

# A Clean Bill

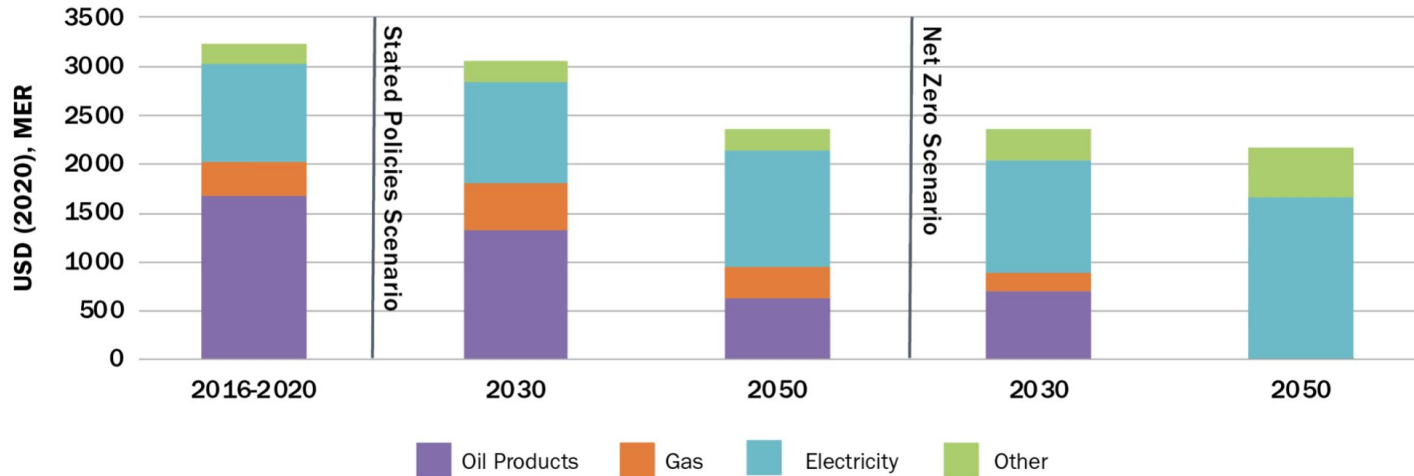
How clean energy makes life  
more affordable for Canadians

Trevor Melanson, communications director



# Canadians will spend less money on energy than they do today as we transition from fossil fuels to clean energy

Average household energy bills by fuel in advanced economies in the Stated Policies and Net Zero Scenarios, 2016 - 2050



Source: International Energy Agency, World Energy Outlook 2021

# Families will spend a bit more on electricity—and a lot less on fossil fuels

## Which families do you think would spend less on energy overall?

A family that drives an electric vehicle and uses a heat pump for both heating and cooling



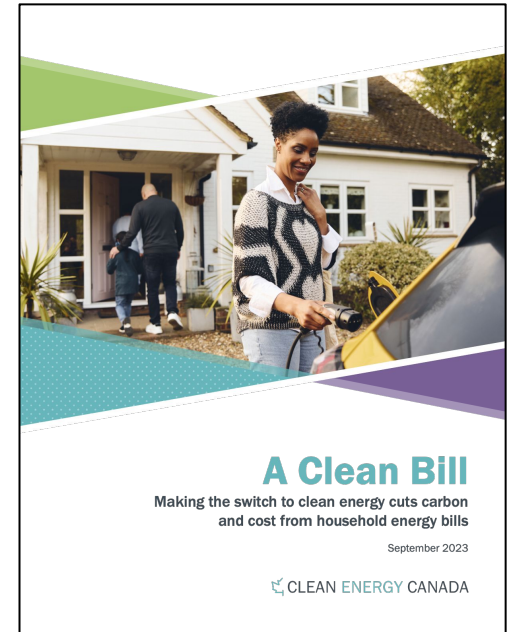
A family that drives a gas-powered vehicle and uses natural gas for heating and air conditioning for cooling



# Ditching fossil fuels can save money

Clean Energy Canada's analysis finds that switching to clean energy, like EVs and heat pumps, **would save a household in the Greater Toronto Area over \$800 per month**—even when upfront costs are factored in.

We will be running numbers for all provinces this year and releasing an interactive website/calculator.



# Clean energy single-family households come out ahead

## House 1 Starting from zero

\$  
**\$2,300**  
PER MONTH

↑ **\$807**  
MORE  
than the clean  
energy family

## House 2 Living the clean energy life

\$  
**\$1,493**  
PER MONTH

↓ **SAVINGS OF UP TO \$807**  
compared to  
neighbours

The clean energy family was able to save nearly **\$10,000 per year**

IN THE DRIVEWAY



HEATING AND COOLING



WATER HEATING



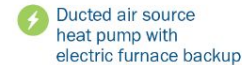
COOKING



IN THE DRIVEWAY



HEATING AND COOLING



WATER HEATING



COOKING



# Clean energy single-family households come out ahead

## Starting from zero

### MONTHLY BILL

	ENERGY COSTS	EQUIPMENT COSTS* (excludes resale value for cars)	TOTAL
VEHICLE COST	\$1,118	\$829	\$1,947
HEATING & COOLING	\$151	\$40	\$191
WATER HEATING	\$16	\$9	\$25
COOKING	\$2	\$9	\$11
REMAINING ELECTRICITY BILL	\$126		\$126

CLIMATE ACTION INCENTIVE PAYMENT (carbon tax rebate)	\$(81)		\$(81)
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<b>TOTAL</b>	<b>\$1,412</b>	<b>\$888</b>	<b>\$2,300</b>
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**\$ \$2,300 PER MONTH**

## Clean energy family

### MONTHLY BILL

	ENERGY COSTS	EQUIPMENT COSTS* (excludes resale value for cars)	TOTAL
VEHICLE COST	\$473	\$720	\$1,193
HEATING & COOLING	\$102	\$33	\$136
WATER HEATING	\$15	\$12	\$27
COOKING	\$4	\$7	\$11
REMAINING ELECTRICITY BILL	\$126		\$126

CLIMATE ACTION INCENTIVE PAYMENT (carbon tax rebate)	\$(81)		\$(81)
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<b>TOTAL</b>	<b>\$720</b>	<b>\$773</b>	<b>\$1,493</b>
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**\$ \$1,493 PER MONTH**

# Clean energy multi-family dwelling households come out ahead

## Starting from zero

\$  
**\$941**  
PER MONTH



**\$459**  
MORE

than the clean energy family

## Clean energy family

\$  
**\$482**  
PER MONTH



SAVINGS OF UP TO  
**\$459**

compared to neighbours

The clean energy family was able to save over **\$5,000 per year**

TRANSPORT

HEATING AND COOLING

WATER HEATING

COOKING

TRANSPORT

HEATING AND COOLING

WATER HEATING

COOKING

Toyota Corolla Hatchback

Building central natural gas heating with radiator and window A/C

Natural gas

Natural gas stove

Two Toronto Transit Commission passes

Ductless air source heat pump with electric baseboard backup

Heat pump

Electric stove



# Clean energy multi-family dwelling households come out ahead

## Starting from zero

MONTHLY BILL			
	ENERGY COSTS	EQUIPMENT COSTS* (excludes resale value for cars)	TOTAL
VEHICLE COST	\$463	\$290	\$753
HEATING & COOLING	\$100	\$5	\$106
WATER HEATING	\$10	\$9	\$20
COOKING	\$2	\$9	\$11
REMAINING ELECTRICITY BILL	\$52		\$52
CLIMATE ACTION INCENTIVE PAYMENT (carbon tax rebate)	\$(61)		\$(61)
<b>TOTAL</b>	<b>\$628</b>	<b>\$313</b>	<b>\$941</b>

**\$ \$941 PER MONTH**

## Clean energy family

MONTHLY BILL			
	ENERGY COSTS	EQUIPMENT COSTS* (excludes resale value for cars)	TOTAL
TRANSPORT	\$286		\$286
HEATING & COOLING	\$71	\$40	\$111
WATER HEATING	\$10	\$12	\$22
COOKING	\$4	\$7	\$11
REMAINING ELECTRICITY BILL	\$52		\$52
CLIMATE ACTION INCENTIVE PAYMENT (carbon tax rebate)	\$(61)		\$(61)
<b>TOTAL</b>	<b>\$423</b>	<b>\$59</b>	<b>\$482</b>

**\$ \$482 PER MONTH**



# Savings are even greater in other provinces

In Metro **Vancouver**, savings go up to

**\$1,037** for single-detached homes  
**\$495** for condos

And in **Halifax**, savings are

**\$940** for single-detached homes  
**\$647** for condos



# EVs are the biggest money savers

## ELECTRIC

### 2023 Chevrolet Bolt EV

Retail price: **\$38,943**

Rebate-adjusted price: **\$30,479\*\***

Battery range: 417 kilometres

**Total ownership cost: \$48,943**

Break even point\*  
**8 months**

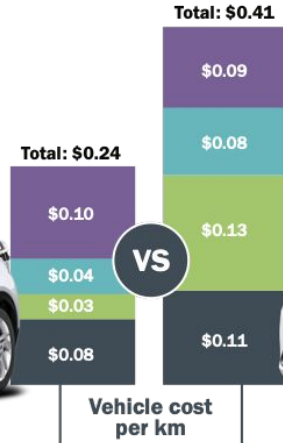


## GAS

### 2023 Toyota Corolla Hatchback XSE

Retail price: **\$29,890**

**Total ownership cost: \$82,515**



Choosing a Chevrolet Bolt instead of a Toyota Corolla Hatchback would save **\$33,600** over a **10-year ownership period**.

- Fuel
- Maintenance and repairs
- Cost of car (depreciation)
- Taxes, insurance, and other costs

# For cars of every size

## ELECTRIC

### 2023 Ford F-150 Lightning XLT Standard Range

Retail price: **\$69,000**  
 Rebate-adjusted price: **\$62,955**  
 Battery range: 386 kilometres

**Total ownership cost: \$65,694**

Break even point  
**7 months**



**TOTAL SAVINGS**  
**\$47,409**



## GAS

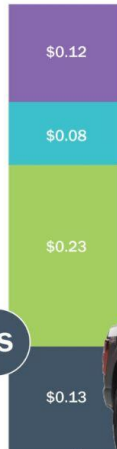
### 2023 Ford F-150 XLT SuperCrew 4x4 Mid

Retail price: **\$61,305**

**Total ownership cost: \$113,103**



Total: **\$0.57**



VS

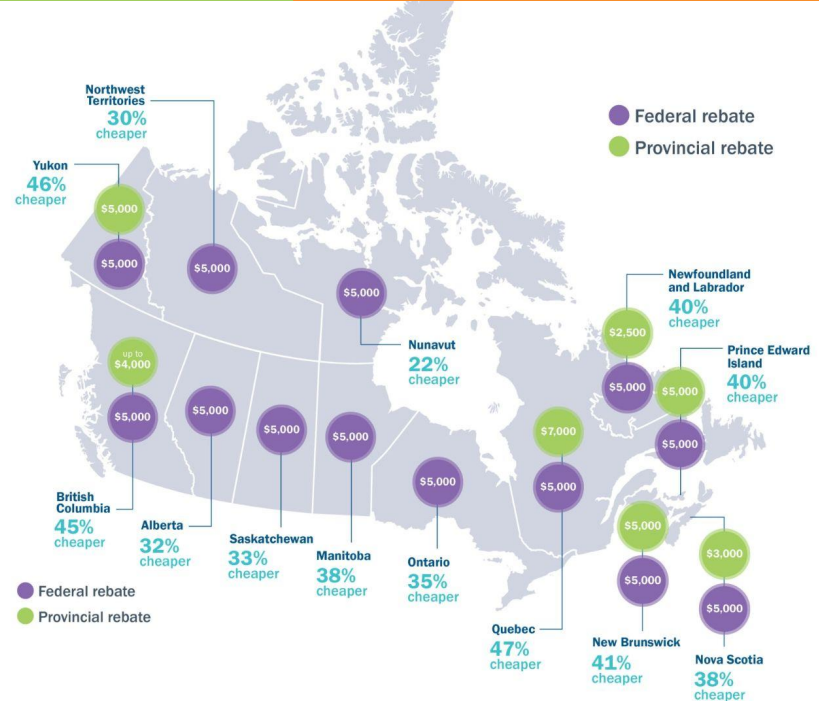
Vehicle cost per km

- Cost of car (depreciation)
- Fuel
- Maintenance and repairs
- Taxes, insurance, and other costs

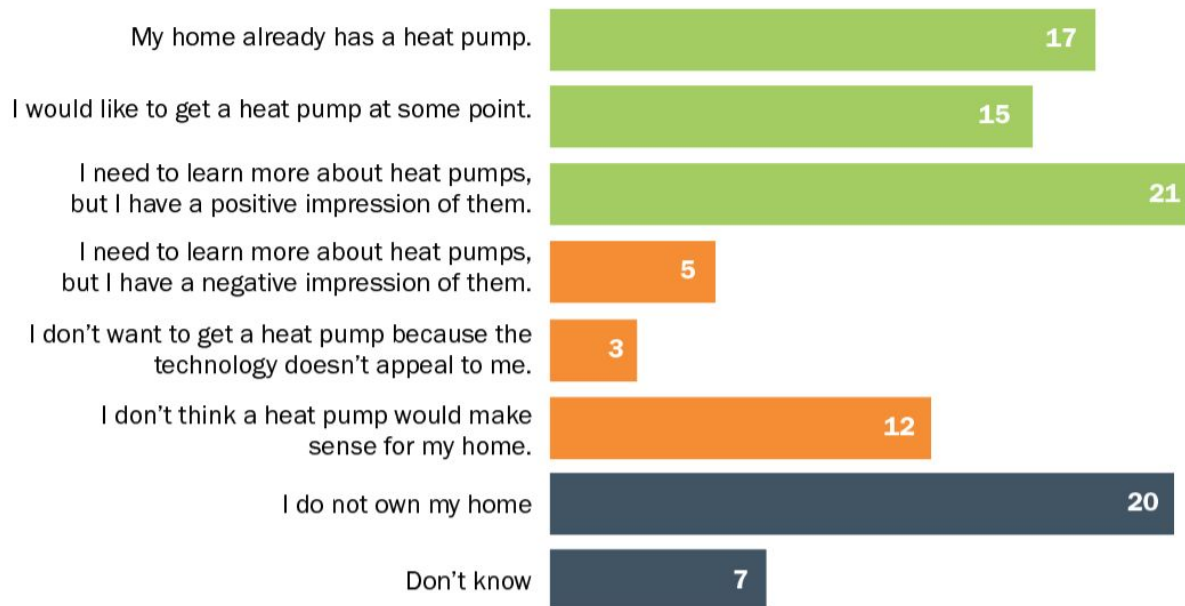
\* Except for the Quebec provincial rebate (but eligible for the federal rebate).

# EVs are cheaper - no matter where you live

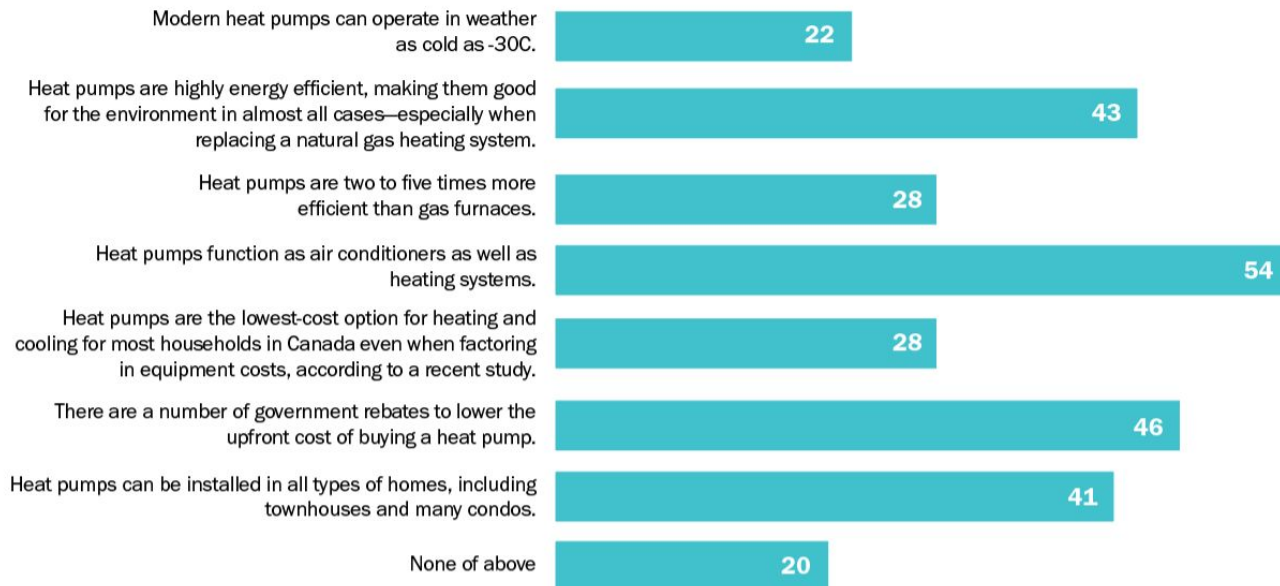
But savings are greatest in **Quebec** and **British Columbia**, where electricity is much cheaper than gas and provincial rebates are available



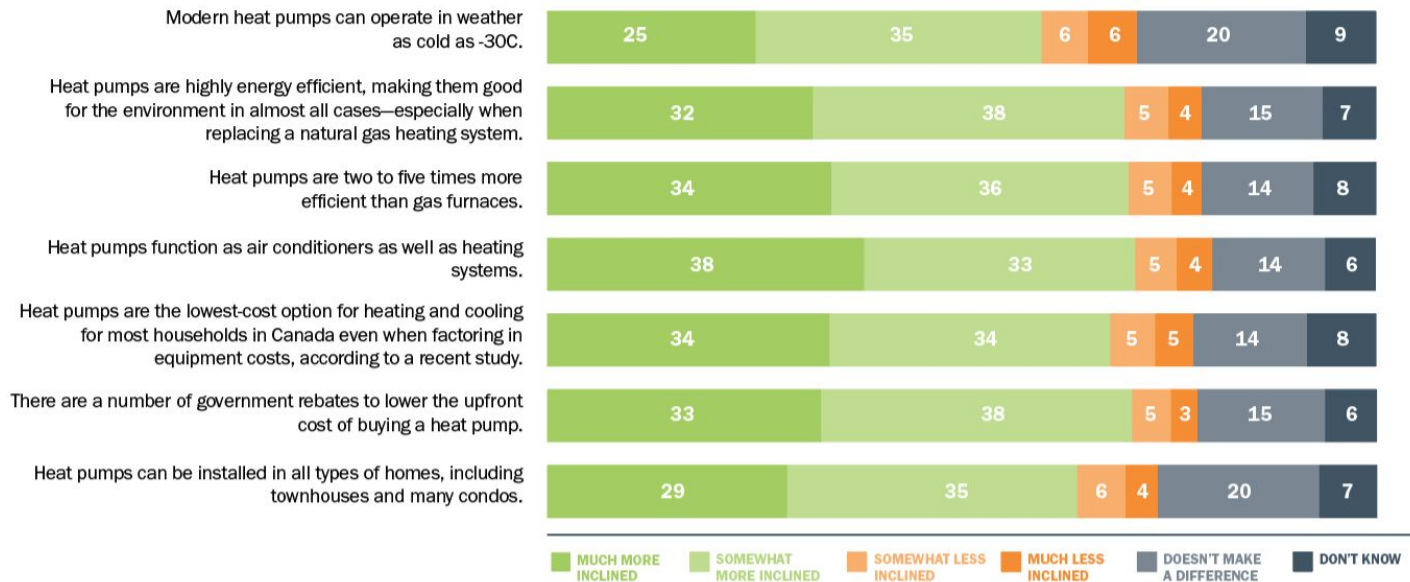
## From what you know about heat pumps, how would you feel about installing one in your home?



Below are a number of facts about heat pumps. Select all that you previously knew about before this survey.

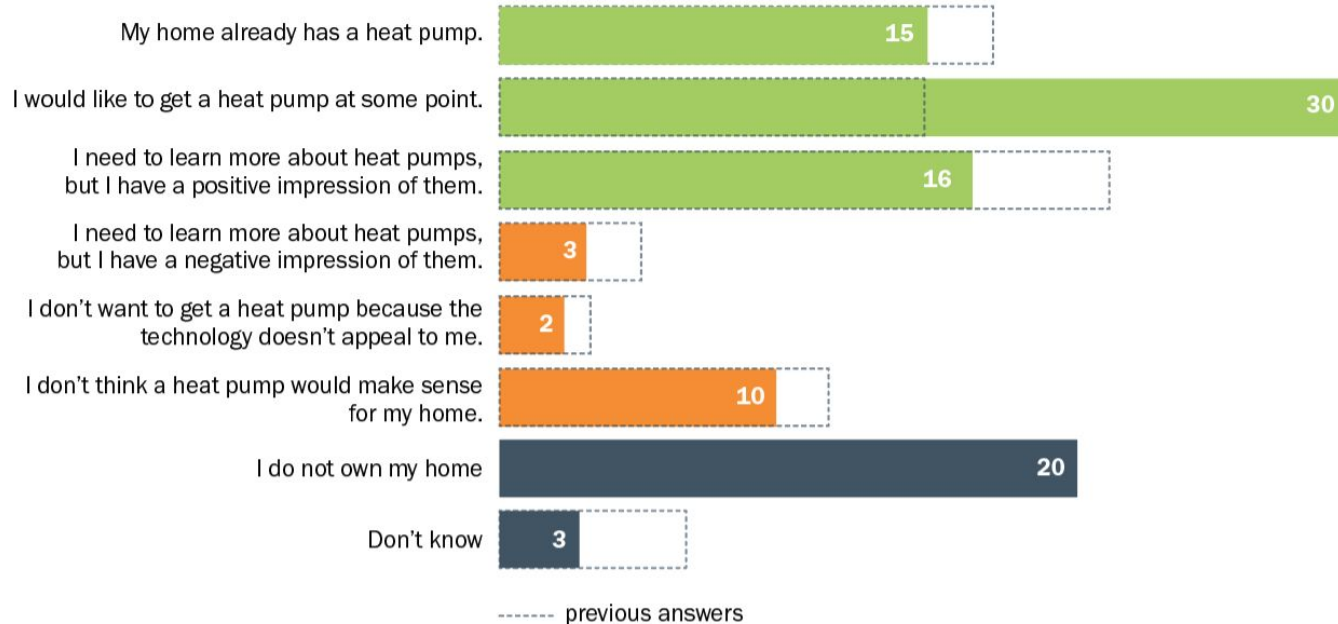


Indicate if each fact would make you more or less inclined to install a heat pump in your home.

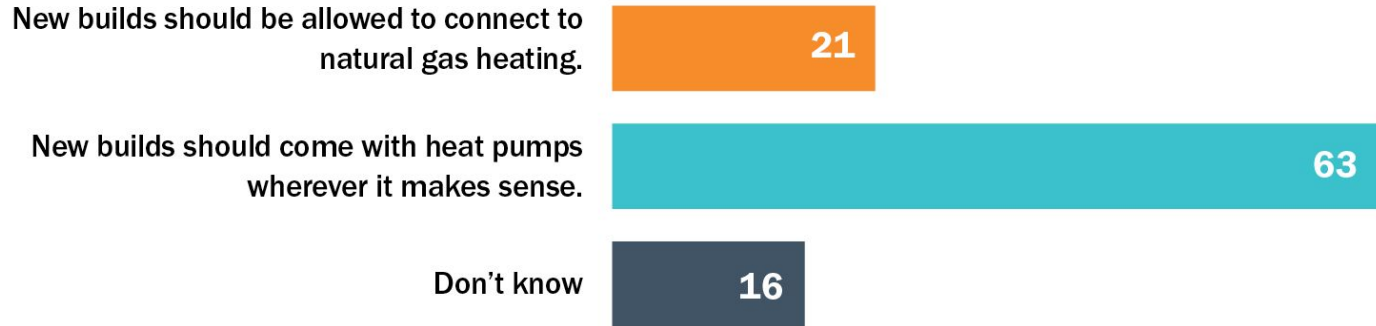




We would like you to now reconsider and re-answer the same question from before: how would you feel about installing a heat pump in your home?



In regions of the province where heating needs can be met with heat pumps, should new buildings be permitted to connect to natural gas for heat in the construction phase or should they come with heat pumps instead?



# Questions?

Each Monday we publish the Clean Energy Review, a free weekly digest of must-read climate and clean energy stories from across Canada and around the world.

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