A LETTER TO MY MEMBER OF PARLIAMENT

May 29, 2017

Joyce Murray Member of Parliament for Vancouver Quadra 206 – 2112 West Broadway Vancouver, B.C. V6K 2C8

Dear Ms. Murray,

Re: Oil Sands Expansion and Kinder Morgan: the Emissions Implications

The decision on May 29th takes us further down a dangerous path. The Finance Minister's announcement confirms again that the assumed economic benefits of continuing to expand oil sands production to 2030 are driving Canadian policy.

Well before this latest development, I had already begun to draft this letter questioning your decision to continue supporting the government's position on the Kinder Morgan expansion.

We desperately need an open and resolutely candid public discussion of the emissions implications. I intend that this should be a public letter.

I received a copy of the letter you sent by email to some of your Vancouver Quadra constituents on April 27, 2018, which you wrote in response to a public gathering at your office on March 23rd expressing opposition to the project. I was present at that event.

In your letter, you justify the decision to proceed with the Kinder Morgan project.

I am enclosing for your consideration an analysis which I recently prepared that looks at our current emissions situation, based on the Government of Canada's most recent greenhouse gas emissions projections to 2030 (*Canada's 3rd Biennial Report* released on December 29, 2017).

The economic rationale underlying the approval of the Kinder Morgan and Line 3 pipelines is the planned expansion of Canada's oil sands production from the 2015 level of 2.5 million barrels per day to 4.5 million by 2040.

The evidence shows that, between now and 2030, technological innovation cannot lower carbon intensity per barrel fast enough to alter the existing trend, in which emissions continue to increase in step with rising production. The Government of Canada's most recent numbers (*Canada's 3rd Biennial Report*, December 29, 2017) tell the story:

9	2005	2015	2020	2030	change 2015-2030
Emissions	35	71	89	115	+44 Mt CO ₂ eq
Production	1.065	2.526	3.361	4.236	+1.7 million bpd

Figure A: Oil sands emissions and production figures from Canada's 3rd Biennial Report

Source: Canada's 3rd Biennial Report to UNFCCC (December 29, 2017), Table 5.9

If we continue to expand oil sands output as currently projected, annual emissions in that industry will be about 44 million tonnes (Mt) higher by 2030 than they were in 2015.

The question is whether this 44 Mt increase can be reconciled with Canada's commitment to reduce our total emissions 30% by 2030 below the 2005 level, down to 523 Mt. Under current policies, the total is expected to be 722 Mt by 2030. To meet the target, cuts of about 200 Mt will have to be achieved within the next decade.

In your April 27, 2018 letter to your constituents, you say this, in defending the Trudeau Government's s decision to proceed with the Kinder Morgan pipeline expansion:

Alberta is the largest source of Canada's emissions, so Alberta's cooperation was essential to creating Canada's Climate Plan. Alberta's cooperation was also necessary to ensure other provinces and territories signed on. More importantly, <u>Alberta's GHG reduction measures</u> – <u>capping total emissions growth at a level</u> <u>far below previous oil sands expansion targets</u>, increasing its carbon tax, regulating methane emissions, and agreeing to phase out coal-fired electricity by 2025 – <u>are critical to Canada achieving our national GHG reduction targets</u>.

You are telling residents of Vancouver Quadra that we must accept the Kinder Morgan pipeline expansion through British Columbia because Alberta's cooperation is essential to meet Canada's emissions reduction target by 2030.

The evidence does not support the claims you make about Alberta's carbon reduction policies, which you say are "critical" to Canada meeting its target.

Alberta's 100 Mt "cap" on oil sands emissions

I wish to respond, firstly, to the claim you make about the benefits of Alberta "capping" oil sands emissions growth "at a level far below previous oil sands expansion targets".

In November 2015, Alberta announced it was imposing a 100 Mt cap on oil sands emissions. In order to assess whether this cap will make any contribution to limiting Canada's GHG emissions by 2030, it is helpful to start by noting that the actual level of oil sands industry emissions in 2015 was 71 Mt (as shown in Figure A above) and that the government's most recent projections show the level will rise to 115 Mt by 2030. The question we must ask is whether the expected future level of oil sands emissions has been significantly reduced below previous forecasts, and whether that reduction can be attributed to Alberta's 100 Mt cap, as you have claimed.

December 2013: Canada's Sixth National Report on Climate Change

At the end of December 2013, the last year before the collapse of world oil prices (the price decline began in July 2014), *Canada's Sixth National Report on Climate Change* projected that oil sands production would reach 4.567 million barrels per day (bpd) by 2030, and that emissions from the oil sands industry would rise to <u>137 Mt</u>. That was the Government of Canada's projection at a time when global oil prices were at their height, and when the long-term future growth of the oil sands industry appeared to be assured.

The oil and gas industry's own projections in June 2014 (just before the start of the steep decline in world oil prices began) showed oil sands production rising to 4.81 million bpd by 2030, a more ambitious outlook than Canada's official projections (Source: CAPP, *Crude Oil: Forecast, Markets & Transportation*, June 2014).

In your April 27, 2018 letter to your constituents, you refer to "previous oil sands expansion targets". Those previous "targets" (they were actually forecasts or projections based on expected future long-term oil prices and demand) assumed continued high world oil prices, which had prevailed up until the summer of 2014.

By early 2015, oil prices had fallen 50%. By the time CAPP released its June 2015 forecast, it had reduced its own estimate for 2030 oil sands production down to 3.50 million bpd (CAPP did not provide any forecast of emissions levels). Because the cost of production per barrel for oil from Canada's oil sands is among the highest in the world, future oil sands production levels are driven by future world oil prices. As future long-term oil prices declined, so did oil sands production forecasts.

February 2016: Canada's Second Biennial Report on Climate Change

The rapid fall in forecasted oil sands production accounted for a large reduction in the projected level of oil sands emissions. This fall in the expected emissions level had nothing to do with the Alberta's 100 Mt cap – which did not even exist in June 2015, when CAPP published its revised production forecast.

When the Federal Government published its revised projections of oil sands output to 2030 (*Canada's Second Biennial Report on Climate Change*) in February 2016, its projection of oil sands production to 2030 had been lowered to 4.258 million bpd, with projected annual emissions of <u>116 Mt</u> (down from the 137 Mt figure projected in December 2013). That reduction was largely driven by the reduced oil sands production level, which in turn reflected the decline in global oil prices. It was also the result of lowered expectations about the future volume of oil sands upgrading, which accounted for 5 Mt of that reduction.

January 2017: Canada's 2016 Greenhouse Gas Emissions Reference Case

In January 2017, the Government of Canada's projected oil sands production level for 2030 was again lowered, down to <u>3.967</u> million bpd, and projected emissions were reduced to <u>108 Mt</u> (*Canada's 2016 Greenhouse Gas Emissions Reference Case,* January 5, 2017, *Table A7*). That again had nothing to do with the cap. That revised projection of the future path of Canada's oil sands production to 2030 was based on forecasts done by the National Energy Board (NEB). It reflected a further 300,000 bpd reduction in the expected level of oil sands production by 2030. The NEB's forecast was based on calculations about the future growth of global oil demand – closely tracking similar projections done by the International Energy Agency (IEA).

December 29, 2017: 3rd Biennial Report

The Government of Canada's most recent projections released on December 29, 2017 (3^{rd} *Biennial Report*), the expected level of oil sands production in 2030 has now been revised upwards again to 4.2 million bpd, with the projected annual level of oil sands emissions now expected to reach <u>115 Mt</u> by 2030.

Overall, during the past four years, the expected level of oil sands emissions by 2030 has been lowered from a high point of 137 Mt (given in the 2013 report) down to 115 Mt.

That revision has been entirely driven by the sharp decline of world oil prices since July 2014 – and the resulting reductions in the expected oil sands production level by 2030 as well as some reduction in upgrading.

None of that 22 Mt reduction in the expected level of oil sands emissions by 2030 has any connection with Alberta's 100 Mt "cap" announced in November 2015.

Furthermore, Alberta's cap, while it is called a "100 Mt cap", is set at a high enough level that it will allow oil sands emissions to freely increase from 71 Mt in 2015 to 115 Mt by 2030, because of the way the cap limit is defined by the Province of Alberta.

Despite its name, the Alberta cap will in fact allow total emissions in the oil sands industry to grow to as much as 116 Mt before they exceed the upper limit. The *Reference Case* document (January 5, 2017) explained that the 108 Mt of oil sands emissions (the level of oil sands emissions projected at that time for 2030) would in fact be well *below* the cap. The reason for that is that the 100 MT cap limit excludes some kinds of oil sands-related emissions:

Based on the Alberta Government's announcement, Alberta's 100 Mt cap on oil sands emissions excludes emissions from cogeneration of electricity and <u>new</u> <u>upgrading</u>. When taking these into account, total emissions from oil sands is <u>93</u> <u>Mt in 2030 under the reference case scenario, below the 100 Mt cap.</u>

- Reference Case, section 2 "Emissions projections by sector", note 4, p.7.

Although it is not commonly understood, the 100 Mt cap does not apply to, or restrict, the growth of additional emissions generated by "new upgrading" in Alberta. Upgrading is a highly emissions-intensive process that converts raw bitumen into a higher-value crude oil before it is shipped to foreign refineries for further processing. The cap also exempts additional emissions attributed to cogeneration. Therefore, <u>under Alberta's cap</u>, total oil sands emissions will be allowed to rise to about 116 Mt before they exceed the cap.

Therefore the cap, in reality, is 116 Mt.

This feature of the cap was again confirmed when Canada released its most recent emissions report, the 3^{rd} Biennial Report (December 29, 2017). The new projections show that oil sands production is now expected to rise to 4.236 million bpd by 2030 (up from the previous estimate of 3.967 million bpd), and that oil sands emissions (according to the Government of Canada's methods of calculation) are now projected to reach <u>115</u> <u>Mt</u> by 2030. The new report explains that the projected increase of oil sands emissions to 115 Mt by 2030 will still be within the cap limit, and that under Alberta's definition the increased figure is equivalent to only 99 Mt (3^{rd} Biennial Report, notes g and h, at pp.138-139).

44 Mt rise in oil sands emissions between 2015 and 2030

You praise Alberta's "cooperation" in efforts to achieve Canada's 2030 emissions reduction target. I believe you are seriously misleading your constituents about the capability of Alberta's new policies to contribute any deep emissions reductions to the national effort over the next twelve years to meet the 523 Mt target.

The continued expansion of Alberta's oil sands industry is going to contribute a 44 Mt increase to the annual level of Canada's total emissions between 2015 and 2030. Alberta's much vaunted cap will do nothing to curb that increase.

The actual level of oil sands emissions in 2015 was 71 Mt (up from 35 Mt in 2005, so it doubled in the first ten years). A cap of 116 Mt will therefore allow very substantial emissions growth over the next decade.

This projected 44 Mt increase will be by far the largest source of emissions growth in Canada over that period – compared to any other industry, or any other economic sector in any other province.

To appreciate the significance of the 44 Mt increase, *an equivalent 44 Mt will need to be cut from other economic activities in Canada* (i.e., from our transportation sector, or other industries like pulp and paper, etc.) to offset that rise. A 44 Mt reduction is massive: in 2015, British Columbia's total emissions were 61 Mt. For British Columbia to meet our target by 2030 (a provincial target of about 40 Mt), we will need to find ways to cut about 20 Mt from all of our economic activities combined. Therefore British Columbia's contribution to meeting Canada's 523 Mt target will be a *reduction* of 20 Mt, almost one-third of our total emissions. Alberta's "cooperation" will comprise a 44 Mt *increase* in oil sands emissions.

Another way to illustrate the comparative significance of this expected 44 Mt increase in oil sands emissions is to consider the emissions reductions we hope to achieve in the transportation sector:

Based on current policies, the Federal Government's most recent projections (taking into all current emissions reduction policies implemented up to September 2017) show that total transportation emissions across Canada between 2015 and 2030 are expected to decline by only 18 Mt. If we take into account all the "additional measures" promised under the government's *Pan-Canadian Framework* plan, the total projected reduction for the entire transportation sector will be only 32 Mt by 2030, measured against the 2015 level. It is important to keep in mind that most these promised "additional measures" are not yet implemented and in most cases have not yet even been developed. It will be a desperate struggle to reduce transportation emissions by 32 Mt by 2030.

The truth of the matter is that the substantial emissions growth in the oil sands industry between 2015 and 2030 will negate all the emissions cuts that we hope to achieve from the entire transportation sector across Canada (i.e. all passenger cars, all road freight transport, rail, domestic aviation, and marine shipping).

Province of Alberta: emissions projections to 2030

In the letter you sent to your constituents, you claim "Alberta's cooperation" is "critical to Canada's achieving our national GHG reduction targets". It is true that without deep emissions cuts in Alberta, Canada will not be able to meet it 2030 target of 523 Mt.

But the available evidence does not show that the carbon reduction policies recently adopted in Alberta (which you identify in your email) will make any substantial contribution to the cuts we need. The problem is that the growth of oil sands emissions between 2015 and 2030 will cancel out most of the reductions promised by Alberta over the next decade.

The Government of Canada's *3rd Biennial Report* gives this estimate of the Alberta's total emissions to 2030:

- g	2005	2015	2020	2030
Alberta	233	274	278	287

Source: Canada's 3rd Biennial Report (December 29, 2017), Table 5.27.

The above projection is based on current measures: it takes into account the future benefit of all major new carbon-reduction policies put in place up to September 2017 by Alberta and by the Federal Government. It does not include the impact of promised regulations to reduce methane reductions in the oil and gas industry – because the methane regulations

have not yet been implemented. It does include the shutdown of all coal-fired electricity generation in the province by 2030.

The Government of Alberta's *Climate Leadership Plan Progress Report*, released in December 2017, provides us with a more optimistic projection about the expected impact of Alberta's new policies by 2030. It includes the benefit of policies not yet implemented. It assumes *full implementation of all future measures* promised in Alberta's Climate Leadership Plan (CLP):

	2015	2020	2030
Alberta	274	270	254

Source: *Alberta Climate Leadership Plan Progress Report*, 2017 Policy and Economic Expectations ("with CLP and federal climate policies"), (December 29, 2017), Table 1.

The *Progress Report* takes into account a promised 14 CO₂eq cut of methane emissions below the business-as-usual level in Alberta by 2030. It also takes into account the promised phase out of coal-fired electricity in Alberta (which will provide a 17 Mt reduction over the next decade). It includes 7 Mt of additional future reductions based on the government's promise that when Alberta's existing coal-fired electricity plants are replaced (mainly with natural gas), 30% of the replacement will be renewable energy sources. It counts the future benefits of Alberta's carbon tax.

Assuming that Alberta's total emissions could decline to 254 Mt by 2030, that is only a 20 Mt cut below the 2015 level – and <u>still 20 Mt *above* the province's 2005 level</u>. Canada's national commitment is 30% below the 2005 level. To meet that target, Alberta would need to reduce its emissions to 163 Mt by 2030.

But there is no possibility that Alberta can do that. The expected 44 Mt increase in oil sands emissions between 2015 and 2030 will cancel out most of the promised reductions over the next decade in Alberta's other economic sectors (i.e., the phasing out of coal-fired electricity.

At present, Alberta accounts for about 37% of Canada's total emissions, due to the dominant role of the emissions-intensive oil and gas industry in that province. Assuming that Alberta fulfills all its promises and meets its 254 Mt estimate – and even if the other provinces could achieve all the needed additional cuts required to meet Canada's 523 Mt target – Alberta's economy will account for an astonishing 48% of Canada's total emissions by 2030.

It is misleading to describe this situation as "cooperation". Alberta will continue to expand its oil sands industry, the largest source of continuing emissions growth in Canada. Alberta will contribute no reduction at all of its own emissions below the 2005 level. If Canada is going to meet its emissions reduction commitments by 2030, the burden of making the deep cuts required will fall on the other provinces – cuts in the

order of 30% below their own 2005 emissions levels, and they will have to achieve even deeper cuts to make up for Alberta's inability or unwillingness to contribute its share of the deep reductions we need.

Here we come to the final and most serious problem. We are embarked on a plan to build two new pipelines to facilitate the expansion of oil sands production. But we have no reasonable assurance that the other provinces can achieve the deep emissions reductions we will need to meet Canada's 523 Mt target by 2030.

Order in Council: November 29, 2016

When the cabinet approved the Kinder Morgan expansion on November 29, 2016, the final step was the formal Order in Council that recited a series of reports which, according to the Order, provided the findings and evidence relied on by the cabinet to justify their decision. The Order is one page in length, with a nine-page "Explanatory Note".

The Order in Council stated that the "Governor in Council" (the thirty members of the Trudeau cabinet) is "<u>satisfied</u>" that this pipeline expansion project is "<u>consistent with</u> <u>Canada's commitments in relation to the Paris Agreement on Climate Change</u>" (i.e., to cut our total emissions to 523 Mt by 2030). That is obviously a crucial statement. The Order in Council provides the ethical foundation, not just the legal foundation, for the pipeline approval decision. The Order in Council is discussed in detail in my essay at Note 9 (p.18) and in the Additional Note (p.33).

But none of the reports from the three separate inquiry processes cited in the Order in Council – namely, (i) the report of the NEB inquiry that recommended approval of the project (May 19, 2016), (ii) the draft and final reports of the *Trans Mountain Expansion Project Review of Related Upstream Greenhouse Gas Emissions* (May 19, 2016 and November 25, 2016), and (iii) the *Report from the Ministerial Panel for the Trans Mountain Expansion Project* (November 1, 2016) – provided the cabinet with any evidence or grounds that could have justified that conclusion. None of the three processes conducted an inquiry into that question. In fact, the Ministerial Panel's report clearly informed the cabinet that the question remained "unanswered".

The result is an extraordinarily serious breakdown in governance at the federal level. The Federal Government's review processes have failed to consider whether increased emissions from expanding oil sands production over the next fourteen years could be reconciled with our commitment to cut Canada's total emissions to 523 Mt by 2030. And yet, the Order in Council states that the government is "satisfied" that the pipeline is consistent with our emissions reduction commitment and gives final approval to the project, specifically citing the *Trans Mountain Expansion Project Review* report in support of that conclusion.

The *Trans Mountain Expansion Project Review* contained no analysis at all about whether the increase in oil sands emissions associated with the Kinder Morgan expansion (which it accepted would be in the range of 13 Mt to 15 Mt) can be reconciled with our

need to cut Canada's total emissions down to 523 Mt by 2030. It did not ask the question. The Order in Council misrepresented the evidence available to the Cabinet on that crucial issue.

The document gave an assurance to Canadians that the *Trans Mountain Expansion Project Review* had found that the Kinder Morgan project was "consistent" with our reduction commitment, when it had not done so.

We are now in a crisis of legitimacy, setting claims of the "national interest" (i.e., the promised economic benefits of expanding oil sands production) against calls to halt the further rise of oil sands emissions, by far the largest source of emissions growth in the Canadian economy.

The intractable conflicts facing us (and threatening to divide Canadians) are driven by incompatible policies – and can be traced to the failures of the upstream emissions review process (designed by the Liberal Government) that delivered its final report on November 25, 2016. That process left the core question unresolved.

Questions for my Member of Parliament

In your April 27 letter to your constituents, you write that you've chosen to respect the Cabinet's right to approve the project, offering this explanation:

Cabinet's approval process <u>considered your legitimate concerns</u> related to increased tanker traffic, spill risk and <u>greenhouse gas emissions</u>, yet they determined that <u>on balance</u> the project still serves the national interest.

Surely the Kinder Morgan expansion project could not conceivably serve the national interest if it were inconsistent with our Paris Agreement commitments. Therefore, we must ask on what basis did the members of Cabinet arrive at their determination that that this project, facilitating the continued expansion of oil sands production, could be "consistent" with meeting our 523 Mt target? We have no answer to that.

The Order in Council stated that the Cabinet made their determination based on the *Trans Mountain Expansion Project Review*. But we know that report did not include any evidence or findings that could have justified that conclusion. Nor does the Order in Council point to any other source of evidence that could have supported that determination. Even the nine pages of "Explanatory Notes" attached to the Order do not tell us anything about any other report or source which might have guided that decision.

You assert that the Cabinet had the "right" to make this fateful decision on November 29, 2016, apparently on the basis that they had the power under the *National Energy Board Act* and the *Canadian Environmental Assessment Act 2012* to grant the authorization by Order in Council.

However, the important questions relate to your own decision. You are the representative of the residents of Vancouver Quadra. You are not an agent of the Cabinet. As you would

agree, in our parliamentary system of government, all elected members have an untrammeled right to decline to support the government on a matter of principle or conscience, and especially on a matter of grave consequence. You had the right to decide whether to support the government on its approval of the Kinder Morgan expansion. The Cabinet's decision was not binding on you.

I therefore wish to ask you about the grounds of your own decision: on what basis do you justify your support for the government, given what you knew?

I do not know in any detail what information you possessed by November 2016 about the emissions implications of proceeding with the Kinder Morgan expansion. You attended meetings with your caucus and with Ministers. If you had additional information that persuaded you that the planned expansion of oil sands production to 2030 could be reconciled with our 523 Mt target, what was it?

You write in your April 27, 2018 letter that after the announcement in November 2016 you publicly expressed your "profound disappointment at this decision." But you never told us why you were disappointed: was it because you believe that the consultation with Aboriginal communities was inadequate? Was it because you had concluded that the risks to the rivers and West Coast from oil spills are unacceptable?

Or was it because you had concluded by November 2016 that the projected increase in oil sands emissions from expanding oil sands production in Alberta (enabled by this pipeline and the Line 3 project) could not be reconciled with our 523 Mt target? If the explanation for your "disappointment" was related to unanswered questions about emissions, how then can you justify your decision to support the Cabinet's decision? Surely, in that case, you are supporting a policy that you know to be reckless and unethical.

Surely we, as your constituents, are entitled to know the answers to these questions.

Speaking for myself as constituent, I am asking for your answers to these questions. I attended the meeting you held on December 16, 2016 – about two weeks after the pipeline decision – and you offered no explanation, other than to say you were disappointed.

In your April 21, 2018 letter you tell your constituents: "In the fall of 2016 I wrote a paper outlining these key concerns, and presented it to all ministers and Liberal members of parliament." In an email to me on January 22, 2018 you described this as a 2-page paper called "The Case Against Kinder Morgan". But what does it say? Have you released this document to constituents? Would you send me a copy?

I wish to know whether your paper raised questions or concerns about the emissions implications of the Kinder Morgan project, and whether you expressed to ministers and Liberal members any concerns you had about the failures of the *Trans Mountain Expansion Project Review* process.

In response to your 2-page paper, did you receive answers that satisfied your concerns? In the matter of the projected growth of oil sands emissions and whether they could be reconciled with our Paris commitments (assuming you raised that in your paper), what response did you get?

The substance of what I am seeking is information that explains your support for this pipeline decision. Before the November 29, 2016 announcement, there was never a public inquiry process, or any process at all that provided Canadians with reasoned assurance that the projected oil sands expansion in Alberta between 2015 and 2030 would be consistent with meeting our national emissions target of 523 Mt by 2030.

The Trans Mountain Expansion Project Review

. . .

In the fall of 2016, I contacted you directly in an effort to draw to your attention the fact that the government had failed to address the fundamental question of whether emissions growth from continued oil sands expansion could be consistent with meeting our 523 Mt target. The draft emissions assessment for the Kinder Morgan project (formally known as the *Trans Mountain Expansion Project Review of Related Upstream Greenhouse Gas Emissions*) had been released on May 19, 2016.

I wrote to you on September 6, 2016, and provided you with a copy of my submission to the Ministerial Panel, dated August 23, 2016, documenting in detail that the Kinder Morgan report had failed to answer the core question.

On September 16, 2016, following your Town Hall meeting in Burnaby on September 7, I sent you a detailed analysis of the Kinder Morgan emissions assessment, directing your attention to the failure of the report to deal with the emissions question. I quote below a portion of the analysis that I sent to you in that letter:

8. The Kinder Morgan assessment concedes that oil sands emissions will continue to increase, and they will be the main driver of growth in Canada's total emissions:

The growth in emissions to 2030 is <u>driven largely by growth in the</u> <u>upstream oil and gas sector and, in particular, from the oil sands</u>. ECCC projections indicate that GHG emissions from the oil sands could increase from 62 Mt in 2013, to 90 Mt in 2020 and up to 116 Mt in 2030.

- Report, section B.2.1, p.17

10. The Kinder Morgan expansion, if built, will have the capacity to transport an additional 590,000 bpd, which is 25% of the proposed total expansion of oil sands production between now and 2040. This project is a major step down an unforgiving pathway. Together with Line 3 and Energy East (the two other pipelines that are already far advanced in this same un-reformed approval process), Kinder Morgan will furnish 80% of the additional shipping capacity needed to double Canada's oil sands production by 2040.

- 11. The fundamental question we must ask in any emissions assessment is this: can we achieve a 30% cut in Canada's total emissions by 2030, down to 524 Mt (as promised in Paris), if emissions from expanding oil sands production keep rising? That is the question a principled assessment would be bound to answer.
- 13. We will not be able to take any share of the needed reductions from the oil and gas sector, if oil and gas emissions are still growing between 2020 and 2030.

. . .

14. The Kinder Morgan report does not answer the fundamental question. It doesn't even ask the question. The report is silent about whether we can obtain large enough reductions *from other economic sectors* to obtain the deep cuts we need and to offset the continued increases in oil and gas sector emissions. *The report provides no data or analysis to demonstrate that could be done*. The report is completely silent about the feasibility of meeting the 2030 target.

You called me by telephone on October 25, 2016, in response to my September 16, 2016 letter. Our discussion was focused on the Kinder Morgan report and its failure to address the emissions issue. Immediately following that call, I sent you an email with this summary of the issues we had discussed:

In my essay sent to you on September 7, and in our telephone conversation today, I put the "fundamental question" in these terms: can we achieve a 30% cut in Canada's total emissions by 2030, down to 524 Mt (as promised in Paris), if oil sands production is going to double from the 2014 level of 2.4 million bpd to 4.8 million bpd by 2040, which is the current NEB production forecast explicitly adopted by the Kinder Morgan assessment report in section B.2.1 at page 15, "Canada's Oil Supply Growth".

In our telephone conversation today I described that as the "nub" of the problem.

My main criticism of the Kinder Morgan report is that it is entirely silent about whether we can reconcile that kind of oil sands expansion with the 2030 target. The assessment report makes the claim that new provincial carbon reduction measures announced since September 2015 "will have an impact" on Canada's total emissions by 2030 (i.e., that all the new provincial measures will lower the annual level below the currently projected 815 Mt by 2030), but it fails to provide any quantified estimate to tell us *how much* the recently promised policies might actually reduce future emissions: see Kinder Morgan emissions assessment, section B.2.1.1, pp. 16-17.

In my telephone discussion with you on October 25, 2016 and in my email that day, I did not suggest or ask that you should defer to my views. What I was asking you to do was simply consider very carefully the troubling evidence, available from numerous experts,

about the path of emissions in Canada under current policies, and about the extreme difficulties we already face in achieving deep cuts over the remaining 14 years (now just 12 years) to 2030, and about the implications of adding, on top of our existing challenges, substantial additional growth in oil sands emissions. You had at hand ample resources to examine these issues. Nothing I was telling you was much different from what experts like Katherine Harrison and Simon Donner had already told the Ministerial Panel, and the warnings already given by energy economist Marc Jaccard and others.

In our telephone discussion, I referred you to a recent report by Marc Jaccard and his research associates Mikela Hein and Tiffany Vass. In his paper published on September 20, 2016, Jaccard showed that even if all new provincial and federal carbon reduction measures were fully implemented, Canada's total emission by 2030 would be reduced by about 8% below the 2005 level – far short of our 30% commitment. Jaccard, who you know and regard highly, is one of the leading energy economists in Canada. His report documented the difficulties we would face meeting our 2030 target, and he highlighted in particular why relying principally a carbon tax was not in his view a realistic policy, because in order to achieve our emissions reduction goals by 2030 a carbon tax would have to be increased to very high levels over the next decade – levels very likely beyond what the public will accept.

At the end of our call on October 25, you asked me to forward the link to Jaccard's recent paper, which I did. In a brief reply on October 27, you thanked me for sending the link and also for "articulating the 'nub' so clearly". I understood you to have a good understanding of climate issues and to be knowledgeable about the details of carbon reduction policy. It appeared to me that you appreciated the seriousness of the "gap" between Canada's 523 Mt target and the limited cuts that could be achieved over the next decade under proposed new policies.

I also assumed that you had read the report of the *Trans Mountain Expansion Project Review*. The final version of that report was published on November 25, 2016, but the draft version "for public discussion" (essentially identical to the final version) had been available since May 19, 2016. You would have been aware of the limited scope of the emissions assessment completed by that review.

By November 28, 2016, you had surely read the report of the Ministerial Panel, publicly released on November 1, four weeks before the decision. You must have been aware that the Ministerial panel had unanimously found that the question had not been answered. The panel was not allowed to make "recommendations". But the panel identified crucial questions that had not been answered by the National Energy Board (NEB) inquiry or the *Trans Mountain Expansion Project Review*. The panel said at page 46 of their report:

Our role was not to propose solutions, but to identify important questions that, in the circumstances, remain unanswered.

The first "high-level question" that "remains unanswered", according to the three panel members, was whether the growth of emissions that will result from building the Kinder

Morgan pipeline can be reconciled with Canada's climate change commitment, which includes our 2030 emissions reduction target. The panel states the question this way:

Can construction of a new Trans Mountain Pipeline be reconciled with Canada's climate change commitments?

— Ministerial Panel Report, November 1, 2016, p. 46 <u>https://www.nrcan.gc.ca/sites/www.nrcan.gc.ca/files/files/pdf/16-011_TMX%20Full%20Report-en_nov2-11-30am.pdf</u>

The Ministerial Panel had concluded that this is one of the important questions that "remain unanswered". The Ministerial Panel's report was delivered to the government on November 1, 2016, and was publicly available within a day or two. The government did not respond. Four weeks later, the cabinet announced its decision approving the two pipelines – without any public comment on the unanswered question.

You were surely aware by November 29, 2016, that the *Trans Mountain Expansion Project Review* had not answered the fundamental question about whether planned oil sands expansion could be consistent with meeting our 523 Mt reduction target. You knew that the NEB report had excluded all evidence about that question. And you knew the Ministerial Panel had clearly stated on November 1st that the question remained unanswered.

It appears that when you, as our Member of Parliament, chose to support the government's decision (or as you put it to "respect the Cabinets right to approve the project"), you did so *knowing* that no inquiry process had determined that the increased oil sands emissions could be reconciled with our Paris Treaty commitments.

Why did you, as our Member of Parliament (well aware of your constituents' legitimate concerns about greenhouse gas emissions), decide to support the government on this matter when you were aware the Cabinet was relying on the *Trans Mountain Expansion Project Review* to justify its claim that "the project is consistent with Canada's commitments"? You knew that claim was untrue.

The Pan-Canadian Framework

We are left with nothing that offers us any reasonable assurance Canada can meet its emissions reduction target of 523 Mt. There was no inquiry process that addressed what I described as the "fundamental" question in my email to you on October 25, 2016.

Instead, Canadians are now told by Liberal MPs to place their confidence and trust in the *Pan-Canadian Framework* plan. The document was released on December 9, 2016 - a week *after* the government approved the two pipeline projects.

The *Framework* is a composite plan of future carbon reduction policies, none of them implemented when the document was release, and most of them proposing future measures or regulations that had not yet been developed. It was not the fruit of an

independent inquiry, or any kind of hearing process that might have allowed its ambitious claims to be tested by cross-examination or public scrutiny. It was an arrangement worked out by the Federal and provincial governments behind closed doors, unveiled publicly after the Order in Council was signed. In the case of Alberta, it offered up prominently a list of that province's policies (the 100 Mt oil sands cap, methane regulations, phasing out coal-fired electricity, etc.) that you featured in your April 27, 2018 letter to your constituents, which I have discussed above.

Alberta's new policies will contribute virtually nothing to the deep cuts we need between now and 2030.

Among its most egregious features, in making its bold claim that we can meet our 523 Mt by 2030, the *Pan-Canadian Framework* plan takes into account that 60 Mt of future "reductions" will be achieved by purchasing carbon "credits" from California (those are not cuts that will occur in Canada at all). Another 44 Mt Mt were attributed in the December 9, 2016 document to future undefined "additional measures" that are generically described as "green technology" and "technology and innovation", without any particulars showing which sectors or industries might achieve these future cuts. We have no way of verifying they will happen.

The plan also relies heavily on the future benefits of a national carbon tax, when in fact the only agreement so far is a carbon tax rising to \$50 per tonne by 2022, which falls far short of what would be required to achieve the promised future cuts.

The *Pan-Canadian Framework* plan is completely silent about whether the planned expansion of oil sands production to 2040 is consistent with the 2°C commitment. The International Energy Agency (IEA) has stated unequivocally that current "business-as-usual" projections showing continued growth of global crude oil production to 2040 are inconsistent with the goal of limiting the long-term rise of average global temperature to $2^{\circ}C$ – a climate policy commitment affirmed by all signatory countries (including Canada) under the 2015 Paris Agreement. The IEA has repeatedly warned that global oil consumption must begin to decline by about 2020 if we are going to $2^{\circ}C$ limit.

The projected growth of Canada's oil sands production to 4.5 million bpd by 2040 (which provides the economic rationale for approving the Kinder Morgan and Line 3 projects) is a business-as-usual projection by the NEB. A fundamental contradiction lies at the heart of our national policy, and is unaddressed by the *Pan-Canadian Framework* (see Note14 of my enclosed essay: Global oil consumption and the 2°C limit).

I discuss other aspects of the *Pan-Canadian Framework* in my enclosed paper, in Notes 10, 13, and 14.

It is clear that if oil sands production continues to expand as currently projected, Alberta will be unable to provide any significant contribution to solving our emissions problem. The *Framework* plan offers no reasonable assurance that the other provinces can make the deep cuts we need.

For these reasons, the risks of proceeding with the expansion of oil sands production are unconscionable.

Yours truly,

David Gooderham

Encl. Oil Sands Expansion and Kinder Morgan: The Emissions Implications (available online at <u>dagooderham.com/essays</u>)