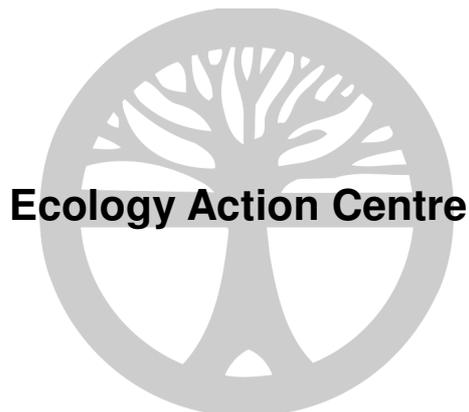


**Written submission C for Nova Scotia Environmental
Assessment Board Public Hearings on the Keltic
Petrochemicals Inc. Proposed LNG and Petrochemical
Plant Facility – Goldboro, Nova Scotia**

To

**Nova Scotia Environmental Assessment Board,
Mr. James Gordon**

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Introduction

The Ecology Action Centre has reviewed the impacts of the proposed Keltic Petrochemicals Inc. plant on the natural and social environment of Nova Scotia with reference to EAC's mandate which is *to promote a society in Nova Scotia which both protects and respects nature and also provides economically sustainable solutions for its citizens*. We ask whether this project is sustainable, whether it meets the needs of the local population and contributes to the long-term energy security of Nova Scotians.

The environmental impacts assessment (EIA) report was consistently vague in its terms, and did not offer a clear picture of the negative impacts or the benefits of the project. Below are some of our concerns and questions which require clarification from the proponent, as well as points the panel should seriously consider in their report. In our presentations we will be seeking clarification, confirmations and commitments from the proponent to some of these points and questions.

In the EIA it is indicated that people were supportive of a project despite lacking important information and details. *“Overall sentiment at this open house was supportive of the Project. However, people stated that they were getting tired of hearing the same things in meetings, and still not knowing how firm the prospects for development and employment opportunities were.”* (14-7) The EAC wants to ensure that the proponent will bring clarification to the local people during the public hearings. Realising that many regulatory agencies have already pointed out to the Panel the many gaps in the information provided about impacts and environmental assessments in the EIA, we will focus our presentations and written submissions on other points needing clarification, though there may be some overlap with government comments.

Use of Ambiguous Wording

The proponent lacks commitment throughout the report. This is noticeable by the choice of words and dismissal of impacts, which does not permit the reader to determine what will occur and what will not. For example, the Executive Summary concludes that “under normal operations none of the predicted Residual Effects are [sic] significant...Table ES-1 describes the predicted effect and the identified mitigation or avoidance measure which could reduce or eliminate the predicted effect.” (ES-6) While soothing, these words – and many in the detailed EIA – are not commitments. First, the impact of the project is not just under “normal” operations – what happens when accidents occur? There is an implication of emergency flaring once or twice a year and that “The flare at the SCB is also for emergency purposes only and will not be operating on a regular basis” (9-22)! What determines a regular basis? What if emergencies happen more often than estimated? What are the impacts then? Who decides what an emergency purpose is?

Who is defining the terms of the impacts, their acceptability and the level of compliance by the proponent? Even the “relatively few” significant effects outlined in the Summary are brushed aside:

“a small loss of habitat for terrestrial birds and animals is unavoidable” but does that make it acceptable?

“- significant changes will occur in aquatic habitat...” but they will be “...both positive and negative...”, suggesting that they will cancel out – but will they?

“- any disturbance of a cemetery will have significant impacts...Public consultation and monitoring...will ensure that no unacceptable impacts occur”. Consultation does not mean the public will be listened to; monitoring may simply measure the extent of the damage, not prevent it. And will the public determine what are “unacceptable impacts”?

“Major upgrades in road infrastructure and careful scheduling of Project related traffic will reduce impacts to an acceptable level.” How is “acceptable” defined? By whom?

Thus, we are assured that “Through careful design and planning, combined with prudent application of proven mitigation measures, Keltic has identified and addressed all potential adverse environmental effects, and reduced the predicted impacts to a low level of significance.” But again, who – or what - defines “prudent”? The people affected or the profit concerns of the promoters? “proven” – where? In places with similar populations, geology, climate (e.g., fog incidence), etc.? “all potential effects” or primarily those expected under normal operations - accidents, by definition, are not expected. Who defines what is a “low level of significance”?

Throughout the EIA, one asks these questions in trying to determine based on whose standard, whose definition and whose guarantee should the reader and decision makers put their trust. The reader is left with a mind full of question and doubts as to the reliability of the proponent’s commitment and accuracy in their reporting. For example, even under the plants normal operation conditions, the mitigation and avoidance measures presented are “identified”; as possible measures which might be undertaken and, if undertaken, “could” reduce the damage. What security is the company prepared to post to allow the responsible government agencies to take protective or compensatory actions for damages during the construction, operation, or de-commissioning phases? For instance, should we accept the assurance that removal of infrastructure “will be undertaken in full compliance with existing regulatory standards” (2-157), knowing the pressures companies exert on governments to change their regulatory standards? What guarantees does the proponent give that it is committed for the long term, since it has not provided any explanation as to how they will ensure having the financial capacity to rehabilitate the site? How can we be guaranteed that our health is being protected by the proponent’s mitigation measures? How can we trust the proponent to meet and exceed the safety standards or follow through with decommissioning? Especially when its own EIA is lacking full information on the impacts of the project, provides inconsistent information, is filled with noncommittal words, and leaves the reader unsure of the proponent’s ability to properly assess the projects impacts? The proponent has no track record with this type of project, and its EIA has shown very little strong commitment to a thorough impacts assessment.

Alternative and Economic Benefits

The EIA does not cover what would be the environmental impacts of siting the project in an existing industrial site, or what would be the economic benefits to the Province if they did so. The proponent explains cost as the major reason for avoiding the Straight of Canso and the Bear Head location, yet this is not enough explanation for the Panel to determine whether, given the richly diverse ecosystems of the preferred site, an alternative site would have less environmental impacts and more economic benefits.

“The cost effectiveness was determined based on a discussion of the ecological, economic, social, and cultural gains associated with the employment of a particular method against the actual monetary cost.” (6-8) *“... team’s professional judgement and experience with comparable projects.”* (6-8) and table 6.0-1 Who is this Team? What were the ecological, economic, social and cultural elements looked at for alternative sites like the Strait of Canso or Bear Head? Since this was a qualitative assessment, what were the criteria? Who was consulted in ensuring these “gains” were adequately identified and compared?

The EAC contends that though this type of development is not advantageous to Nova Scotia in the long term, if it does occur, it would bring more economic benefits and less environmental impacts in an existing industrial site.

Petrochemicals

For example the petrochemicals products are being shipped to foreign markets for manufacturing. Yet the EIA states that *“The petrochemical component of this Project provides new value added industry to Nova Scotia and is a long term alternative to Nova Scotia being solely an exporter of natural gas.”* (5-2). The problem is that Nova Scotia needs to import the natural gas in order to export plastic resin and natural gas? Why should Nova Scotia be an exporter of natural gas and plastics? Why do we not just use our natural gas here and reduce our imports of oil and coal? Wouldn’t situating the Keltic project next to existing manufacturing industries facilitate the creation of plastic manufacturing in the Province? Would this not create more jobs in Nova Scotia? Wouldn’t that be a better economic solution for Nova Scotia in the long-term?

If placed at the current location, a Nova Scotia company who would want to use the plastic resin created at the facility would likely have to incur high costs for locating in the current wilderness behind the Goldboro Industrial Park, and would have more environmental impacts. It would also require more time and delay the creation of jobs and a place in the market.

The same applies for the energy aspects of this project. The EIA states that *“The Keltic Project provides the further additional benefits of ensuring the diversification of the energy supply and long term viability of the natural gas industry in Nova Scotia. From an environmental standpoint, natural gas provides a clean source of energy and presents an opportunity to improve air quality through the potential to convert coal or oil fired power generating facilities.”* (4-5). Currently provincial regulations make it difficult for Nova Scotia’s power provider to convert its operation to natural gas. If the natural gas imported was to be used to replace our Province’s use of oil and coal, as is the reason for exporting to the USA, then the above statement would be true. However, this is not the case. The natural gas and its green house gas emissions and air pollutants will be adding to Nova Scotia’s over all dirty fuel, and will not reduce in any way our dirty emissions. The Keltic project is an addition not a subtraction of air pollutants and carbon emissions.

Furthermore, the statement that natural gas is a clean source of energy is based on which comparison? Is it a cleaner source of energy than energy efficiency, wind power, tidal stream, or hydropower? Is liquefied natural gas that much cleaner than oil and coal burning considering the whole contribution of global warming gases from extraction to final use? Is not also true that if this was a wind farm instead of a LNG and petrochemical industry, than

the air emissions would be zero and therefore be a cleaner option for providing Nova Scotians with energy?

Finally, this statement is also incorrect as the majority of the “energy” supplied by the project is flowing to the Eastern United States markets and therefore provides no diversity to Nova Scotia users. Furthermore, how can the “long-term viability” of the natural gas industry be assessed given that this is an imported source of energy, and does not guarantee that natural gas companies will be able to tap into the small natural gas reserves under Nova Scotia’s jurisdictions in the long-term. The petrochemical industry is created based on an imported raw material and the only local material used is our water. How can Nova Scotia have a long-term viable petrochemical industry when it cannot happen in the first place without importing the material? How is this added-value?

Cogeneration and Energy

The Cogeneration facility would also be of greater gain to Nova Scotia if situated in an existing industrial site. The EIA states that “*There are certain economic efficiencies that can be achieved by having a petrochemical complex, an LNG terminal and a cogeneration unit integrated on a common site.*” (4-6) This is true. What would be the economic benefits if other manufacturing industries were present around it? Could the waste and by-products be used as a source of supply for another local industry? Wouldn’t the proponent gain more economic returns from selling the energy it produces to near by users? In an existing site, companies could remove themselves from the main power supplier, which uses coal and oil, and switch to using the cogeneration facilities energy. Also, the cost of doing this conversion would surely be affordable given the proximity to the cogeneration facility, and could be done rather rapidly once the cogeneration facility is operational.

The cogeneration facility is a useful approach to increasing energy efficiency and reducing pollution. However, it would bring more economic benefits to Nova Scotia as a whole if the project was situated where this technological opportunity can be utilized by other users currently in need of reducing both their energy costs and their green house gas emissions.

Access

The situation of the plant would also be more beneficial for jobs and save costs as well as noticeably reduce its negative environmental and health impacts if it was situated close to an existing highway capable of handling the truck loads.

The proponent and the EIA look at the current site for feasibility from a shipping perspective, which still needs to be proven from an environmental and health perspective, but has not located the site based on the best land routes. The location of the site from the beginning involved disrupting or rerouting highway 316 and therefore could only be safely and easily accessed through the creation of a highway which would have cut through road-less wilderness, multiple rivers and wetlands, and caused enormous environmental impacts. Current industrial site, even coastal ones, have the road access to ensure safe routes for commuters and truckers, create less environmental and health impacts and are closer to residents of potential workers thereby reducing the total amount of vehicle emissions.

Finally, the location of the Keltic project in Goldboro would create the type of socio-economic adverse effect in the long-term that comes from creating a one-industry-one-resource town. Nova Scotia needs to diversify its economy and should seriously ponder the long term impacts of building the economy of rural isolated villages on imported one resource. After all, what will be the economic cost to the Province for the unemployment and economic adverse effect that will occur when the site will cease to operate? During those potential 50 years of operation what will the cost be to the Province for preventing the degradation of the surrounding communities health and environment? Who will bear the cost of the adverse long-term ecological and health effects?

Sustainability

In the EIA the proponent states that “*Creation of a value-added industry utilizing the existing offshore infrastructure and supplementing with LNG imports creates long-term sustainable economic benefits to the local area of Goldboro and the Province.*” (4-9) What is the proponent’s definition of long-term, sustainable and local area? The project is expected to survive at the most 50 years if all goes well. Is this long-term? How long will some of the environmental and health effects coming from the site’s chemical nature linger in the environment? Is the site sustainable when 50 years is less than three generations, and petrochemical industries have only been in existence for less than 100 years? How can the project be sustainable if you cannot guarantee long-term availability of supply? How can the proponent define using the offshore as long-term when it is widely known that current local supplies are running dry within the first 20 years of the Keltic project? With the North American economy slowing down, how can future offshore supply be guaranteed?

It is important to remember when making this “long-term sustainable economic benefits” claim that the project relies on a non-renewable source which is being imported from yet unconfirmed suppliers. Furthermore, these suppliers are controlled by countries with long histories of political unrest, such as Indonesia, Nigeria, Russia, etc. As well, the demand for natural gas, and liquefied natural gas, is currently strong not only in North America but Asia, Middle East and Europe all of which are closer to the sources, have higher populations which are becoming closer to the material and energy consumptive levels of the USA, and can gain more political advantages by doing business with the supplier countries? The proponent’s sustainable and long-term claim is not defined or proven.

When explaining the benefits of the cogeneration facility, the EIA states that “*This approach fits with the Province’s encouragement of pollution prevention which shows that environmental sustainability can be well matched with economic prosperity.*” (5-2). It is true that the cogeneration plant fits with pollution prevention, if one disregards the presence of renewable energy sources available to Nova Scotians. However, where does the petrochemical plant fit in with the Province’s pollution prevention approach? There is no prevention of pollution in this project given the lack of avoidance approach taken by the proponent in the EIA, and the intense water consumption required and air pollutants emitted by the site.

It is true that environmental sustainability and pollution prevention is a fundamental part of economic prosperity. However, the Keltic project is neither environmentally sustainable, nor preventing pollution, and the role it will play in the Province’s economic prosperity has yet to

be proven given the long-term environmental and health costs associated with the project which will be the financial burden of all Nova Scotian taxpayers.

Other Points

In table 6.0-1 the report describes the physical area of alternative sites, Bear Head and Canso Straight, as “steeply sloping terrain” in explaining the high cost to the proponent of the alternative. Looking at picture of Bear Head it does not look much steeper if even than Goldboro. Why is the terrain in Goldboro not indicated as an alternative assessment criteria?

On page 6-13 the proponent mentions use of sea water and determines this alternative too environmentally unfriendly and too costly to use. Yet numerous times throughout the report, using sea water as an alternative is mentioned as a likely option for the long term? Therefore, why has the cost and environmental analysis not been carried out?

Must Consider

The environmental, social, cultural and economic impacts of this project are significant and long-term. Why should one generation of job seekers with one generation of private investors determine the future of many generations and several communities? Who will be accountable for long-term consequences of impacts to communities and people? The proponent? The Province? The municipality? Or will the burden fall on the future generations as the burden of the Sidney Steele legacy, the Tar Ponds, has fallen on us in every part of Nova Scotia? How will accountability be guaranteed?

Why are would we accept this project’s heavy safety, health, environmental, social, cultural and economic toll just to provide a market that is created mostly from the lack cost effective energy efficiency practices in the United States? If they are not willing to accept this toll for themselves, why should we?

Conclusion

The Ecology Action Centre believes the environmental assessment board panel needs to seriously consider the economic arguments brought forth by the proponent and whether or not they are in line with the vision Nova Scotians have for their Province. As well, considering the long-term, non-reversible effects the project will have on the environment, it is important that the Panel make a clear decision as to the sustainability and feasibility of this project. The Panel already knows from the public review of the environmental impacts assessment report by the proponent that major health impacts and environmental impacts are not accurately assessed. In understanding the wide array of impacts this project will have on Nova Scotia, the EAC hopes this paper helps remind the Panel, that this project is not sustainable, does not meet Nova Scotia’s energy needs and is improperly situated in the wilderness of Goldboro.

Supporting written material for this submission will be provided to the Panel by the regulations deadline. As always we also refer the Panel to our website (<http://ecologyaction.ca/lng/>) for more information.