Article rank 28 Apr 2016 The Globe and Mail Metro (Ontario Edition) ADRIAN MORROW GREG KEENAN

Agency will have sweeping mandate to overhaul energy use

The Ontario government plans to make the majority of the province's buildings emissions-free and slash the use of cars to just 20 per cent of commuter trips by 2050 as part of a dramatic plan to meet its climatechange goals.

To achieve these aims, the province will establish a "new ultra-low-carbon utility" – an agency with a sweeping mandate to change everything about how Ontarians use energy to reduce carbon emissions drastically.

These details are in a confidential draft of the province's Climate Change Action Plan obtained by The Globe and Mail. The strategy, which wants to put "a zero emission or hybrid electric vehicle in every multicar household driveway within eight years," is expected to be unveiled next month. It is meant to supplement a cap-andtrade system for carbon emissions that takes effect next year.

The draft plan promises to get at least 1.7 million electric and hybrid cars in use by 2024, take seven million gas-burning vehicles off the road by 2030, and ensure that by 2050, 80 per cent of residents use public transit, walk or cycle to work. » It would also cut emissions from buildings by 15 per cent by 2030 and ensure most buildings are emissions-free by 2050. This would be done by helping homeowners and businesses install solar panels or geothermal systems and undertake retrofits, and by changing the building code to require renovations and new construction to make buildings more energy-efficient.

It would buy offsets to make the Ontario government carbonneutral next year.

By 2030, the government would cut its own emissions by 50 per cent.

The plan would provide funding for industry to switch to cleaner factories and for research into new, low-carbon technologies.

To co-ordinate the electricity system, home-based power generation such as rooftop solar panels, low-carbon transportation and energy-efficient heating and cooling systems in buildings, a new utility would be established – effectively an agency to oversee a massive shift to low-emission homes, buildings and transportation options.

Environment Minister Glen Murray's spokesman, David Mullock, said the document obtained by The Globe is a preliminary draft circulated among industry to get feedback on the government's ideas.

"These discussion documents are very much draft in nature and do not reflect any final decisions regarding the Climate Change Action Plan. We will continue to consult on the Climate Change Action Plan to ensure that Ontario is successful in reducing greenhouse gas emissions and in meeting our reduction targets," he wrote in an e-mail.

"This looks like a fairly comprehensive approach," said Keith Brooks of Environmental Defence.

He said the idea of having a single agency to help Ontarians retrofit their homes and oversee the transition to electric and hybrid vehicles is a good one; such things now are often handled piecemeal.

But Mr. Brooks cautioned the plan is short on details: "This looks like a precursor to an action plan."

The document is largely silent, for instance, on how the new utility would fit with existing electricity distribution, transmission and generation companies. It also does not say how much more emissions-free electricity generation – whether from nuclear plants, wind farms or solar projects – would be necessary.

The plan does not spell out how it would get Ontarians to switch to zero-emission or hybrid electric vehicles in eight years.

Possibilities include giving drivers more rebates on electric cars or mandating that a certain percentage of auto makers' sales be electric or hybrid.

Either way, reaching that number will be hard.

By The Globe's calculation, it would entail sales of 1.7 million hybrid or electric vehicles in the next eight years in Ontario or about 200,000 annually – compared with just 52,000 last year.

Whether it is possible to reach that goal "depends on what you're smoking," said one auto industry source who has been involved in discussions with several provinces regarding plans to increase the electric and hybrid vehicle fleets. About 8 per cent of the fleet is replaced annually, the source said, which means it takes about 20 years to turn over completely.

"Manufacturers are not and will not make or sell that many cars for Canada by that date," said Flavio Volpe, president of the Automotive Parts Manufacturers' Association of Canada.

Such a move would also signal to manufacturers of large volumes of vehicles with internal combustion engines that the products they make in Ontario are not welcome in the province, Mr. Volpe said.

Transportation accounted for 35 per cent of the greenhouse gas emissions in Ontario in 2013, the document says, pointing out that to meet the province's goals, all vehicles will need to be low- or zero-emission by 2050.

The report suggests the government will push for the trucking industry to switch to cleaner-burning natural gas. It also says the province will "promote complete communities" – planning jargon for encouraging cities and towns to stop sprawling and create dense developments where people live within walking distance of work.

Joe Vaccaro, chief executive officer of the Ontario Home Builders' Association, said his industry can meet the

province's goals, but the government would have to make building code changes over a period of time so companies can adapt, and also make it easier to connect home solar panels and geothermal systems to the grid. He said some developers are already raising carbon-neutral buildings, with tight construction and strong insulation, and solar panels or geothermal systems producing electricity.

"The aspiration is great, as long as we're reasonable about how to achieve this," he said in an interview.

"It's not in the realm of the impossible."

Mr. Vaccaro also pointed out that new home construction makes up only 1 per cent of the total annually, meaning the province will achieve its most significant emissions reductions by retrofitting existing buildings.

Among other things, he said the province could require an energy-efficiency audit whenever a home is sold; this would encourage people to retrofit their homes to raise their value.

Premier Kathleen Wynne and Environment Minister Glen Murray have made climate change a central policy priority over the past year.

The province aims to cut greenhouse gas emissions by 15 per cent below 1990 levels by 2020, 37 per cent by 2030 and 80 per cent by 2050. Ontario currently sits about 6 per cent below, meaning it has a lot of work to do.

Cap-and-trade is expected to raise about \$2-billion annually, and the government plans to use the proceeds to build new transit lines and set up other programs under the action plan.