by: 

Date: Wednesday, April 11, 2018
Edited by: John Cannella (John.Cannella@ieso.ca)
[Contact Editor](#)

IESO Mentions

News - 1 Results



Francesca Dobbyn continues fight for rural Ontario, seeks Liberal nomination

Mount Forest Confederate - Tue Apr 10 2018 Page: 1

OWEN SOUND - Francesca Dobbyn, known locally for her community advocacy and for speaking truth to power to instigate change, has announced plans to continue representing the people of her community at Queen's Park. Dobbyn hopes to secure the ...

[Back to Top](#)

Industry News

News - 4 Results



'Radical' change needed to meet climate goals; Watchdog says Liberal plan isn't enough, while praising coal phase-out

Toronto Star - Wed Apr 11 2018
Byline: Robert Benzie Queen's Park Bureau Chief
Page: A11

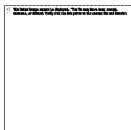
Ontario's environmental watchdog warns the province's aggressive greenhouse gas emission-reduction targets cannot be met without radical changes in behaviour. Environmental commissioner Dianne Saxe noted Tuesday that the government's own ...



Ontario's energy plan ignores provincial climate law: watchdog; Ontario's energy plan ignores climate law: watchdog

Canadian Press - Tue Apr 10 2018
Byline: Shawn Jeffords

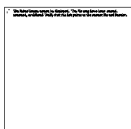
TORONTO - The Liberal government's long-term energy plan ignores its own climate change laws, and more must be done to shift the province from fossil fuels to low-carbon power sources, Ontario's environmental watchdog said in a report released ...



Dobbyn seeks Liberal nomination

Owen Sound Sun Times - Wed Apr 11 2018
Byline: Rob Gowan
Page: A1 / Front

Francesca Dobbyn said watching the Progressive Conservative leadership race was what finally made her decide to seek the provincial Liberal nomination in Bruce-Grey-Owen Sound. "I feel very strongly that (PC leader) Doug Ford is the greatest threat ...



EPRI Study: Electrification Can Lower Costs, Reduce Energy Use and Emissions

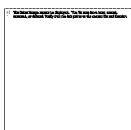
Targeted News Service - Tue Apr 3 2018 Page: n/a

The Electric Power Research Institute issued the following news release: A new report by the Electric Power Research Institute (EPRI) concludes that increased use of electric vehicles and increasing customer choice coupled with an expanded array of ...

[Back to Top](#)

IESO Mentions

Full Articles



Francesca Dobbyn continues fight for rural Ontario, seeks Liberal nomination

Mount Forest Confederate - Tue Apr 10 2018 Page: 1

OWEN SOUND - Francesca Dobbyn, known locally for her community advocacy and for speaking truth to power to instigate change, has announced plans to continue representing the people of her community at Queen's Park.

Dobbyn hopes to secure the Liberal party nomination at the provincial riding association's nomination meeting on April 21, in preparation for the Ontario general election on June 7.

"Ontario Liberals are dedicated to improving the lives of the people of this province, and it would be a privilege to serve my community in that same spirit," Dobbyn says. "I've seen firsthand the very real struggle Ontarians are having, particularly those of us who live outside the big cities. My goal is to continue my advocacy work as your member of provincial parliament, where the people of the Bruce-Grey-Owen Sound

riding most need a strong voice and I can have the greatest impact."

Dobbyn is no stranger to policy making at the provincial level.

As executive director of the United Way of Bruce Grey, she was part of a process that resulted in a number of changes to energy policy, including a moratorium on winter hydro disconnections. As a result, she's now the local voice on the Independent Electricity System Operator's Market Renewal Working Group, a committee advising the manager of Ontario's power system through reforms to the wholesale electricity market.

"I'm thrilled to support Francesca in pursuing the Liberal candidacy," said Kimberley Love, past federal Liberal candidate, who will manage Dobbyn's campaign for the local provincial seat. "There's a lot at stake in this election. Bruce-Grey-Owen Sound needs a strong and effective voice at Queen's Park. Francesca deeply understands our communities here, she has a track record of success, and she fights passionately for what people in our area need."

If Dobbyn is successful in winning the nomination, she will be on leave from her United Way role for the duration of the election.

Dobbyn has served the communities of Bruce and Grey counties as the executive director of their United Way for more than 13 years. In that role, she helped found the Grey Bruce Children's Alliance and the Bruce Grey Poverty Task Force.

Dobbyn co-chaired the Queen's Park bandstand project in the City of Owen Sound - bringing together volunteers and contractors - and raised the \$10,000 needed for the project through a One Million Pennies fundraising effort to explore options for the city's condemned structure.

A psychology BA graduate of the University of Guelph, Dobbyn has since participated in many professional development opportunities. Competing Canada-wide, Dobbyn was accepted into two residency programs at the Banff Leadership Centre. The first was a nine-month project that explored issues and market-based solutions for income inequity (2016), the second was a one-month on-site residency called Getting to Maybe that explored systems change (2017).

Earlier in her career, as a community advocate, she acted as municipal tourism director and festival co-ordinator for the Wiarton Willie Festival: winner of "World's Greatest Event," "Most Popular Event in Ontario" and "Best Public Service Announcement" under her direction.

Dobbyn has been honoured with the Person of the Year award by the Grey Bruce Labour Council, the Charlie Kelly Award for raising the profile of tourism in Bruce-Grey region, and Community Service Not For Profit award by Owen Sound Chamber of Commerce. Born in Cornwall, England, Dobbyn grew up in Kincardine where her father worked for BNPD, now Bruce Power. For the last 25 years, Dobbyn has lived in and around the region. Her two grown children have found their homes in northern Ontario.

Dobbyn is excited to continue to represent the people and communities of Bruce-Grey-Owen Sound at Queen's Park.

[Back to Top](#)

Industry News

Full Articles



'Radical' change needed to meet climate goals; Watchdog says Liberal plan isn't enough, while praising coal phase-out

Toronto Star - Wed Apr 11 2018
Byline: Robert Benzie Queen's Park Bureau Chief
Page: A11

Ontario's environmental watchdog warns the province's aggressive greenhouse gas emission-reduction targets cannot be met without radical changes in behaviour.

Environmental commissioner Dianne Saxe noted Tuesday that the government's own climate-change legislation requires weaning off of fossil fuels, such as gasoline and natural gas, by 2030.

"The climate law means that Ontarians must be prepared to reduce emissions from fossil fuel use by 40 to 50 per cent in the next 13 years," said Saxe, as she unveiled her annual 320-page report to the Legislature. "This means more conservation and converting some fossil fuel uses, including some gas-fuelled cars and trucks and some heating of our homes and businesses, to electricity, instead."

Saxe said the Long-Term Energy Plan, unveiled last October, does not take into account the dramatic change required to curb carbon emissions that scientists say contribute to climate change. That's because the energy blueprint calculated that demand would remain stable even though the Liberal government is subsidizing electricity to keep hydro rates lower as Ontarians head toward the June 7 election.

Saxe, an independent officer of the Legislature similar to the ombudsman and auditor general, praised Queen's Park for phasing out dirty coal-fired emissions. She noted Ontario's electricity system was 96-per-cent emission-free due to nuclear generation, as well as solar and wind sources, even though coal was cheaper.

Environment Minister Chris Ballard defended the government's record on the file.

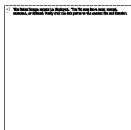
"Ontario has a very comprehensive plan to fight greenhouse gas emissions," said Ballard, noting the Clean Economy Alliance has hailed Ontario as "a leading jurisdiction" on cutting emissions.

"Our climate change action plan has some 90-plus points. I'm sorry that we can't fit it on a bumper sticker ... but it is exceptionally detailed."

That was a shot at Progressive Conservative Leader Doug Ford, who leads the governing Liberals in every public-opinion poll and has yet to unveil his plan to reduce greenhouse gas emissions.

While former Tory leader Patrick Brown had pledged to scrap the Liberals' cap-and-trade partnership with Quebec and California and impose Prime Minister Justin Trudeau's federal carbon tax, Ford is opposing any such measure.

[Back to Top](#)



Ontario's energy plan ignores provincial climate law: watchdog; Ontario's energy plan ignores climate law: watchdog

Canadian Press - Tue Apr 10 2018
Byline:Shawn Jeffords

TORONTO - The Liberal government's long-term energy plan ignores its own climate change laws, and more must be done to shift the province from fossil fuels to low-carbon power sources, Ontario's environmental watchdog said in a report released Tuesday.

Environmental Commissioner Dianne Saxe said Ontario's climate laws would require a drop in fossil fuel use by 40 to 50 per cent in the next 13 years to meet emission-reduction targets set for 2030. The target - a 37 per cent cut below 1990 levels - is still within reach, but only if the government begins to plan for it now, she said.

"The whole reason to have a 25 to 30-year long-term energy plan is precisely so we can look ahead and make plans and not constantly be panicking and rushing to deal with the latest emergency," Saxe said. "Yet there's nothing in the long-term energy plan to deal with that long-term challenge."

Saxe, a non-partisan officer of the legislature, said the province's long-term energy plan predicts stable demand for electricity but doesn't spell out how it will reduce fossil fuel use. In order to meet its climate change goals, the province will need to shift away from fossil fuel use in some cars and trucks, and from home heating using fossil fuels to electricity.

"Conservation absolutely has to be number one," said Saxe. "It's always the cheapest and the best. But it's not going to take us the whole way ... We're going to need a lot more low-carbon electricity."

In its long-term plan released last fall, the government addressed rising costs in the system and said that for most of the next two decades it aims to keep hydro price increases gradual for consumers, rather than lower or freeze rates.

Average hydro bills are projected to rise to \$197 in 2032. That's a slower progression than the government's previous long-term plan in 2013, which expected bills to hit that mark by 2026. But much of that is due to the 25 per cent rate cut introduced by the Liberal government in early 2017 to quell anger around high electricity prices. That move involved a complex borrowing scheme that will cost Ontarians billions in extra interest.

Saxe said the money allocated to lower rates for customers would in some cases be better spent helping low-income residents increase the energy efficiency of their homes.

"If you spend a chunk of money making those homes more efficient, then you do a number of things," she said. "You improve the quality of life for the people living there ... and you reduce their bills."

Saxe also praised the government's role in cleaning up Ontario's electricity system by ending coal-fired power, but the report acknowledges that it has resulted in increased costs for ratepayers. The move away from coal-fired power has also helped reduce the number of smog days every year and the health impacts associated with air pollution, she said.

"Another really important thing that people forget that we get with these higher electricity bills is air we can breathe," she said. "The sky is blue, not yellow. ... burning coal looks cheap on the power bill but it only looks cheap because you're not counting most of the damage."

Energy Minister Glenn Thibeault said in a statement that the government remains committed to an electricity system that "includes renewable energy generation and conservation" that align with its climate change goals.

Thibeault said funds raised from the province's cap-and-trade plan are being invested in projects that help fight climate change.

"These investments include hundreds of thousands of dollars into transit, and energy efficient upgrades for homes, schools, hospitals, social housing, universities and colleges - and we will ensure we continue making positive changes to meet and beat our emission reduction targets," he said.

NDP energy critic Peter Tabuns said the commissioner's report points out the "hypocrisy" of the government's energy and climate change policies. The government isn't doing enough to invest in conservation that would drive down costs for the province and ratepayers, he said.

"I listen to the Liberals regularly talk about how climate change is one the greatest issues facing humanity," he said. "And yet when it comes to their own energy plan, they ignore it."

[Back to Top](#)



Dobbyn seeks Liberal nomination

Owen Sound Sun Times - Wed Apr 11 2018

Byline: Rob Gowan

Page: A1 / Front

Francesca Dobbyn said watching the Progressive Conservative leadership race was what finally made her decide to seek the provincial Liberal nomination in Bruce-Grey-Owen Sound.

"I feel very strongly that (PC leader) Doug Ford is the greatest threat to our social safety net that we have built over these years since Mike Harris," Dobbyn said Tuesday at the party's campaign office in downtown Owen Sound. "I want to ensure that all the work we have done around anti-poverty work, the work I have done over 30 years of working to support people in the community, stays in place."

Dobbyn, who is executive director of the United Way of Bruce Grey, said she has always been really interested in politics and the process. She "dipped her toe in" politics in the municipal election in 2014 when she unsuccessfully ran for Owen Sound city council, where she finished ninth in the race for seven spots.

"It needed to be the right time for me personally," Dobbyn said of her decision to run this time. "My kids are all grown, the organization I work for is in really great shape, the best year ever, so now is the time to explore this opportunity."

Dobbyn is the first and only candidate so far who has declared an intention to seek

the Bruce-Grey-Owen Sound Liberal nomination for the June 7 provincial election. The local provincial Liberal riding association will hold a nomination meeting and annual general meeting on April 21 at 3:30 p.m. at the Quality Inn in Owen Sound. If Dobbyn is chosen as the candidate, she will take a leave from the United Way.

Dobbyn announced her candidacy in front of about a dozen people in a small campaign office on 8th Street East across from city hall, where she said she is excited about running.

"I am shocked I haven't had a second thought of, 'gee, how do I get out of this,'" Dobbyn said. "It has just been, 'this is totally the right decision.'" Born in Cornwall, England, Dobbyn was raised in Kincardine where her father worked at the Bruce Nuclear Power Development. She has called the region home for the last 25 years and is the mother of two grown children.

For the past 13 years she has been executive director of the local United Way, where through her role she has helped found the Grey Bruce Children's Alliance and the Bruce Grey Poverty Task Force. She has long been an energy poverty advocate and over 10 years has fought against electricity disconnections, which led to a provincewide ban on the practice last year.

She said many of the issues she deals with in her role are issues that impact rural residents, something that should help her and her party in the riding and across the province.

"In the last two years we have been able to highlight the needs of rural Ontario, bringing attention to the high hydro rates that were really crippling rural Ontario, and we have made changes around that," said Dobbyn. "The feedback when I was talking to the party in the initial exploration around doing this, was there was a desperate need from them to understand what is happening in rural Ontario, because they don't have any rural MPPs and they needed that feedback."

Dobbyn said if she is elected she would continue to bring the rural voice to Queen's Park to make sure the decision makers understand what the needs are outside the big cities.

"Too often there is an assumption that there is transit, there is an assumption that if we consolidate services to create efficiencies the people themselves will move to those services, but we have no regional transportation, the city of Owen Sound has a transit system and that is it," said Dobbyn. "Health care is a huge issue for people moving around the communities, so it is really important for me to have those issues at the beginning of the decision-making, not at the end of the decision-making."

Locally, Dobbyn hopes to connect with fiscal conservatives, because she feels they may perceive her as "a bleeding heart, spend, spend, spend and assist people."

"What they need to understand is I have been a single parent for many, many years, decades even, and put one through college by myself so I know how to balance a budget, I know how to manage on nothing," said Dobbyn. "I have been running a charity that last year was 8.5 per cent administration on the fundraising side of things, so I know what fiscal conservatism is, I know what fiscal responsibility is."

Dobbyn said by addressing poverty, it pays off with lower health care costs, lower social costs and lower crime rates.

"That is what I want to get out there," she said.

Richard Suchow, president of the Bruce Grey Owen Sound Provincial Liberal Riding Association, said it has taken the party a while to announce a candidate, but he feels it was worth the wait.

"We are very pleased at this point that we have got the candidate that we have," said Suchow.

"She is up-to-date with some of the major issues that are affecting all families here in Grey-Bruce."

If Dobbyn is successful in being named the Liberal candidate, she will be up against two-term PC MPP Bill Walker, NDP candidate Karen Gventner and Trillium Party candidate Elizabeth Marshall. The Green Party of Ontario plans to have a candidate, but one hadn't yet been named as of Tuesday.

The riding has been represented by a PC MPP since it was created in 1999, but Suchow said he thinks the Liberal party can take the riding on June 7.

"It is not about really beating somebody, it is more about getting your agenda in the community because we think we offer something that is valuable for all our sectors and economic levels," said Suchow. "We want the right person in there, and we don't want to be seen as we are just there to beat somebody. No, it is about what is good for your community."

[Back to Top](#)



EPRI Study: Electrification Can Lower Costs, Reduce Energy Use and Emissions

Targeted News Service - Tue Apr 3 2018 Page: n/a

The Electric Power Research Institute issued the following news release:

A new report by the Electric Power Research Institute (EPRI) concludes that increased use of electric vehicles and increasing customer choice coupled with an expanded array of attractive electricity-powered technologies will help improve U.S. energy efficiency while reducing emissions in concert with substantial economic growth over the next three decades.

EPRI's U.S. National Electrification Assessment (USNEA), released today at the National Press Club in Washington, D.C., assesses how rapid advances in innovative electric technologies may impact consumers' energy purchases and the resulting implications for energy efficiency, the environment and the electric grid.

EPRI's advanced economic modeling evaluates customer choices in the context of a detailed regional energy model that includes all major economic sectors and energy sources.

"Electric technologies today provide affordable, efficient and cleaner alternatives for many energy uses and further improvement is imminent with fundamental technology advances occurring every day in the end-use, delivery and supply of electricity. This report is intended to stimulate a discussion of how we can achieve

the maximum possible benefits from these technology advances - a process we call efficient electrification," said Michael W. Howard, president and CEO of EPRI.

EPRI's assessment examined four core scenarios in considering opportunities, drivers and challenges for efficient electrification. The four scenarios involve different assumptions about the trajectory of technological innovations and environmental policies.

The study found that under each scenario, economy-wide electrification and technology advances led to reductions in energy consumption and emissions driven by electrification and efficiency gains. Natural gas use increases across all four scenarios. Carbon capture and storage becomes an essential technology for natural gas use to continue to grow in the scenarios that assume a future carbon price.

The study highlighted potential shifts in electricity loads across the United States caused primarily by additions of "grid interactive" innovative electric technologies including electric vehicles, heat pump water heaters and other connected devices. The assessment also emphasizes the important efforts to fully integrate them, potentially adding significant flexibility to the grid as highlighted in EPRI's Integrated Grid Benefit-Cost Framework and Integrated Energy Network efforts.

EPRI noted that realizing such benefits is contingent on continued investment in technology innovation to ensure a full-portfolio of electricity generation options, advance electric-powered devices and accelerate the transition to a modernized, flexible, resilient and integrated electricity grid.

"The key observations from this study provide insights into the achievability of a cleaner and more cost-effective future, but EPRI must also focus on advancing the technology and electric system understanding to enable the results of this study to become a reality," Howard said. "EPRI is conducting more detailed analyses of efficient electrification at state and regional levels along with expanding our research collaborations on this topic. We are also working with stakeholders around the world to assess how electrification can lead to a more efficient integrated energy network."

The assessment was summarized by EPRI technical experts Geoff Blanford and Allen Dennis. Their presentations were followed by a panel discussion led by Anda Ray, EPRI senior vice president, and three members of EPRI's Board of Directors: Jeffrey Lyash, president and CEO Ontario Power Generation, Inc.; Pat Vincent-Collawn, chairman, president, and CEO of PNM Resources, Inc.; and Sheryl Carter, director, Power Sector of the Natural Resources Defense Council.

More information is available at EPRI.com, where interested parties can also subscribe to EPRI's monthly electrification newsletter and register to participate in EPRI's inaugural Electrification 2018 conference, August 20-23, 2018, in Long Beach, California.

[Category: Utilities]

MSTRUCK-6236906 MSTRUCK

[Back to Top](#)