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June 4, 2021

Sent via email: IAAC.AlbertaCoal-CharbonAlberta.AEIC@canada.ca
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Potential Regional Assessment of Coal Development
and Exploration Activity in Southwest Alberta
Impact Assessment Agency of Canada
160 Elgin St., 22nd floor
Ottawa, ON K1A 0H3

Dear Dr. Bonnell, Manager – Strategic and Regional Assessments, Impact Assessment Agency of Canada,

Re: Addendum to submissions regarding the "Potential Regional Assessment of Coal Development and Exploration Activity in Southwest Alberta" pursuant to s. 93(1) and s. 97(1) of the *Impact Assessment Act*

I write to you on behalf of Niitsítapi Water Protectors ("NWP"), Canadian Parks and Wilderness Society Southern Alberta Chapter ("CPAWS S AB") and Livingstone Landowners Group ("LLG") regarding the "Potential Regional Assessment of Coal Development and Exploration Activity in Southwest Alberta."

This is an addendum to my May 28, 2021, submissions regarding the above-captioned potential regional assessment, to correct two errors and provide some further information.

"Downstream" emissions

On page 28, in section "**d)** iii) *(4)* (b) "Downstream" emissions", I wrote "The total lifecycle emissions from the coal produced by all the proposed projects in Canada would be approximately **3 Mt annually** when accounting for the end use of the coal in steelmaking.[49]" This was an error – the figure "3 Mt annually" is the amount of "downstream" CO2 emissions **one proposed project** (the Tent Mountain Mine project) would produce annually, given its

proposed annual production capacity of 1.2 Mt of cleaned coal (see footnote 49 of my May 28, 2021, submissions).

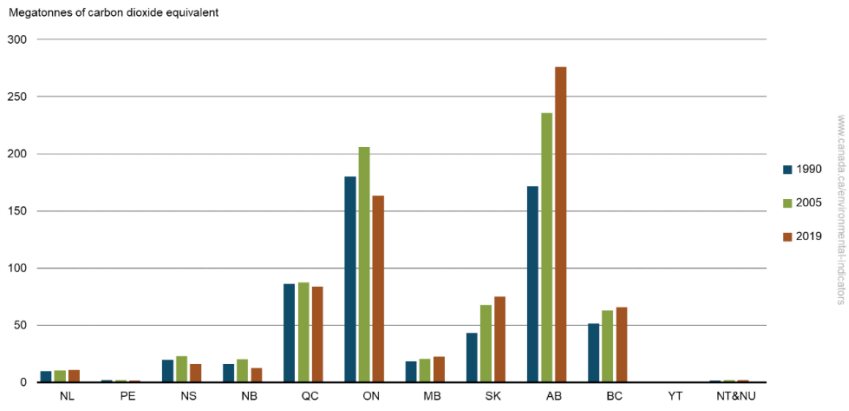
Many of the proposed projects in the regional assessment proposed study region do not have proposed annual production capacities listed by their respective proponents in their public documentation. As such, an accurate figure of the potential CO2 emissions from all proposed projects in the proposed study region is not possible. However, where proposed production capacity figures are not available from any source, we can speculate what the annual production capacities of each project are based on other similar-sized projects, and then generate a rough estimate of the total annual production capacity of all proposed projects in the proposed study region, and from that, a rough estimate of the total potential CO2 emissions from all proposed projects.

Attached as Appendix "A" is a table detailing the estimated production capacity of all proposed projects in the proposed study region. For those projects where the proposed production capacity could not be found, an estimate of 4.0 Mt/year is used, and those estimates are in italics. Attached as Appendix "B" are a collection of maps from a number of sources which show where these proposed projects are situated in the proposed study region.

Using the figures set out in Appendix "A", the total "cleaned" or processed coal production capacity of **all** the proposed projects in the proposed study region is 99 Mt/year. This would produce **258 Mt annually** in "downstream" CO2 emissions when this coal is burned in the steelmaking process.[1] I note this is a very rough estimate, but it demonstrates the scale of CO2 emissions all of these proposed projects would generate in "downstream" emissions in an aggregate or cumulative basis.

To put this in context, Environment and Climate Change Canada has estimated that the total (all sources) of greenhouse gas emissions in Alberta in 2019 was **270 Mt** (see Figure 1).[2]

Figure 1:



[1] The figure of 258 Mt was arrived at by taking 99 Mt of annual cleaned coal production, subtracting 28% for non-carbon content in the coal (both moisture and other elements), and subtracting 1% for carbon that ends up in the steel. Carbon dioxide is 3.67 times the mass of carbon itself, so we estimate a rough total of 258 MT, not including extraction and transport emissions.

[2] Environment and Climate Change Canada, "Greenhouse gas emissions by province and territory, Canada, 1990, 2005 and 2019" (date modified 15 April 2021; accessed on 03 June 2021), online: https://www.canada.ca/en/environment-climate-change/services/environmental-indicators/greenhouse-gas-emissions.html.

Metallurgical coal exports

On page 35, in section "**d)** iv) The future global market for metallurgical coal", I wrote "Consider the 17-20 MT/year[79] currently exported through Canadian ports." This was an error, and referred to thermal coal exports. The amount of metallurgical coal exported through Canadian ports is approximately 32-35 Mt/year.[3]

I apologize for these two errors contained in my May 28, 2021, submissions.

Ecojustice and my clients wish to again thank you for this opportunity to provide submissions on the scope of this potential regional assessment, and we would welcome a meeting with you and your team to discuss them further.

Sincerely,

<Original signed by>

_____

David Khan
Barrister & Solicitor

cc: The Honourable Jonathan Wilkinson MP
Minister of Environment and Climate Change
200 Sacré-Coeur Boulevard
Gatineau, QC K1A 0H3

Carys Burgess, Impact Assessment Agency of Canada

Barbara Pullishy, Alberta Regional Director, Impact Assessment Agency of Canada

clients

[3] See Appendix "C": Correspondence from the Honourable Seamus O'Regan Jr., P.C., M.P., Minister of Natural Resources, to Emily King, Ecojustice (28 May 2021).

APPENDICES

[A] **Appendix "A"**: Metallurgical Coal Mine Proposed Projects - SW AB and SE BC - Estimated Production Capacity (Mt/year) ("cleaned" or processed coal)

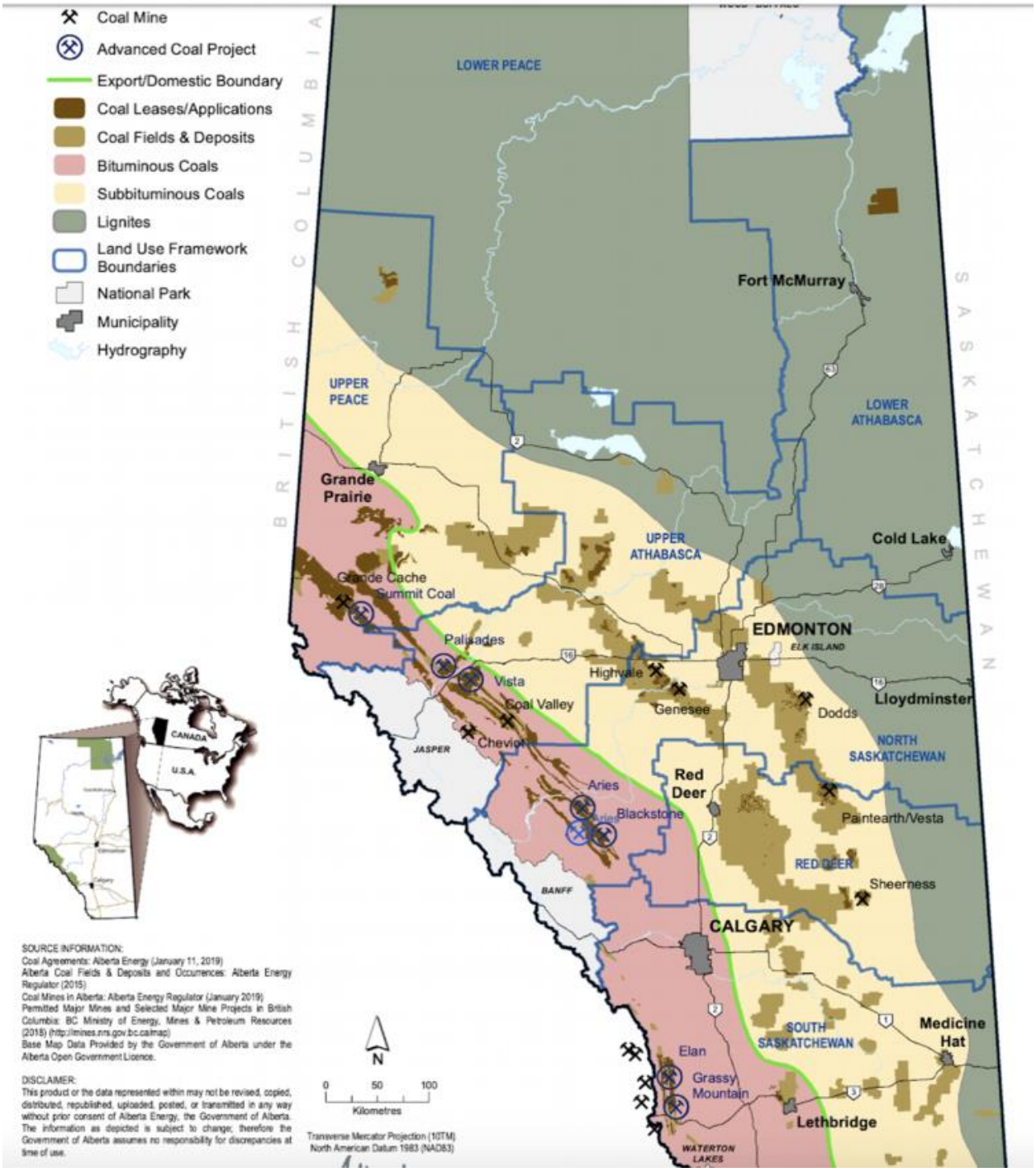
[B] **Appendix "B"**: Maps from a number of sources which show where the proposed projects are in the proposed study region

[C] **Appendix "C"**: Correspondence from the Honourable Seamus O'Regan Jr., P.C., M.P., Minister of Natural Resources, to Emily King, Ecojustice (28 May 2021)

APPENDIX “A”

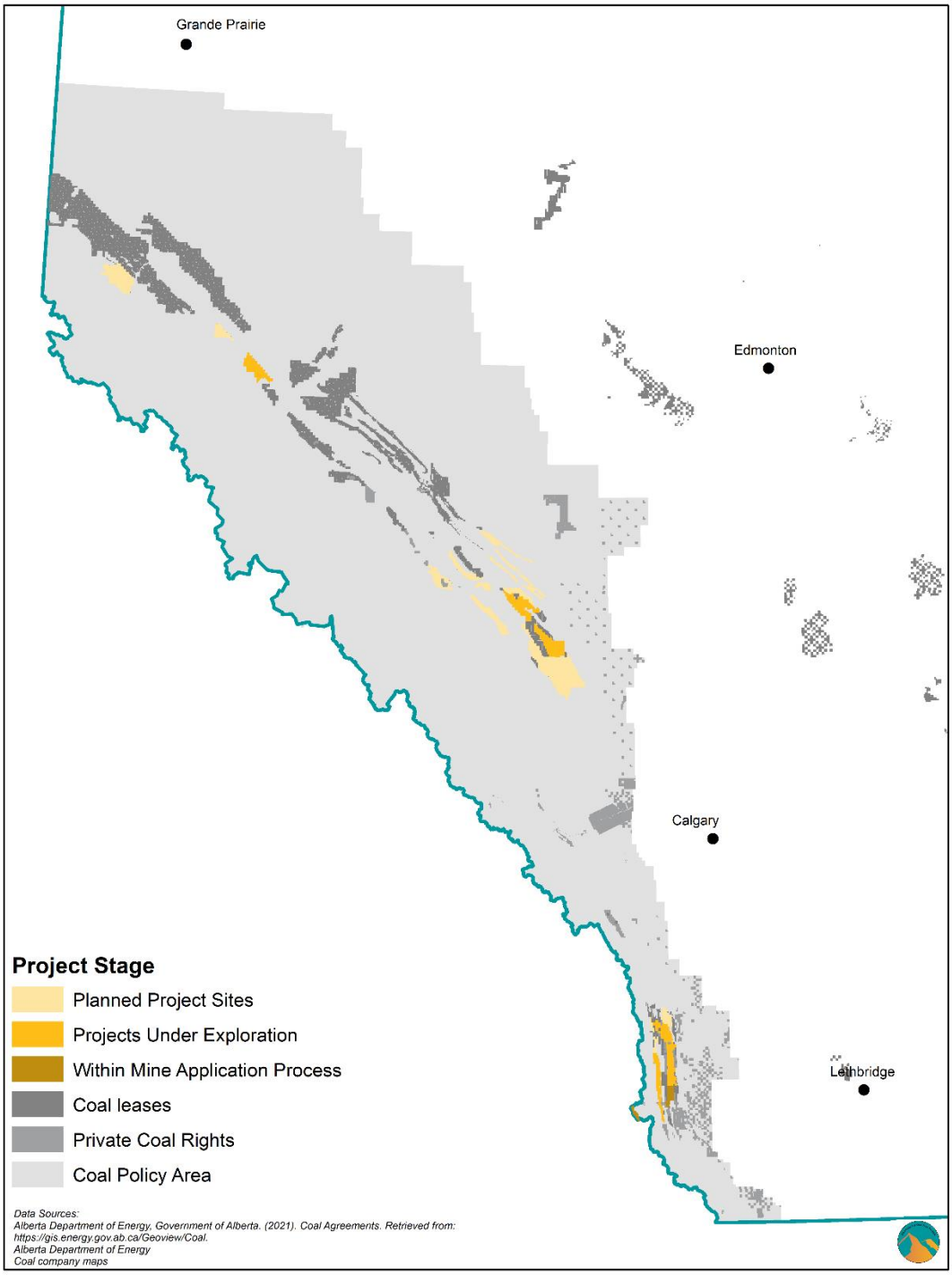
Metallurgical Coal Mine Proposed Projects - SW AB and SE BC - Estimated Production Capacity (Mt/year) ("cleaned" or processed coal)					
Proponent	**Project**	**Prod Cap (GEM Tracker)***	**Prod Cap (other sources)**	**Further info (or other source)**	**Coal Category****
			(estimates in italics)		
ALBERTA - Rocky Mountains and Eastern Slopes (SW AB)					
Exploration (current or completed since 2017)					
Atrum Coal Ltd (Elan)	Elan South		*4.00*	https://www.atrumcoal.com/projects/elan-project/	Category 2
	Isolation South		6.00	https://www.atrumcoal.com/projects/elan-project/	Category 2
Cabin Ridge	Cabin Ridge		*4.00*	https://www.cabinridgecoal.com/our-project/	Category 2
Montem Resources	Chinook		*4.00*	https://montem-resources.com/projects/chinook-project/	Category 2
NOIR Resources	Pallisades		*2.00*	https://www.noirresources.ca/noirprojects	Category 2 & 4
Ram River Coal Corp	Aries	4.00		https://capitalinvestmentpartners.com.au/ramcoal.htm	Category 2
Valory Resources (Black Eagle)	Blackstone		*4.00*	https://www.miningnewsfeed.com/reports/annual/Valory_Resources_Inc_Investor_Presentation_102019.pdf	
Mine Applications in Progress					
Montem Resources	Tent Mountain	1.00		https://montem-resources.com/projects/tent-mountain/	Category 4
Riversdale Resources (Benga)	Grassy Mountain	5.00		https://www.ceaa-acee.gc.ca/050/evaluations/proj/80101?culture=en-CA	Category 4
Planned Future					
Blairmore (CIP)	Blairmore		*4.00*	https://capitalinvestmentpartners.com.au/blairmore.htm	Category 2
Montem Resources	4-Stack		*4.00*	https://montem-resources.com/projects/greenfield-projects/	Category 2
	Isola		*4.00*	https://montem-resources.com/projects/greenfield-projects/	Category 2
	Oldman		*4.00*	https://montem-resources.com/projects/greenfield-projects/	Category 2
NOIR Resources	Moberly Creek		*4.00*	https://www.noirresources.ca/noirprojects	Category 2
Oros Coal	Bighorn		*4.00*	https://capitalinvestmentpartners.com.au/oros.htm	Category 2
	Haven Creek		*4.00*	https://capitalinvestmentpartners.com.au/oros.htm	Category 2
	Ram River West		*4.00*	https://capitalinvestmentpartners.com.au/oros.htm	Category 2
	Scurry South		*4.00*	https://capitalinvestmentpartners.com.au/oros.htm	Category 2
	TVI Nordegg		*4.00*	https://capitalinvestmentpartners.com.au/oros.htm	Category 2
Phalanx Coal (CIP)	Clearwater		*4.00*	https://capitalinvestmentpartners.com.au/phalanx.htm	Category 2
	Ram River East		*4.00*	https://capitalinvestmentpartners.com.au/phalanx.htm	Category 2
BRITISH COLUMBIA - Elk Valley area (SE BC)					
Centermount	Bingay Coal	1.00		https://projects.eao.gov.bc.ca/p/588511c6aaecd9001b8257f1/project-details	N/A
Jameson Resources (NWP Coal)	Crown Mountain	4.00		https://projects.eao.gov.bc.ca/p/588511f9aaecd9001b828bf0/project-details	N/A
North Coal	Michel Coal	2.00		https://projects.eao.gov.bc.ca/p/58851215aaecd9001b82a8d3/project-details	N/A
Teck	Castle (aka Fording River Extension Project)		10.00	https://iaac-aeic.gc.ca/050/evaluations/proj/80702	N/A
	TOTAL (GEM Tracker)	17.00			
	TOTAL (other sources or est.)		82.00		
				*GEM Tracker: https://globalenergymonitor.org/projects/global-coal-mine-tracker/tracker-map/	
	TOTAL (proposed region)	**99.00**		** "Alberta 1976 Coal Policy": Cat 2 lands are currently effectively restricted to most development	

APPENDIX “B”



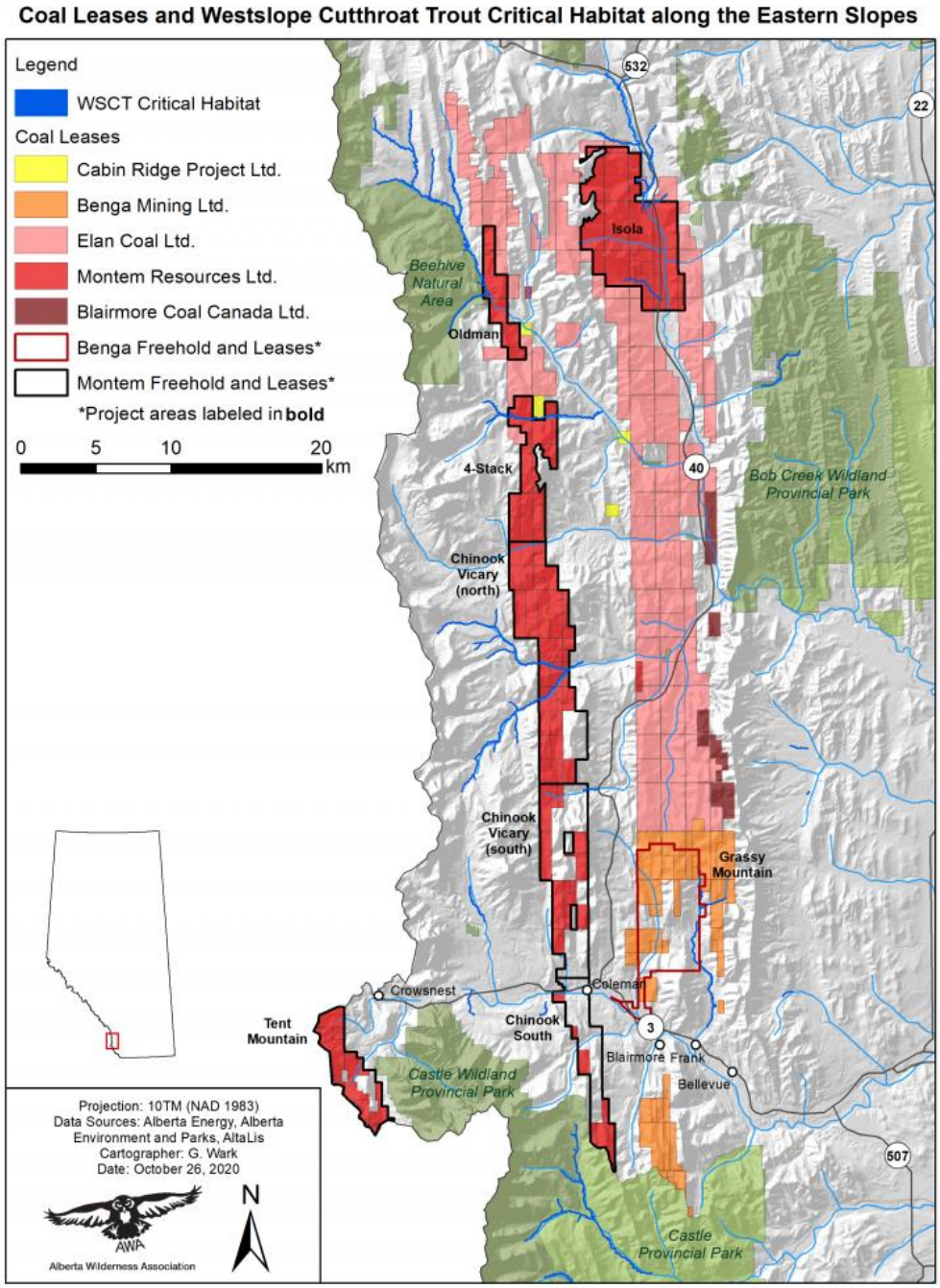
Coal Leases/Applications and Coal Projects across Alberta

From Oldman Watershed Council: https://oldmanwatershed.ca/blog-posts/2020/7/30/coal-mining-in-the-oldman-watershed



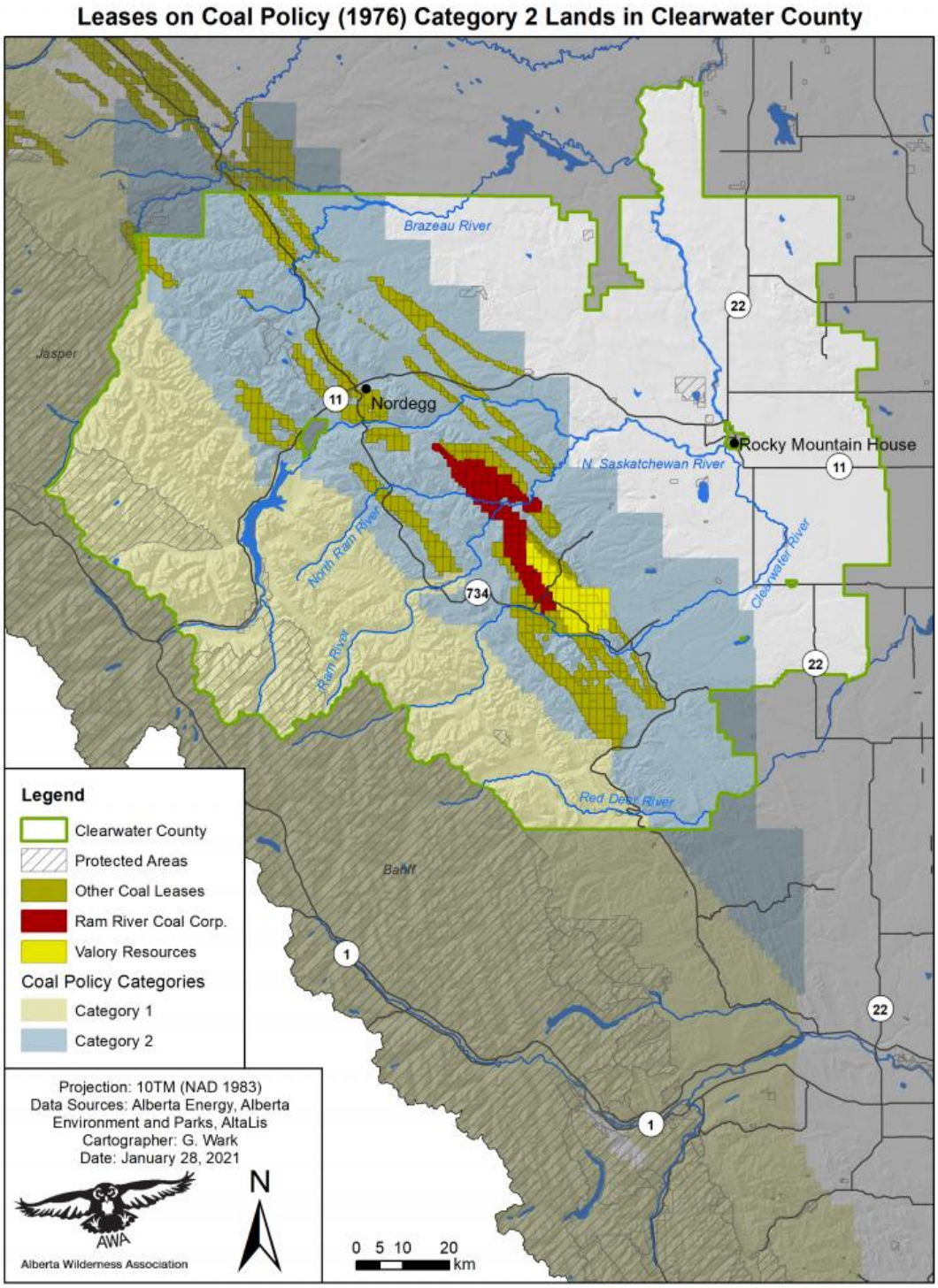
Coal Leases and Projects across southwest Alberta, and the 1976 Coal Policy Area

From CPAWS Southern Alberta



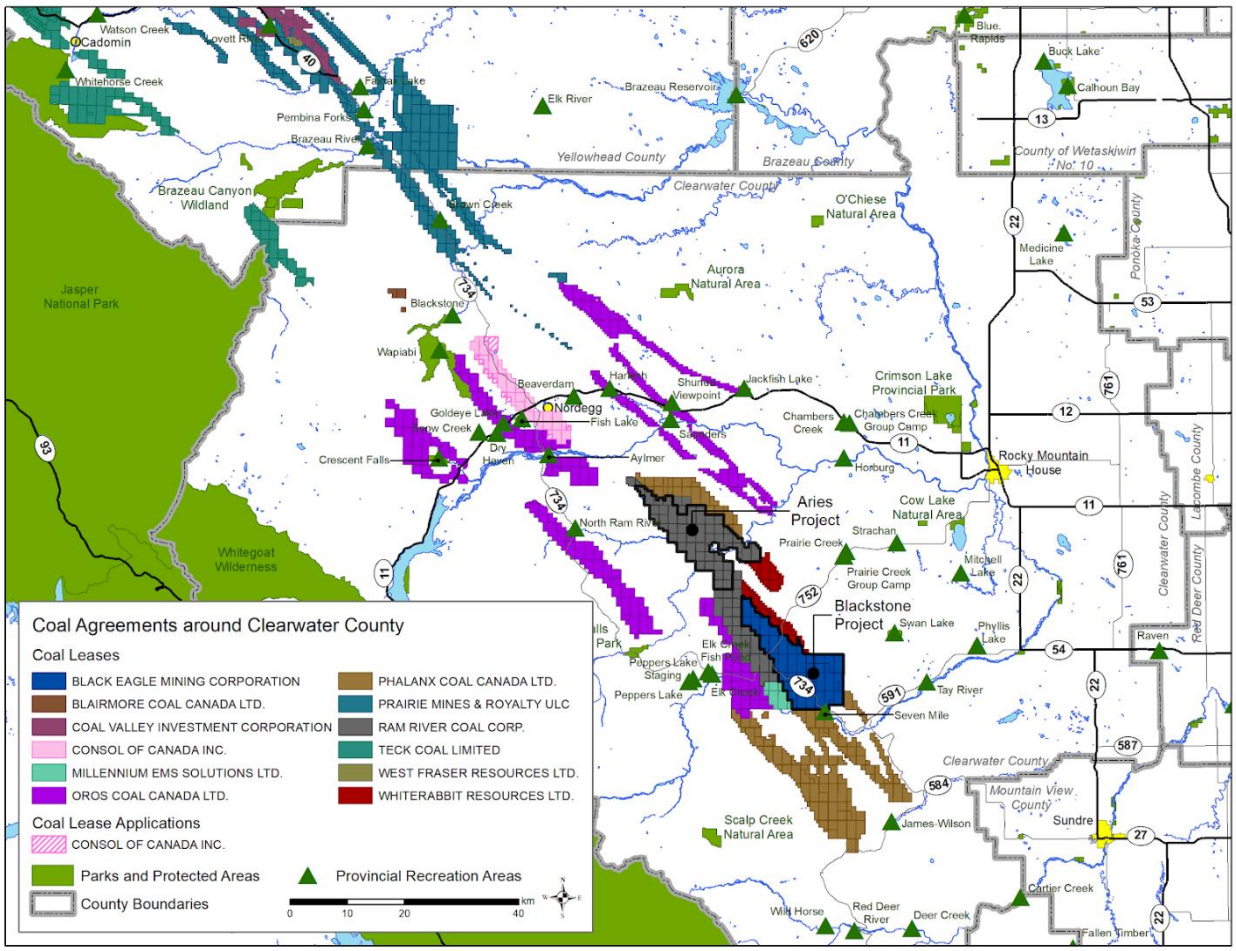
Coal Leases/Applications and Coal Projects in the Oldman Watershed, Alberta

From Alberta Wilderness Association: https://albertawilderness.ca/issues/wildlands/energy/coal/#inline-maps|parentHorizontalTab2



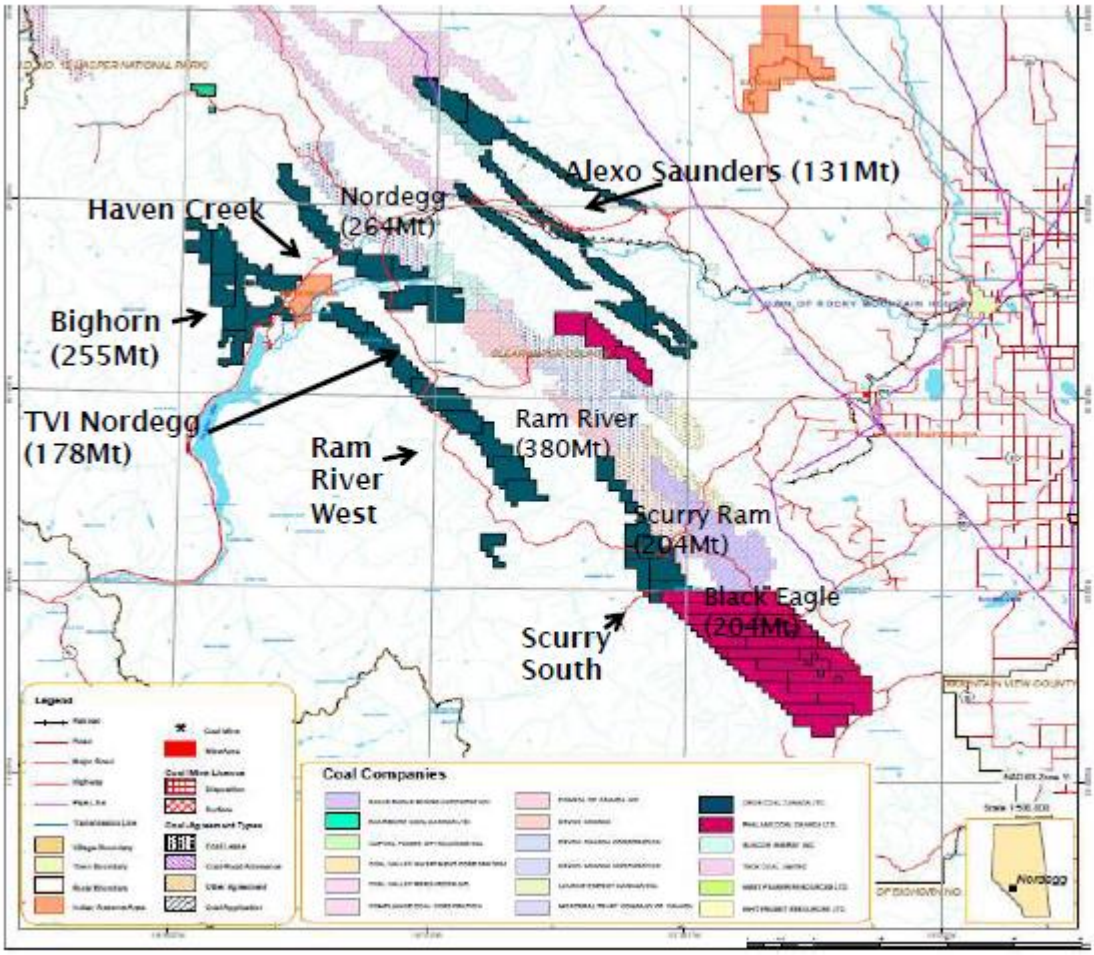
Coal Leases and Coal Projects (Ram River (Aries) and Valory Resources (Blackstone)) in Clearwater County, Alberta

From Alberta Wilderness Association: https://albertawilderness.ca/issues/wildlands/energy/coal/#inline-maps|parentHorizontalTab2



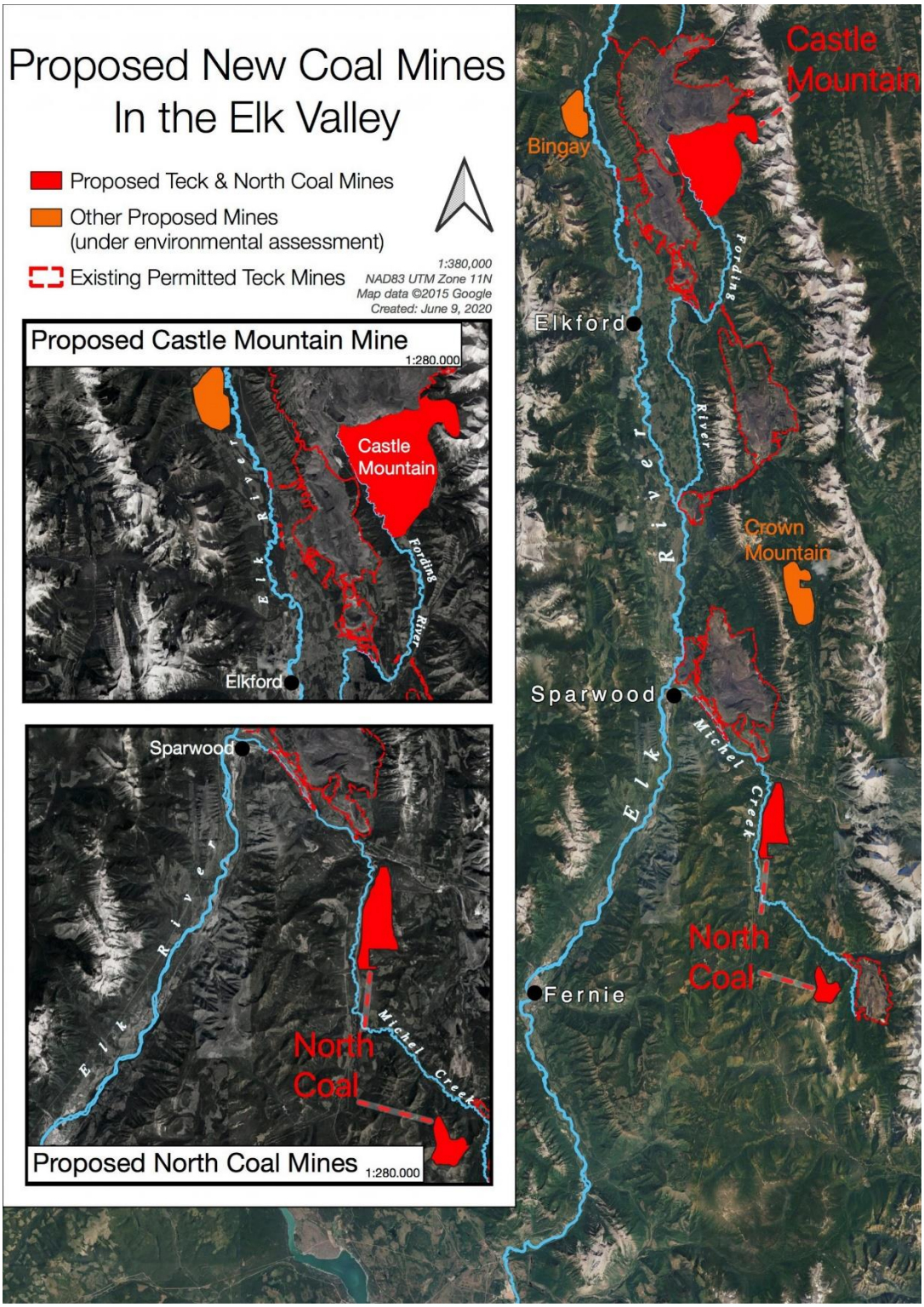
Coal Leases and Coal Projects in Clearwater County, Alberta

From CPAWS Northern Alberta: https://cpawsnab.org/wp-content/uploads/clearwater_coal_agreements_pa_projects_011721.png



Coal Leases and Coal Projects (Oros Coal projects, and showing Valory Resources (Blackstone or "Black Eagle")) in Clearwater County, Alberta

From Capital Investment Partners: https://capitalinvestmentpartners.com.au/oros.htm



Coal Leases and Coal Projects in the Elk Valley, British Columbia

From Wildsight: https://wildsight.ca/wp-content/uploads/2020/05/elk-valley-mines-map-2020-with-Castle-North-1.jpg

APPENDIX “C”

Minister
of Natural Resources

Ministre
des Ressources naturelles

Ottawa, Canada K1A 0E4

May 28, 2021

Ms. Emily King
Ecojustice
ekingecojustice.ca

Dear Ms. King:

Pursuant to section 22 of the *Auditor General Act*, I am pleased to respond to your Environmental Petition No. 390B titled, "the quantification of Canada's total carbon dioxide (CO2) emissions from exported fossil fuels." Natural Resources Canada received your petition on January 28, 2021.

Enclosed is Natural Resources Canada's response to your petition. I understand that my colleagues, the Honourable Jonathan Wilkinson, Minister of Environment and Climate Change, and the Honourable Omar Alghabra, Minister of Transport, will be responding separately to questions that fall under their respective mandates.

I appreciate having the opportunity to respond to the petition, and I trust that you will find the information helpful.

Thank you for raising this important matter.

Yours sincerely,

<Original signed by>

The Honourable Seamus O'Regan Jr., P.C., M.P.

Enclosure: (1)

c.c.: Distribution

Distribution

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Mr. Jerry V. DeMarco
Commissioner of the Environment and Sustainable Development
petitions@oag-bvg.gc.ca

Natural Resources Canada's Response to Environmental Petition No. 390B regarding the quantification of Canada's total carbon dioxide (CO2) emissions from exported fossil fuels

Q3. What was the aggregate quantity of the following fossil fuels exported from Canada in 2016, 2017, 2018, 2019 and 2020 (if numbers from 2020 are not yet available, please indicate when such numbers may be available)? a. Metallurgical coal, b. Thermal coal, c. Oil (including heavy oil and bitumen), d. Natural gas, e. Natural gas liquids.

Total Canadian Fossil Fuel Exports

	Metallurgical coal (million tonnes/year)	**Thermal coal (million tonnes/year)**	**Oil (thousand barrels/day)**	**Natural gas (billion cubic feet/year)**	**Natural gas liquids (thousand m3 @ 15 degrees/year)**
2016	28.04	2.54	3,100.58	2,975	7,739.42
2017	28.95	2.40	3,321.83	3,005	9,739.89
2018	32.77	1.29	3,621.99	2,810	11,230.47
2019	34.85	2.11	3,761.80	2,705	14,147.95
2020	31.57	4.93	3,657.49	2,505	11,337.85

Sources

Coal: Statistics Canada's International Merchandise Trade Database (HS Codes 2701 and 2702).
Oil: Canada Energy Regulator's 2020 Crude Exports Summary.
Natural gas: Canada Energy Regulator's Natural Gas Exports and Imports Summary.
Natural gas liquids: Canada Energy Regulator's Natural Gas Liquids Export Volume Summary.

Q7. If it does not already do so, is the Government of Canada considering accounting or tracking its export of fossil fuels?

The Government of Canada measures, disseminates, and tracks fossil fuel exports using three different data sources, which are all publicly available:

- The energy statistics program at Statistics Canada compiles and disseminates survey-based energy supply and disposition statistics, including exports of crude oil, natural gas and coal.

- Statistics Canada's International Merchandise Trade Program compiles and disseminates trade data in energy products based on customs documentation, on an aggregated basis according to the North American Product Classification System (NAPCS), and on a disaggregated basis according to the Harmonized Commodity Description and Coding System (HS).

- The Canada Energy Regulator (CER) authorizes and regulates energy exports through long-term licences, permits, and short-term orders. As part of the terms and conditions, holders of these regulatory instruments must submit, on a monthly basis, information regarding their export activity. The CER uses the information to fulfill its regulatory mandate and shares the aggregated data with Statistics Canada and other government organizations.

Q10. Has the Government of Canada considered any new initiatives to reduce emissions from exported fossil fuels in addition to those outlined in its responses to question 9 of Petition # 390 or has it modified any initiatives outlined in its response to that question?

Federal methane regulations came into force in 2018 to reduce methane emissions from Canada's conventional oil and gas sector. Since then, provincial equivalency has been obtained from the three western oil and gas provinces of Alberta, British Columbia, and Saskatchewan. The methane regulation is expected to result in more than 20 Mt/year of greenhouse gas (GHG) emission reduction by 2030. The Government has implemented complementary sectoral measures such as the $750-million Emissions Reduction Fund. The Emissions Reduction Fund supports onshore and offshore oil and gas firms in advancing solutions to decarbonize and reduce methane and other GHG emissions in support of Canada's climate commitments. It is helping to achieve emission reductions that are incremental to what is required under regulations.

Building on the Pan-Canadian Framework, in December 2020, the Government of Canada announced A Healthy Environment and a Healthy Economy[1], which proposes to gradually increase the stringency of carbon pricing, implement the Clean Fuel Standard, and put in place other regulatory and financial measures to decarbonize the Canadian economy. These new measures are expected to further incent large emitting facilities in the oil and gas sector to reduce their GHG emissions.

This suite of measures is expected to significantly lower the GHG emissions of Canada's energy exports. Given oil and gas are a globally consumed commodity and are expected to remain the dominant source of energy consumed for many years, Canada's cleaner oil and gas production is necessary to ensure that our collective efforts to limit global temperature increase to 1.5 degree Celsius by end of this century is realized. Without Canada's oil and gas exports, other jurisdictions with less stringent environmental regulations and emissions targets could fulfill global demand, potentially leading to carbon leakage that would make it more challenging to attain the goal of limiting global warming by 1.5 degrees Celsius by end of this century.

[1] A Healthy Environment and a Healthy Economy, Environment and Climate Change Canada https://www.canada.ca/en/environment-climate-change/news/2020/12/a-healthy-environment-and-a-healthy-economy.html