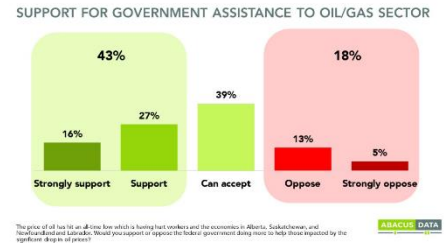


May 21<sup>st</sup>, 2020

Re: Supporting further Canadian Oil and Gas Development

Attn: Honourable Prime Minister Justin Trudeau,

We are writing this letter on behalf of Students For Canada (SFC) to present a supportive view of Canada's Energy / Oil and Gas sector. This letter is in response to concerns raised by several groups criticizing your pledge to support the oil and gas sector as well as other negative statements that followed. A poll completed on March 26, 2020, showed that 82% of Canadians across the nation support or accept assisting the Oil and Gas Industry, as Canada has done with many other industries ([Abacus Data, March 2020](#))<sup>1</sup>. As well, several independent polls have confirmed that the majority of Canadians support Oil and Gas development. The attached diagram "Do Canadians Support the Oil and Gas Development?" illustrates Canadian's support towards Canada's Energy Sector.



How can the Canadian oil and gas industry be "dead" when Canadian Energy companies provide social benefits and are continuously developing clean innovations that reduce emissions? Largely absent in the debate regarding hydrocarbons, is consideration of the fact that global energy demands will continue to increase in the future and that renewable energies are not in a position to replace them for decades to come. Specifically, global oil demand is projected to increase 9% by 2040, with the totality of renewables supplying only 7% of global demand ([International Energy Agency, 2019](#))<sup>2</sup>. Indeed, this illustrates that oil and gas are valuable natural resources, just like lithium, copper, uranium and iron ore, etc., needed to manufacture goods, medical supplies, electronics, outdoor gear, renewables etc. If one additionally considers Canada's commitment to environmental concerns and the effort towards emissions reductions within Canada's Energy sector, limiting Canada's participation in Oil and Gas is counter productive towards the reduction of global emissions.

It is demonstrable that Canada has founded one of the most sustainable hydrocarbon development strategies in the world. Other countries, such as Venezuela, have oil reserves similar to the oil sands in Canada, which they are exploiting but without the technology, social willpower or regulatory strength that Canada has. Those countries with little control over the environmental procedures would certainly benefit from Canada's expertise and experience reducing emissions though the sharing or selling of Canada's technological advances. An example of one source of Canada's expertise is certainly Canada's Oil Sands Innovation Alliance ([COSIA](#))<sup>3</sup>.

COSIA, an organization that is little discussed in mainstream media, was launched on March 1, 2012 and consists of Canadian companies along with several of Canada's leading research Universities (University of Toronto, Waterloo, Alberta, Saskatchewan and many others). "COSIA brings together leading thinkers from industry, government, academia, aboriginal communities and the wider public to help advance innovation and environmental performance." Since its inception COSIA has been working towards being "[a catalyst for better environmental outcomes](#)"<sup>4</sup> by working on:

- Carbon Capture and Storage (CCS)
- Using CCS technology to run steam generators
- Improving energy efficiency for oil sands operations
- Recycling and using water alternatives when producing oil
- Reducing land usage (Multilateral wells)
- Preserving biodiversity
- Accelerating Reclamation
- Encouraging others to submit ideas towards the reduction of greenhouse gas emissions while supplying a global energy demand

Canadian industry has worked, and continues to work, diligently to reduce emissions. Technological and operational efficiencies have resulted in a decrease of 28% in oil sands emissions ([nrcan.gc.ca](http://nrcan.gc.ca))<sup>5</sup>. The political climate of Canada, being dedicated towards reducing environmental impacts, has allowed companies and groups to find innovative solutions towards reducing their environmental footprint. Innovative companies and groups have raised Canada to be ranked number one for Sustainable Development in 2019 relative to the world's top oil exporters ([sdgindex.org](http://sdgindex.org))<sup>6</sup>. If this dedication continues, we would maintain our status as one of the world leaders in Clean Technology innovation ([global-energy-innovation-index.pdf](http://global-energy-innovation-index.pdf))<sup>7</sup>.

It is important to note that coal-derived energy still comprises a significant proportion of Canada's greenhouse gas emissions ([77% in 2017](#))<sup>5</sup>. There is an immediate need to reduce the number of coal-fired power plants worldwide, and Natural Gas has an important role to play in reducing coal consumption. The construction of Liquefied Natural Gas (LNG) facilities demonstrates that Canadian and other energy companies are committed to reducing greenhouse gas (GHG) emissions from coal-fired power plants by transitioning them to natural gas around the world, particularly in South East Asia. While reducing GHG emissions for other countries with LNG, it was also projected to provide \$23 Billion in new government revenue for British Columbia which will provide for additional health care, schools, infrastructure and many other services to be filled by future graduating students and the professionals unemployed ([Government of British Columbia, 2018](#)<sup>8</sup> and [2019](#)<sup>9</sup>). Canada has the capacity to displace up to 40 coal-fired powerplants in Asia, which is equivalent to removing 80% of the cars on Canada's roads ([Joint Study between John Hopkins University, University of Calgary, Michigan Institute of Technology and Southern Methodist University](#))<sup>10</sup>. That's more GHG emissions removed from road transportation than the current temporary impact of COVID-19 ([EIA, Global Energy Review 2020](#))<sup>11</sup>. The concern that methane leaks can subdue the benefits of burning natural gas versus coal is being continually mitigated with the decades of improvement created by companies subject to Canada's oil and gas sector regulations (e.g. [Justin Trudeau's investment towards reducing methane emissions](#))<sup>12</sup> and the creation of The BC Oil & Gas Methane Emissions Research Collaborative ([MERC](#))<sup>13</sup>.

There are consequences for all energy sources, such as the societal, ecological and geological impact of dams, the utility of land dedicated to solar farms, the societal and ecological impacts of mining rare earth minerals for solar panels, batteries and wind turbines. In Canada, we have the expertise (engineers/scientists/researchers) and experience within the oil and gas sector to mitigate consequences and use technology to Canada's and the world's advantage to provide a cleaner sourced, reliable and much needed energy product. Along with this experience comes great innovation that can be applied to new renewable energy sources and ways to mediate emissions.

Over time, Canada's strong position in oil and gas technology will and has benefited Canada in other ways. For example, the geological and engineering knowledge from the oil industry is directly transferable towards geothermal energy exploration, which is based on exploiting moving fluids within the earth to capture/harness a different source of energy. Another technological advantage requiring advanced geoscience and engineering is the use of compressed air stored within sealed underground caverns. Canadian companies, such as HYDROSTOR (<https://www.hydrostor.ca/>)<sup>14</sup>, store surplus energy generated by hydro, natural-gas, coal fired, solar or wind plants by compressing air into sealed caverns. The compressed air acts as a "battery" by storing potential energy that, when needed, is used to turn a turbine generating electricity. To help mitigate emissions Shell Canada launched the Shell Quest carbon capture and storage project in 2015 demonstrating oil and gas experience is crucial for the development of underground carbon storage ([ctvnews](#)<sup>15</sup>; [shell.ca](#)<sup>16</sup>). By May 2019, the facility had stored "more carbon dioxide than any other similar project in the world and is doing it at a higher annual rate" ([ctvnews](#))<sup>15</sup>. With the lessons learned from Quest it is estimated that a similar facility could be built at 20 to 30 percent less cost ([ctvnews](#))<sup>15</sup>.

Groups, such as the [SFC](#)<sup>17</sup>, [IRC](#)<sup>18</sup>, [The First Nations Major Projects Coalition](#)<sup>19</sup> (FNMPC) and [First Nations LNG Alliance](#)<sup>20</sup>, to only name a few, as well as members of University of Alberta's Geothermic group, understand the benefit of Canada's Energy/ Oil and Gas sector. Groups such as these have been working towards a more optimistic, middle ground view of the Canadian Energy sector so that productive conversations can occur. The use of the terms "tar sands", "war", "dead" and "bail out" tend to be trigger words invoking anger and divisiveness. Members of Geothermics understands that carefully chosen words can encourage people to listen and critically think about the issue to promote integrated solutions, especially if the issue involves oil and gas ([geothermics.ca](#))<sup>21</sup>. SFC students do not want to be divided; we want to have a balanced response to responsibly meeting global resource demands in concert with environmental protection and social obligations.

The IRC strives to support First Nations to "attain greater management and control of their oil and natural gas resources" in the support of their economic self reliance (<http://irccanada.ca/about/>)<sup>18</sup>. They also "encourage a greater development and utilization of First Nations human resources in oil, natural gas and related activities" (<http://irccanada.ca/about/>)<sup>18</sup>. FNMPC's slogan "We Are Stronger Together" emphasizes the support indigenous communities, such as their members, have towards Canada's Energy/ Oil and Gas sector (<https://www.fnmnpc.ca/>)<sup>19</sup>. The vision of FNMPC is for "Member First Nations working collaboratively, cooperatively and cohesively towards the enhancement of the economic well-being of our respective memberships, understanding that a strong economy is reliant upon a healthy environment, supported by vibrant cultures, languages and expression of our traditional laws" (<https://www.fnmnpc.ca/>)<sup>19</sup>. The First Nations LNG Alliance is working towards having open conversations and whose purpose is (as stated on website, <https://www.fnlngalliance.com/>)<sup>20</sup>:

- Increase positive LNG dialogue in First Nations communities
- Communicate First Nations messages directly to First Nations audiences
- Communicate balanced LNG information
- Provide a venue for pro-development nations to interact, share knowledge and resources
- Discuss environmental issues and priorities

As stated from Prime Minister Justin Trudeau, if Canada is going to have a future to reduce emissions and find alternative energy sources "we can't do it without" Canada's Energy sector ([Trudeau, May 7, 2020](#))<sup>22</sup>.

Therefore, from an optimistic viewpoint, supporting the Canadian Energy/Oil and Gas sector is another way:

1. To keep talent in Canada to expand energy horizons
2. To support renewable energy development
3. For Canada to have a global impact on the reduction of emissions produced by hydrocarbons by providing technological insight and environmental leadership
4. For indigenous communities to reap the benefits of their land and employment in the resource sector
5. To continue productive conversations around economic growth and balance

We are proud to have worked in and to be associated with Canada's Energy Sector through our master's research. We believe an optimistic attitude and a change in language will act as a catalyst for growth towards cleaner energy and more energy opportunities here in Canada. We are looking forward to observing action attributable to Prime Minister Justin Trudeau's commitment to Canadian Energy and to support struggling Canadian Energy companies during this time and in the future.

Student Authors:

Daniel Baker, MSc. Earth and Atmospheric Candidate, Department of Earth and Atmospheric Sciences, University of Alberta, [dmbaker@ualberta.ca](mailto:dmbaker@ualberta.ca)

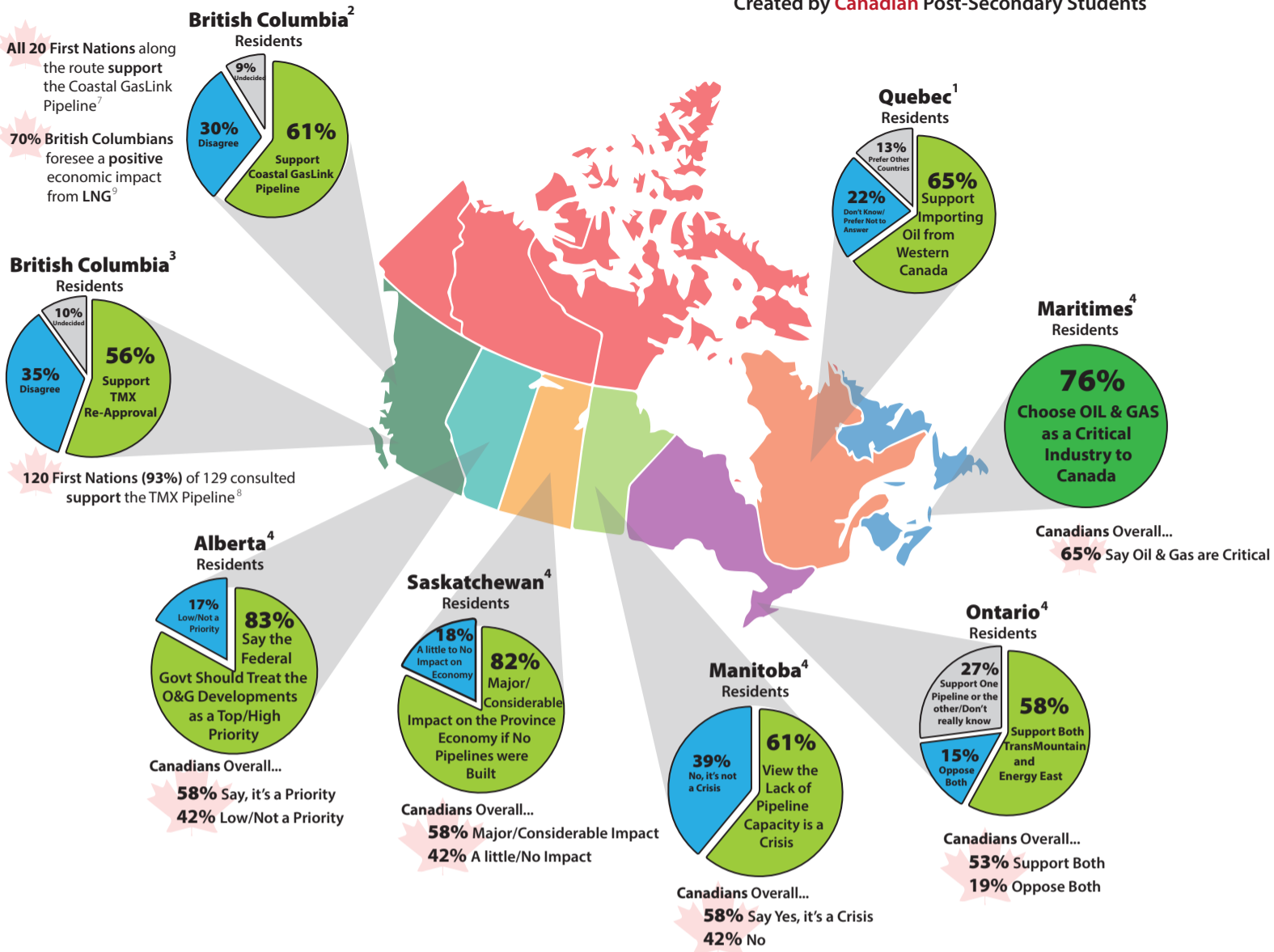
Skye Lybber, MSc. Earth and Atmospheric Candidate, Department of Earth and Atmospheric Sciences, University of Alberta, [stlybber@ualberta.ca](mailto:stlybber@ualberta.ca)

Referenced links to articles using superscript in the above letter as of May 21, 2020:

1. <https://abacusdata.ca/coronavirus-covid19-oil-gas-support-federal-government-alberta-abacus/>
2. <https://www.iea.org/reports/world-energy-outlook-2019>
3. <https://cosia.ca/>
4. <https://www.cosia.ca/blog/innovation-oil-sands-path-sustainable-future>
5. <https://www.nrcan.gc.ca/science-data/data-analysis/energy-data-analysis/energy-facts/energy-and-greenhouse-gas-emissions-ghgs/20063>
6. <https://sdgindex.org/reports/sustainable-development-report-2019/>
7. <http://www2.itif.org/2019-global-energy-innovation-index.pdf>
8. <https://news.gov.bc.ca/releases/2018PREM0073-001910>
9. <https://www.ctvnews.ca/business/b-c-premier-says-final-pieces-of-massive-lng-canada-project-now-in-place-1.4366648>
10. <https://www.lngcanada.ca/news/lng-canadas-export-terminal-will-enable-coal-reliant-customer-nations-to-reduce-ghg-emissions-1/>
11. <https://www.iea.org/reports/global-energy-review-2020/oil#abstract>
12. <https://www.rcinet.ca/en/2020/04/17/trudeau-announces-1-7b-in-support-for-canadas-hard-hit-energy-sector/>
13. <https://www.pembina.org/media-release/bc-methane-emissions-research>
14. <https://www.hydrostor.ca/>
15. <https://www.ctvnews.ca/business/shell-quest-carbon-capture-and-storage-project-reaches-milestone-of-4m-tonnes-1.4434203?cache=yes%3Fclipld%3D89531>
16. [https://www.shell.ca/en\\_ca/about-us/projects-and-sites/quest-carbon-capture-and-storage-project.html](https://www.shell.ca/en_ca/about-us/projects-and-sites/quest-carbon-capture-and-storage-project.html)
17. <https://www.studentsforcanada.ca/>
18. <http://ircanada.ca/>
19. <https://www.fnmpc.ca/>
20. <https://www.fnlngalliance.com/>
21. <http://geothermics.ca/polarizing-language-creating-gridlock-in-energy-debate-says-u-of-a-expert/>
22. <https://www.youtube.com/watch?v=Y09XpxqOzUw&feature=youtu.be>

# Do Canadians Support Oil and Gas Development?

Created by Canadian Post-Secondary Students



## Polls Show Canadians Support Climate Action and Oil & Gas Investment

- **58% (6 in 10)** of Canadians "say that **oil and gas development** should be a top priority alongside **climate action**."  
Angus Reid Institute, Sept 2019<sup>5</sup>
- **69% (7 in 10)** of Canadians "say climate should be a top priority" while **75% of them** "want at least some **investment** in the **oil and gas sector**."  
Angus Reid Institute, Sept 2019<sup>5</sup>
- **62%** of Canadians agree that "if we export our natural gas to China that's **good for the environment** as it reduces China's dependence on Coal" while 16% disagree.  
Skinner, J., April 2020<sup>6</sup>
- **59%** of Canadians agree "that if Canada doesn't develop its oil, another country will increase its production so we're not really helping the environment (28% disagree)."  
Skinner, J., April 2020<sup>6</sup>



**Students for Canada (SFC)** is a group of Post-Secondary students part of a **soft-spoken majority** that **support responsible, sustainable, and balanced** Canadian natural resource development (Forestry, Oil & Gas, Mining, Nuclear, Renewables, Agriculture and much more). SFC students do not want to be divided, but have a balanced response to meeting global resource demands responsibly while balancing environmental protection. We want to help shape **OUR** futures and allow clean technology and environmental innovation to continue to advance. Our natural resources have provided a high quality of living, so we should embrace our Canadian achievements and resources! Revenue from resources provide critical funding for education, medical care, research, transit, future infrastructure and much more.



### Wonder what type of students are part of SFC?

SFC is comprised of undergraduate and graduate students in many backgrounds such as: Agriculture, Arts, Biology, Biojet Conversion, Bioresource Technology, Business, Chemistry, Chemical Engineering, Civil Engineering, Climate Change, Dental Hygiene, Earth and Atmospheric Sciences, Economics, Education, Electrical Engineering, Environmental Engineering, Environmental, Finance, Forestry, Geology, Geophysics, Glaciology, Human Geography, Hydrogeology, Immunology, Integrated Petroleum Geoscience, Kinesiology, Law, Materials Engineering, Mechanical Engineering, Mining Engineering, Medicine, Nursing, Petroleum Engineering, Resource and Agricultural Development and many others.

If you're a post-secondary student who want to be part of a **positive, open, inclusive, collaborative atmosphere** and want to learn more sign up at [studentsforcanada.ca](http://studentsforcanada.ca)

We love hearing ideas and solutions!

### Check out these Independent Poll Sources and Articles to learn more:

- 1 - Leger Polls, 2017. Poll: More Quebecers say yes to importing oil from Western Canada
- 2 - Research Co. Polls, Canesco. March 2020. Most British Columbians agree with building Coastal GasLink
- 3 - Research Co. Polls, Canesco. December 2019. Views of pipeline expansion in British Columbia remain stable
- 4 - Angus Reid Institute. Jan 2019. Six-in-ten Canadians say lack of new-pipeline capacity represents a crisis in this country
- 6 - Angus Reid Institute. Sept 2019. Balancing Act: Majorities say both climate action, oil & gas growth should be top priorities for next government
- 5 - Skinner, J. April 2020. Second Street - Poll Results: Canadians thoughts on oil products and the Industry
- 7 - Flanagan, T. Fraser Institute. 2019. How First Nations benefit from pipeline construction
- 8 - Markusoff, J. Macleans. 2020. The TransMountain pipeline and the end of the 'veto' fallacy
- 9 - Research Co. Polls. March 2019. Resource development in Canada on behalf of LNG Canada

CREATED BY STUDENTS FOR STUDENTS And Canada :)

