

As support for nuclear energy increases, two-in-five say they'd be comfortable with a plant within 50 km

Three-in-five Canadians want further development of nuclear power in the country

January 11, 2023 – As the world pushes towards net-zero emissions targets, and away from the war-influenced roller coaster of fossil fuel prices, many countries – including Canada – are putting the nuclear option back on the table.

Touted as [a low greenhouse gas emission energy source](#), and a way to [insulate against the volatile prices of fossil fuels](#), nuclear power has returned to vogue following a year of oil price shocks.

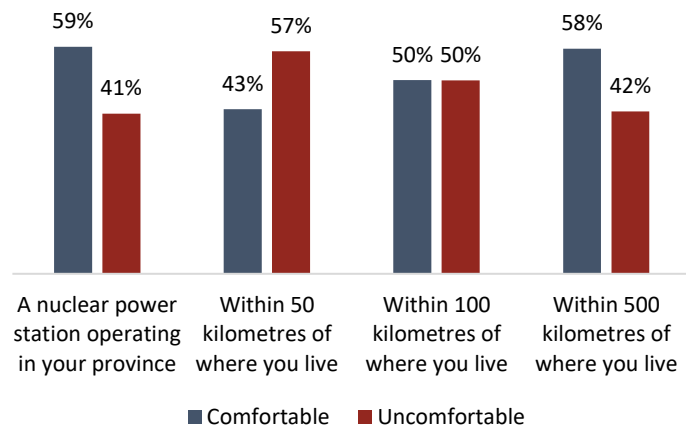
New data from the non-profit Angus Reid Institute finds increasing support from Canadians for nuclear power. In June 2021, half (51%) of Canadians said they would like to see further development of nuclear power generation. Now approaching three-in-five (57%) say the same.

Over a decade ago, in the wake of the 2011 Fukushima nuclear disaster, there was a [global move away from nuclear power](#). Quebec decommissioned its only nuclear power plant [in 2012](#), while Ontario in 2020 had planned a phase out at its Pickering plant, which has [since been delayed](#).

Proximity is a key consideration with Fukushima and the 1986 Chernobyl catastrophe in recent memory. The latter [irradiated a more than 4,000 square kilometre area](#) around the plant still closed for the most part to human activity. However, two-in-five (43%) Canadians say they would be comfortable with a nuclear power plant operating within 50 kilometres of where they live. That proportion increases when Canadians consider a plant operating within 500 kilometres of their home (58%) or within their province (59%).

Further, the data indicate strong support among Canadians for increasing development of solar (81%) and wind power (74%). Support for the continued development of crude oil is muted nationally (50%), but higher in regions where it represents a significant economic pillar – Alberta (75%), Saskatchewan (72%) and Newfoundland and Labrador (72%).

Thinking specifically about nuclear power generation, how comfortable would you be with each of the following: (All respondents, n=5,030)



METHODOLOGY:

The Angus Reid Institute conducted an online survey from Nov. 28 to Dec. 3, 2022 among a representative randomized sample of 5,030 Canadian adults who are members of [Angus Reid Forum](#). For comparison purposes only, a probability sample of this size would carry a margin of error of +/- 1 percentage points, 19 times out of 20. Discrepancies in or between totals are due to rounding. The survey was self-commissioned and paid for by ARI. Detailed tables are found at the end of this release.

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More Key Findings:

- Among the energy sources surveyed, Canadians are least supportive of the expanded use of hydraulic fracturing, also known as fracking (31%), and coal mining (19%).
- Quebec is the only province in which a majority (56%) oppose the expansion of nuclear power. Quebecers (70%), alongside Newfoundlanders and Labradorians (63%), say they are uncomfortable with a nuclear power plant in their province at a majority level.
- At least two-thirds of men of all ages believe Canada should expand nuclear power as an energy source. Women are divided over the increased use of nuclear power (43% support, 38% oppose).
- More than four-in-five (86%) past Conservative voters support the expansion of the use of oil and gas in Canada. One-third (32%) of those who voted Liberal in 2021, and one-quarter (23%) of those who voted NDP, say the same.

About ARI

*The **Angus Reid Institute (ARI)** was founded in October 2014 by pollster and sociologist, Dr. Angus Reid. ARI is a national, not-for-profit, non-partisan public opinion research foundation established to advance education by commissioning, conducting and disseminating to the public accessible and impartial statistical data, research and policy analysis on economics, political science, philanthropy, public administration, domestic and international affairs and other socio-economic issues of importance to Canada and its world.*

Because its small population precludes drawing discrete samples over multiple waves, data on Prince Edward Island is not released.

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Part One: Nuclear power in Canada

Nuclear power generation has been part of Canada's electricity mix since the early 1960s. There are currently four nuclear power plants operating in two Canadian provinces – three in Ontario and one in New Brunswick. The [Canada Energy Regulator](#) estimates the four nuclear stations generate 15 per cent of the country's electricity.

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The global energy crisis brought on by Russia's invasion of Ukraine increased interest in nuclear power. Nuclear power is also seen as "critical" to meeting global net zero emissions targets by the administration of U.S. President Joe Biden and the International Energy Agency. Last year, the Canadian government agreed, announcing \$1 billion in funding for small modular nuclear reactors.

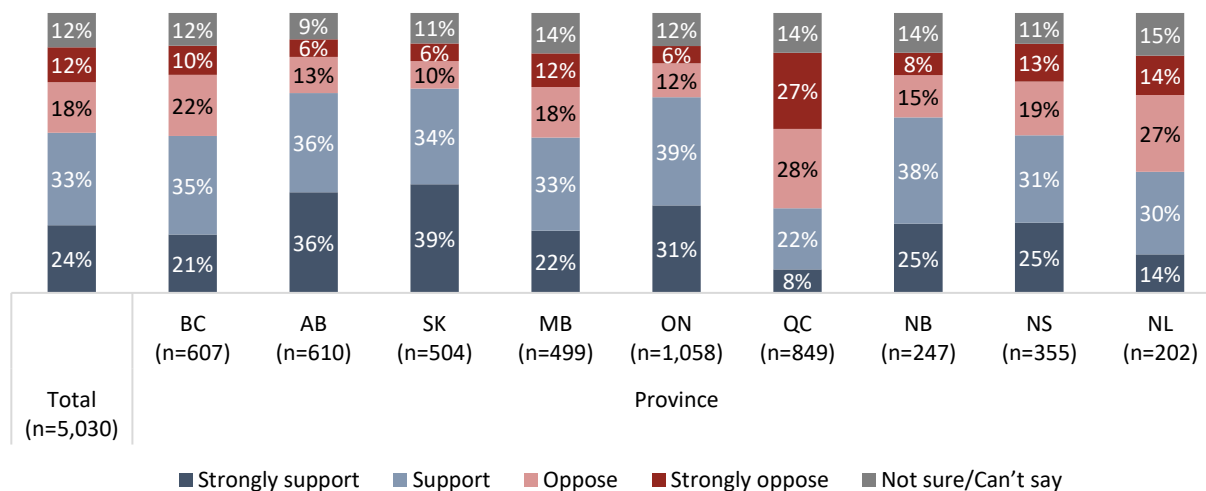
However, there are significant concerns with Canada's aging nuclear power plants. All of Canada's nuclear reactors were built between the 1960s and 1990s, more than half of which have aged beyond their designed 30-year operating lifetime. There are also persistent concerns over the storage of nuclear waste, which must be isolated for hundreds of years. Canada has generated 2.5 million cubic metres of radioactive waste from its history of nuclear power production, 99 per cent of which is graded as having "low-level" radioactivity. Currently, nuclear waste is stored at seven locations in Manitoba, Ontario, Quebec, and New Brunswick, mostly near active or former nuclear reactors.

Three-in-five Canadians support expanding nuclear power generation

Approaching twice as many Canadians support the expansion of nuclear power in the country (57%) as oppose it (30%). Support for further nuclear power generation is high in two provinces that currently have nuclear power plants operating, Ontario (70%) and New Brunswick (63%). Those two provinces have begun exploring smaller so-called "modular nuclear reactors", alongside Saskatchewan (73%) and Alberta (71%), where support for more nuclear power is also high.

Opposition to the further development of nuclear power is highest in Quebec (56%), which decommissioned its only nuclear power plant in 2012.

Please tell us whether you support or oppose EXPANDING efforts to draw energy from each of the following sources:
Nuclear power generation



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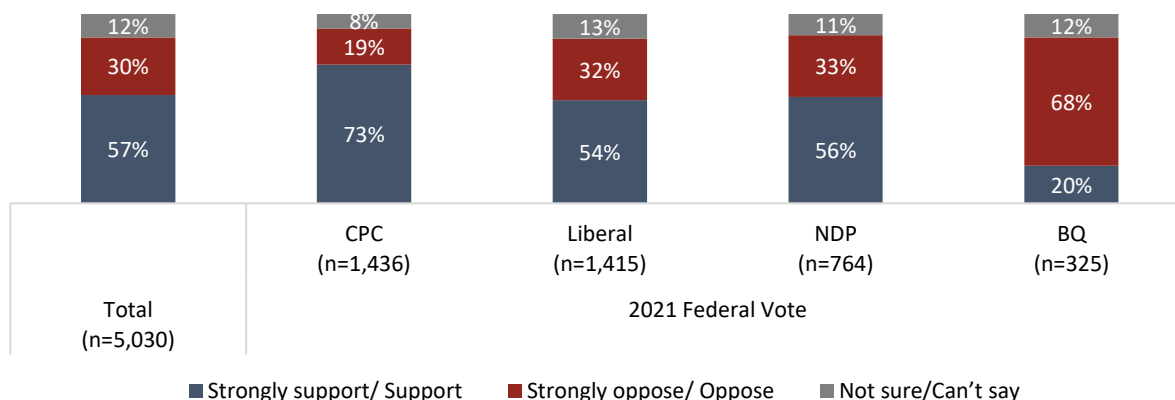
Past Conservative voters are more supportive of further development of nuclear energy (73%) than those who voted Liberal (54%) or NDP (56%). Still, more than half of those who voted for those two parties in 2021 believe nuclear power should be expanded in Canada:

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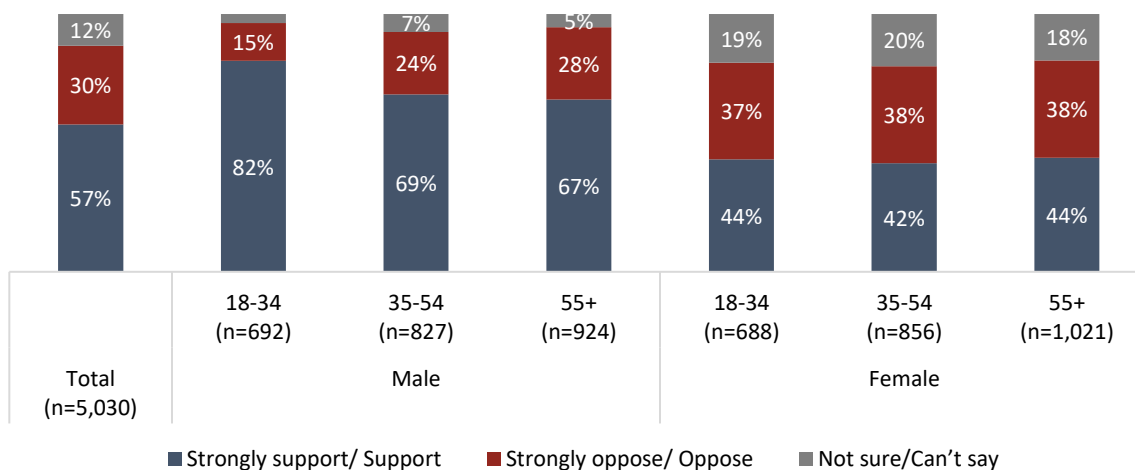
Nuclear power generation



Men, and especially those aged 18- to 34-years old, are much more supportive of Canada increasing its use of nuclear power than women. Women of all ages are divided over the prospect of increasing nuclear power generation than not. This gender divide over nuclear power support has been seen in public opinion [dating back to the 1970s](#).

Please tell us whether you support or oppose EXPANDING efforts to draw energy from each of the following sources:

Nuclear power generation



Desire to expand nuclear increased in last year

2022 saw a resurgence in appreciation for the potential of nuclear power, after a [period of decline](#) for the industry brought on by the Fukushima nuclear disaster in 2011. That year a tsunami caused a nuclear accident at Japan's Fukushima nuclear power plant. In the aftermath, several countries, including Japan

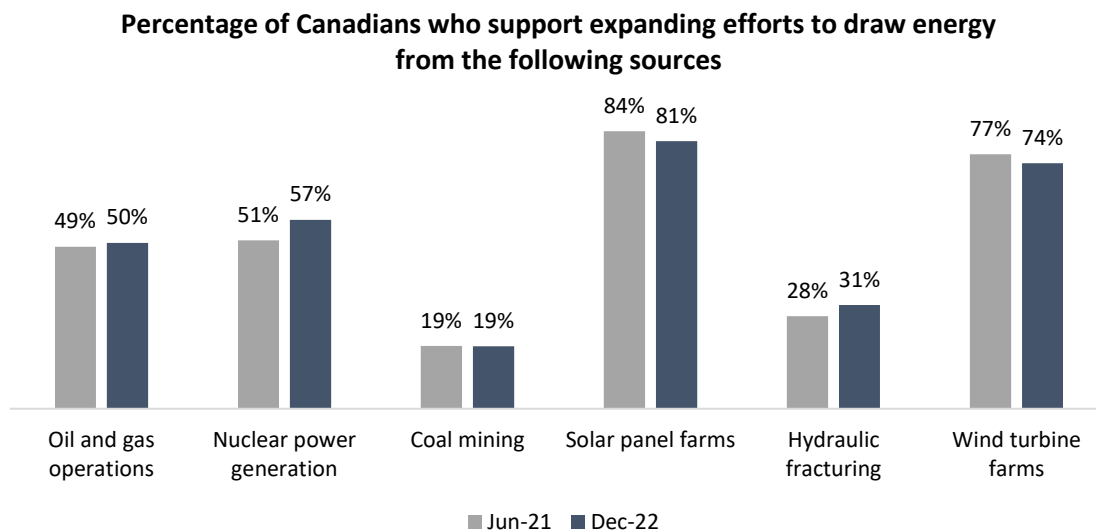
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and Germany, [began scaling back](#) their nuclear power generation. Ontario, too, had [planned](#) to phase out its Pickering plant, though it has [since delayed](#) that plan.

An oil price shock in 2022 brought on by Russia’s invasion of Ukraine has made some countries delay or reconsider [their nuclear phaseouts](#). With many countries setting net zero emissions goals, there is significant appeal in nuclear power as [a low emission energy source](#).

With all this in the background, Canadian support for nuclear power expansion has grown by six points (51% to 57%) in the last 18 months. Meanwhile, support for the increase of supply of other sources such as oil and gas, coal, solar, and wind is stable:



How close is too close?

In the history of nuclear power generation, only two events have been designated a “[major accident](#)” by [the International Nuclear Event Scale](#): the 1986 Chernobyl disaster and the 2011 Fukushima disaster. Two North American disasters – an accident in Chalk River, Ont. in 1952 and the partial meltdown at Three Mile Island in 1979 – [are rated lower on the scale](#).

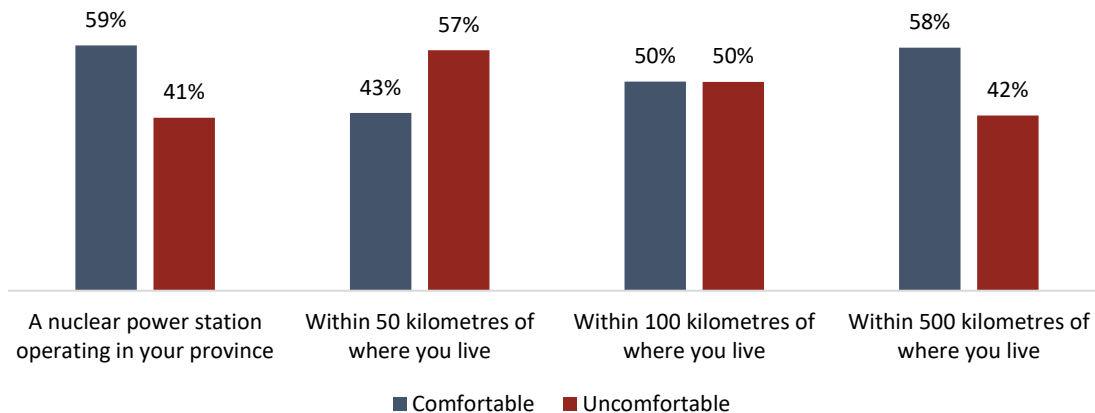
The disaster at Chernobyl required an [initial evacuation](#) of around 30 kilometres from the centre of the power plant, while the disaster at Fukushima required a [smaller evacuation](#) of 20 kilometres. Both disasters spawned exclusion zones that [persist to this day](#), though the one around Chernobyl is much larger in size – 4,143 square kilometres – than the one around Fukushima – 207 square kilometres. Chernobyl killed 30 people initially and 60 of radiation induced cancer. A UN report on Chernobyl in 2005, which has been contested, [estimated 4,000 people died](#) in the years since due to disaster-related illnesses. There has only been [one casualty due to radiation](#) from the Fukushima disaster, but [more than 2,000 people died](#) as a result of the evacuation.

The potential for nuclear disaster means proximity is an important consideration when it comes to nuclear power plants. While there is much less appetite for Canadians for a nuclear power plant to be operating closer to their home than farther away, two-in-five (43%) say they would be comfortable with one operating within 50 kilometres of where they live. That number rises to three-in-five (58%) for a nuclear power plant operating within 500 kilometres. Overall, the majority (59%) say they would be comfortable with a power plant operating in their province:

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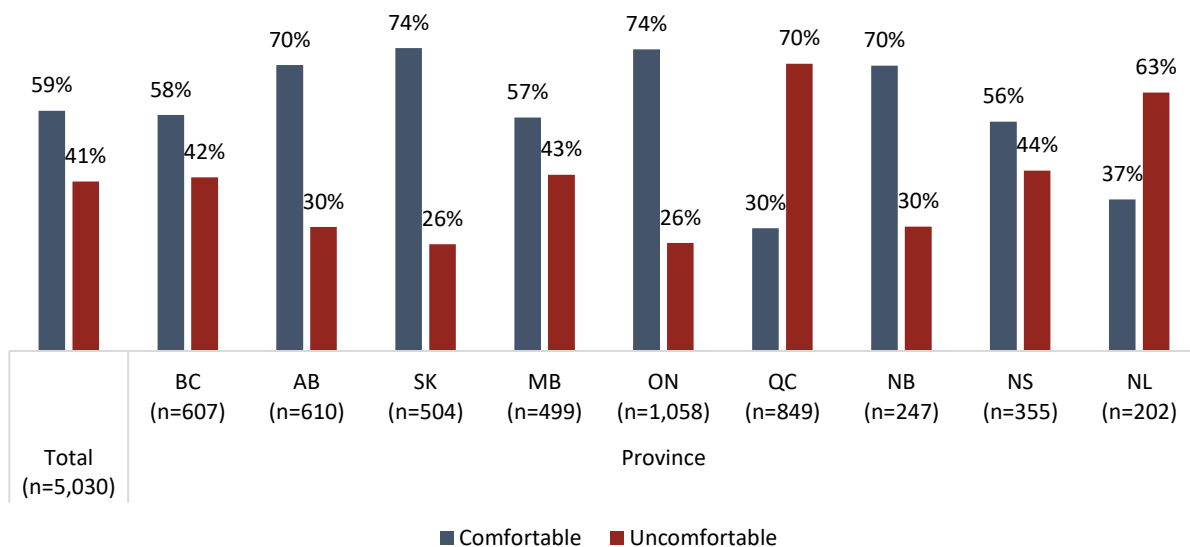
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**Thinking specifically about nuclear power generation, how comfortable would you be with each of the following:
(All respondents, n=5,030)**



In the two provinces where nuclear power plants currently operate – Ontario and New Brunswick – residents are much more comfortable (74% Ontario, 70% New Brunswick) than not (26%, 30% respectively). Majorities of Albertans (70%) and Saskatchewanians (74%), too, say they would be comfortable with a nuclear power plant in their province. Only in Quebec (70%) and Newfoundland and Labrador (63%) do majorities of residents say they would be uneasy with nuclear power generation happening in their province:

How comfortable would you be with a nuclear power station operating in your province?



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Part Two: Oil and gas, and the green alternatives

In 2021, the federal government [passed a law](#) to commit to achieving net-zero greenhouse gas emissions by 2050. The road map to reaching that goal [includes](#) reducing emissions by 40 to 45 per cent from 2005 levels by 2030.

Electricity generation was the [sixth largest](#) source of greenhouse gas emissions in Canada in 2020, although there have already been significant reductions in emissions in that sector since the turn of the century. [According to the government](#), greenhouse gases from combustion-based electricity generation have declined by 52 per cent between 2005 and 2020. This is attributed in a large part due to the [decline in the use of coal](#) across the country, and increase in the use of renewables. Renewable sources currently represent [18.9 per cent of Canada's total energy supply](#), meaning non-renewable, and emissions-intensive energy, still plays a significant role.

Support high for further development of renewables, lower for fossil fuels

There are high levels of support among Canadians for the expansion of solar (81%), and wind (74%) power generation. For both, support is higher among women than men.

There is less support overall for further development of fossil fuels. Traditional oil and gas receive the most support, with half of Canadians (50%) on board with expansion of that energy source. There is less enthusiasm for hydraulic fracturing (31%) – also known as fracking – and coal mining (19%). For all three fossil fuel sources, men are more interested in seeing their expansion than women:

Support for expanding each energy source in Canada							
	Total (n=5,030)	Male			Female		
		18-34 (n=692)	35-54 (n=827)	55+ (n=924)	18-34 (n=688)	35-54 (n=856)	55+ (n=1,021)
Solar panel farms	81%	78%	76%	78%	83%	83%	86%
Wind turbine farms	74%	76%	69%	68%	80%	76%	77%
Nuclear power generation	57%	82%	69%	67%	44%	42%	44%
Oil and gas operations	50%	53%	64%	65%	24%	44%	47%
Hydraulic fracturing	31%	46%	43%	38%	21%	26%	18%
Coal mining	19%	28%	25%	20%	13%	17%	12%

There is also more enthusiasm for an increase in the use of fossil fuel from past Conservative voters than those who voted for other parties in the 2021 election. Those who voted Liberal, NDP and Bloc Québécois are much more supportive of renewable sources than those who voted Conservative, though notably a majority of past CPC voters support the expansion of solar (65%) and half (53%) the expansion of wind:

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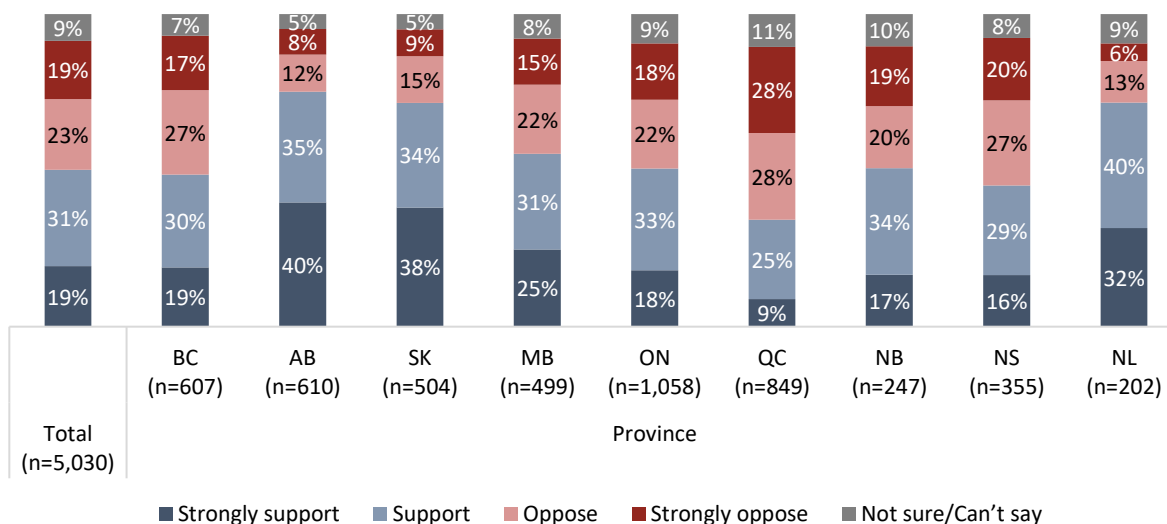
Support for expanding each energy source in Canada					
	Total (n=5,030)	2021 Federal Vote			
		CPC (n=1,436)	Liberal (n=1,415)	NDP (n=764)	BQ (n=325)
Solar panel farms	81%	65%	94%	96%	90%
Wind turbine farms	74%	53%	89%	93%	90%
Nuclear power generation	57%	73%	54%	56%	20%
Oil and gas operations	50%	86%	32%	23%	26%
Hydraulic fracturing	31%	59%	15%	10%	21%
Coal mining	19%	36%	7%	7%	4%

Regional divide evident in support for expansion of oil and gas

The extraction of oil and gas represents significant pillars in the economies of Alberta, Saskatchewan and Newfoundland and Labrador. In those three provinces, enthusiasm for the expansion of oil and gas is much higher than elsewhere in the country. Those in Quebec (55%) are the most likely to oppose more energy being drawn from oil and gas. Opinion is much more divided elsewhere in the country:

Please tell us whether you support or oppose EXPANDING efforts to draw energy from each of the following sources:

Oil and gas operations (crude oil)



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For detailed results by age, gender, region, education, and other demographics, [click here](#).

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