

## Response to Prince George Council by BC Resource Coalition

Letter for presentation to Council regarding:

- August 25, 2021 University of Victoria Environmental Law Centre (“UVic ELC”) letter to BC Minister of Environment and Climate Change Strategy George Heyman and Environmental Assessment Office Executive Director Elenore Arend objecting to the West Coast Olefins Ltd. Project (“WCO”), and
- September 20, 2021 presentation to Prince George Council by the people calling themselves Too Close to Home.

---

Dear Mayor Hall and Council,

We would like to thank the City of Prince George for allowing the BC Resources Coalition to present our position on this matter.

The Coalition supports sustainable, sensible resource project development across British Columbia. We are pleased to present this letter to Prince George Council to provide a response to the above-noted UVic ELC and Too Close to Home communications, and to raise some additional salient points for Council’s consideration. The ramifications of supporting such a request from these people are very concerning. A precedent would be set and a message would be sent to current and future proponents that Prince George is not open for business. Not only does this risk losing current opportunities for the city, but we may never know what future opportunities we have missed if we don’t show an open willingness to factually evaluate potential projects.

BCRC is not specifically advocating for or defending WCO or its proposed project(s) in Prince George or the Regional District of Fraser-Fort George. Environmental, social and economic concerns of the project are the responsibility of the proponent and should be answered through the regulatory processes currently in place. However, we are writing to respond to several troubling arguments, tactics and assumptions in UVic ELC’s letter of August 25<sup>th</sup>, and in Too Close to Home’s September 20<sup>th</sup> presentation to Council. We further raise some considerations as Prince George and other local governments, regional districts, and Indigenous governments across British Columbia work to achieve a balance among environmental, economic and social priorities for the future prosperity of its citizens.

**Critical points for Council's Consideration:**

- BCRC acknowledges all human activity has impacts on the environment. Resource development projects have come to be considered “bad” projects, while renewable energy, emissions reduction or clean tech projects are assumed to be “good” projects. They all have some impacts, whether from the construction materials, the feedstock, the land disturbance, or the energy source, every project – including those considered as “clean”, have some adverse effects. This includes agricultural, residential, and commercial development that are often not subject to a review process and is the nature of our modern society.
- Pressure groups who oppose resource development or value added applications such as petrochemicals, biofuels or renewable energy have a right to do so. It is important that objections to such projects should be grounded in a realistic perspective on the role our resources play today and tomorrow - locally, provincially, nationally and globally and are based on sound, project specific facts. BC's industrial goods/products already have a built-in carbon advantage that must be considered.
- All projects including those that produce products for the world markets, should be considered with an open mind by all levels of government, with adherence to the environmental laws and regulations in place today, and mindful of the emerging technologies that can mitigate harmful effects including air and climate emissions.
- The request by UVic ELC's letter and the Too Close to Home presentation provides no additional benefit of environmental or social transparency or Indigenous engagement. These concerns are already well addressed in current regulatory requirements. This is a clear attempt to try to use the provincial government to pile on regulations adding cost and delay in an attempt to make a project economically unviable to permit. Preventing industry development will have consequences
- Foreign direct investment is dropping and Canadians are increasingly preferring to invest in projects overseas. This is a direct result of burdensome, unknown, and unpredictable approval processes. We must stop this bleed by better managing our EA process and focusing on Yes.
- The Coalition's view is that EAs shouldn't be easy tests. Projects not in the national interest or ones with significant adverse effects should not be approved without significant modifications (or at all). It should be a high bar and a difficult test but it should be known, predictable and continually improving. The EA process must protect the independence of regulators and the integrity of proponents' applications. Decisions should not be made, and additional regulations should not be implemented until the proponent has been given sufficient time to accurately and specifically answer concerns raised.
- Post-secondary institutions and industry are not mutually exclusive, nor is it evident that one is destructive of the other. There is no basis for the argument that they are. Working together can create funding opportunities, collaborative research, and attract

students to the institutions. In turn industry will be provided with cutting edge technology and skilled, trained personnel.

- The Coalition and our members have excellent working relationships with Indigenous Nations across the region as we engage to develop and execute projects across a range of sectors. We support the principles of the assessment and management regime that Blueberry River First Nations is undertaking together with the Province, which we anticipate will have much wider effect than Blueberry Treaty 8 territory.

In conclusion, we believe it is critical to get right the emerging legal balance of decision-making on environmental, economic and social priorities among Indigenous Nations, levels of government and project proponents. Pressure groups have a right to register their objections to proposed projects. However, the legal and procedural aspects of the requests by UVic ELC and Too Close to Home threaten to upend that emerging balance. We believe levels of government, including Indigenous Nations, should decide the future of projects, not pressure groups who, despite having no special standing or exceptional rights, seek to position themselves as the final arbiters of what should and should not be approved.

We respectfully encourage Council to review the information and perspectives offered above as you weigh the request of UVic ELC and Too Close to Home concerning the WCO project. As Council deliberates on your approach for that project with respect to the BC Ministry of Environment's EA process, we encourage you to also consider the wider implications for future economic activity – whether they be fossil fuel-based projects or not – within the jurisdiction of Prince George, and through your collaborative relationships with Indigenous Nations, other local governments and regional districts across British Columbia's north.

*It isn't true that facts never change minds, they just don't change minds that are already made up. If you see your ideas as identities to defend, you twist and resist data to rationalize your views. If you treat ideas as hunches to test, you embrace data to update your view.*  
– Adam Grant, Organizational Psychologist.

Sincerely,  
The BC Resources Coalition

## **APPENDIX A:**

### **Rationale for the Careful Consideration of the UVic ELC and Too Close to Home Request Concerning the WCO project**

#### **BCRC Background**

The BC Resource Coalition is a registered not-for-profit society founded in January 2020 in Prince George, BC. We advocate for sustainable use of Natural Resources within British Columbia through community, Indigenous, and Government engagement and consultation to promote the development and implementation of world-class environmental stewardship and manufacturing technologies. We encourage local and provincial governing bodies to enact legislation for the protection and sovereignty of British Columbia's natural resources value-added sector, establishing BC as a viable and diverse hub of industry and commerce.

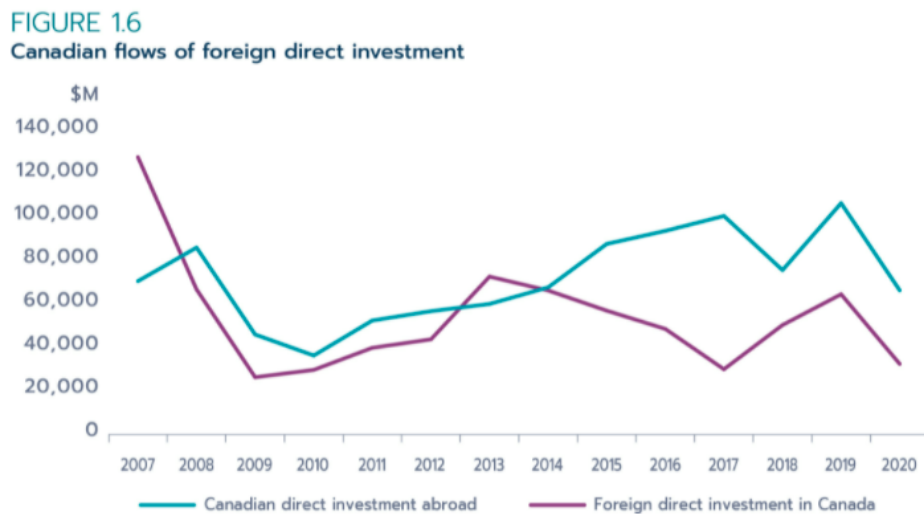
#### **The Economic Recovery and Project Failure by Attrition**

As Council is certainly aware, in addition to adapting to the effects of cyclical industries like energy, forestry, and mining, the region is impacted by the COVID-19 pandemic. Employment and economic activity are improving in most regions, but that is reversible, as the October 14<sup>th</sup>, 2021 Northern Health Region Public Health Order makes clear. Canada and British Columbia need to execute a smart recovery that leverages our natural advantages in resources, and balances energy and climate imperatives. (A “smart recovery” entails those political steps and policy prescriptions set out in two pieces by Resource Works: “[Team Canada for the rebuild](#)” (May 2020) and “[Canada at a hinge point on energy and climate](#)” (September 2021).)

As Resource Works pointed out in May 2020, a focused, clear signal must come from the country's political leaders that Canada is open for business (meaning foreign *and* domestic direct investment), and that this message must be accompanied by a clearly communicated stance by governments that disruptions, blockades, and other anti-recovery mischief will not be tolerated. The country must not return to the [civil disobedience](#) that can place a black mark beside Canada's brand internationally in our ability to address environmental and Indigenous concerns while keeping the country functioning.

All levels of government in this country have a role to play in setting the conditions for a strong economic recovery. This includes careful deliberation about development projects that are brought to political and regulatory authorities for approval or denial. Governments should remain mindful of the signal that is sent about Canada and British Columbia's openness for business when project applications that have been presented in good faith, and evaluated to high provincial and national standards by impartial regulators are then denied by Ministers of the Crown on narrow political grounds that do not always align with the public interest.

Canada is not presently known as an attractive jurisdiction for investment. The data bear this out: Foreign direct investment (FDI) trends over the past decade illustrate the challenge, and the implications for economic activity and Canadians' prosperity.



Source: Statistics Canada, Table 36-10-0025-01, retrieved May 31, 2021.

Source: Global Affairs Canada, *State of Trade 2021 – A closer look at foreign direct investment*.

[https://www.international.gc.ca/transparency-transparence/state-trade-commerce-international/2021.aspx?lang=eng#a1\\_4](https://www.international.gc.ca/transparency-transparence/state-trade-commerce-international/2021.aspx?lang=eng#a1_4)

While FDI into Canada recovered after the global financial crisis of 2008-9, it then tapered off in the 2013-2018 period. In 2016-17 when the widest divergence is observed, Canadian direct investment outflows exceeded total FDI into Canada by about \$70 billion. Much of the decline is accounted for in the energy and mining sectors. It is not a coincidence that this net divestment from Canada occurred during the very prominent failure, withdrawal or (federal) public acquisition of major oil pipeline projects and the unpredictability around federal legislation, regulation and the authority of such bodies as the Canadian Environmental Assessment Agency and the National Energy Board.

From the above chart, it can be concluded that international players steered clear of Canada based on what they saw and heard: that proposed resource projects experience significant regulatory delays (see below), and are the targets of significant, well funded anti-industry activism deploying a variety of tactics including social media campaigns that reach an activist audience far beyond those who can reasonably claim to be affected by a given project, subverting the public engagement phases of regulatory processes, and civil disobedience [at project sites](#), [at regulatory hearings](#), and [in major Canadian cities](#).

The loss of FDI is not purely academic. It has consequences for those Canadian, British Columbian, and Prince George businesses and employees that would have provided supplies, services or labour to those projects. And it has consequences for Canadian living standards. According to Global Affairs Canada's (Small Business, Export Promotion and International Trade) [State of Trade 2021 - A closer look at foreign direct investment](#), FDI brings higher productivity, enhances skill sets, and knowledge/technology transfer from investments in domestic projects.

A strategy of anti-industry pressure groups is to “bleed” major project proponents so that they give up on their Environmental Assessment applications (federally and/or provincially) and withdraw their projects. If these project proponents have an international presence, they take their FDI dollars to other jurisdictions, who may be more friendly to the industrial sector in question, but may also have less stringent environmental, legal or social welfare standards and protections. As [The Economist](#) (October 15, 2021) notes regarding the causes of the world's present energy crisis, geopolitics is a significant factor:

... rich democracies quit fossil-fuel production and supply shifts to autocracies with fewer scruples and lower costs, including the one run by Mr Putin. The share of oil output from OPEC plus Russia may rise from 46% today to 50% or more by 2030.

The evidence of major projects cutting ties and walking away is presented by several entities who study these topics. [CD Howe Institute](#) (February 2019), [Canada West Foundation](#) (November 2018) and Stikeman Elliott law firm ([June 2019](#) and [November 2019](#)) have each analysed major projects that had entered the federal Environmental Assessment (EA) process, under the 2012 legislation, to understand the nature and scope of completion risk. Findings included:

- high level of completion risk for energy projects subject to federal jurisdiction.



- up to 40% (20/50 in the Canada West study) of concluded project reviews from 2015-2019 were withdrawn or terminated by sponsors or rejected by regulators.
- for projects that were terminated by proponents, review times ranged up to 102 months (or roughly 8.5 years) and averaged 41 months (roughly 3.5 years). For projects that were rejected, the timelines ranged up to 124 months (or 10.3 years) and averaged 41 months (or roughly 3.5 years).
- For the largest and most controversial energy projects, the overall completion risk may be even higher.

For clarity, the Coalition's view is that EAs shouldn't be easy tests. Poorly designed projects, ones not in the national interest, or ones with significant adverse environmental effects should not be issued EA Certificates without significant modifications (or at all). It should be a high bar and a difficult test. However, Canadian environmental regulatory processes, when compared to peer countries, [lag considerably](#) in their statutory timelines, and in additional unscheduled delays. Some pressure groups' tactics play a significant role, in the form of extensive (and occasionally spurious or out-of-scope) [written Information Requests](#) (IRs), a formal phase of EAs, to which the project proponent has to prepare a response and file it with the regulator; and/or disrespectful or disruptive conduct at EAs when the chosen format is a public hearing.

We note that this is the principal request of UVic ELC's letter to Minister Heyman and Executive Director Arend: to refer the WCO project to a panel for public hearings. Based on British Columbia experience with two oil pipeline project reviews and BC Hydro's Site C dam project review, environmental pressure groups know that this format offers a more public stage and greater opportunity for opponent group members and affiliates to make their points in a way that can lengthen and even derail the intended purpose of the EA.

In terms of our concerns with this approach, the core of the Coalition's concerns about the presentation of the pressure group Too Close to Home in which it sought to have Prince George Council make a motion to press the Ministry of Environment to hold a combined EA of the WCO project by public hearing is that it seeks to a) overturn the emerging balance of authority over environment, land and resource use decisions between elected levels of government and Indigenous nations, and b) supplant existing law and policy with environmental advocates as adjudicators of what is best for the public interest.

The remainder of this letter discusses the key elements of the environmental legal and regulatory setting and Indigenous authority, with reference to potential adverse impacts of the Too Close to Home and UVic ELC submissions on sensible project development in British Columbia, particularly in the central and northern regions.

## **Local and International Projects facing “Environmental” Resistance**

A great concern to the BCRC is that the continuing and constant resistance to any major project of any kind is extremely damaging to progress being made as a society. In an attempt to stifle the “bad” projects, more and more regulation, review and bureaucracy has been implemented. These same policies and procedures are then also used as the weapon against the “good” projects. In the spirit of a fair and equitable assessments we are seeing an ever increasing number of projects delayed, shelved or stopped outright due to a small vocal voice. This can be seen on the global stage. The undisputed electric car leader, with the vision to electrify the transportation sector seeing resistance and delay to their electric car factory in [Berlin](#) by environmental groups. In the US, there are numerous proposed transmission lines like the grain belt express that are crucial to carry renewable energy. They are facing [stiff opposition](#) and regulatory delays. These regulations have been largely created in the past few decades to limit oil and gas transmission lines and are now being used as a weapon against the very projects intended to replace those opposed.

We are seeing the same thing closer to home with only one LNG project currently under construction from 20 once proposed. This has [robbed First Nations](#) of opportunity while there is a global energy crisis causing coal demand to soar. The Site C project is now well under construction after years of regulatory delays yet there are still calls to cancel it and fight climate change in the [same breath](#).

It is important to recognize these trends and ensure that we are looking at projects with realistic expectation, appropriate levels of regulation and impacts at a macro and micro level. Having tunnel vision will only leave us stuck in the presence, with no new projects and no new opportunity.

## **Importance of Industry to Post Secondary Institutions**

In the presentation made to Prince George City Council on September 20<sup>th</sup>, 2021 Council was informed that development of the WCO project would be destructive to the local University. This is a false narrative, unfounded in fact. Industrial development is crucial for post secondary institutions. It is critical for providing funding and donations to these institutions, and provides funding and research opportunities for industry-academia [collaboration](#). The institutions in turn provide education and training for the skillsets demanded by industry. Students and researchers alike are attracted to institutions that have local industry specializing in their fields of study.



UNBC has again ranked as the [top university](#) in its category in Canada. Despite this there is still significant opportunity for growth. With the recent addition of a [Civil Engineering program](#) there has already been a major [donation](#) from industry partner TC Energy. This will only grow with additional STEM programs at the University and collaboration with industry. UBC sees significant support from BC industry such as UBC's [Pulp and Paper Research facility](#) going strong for over 40 years, or [BRIMM](#) which connects mining researchers with industry. The possibilities are endless when Universities and Industry work together. To claim otherwise is a detriment to local industry, the university and the region.

The opportunities aren't only limited to the University. CNC can also see huge benefits from collaboration with industry. CNC's [strategic plan](#) states, "New funding sources and efficiencies will be required to fuel future College growth." Trades are critical for industry and creating a strong demand for these high paying jobs with continue to support these programs. Support from new and innovative industries can fuel this growth.

The BCRC encourages these groups to work together and hopes that the City of Prince George will be supportive in this endeavor.

## **Workcamps**

Workcamps are important for rural resource development. These should be supported where necessary but should not a reason to negatively view major project. It is unlikely any project in or near the city will one. Prince George's strong skilled trades and growing hospitality industry is uniquely positioned to benefit from and attract projects.

If we camps are truly a concern to a community where one is proposed then the methods are recommendations outlined by [Community Development Institute](#) at UNBC. It is also an excellent example of the positive research that can come from Industry/University collaboration.

## **EA Act 2018 and Regional Environmental Assessments**

Regarding UVic ELC and Too Close to Home's request of the EAO and Prince George Council that the proposed WCO project be subjected to a Regional Environmental Assessment (REA) (under the Environmental Assessment Act 2018), the Coalition recognizes that there are mechanisms in place for such a request.

In our view, it makes sense – in appropriate cases – to have reviewable projects in British Columbia evaluated in the regional context, particularly with reference to Indigenous nations priorities and ways of life in regions of the province that have historically experienced significant industrial development, namely the northeast / Treaty 8 territories. The *Environmental Assessment Act 2018* and Regulations provide for REAs to take place, to assess wider and cumulative effects of reviewable projects.

A reference case for a jurisdiction that has for a decade employed Cumulative Effects Assessments (CEAs) or ecosystem-based management tools to guide individual project approvals is [Norway](#). It has a well-defined and well-understood (by project proponents and the Norwegian public) approach to development of its offshore marine areas for a range of sectors and activities: oil and gas extraction, off-shore power generation, shipping and fishing. As British Columbia and local levels of government look to develop a similar framework here, it could do worse than adapt some best practices from a country that has managed to implement a sustainability framework without impeding economic activity, or gaining an international reputation as a jurisdiction where projects fail.

We note that UVic ELC in particular has requested the Ministry of Environment and the EAO to conduct an REA of the WCO project, and that its letter takes pains to point out that this regulatory process sits outside the EAO's decision to grandfather WCO's EA application under the previous legislation. There are many implications to introducing an REA into the environmental regulatory process, as the Business Council of BC [sets out](#). An REA essentially introduces a land-use planning tool into an environmental evaluation:

REA is better for looking at the potential hypothetical futures based on a shared understanding of “what’s important” and how to identify both apportionment of burdens from and among land and resource users, as well as realization of the opportunities and benefits from development. But let’s be clear, REA basically amounts to land-use planning (LUP), albeit on a smaller scale than British Columbia’s history with LUP. A must have pre-requisite for REA in B.C. is a clear understanding of how the results of such a process(es) will be integrated into regulatory decision-making. Both CEA and REA are tools. Neither are panaceas.

The call for an REA may be entirely reasonable, but as UVic ELC must be aware, the COVID-19 pandemic has [set back work](#) by the Ministry of Environment’s on developing the REA framework and Regulation. In our view, the combination of the two requests by these groups represents a significant potential delay in the process: from a public hearing that

could devolve into a circus and a flurry of Information Requests, and from a yet-to-be completed regulatory framework, whose practical integration into a specific application is not yet clear. As we discuss above, the delay may well yield better answers. But it may also be a tactic whose desired outcome is that the project proponent simply walks away.

## **Supreme Court of British Columbia “Blueberry River First Nations” Judgement**

Unlike Norway, the most significant aspect that British Columbia (and the federal Crown) must incorporate into the evaluation and decision-making process for reviewable projects is Indigenous Nations’ priorities, rights and title. Even before Canada and British Columbia adopted the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), most project proponents embrace the engagement with Indigenous Nations (who are themselves sometimes the project proponents) as they propose their projects for EAs. This is an emerging area of law, policy and regulation, driven to a significant extent in Canada by case law.

The Coalition and our members have excellent working relationships with Indigenous Nations across the region as we engage to develop and execute projects across a range of sectors. We noted with interest the [Supreme Court of BC’s decision](#) on June 29, 2021 in Blueberry River First Nations (“Blueberry”) that require, in the Court’s judgement, “The parties must act with diligence to consult and negotiate for the purpose of establishing timely enforceable mechanisms to assess and manage the cumulative impact of industrial development on Blueberry’s treaty rights, and to ensure these constitutional rights are respected.”

We support the principles of the assessment and management regime that Blueberry is undertaking together with the Province, which we anticipate will have much wider effect than Blueberry Treaty 8 territory. The October 7, 2021 announcement by the Ministry of Indigenous Relations & Reconciliation that it has reached agreement on existing permits in the territory is most welcome. As the Province’s [press release](#) notes:

Once an interim approach is in place, the negotiation teams will work to reach long-term solutions that protect Treaty 8 rights and an Indigenous way of life. They will explore establishing areas for protection and developing ecosystem-based management systems to incorporate cumulative impacts into decision-making. The solutions will work to reset the balance promised in Treaty 8, ensuring environmental sustainability, protection of Treaty 8 rights and Indigenous culture, and stable economic activity and employment.

We look forward to learning the details of the interim approach – and indeed a final framework – for reviewing new resource project activities on Treaty 8 territories that balance Treaty 8 rights, the economy and environment. We anticipate that the final framework will offer improved certainty and a procedural guide for project proponents who wish to engage in resource activities together with Treaty 8 Nations (and beyond). Indigenous Nations are best-positioned to understand and define the balance among environmental conditions and economic and social development to achieve their own priorities and objectives.

### **Relevance of Global Energy Supply Crisis to British Columbia’s upstream oil and gas, and value-added projects**

The way in which the above discussion is relevant to British Columbia’s energy setting, and to the presentation to Council on September 20, 2021 by Too Close to Home (incorporating by reference UVic ELC’s letter of August 25, 2021) is as follows:

- The BC energy sector, comprising hydroelectricity, renewables like wind and solar, and yes, fossil fuels, provides a stable, firm source of primary energy to British Columbia residents and businesses.
- Natural gas represents a particularly important natural resource asset for British Columbia: it is abundant, easily accessible, and provides a fuel source and feedstock for a variety of domestic applications. It is the essential commodity in BC’s budding LNG export industry.
- We believe BC’s abundant and stable natural gas supply, which forms the backbone of much economically valuable industrial activity, is taken for granted.
- British Columbia and Canada have long been producers and exporters of raw natural resources such as energy and forestry commodities, and importers of their value-added derivative products – at higher prices – while economic activity, revenues and additional jobs go to other jurisdictions. A project such as WCO (and others that unlock the value-added opportunities from BC’s natural gas) when developed and delivered to today’s high environmental standards, and designed to abate future climate impacts as much as technologically possible, represents continued viability for the natural gas industry, and regional economic stability and prosperity for British Columbia’s central and northeast regions.

- The potential applications for natural gas liquids and other derivatives, as well as other projects such as hydrogen and helium production can stabilise the entire energy value chain, on which a significant proportion of BC's northeast prosperity depends, and forms a continuing Crown revenue stream to the BC government and regional/civic authorities. In other words, if BC's natural gas industry is not healthy, British Columbians could well experience the same energy shortages and resulting hardships as some Asian and European countries are today.
- BC's industrial goods/products already have a built-in carbon advantage, and firms are working with the provincial gov't to minimise emissions and promote exports. This is based on an MOU between the [BC government](#) and the [Business Council of BC](#).

Pressure groups who oppose new (to British Columbia) applications for fossil resources such as petrochemicals based on natural gas have every right to do so. However, the Coalition's position is that objections to such projects should be grounded in a realistic perspective on the role our energy resources play today and tomorrow - locally, provincially, nationally and globally.

Fossil energy projects, including those that produce petrochemical feedstocks and products for the world, should be considered with an open mind by levels of government, with adherence to the environmental laws and regulations in place today, and mindful of the emerging technology that can mitigate harmful effects including air and climate emissions. The IEA's Clean Technology Scenario demonstrates the potential – with sufficient political will, regulation, investments and technology application by the private sector – to operate with decreasing impacts on the world's climate, and on local air and watersheds, over the coming decades.

To dismiss a potential project such as WCO based on yet to be determined potential environmental concerns, unfounded claims of “white elephants” or stranded assets, an incomplete accounting of Indigenous rights and priorities, and an aggressive interpretation of provincial environmental laws and regulations, is to forego the kinds of projects that will a) happen elsewhere in the world to meet future demand, and b) set a very difficult precedent in this province for future land-based and resource-based projects that can convey significant benefits with manageable environmental impacts.

## Global Backdrop for Fossil Energy and the Petrochemical Industry

To frame the issues before Council, it is important to consider the global setting, including pressures and challenges as governments worldwide grapple with the energy transition, both of primary energy demand, and demand for derivative products such as petrochemicals.

The present moment, perhaps to the surprise of many governments around the world, represents a reality-check for the greening of power grids from China to India to Europe and elsewhere. While the causes are myriad, the present energy supply crisis demonstrates the risks of adopting new technologies without the backstop that countries need as the energy transition unfolds over the next decade and beyond.



The Economist ([“The energy shock”](#), October 15, 2021) highlights the challenges that policymakers face, and that citizens and businesses must bear, as “The first big scare of the green era reveals grave problems with the transition to clean energy”. It points to natural gas as an essential bridge fuel particularly in Asia (as have many authorities over the past two decades, including the International Energy Agency (“IEA”) in its annual World Energy Outlook and other analyses). Prescriptions include increased investment in both natural gas and renewables (e.g. to address an LNG shortfall of as much as 14% of global demand), requiring safety buffers to manage intermittency of renewable supply, and improved environmental and climate policies and regulatory certainty for utilities to plan and develop to smooth the transition to large-scale battery backup and storage capacity.

In short, aggressive energy policy responses (and rich-world legal threats, investor pressure and fear of regulations) have dropped fossil energy investment by 40% since 2015. The focus – very appropriately – on reducing greenhouse gas emissions has become unbalanced from the real-world demand for energy.

From the perspective of our members, and as The Economist notes, “from investors’ perspective, policy is baffling. Many countries have net-zero pledges but no plan of how to get there and have yet to square with the public that bills and taxes need to rise.”



With prices for natural gas in North America hovering between [\\$2.50 and \\$3.50/mmBTU](#) for the past five years (per Trading Economics), until very recently many producers have merely been “hanging on” and maintaining production at [relatively stable levels](#) (per Government of BC, Natural Gas and Oil Statistics). As the energy crisis is making abundantly clear, without a stable reserve of diverse energy sources - including natural gas - while policymakers pursue emissions reduction strategies in primary energy supply can dramatically and adversely affect entire populations, and can have the perverse effect of slowing the energy transition as some countries revert to purchasing or producing coal.

Turning to the global setting for the petrochemical industry, according to the International Energy Agency it is projected not to contract, but rather to expand substantially in the coming decades. The IEA’s [Future of Petrochemicals Report](#) (October 2018) projects that the growth in petrochemical demand worldwide will account for one third of overall oil demand to 2030, and nearly half to 2050.

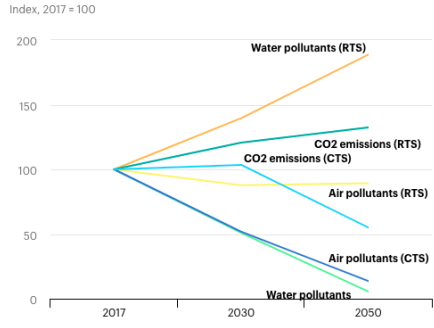
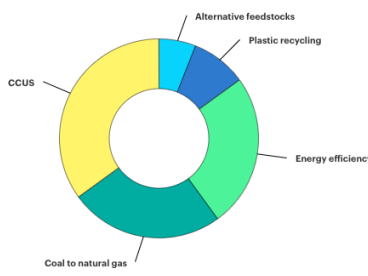
We reproduce below the key observations by the IEA in respect of petrochemical products produced today, and how they might be produced in future with available mitigation technologies and practices to limit air, water and climate impacts (its “Clean Technology Scenario” or CTS):

Petrochemical products are everywhere and are integral to modern societies. They include plastics, fertilisers, packaging, clothing, digital devices, medical equipment, detergents, tires and many others. They are also found in many parts of the modern energy system, including solar panels, wind turbine blades, batteries, thermal insulation for buildings, and electric vehicle parts.

Petrochemical feedstock accounts for 12% of global oil demand, a share that is expected to increase driven by increasing demand for plastics, fertilisers and other products.

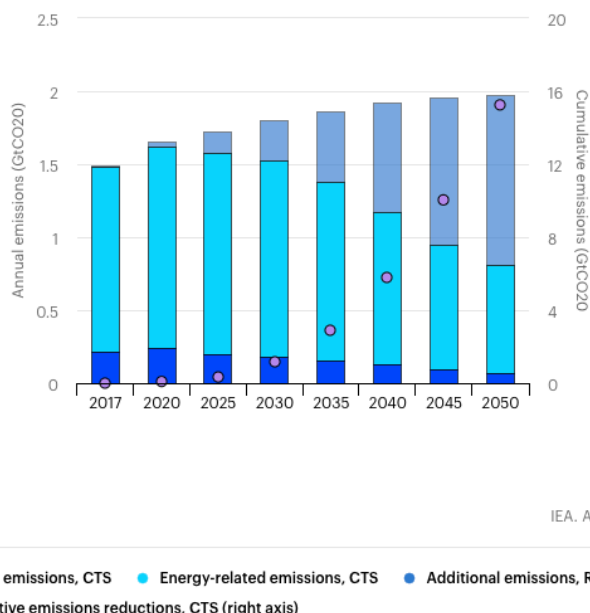
Although substantial increases in recycling and efforts to curb single-use plastics are expected to take place, especially in Europe, Japan and Korea, these efforts will be far outweighed by developing economies sharply increasing their shares of plastic consumption (as well as its disposal). The difficulty in finding alternatives to petrochemical products for many applications is another factor underpinning the robust overall demand growth.

The growth in demand for petrochemical products means that petrochemicals are set to account for over a third of the growth in oil demand to 2030, and nearly half to 2050, ahead of trucks, aviation and shipping. *Petrochemicals are also poised to consume an additional 56 billion cubic metres of natural gas by 2030, equivalent to about half of Canada's total gas consumption today.* (Emphasis added)

<p><b>Annual pollutants from chemical production in the RTS, 2017-2050</b> <a href="#">Open</a></p>  <p>Index, 2017 = 100</p> <p>2017 2030 2050</p> <p>Water pollutants (RTS) CO2 emissions (RTS) CO2 emissions (CTS) Air pollutants (RTS) Air pollutants (CTS) Water pollutants</p> <p>IEA. All Rights Reserved</p>	<p><b>Contributions to emission reductions of plastic recycling and reuse and alternative feedstocks</b> <a href="#">Open</a></p>  <p>CCUS Coal to natural gas Energy efficiency Plastic recycling Alternative feedstocks</p> <p>IEA. All Rights Reserved</p>
<p>Source: IEA, <i>Annual pollutants from chemical production in the RTS, 2017-2050</i>, IEA, Paris <a href="https://www.iea.org/data-and-statistics/charts/annual-pollutants-from-chemical-production-in-the-rts-2017-2050">https://www.iea.org/data-and-statistics/charts/annual-pollutants-from-chemical-production-in-the-rts-2017-2050</a></p>	<p>Source: IEA, <i>Contributions to emission reductions of plastic recycling and reuse and alternative feedstocks</i>, IEA, Paris <a href="https://www.iea.org/data-and-statistics/charts/contributions-to-emission-reductions-of-plastic-recycling-and-reuse-and-alternative-feedstocks">https://www.iea.org/data-and-statistics/charts/contributions-to-emission-reductions-of-plastic-recycling-and-reuse-and-alternative-feedstocks</a></p>

Direct CO<sub>2</sub> emissions by scenario, 2017-2050

Open 



Source: IEA, *Direct CO<sub>2</sub> emissions by scenario, 2017-2050*, IEA,  
Paris <https://www.iea.org/data-and-statistics/charts/direct-co2-emissions-by-scenario-2017-2050>

The IEA's Clean Technology Scenario identifies these emissions reduction opportunities, even while plastics production increases, largely in response to increased demand in the developing world:

- In the CTS, air pollutants from primary chemical production decline by almost 90% by 2050, and water demand is nearly 30% lower than in the Reference Technology Scenario (RTS), the base case for projections in *The Future of Petrochemicals*.
- The CTS also emphasises waste management improvements to rapidly increase recycling, thereby laying the ground work to more than halve cumulative ocean-bound plastic waste by 2050 compared to the RTS.
- In the CTS, a 45% reduction in direct CO<sub>2</sub> emissions is attained in 2050, relative to current levels, despite demand for primary chemicals increasing by 40%. Emissions are 60% lower in the CTS than in the RTS by 2050.