



# How clean energy makes life more affordable—and how to talk about it

Join us as some of Canada's leading climate think tanks offer informed insight on the most politically salient issue of the year.



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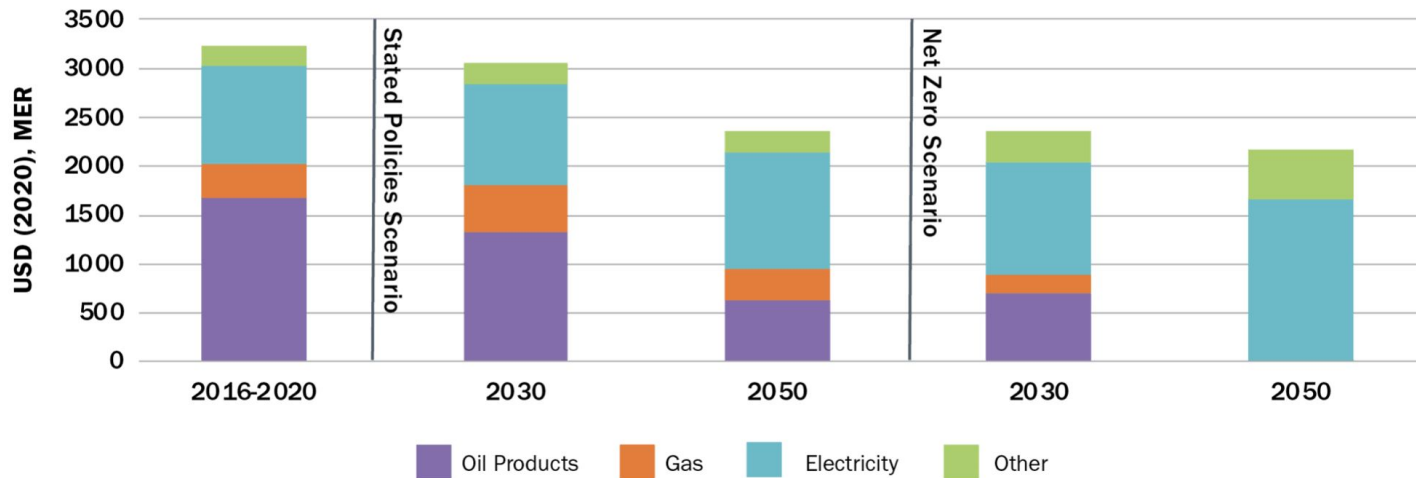


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# Canadians will spend less money on energy than they do today as we transition from fossil fuels to clean energy

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**



# A Clean Bill

How clean energy makes life  
more affordable for Canadians

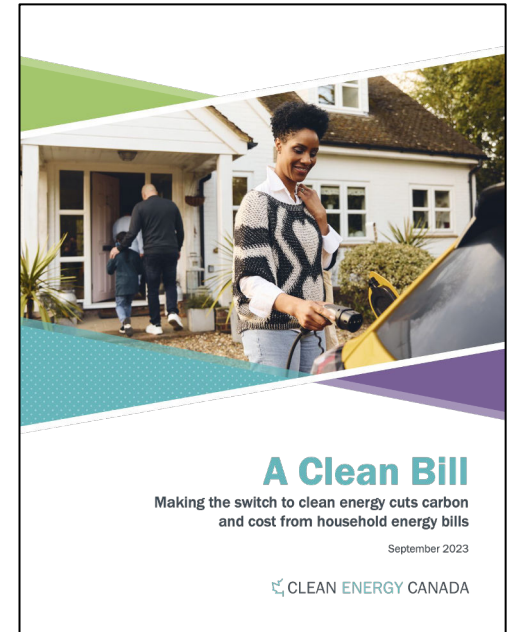
Jana Elbrecht, Policy Advisor



# 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 also found that most EVs now break even with gas cars in under a year.



# Clean energy single-family households come out ahead

## House 1 Starting from zero



## House 2 Living the clean energy life



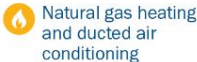
The clean energy family was able to save nearly **\$10,000 per year**

IN THE DRIVEWAY



Ford F-150 and gas Hyundai Kona

HEATING AND COOLING



Natural gas heating and ducted air conditioning

WATER HEATING



Natural gas

COOKING



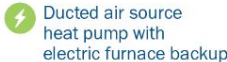
Natural gas stove

IN THE DRIVEWAY



Chevrolet Bolt EV and Hyundai Kona EV

HEATING AND COOLING



Ducted air source heat pump with electric furnace backup

WATER HEATING



Heat pump

COOKING



Electric stove

# 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**

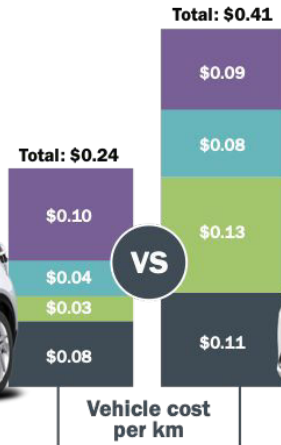


## GAS

### 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

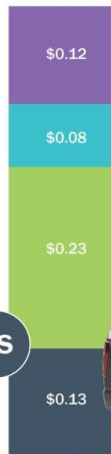
### 2023 Ford F-150 XLT SuperCrew 4x4 Mid

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

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



Total: **\$0.57**



VS

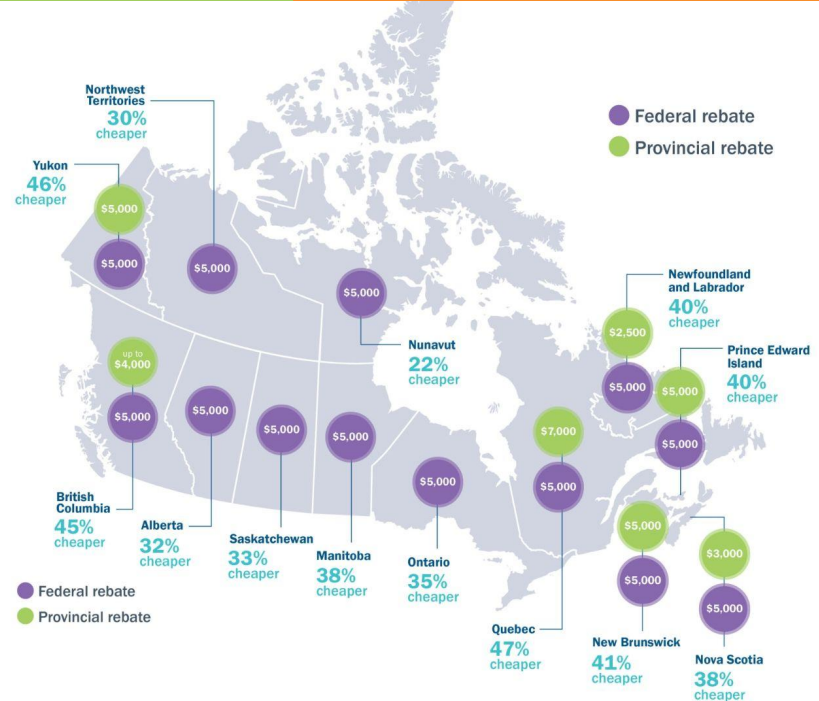
Vehicle cost per km

- 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



# Realizing savings for all Canadians

## Improve affordability

Lower upfront costs, savings for renters

## Enhance accessibility

EV charging, low-income programs, easy rebates

## Empower customers

Electricity pricing, smart grids





# *Re.Climate*<sup>TM</sup>

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COMMUNICATING FOR CHANGE

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Re.Climate is Canada's go-to centre for training, research and strategy on climate change communication and engagement at Carleton University.



# **We know cost of living and affordability dominate evaluations of climate policy**

- Cost of living and affordability triggering security values at the expense of social values.
- Canadians are preoccupied with cost of living and affordability concerns.
- These security concerns are muting support, setting limits, on support for climate action, particularly regulations with financial implications (carbon price, clean fuels regulation, clean electricity regulation).
- This is a challenging environment to be communicating enhanced ambition and stronger targets.
- Energy Efficiency Affordability framing may only take us so far.

# 35%

## Canadians divided

Abacus, October 2023 for CCNB

**35%** believe Clean Electricity Regulation is fair.

**35%** believe CER unfair in 2023.

**-14%** think the CER fair in 2023, compared to 2022.

**+10%** think it is unfair.

More optimistically:

**22%** very unfair/unfair

**22%** very fair/fair

**49%** slightly unfair/neutral/slightly fair

# Fairness is a distributional evaluation

- **70%** of Canadians believe low-income households will be more harmed by the CER than other groups in 2023; up 3% from 2022
- **60%** of Canadians in 2023 believe people who consume more electricity will be affected the most, down 9% from 2022
- **53%** of Canadians in 2023 believe the CER will protect nature and future generations, down 8% from 2022
- **53%** believe the CER will make their financial situation worse, up 4% over 2022
- **36%** believe they will be worse off compared to others, up 3% from 2022

# 51%

**of Canadians think  
the CER is acceptable**

Abacus, October 2023 for CCNB

**51%** of Canadians think the CER is acceptable,  
**-11%** from 2022

Unacceptability is **+7%**

**17%** very unacceptable/unacceptable

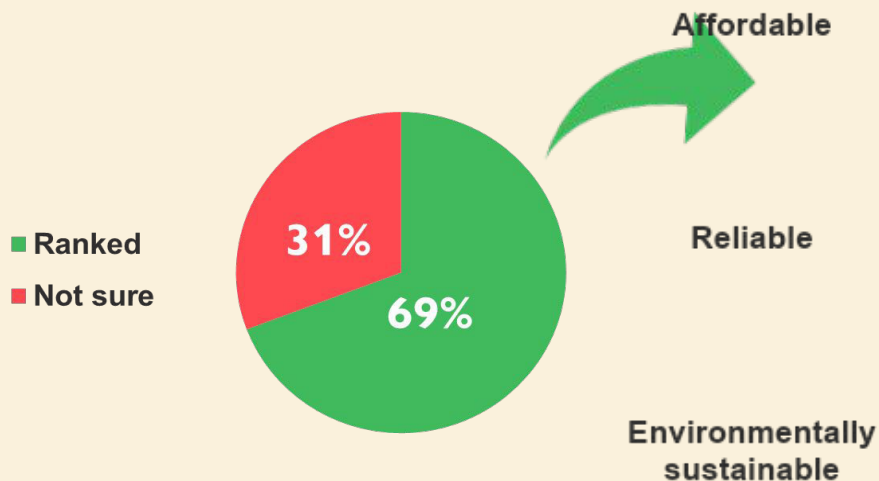
**34%** very acceptable; acceptable

**43%** slightly unacceptable/neutral/slightly acceptable

# Electricity Source Priority Rankings

## QUESTION

Which aspect is most important to you when it comes to your electricity (where 1 is your top priority, 2 is your second priority and 3 is your third priority)?



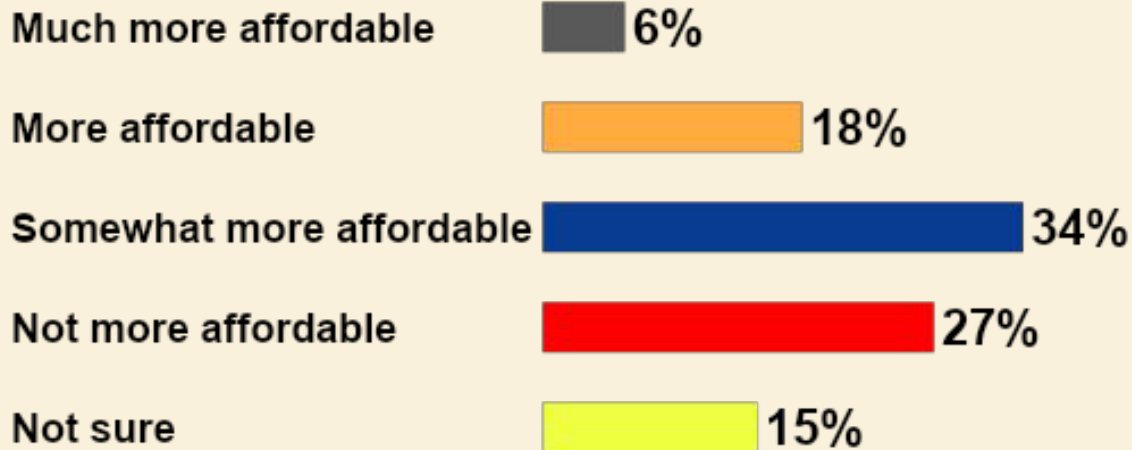
■ Ranked 1st   ■ Ranked 2nd   ■ Ranked 3rd

## Outcome of Transition Incentive Policies

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### QUESTION

In the previous question you indicated that Affordable is most important to you when it comes to your electricity. In your opinion, are existing policies you are aware of that provide financial support to help cover the up-front costs of energy efficiency upgrades, installing heat pumps, and switching from gas to electric vehicles making these options more affordable?



## Create Space for Conversations

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- More than half of Canadians trust friends and family as sources of information on electricity affordability (Abacus 2023)
- Creating shared meaning
- Make it local, practical



### Take control of climate pollution.

We need to take control of the climate pollution putting our safety at risk. A clean electricity regulation builds on Canada's success. We already have a relatively low-polluting electricity system. We need to go the last mile because electricity is central to our quality of life and modern living. Good policy gives Canadians access to affordable power from wind, solar and storage technologies. Good policy reduces energy poverty by giving Canadians more access to energy efficiency programs.

- 43% strongly agree/agree; 62% with slightly agree
- 42% slightly disagree/neutral/slightly agree
- 60 plus strong supporters

### Take control of climate policies.

We need to take control of policies that put our quality of life at risk. A clean electricity regulation, like a carbon tax and clean fuels regulation, raises the cost of living and forces people to make hard, unsafe choices between heat or food. These bad policies are unaffordable and increase energy poverty. We need to regain control over the cost of living and feel safe again. We can't afford to deal with climate change right now.

- 37% strongly agree/agree; 51% with slightly agree
- 41% slightly disagree/neutral/slightly agree
- 45 to 59-year olds strong supporters



# NARRATIVE STRUCTURE

## CHALLENGE

The world is changing.

Climate solutions that work are available, affordable, and stabilize energy costs

## CHOICE

Clean electricity.

Climate action is fair, polluters should pay

## OPPORTUNITY

Action on climate makes life more affordable.

Canada is succeeding and can meet future goals



# Use powerful visual language

Canada — Part of the appeal of solar is the potential for local jobs, community ownership and local energy supply. JOAN SULLIVAN, IRON AND EARTH



## Use Plain, Powerful Language

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### INSTEAD OF...

Economic benefits

Just transition, equity + inclusion

Social

Environment

Low-carbon

Mitigation + emissions

Adaptation

### CONSIDER...



Good stable jobs, new businesses and investments



Putting people at the heart, fairness, accessible for all



Communities, neighborhoods, families, schools, businesses



Nature, forests, animals, rivers, oceans, food, clean water



Pollution-free, modern energy, clean



Pollution, heat-trapping blanket



Actions to reduce damage, risk and vulnerability

## Closing Thoughts: Tips, Challenges, and Questions

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- Frame affordability concretely to reflect lived experience, especially for 45 to 59 year olds.
- Don't forget reliability and to highlight benefits to health, nature and future generations.
  - A good third of the population are strong allies less focused on costs/affordability, especially people 60 plus.
- Savings benefits may be less important right now than the value people perceive from energy price stability (e.g., energy security). That said, the Control Climate Policies narrative is most supported by 45-to-59-year-olds, a cohort most concerned about cost of living
- Don't overstate by ignoring program accessibility and navigability concerns: Heat pumps may deliver great improvements but if you can't get one who cares.
- Consider the balance between the focus on the consumer versus the need for industry to do more of its fair share.
- How do we respond to the growing trust in family and friends over institutions, including academics, environmental groups and government?



Thank You

***Re.Climate***

# 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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