

## **Introduction**

The University of Waterloo's Environmental Assessment Review Society has completed its evaluation of the Bay du Nord Offshore Oil and Gas Project (#80154) proposed by Equinor. It is our opinion that the project proposal should be rejected by the Minister. We recommend that investments in the proposed project be allocated into areas which can proactively address the environmental and economic concerns of the province such as renewable energy development and pandemic recovery.

## **Biophysical Impacts**

The Environmental Impact Statement lists direct or indirect contamination through the food chain as a potential unplanned project impact. However, it does not adequately address the threat nor the potential for species at risk vulnerable to dramatic environmental changes such as the proposed effects of this project and implications to the greater Atlantic food web. As species counts may shift, this has the potential to harm the country's GDP at large due to impacts on the fishing industry. For instance, the Atlantic cod crisis overfishing down the trophic levels, which ultimately depleted prey fish and top consumers across the food web. When one species is impacted, every species is impacted. Patterns of bioaccumulation, or accumulation of a contaminant in a single species, and biomagnification, or accumulation of a chemical through greater concentrations throughout the food web, as a result of contaminants are essential to consider, as they may alter the already vulnerable Atlantic food web and species diversity. Further, a DFO science report has indicated that this project may have risk of uncontrollable blowout due to its depth of drilling. This project is predicted to see some of Canada's deepest production wells (1,200 meters), as compared to the current drilling depths (100 meters). This risk of uncontrollable blowout would risk deep sea coral and sponge communities - as well as risks to whales, some of which are already endangered due to ship strikes. A blowout at the wellhead at this location is estimated to take 18 to 36 days to cap, leaving species and those reliant (industry, social, cultural) on them vulnerable to these effects.

The Environmental Impact Statement further states that marine fauna found off the coast of Eastern Newfoundland include 20 marine mammals and several sea turtle species, which are considered to be at risk or of special conservation concern. Key feeding grounds and several Ecologically and Biologically Significant Areas (EBSAs) have been identified due in part to their known importance to a number of marine mammal species. As a result, impacts of the project may have particular significance in the likelihood that they would affect ecologically important and sensitive species.

## **Socio-Economic Impacts**

While the Bay du Nord project would support economic development both within Newfoundland and Labrador and at the national scale, the effects of the project may limit or produce net-negative economic benefits. As mentioned, the project has potential to negatively affect marine species through changes to habitat and food availability. This

is particularly significant when examining the region's context. The project site for instance overlaps with fisheries of crab, shrimp, fish, and lobster used both domestically and internationally. As a result, impacts to these fisheries may negatively affect the global fishing sector, creating impacts both to Canada's Atlantic provinces as well as at the global scale. While the Bay du Nord project has been celebrated for its potential to support economic developments within Newfoundland and Labrador, the province may be hit hard by these potential impacts. In 2016, the province's fishing sector produced over \$432 million worth of product and accounted for 2.4% of the province's total GDP.

While we recognize there is a pronounced need for jobs in Newfoundland and Labrador which the Bay du Nord project could help alleviate, we are cautious of the economically risky investment the project represents. In general, oil and fossil fuel projects closely follow cycles within the market which can affect their output and overall employment. For example, the Bay du Nord project was initially stopped due to the decline in gas prices which was experienced during the COVID-19 pandemic. Additionally, while the project's 30-year lifespan bodes well in terms of long-term employment and economic opportunities this exposes the project to more variability which may impact the extent of these opportunities. As there is no indication of how the project will contribute to the long-term economic condition of the province, there is a risk that declining output in the latter half of the project, combined with fluctuating prices, could result in early closures that prevent adequate transitions. As a result, there also does not appear to be adequate consideration of how the project will prevent a boom-and-bust cycle from forming once the project is completed. Because of these aspects of the project planning, we do not agree that the Bay du Nord project represents an ideal investment in the province. Rather, we would recommend proactive options that address long-term employment goals with emphasis on training and adapting the labour force to a changing energy system. Skills in oil and gas drilling, for example, are highly transferable to sectors like carbon capture and geothermal power. As the oil and gas industry represents a significant portion of employment in Newfoundland and Labrador, these opportunities represent more viable long-term solutions for employment in the province.

This project is projected to emit 177,770 and 257,715 tons of Carbon emissions per year, which accounts for 2.4% of Newfoundland and Labrador yearly emissions. Over a 30-year period, the anticipated lifespan of the project, it is estimated that between 5,333,100 and 7,731,450 tons of carbon will be emitted. Floating production storage and offloading (FPSO) accounts for 60%-90% of these emissions. Environment and Climate Change Canada has requested that Equinor develop GHG reduction plans for all phases of the project to comply with the Federal Government's 2030 GHG reduction targets. There is no mention of what this reduction plan would entail and what actions would be taken if the project does not reduce emissions. These GHG emissions are greatly concerning, and we echo points made by other commenters about the project's ability to hinder Canada to meet its 2030 emission targets and commitment to the Paris Agreement. Additionally, it is stated in the Environmental Assessment Report that GHG reduction measures will only be incorporated into the project if economically feasible. Knowing this, it appears that Equinor is only willing to reduce emissions if

economically beneficial which not only contradicts the Federal Government's reduction plan but also Equinor's low carbon strategy. If there was a reduction plan with stated reduction rates and disciplinary action, then we would be more likely to approve this project. However, as an oil and gas project, there are inherent downstream GHG effects of the Bay du Nord project which have gone unaccounted for in the project's EIS.

Although Equinor has ambitions to achieve net-zero emissions by 2050 and become the lowest-emitting oil project in Canada, the company is aiming to increase oil and gas input over the next 5 years. It should be noted that the International Energy Agency has claimed that new fossil fuel extraction projects are unadvisable to meet our target of net-zero carbon emissions by 2050. This area off the coast of Newfoundland and Labrador can also be host to large scale off-shore wind development instead of or complementary to off-shore oil development. Despite rapidly falling costs to build wind energy systems, there is no indication that Equinor has considered this alternative, whether alongside or instead of oil extraction in the Bay du Nord. Throughout the next three decades, Canada will be transitioning to renewable energy sources to meet pressing climate targets while Equinor increases their fossil fuel inputs throughout the lifespan of this project. As such, due to such drastically conflicting claims, it is not clear as to how Equinor plans on achieving their demanding environmental objectives.

Furthermore, projects of this temporal magnitude can have unforeseen delays, accidents, and repercussions that will only become apparent once significant investment has occurred past a point of no return (or at least unadvisable return). For example, the Bay du Nord Project may potentially include additional wells and tie-backs to the production facility which entails unaccounted resources and time. Thus, foresight and overestimation are key in uncovering and preparing for future hidden costs.

With regards to the global implications of increased fossil fuel production and inequitable impacts from the climate crisis, most recent studies have shown that to achieve the Paris climate goals a large majority of hydrocarbon reserves in Canada will have to be left unextracted. Considering the ongoing need for development in the global south, it may be valuable to consider if these countries with hydrocarbon reserves should be allowed to develop their reserves without additional pressure on the global carbon budget from wealthier nations. In addition, the EU has already begun work on the "European Green Deal" which will support EU countries in transitioning their economies to low-carbon. European oil and gas majors are currently developing and implementing plans to comply with this goal. Whether through voluntary action, such as the Danish state-owned company Orsted transitioning to become a wind energy company, or through judicial action such as Shell being ordered to greatly reduce their GHG emissions in half by 2030 (*inclusive of scope 3*), EU companies are already or will be soon weaning off of new oil and gas projects. As the proponent is headquartered in Norway, one of the wealthiest countries in the world per capita, Equinor may soon become the target of new legal action or host to rapid decarbonization attempts as the EU comes closer to 2030 deadlines. While the operation of the Bay du Nord represents a relatively small portion of Canada's total GHG emissions, no analysis of its scope 3 emissions (emitted upon use of the actual product being developed - oil) has been conducted, tarnishing the proponent's credibility for purporting to comply with global

climate goals. With the current international climate emergency, this project is not generally in our best interests due to what has been previously discussed. The latest Intergovernmental Panel on Climate Change (IPCC) report should remind everyone that there is no room for the development of new reserves in oil, especially if we are to meet such climate targets.

Due to the recent invasion of Ukraine by Russia, rising oil prices have created renewed interest in the Bay du Nord project as a potential solution for bolstering energy security in Canada. However, given the long 30-year time scale of the Bay du Nord project, the project is unlikely to provide the immediate benefits expected. Moreover, changes in political climate will likely occur over the coming 30 years and so recency bias should not influence our decision to proceed with this project. It is also important to caution conflicting interests. Equinor is 67% owned by the Norwegian government and as highlighted by current political conflicts in Europe, it may not be advisable for Canada to partake in a large scale project that they do not have majority ownership of for the long-term

## **Conclusion**

While the argument could be made that the Bay du Nord project is necessary for economic and social development, this argument does not consider the subsequent social, economic, and environmental impacts of the project which would likely negate these potential contributions, or the viable alternatives to support sustainable development. While fluctuating oil prices spur arguments for greater need for energy security in Canada, these same fluctuations highlight the insecurity surrounding fossil fuels in general. Rather, investments in alternative energy sources may create proactive solutions to economic development issues in the context of changing energy systems, political climates, and efforts to address climate change. We conclude that the Bay du Nord project should be rejected by the Minister and relevant funds should be invested into more economically, socially, and environmentally sustainable avenues to support the province and Canada in the long-term.

## **About Us**



The University of Waterloo's Environmental Assessment Review Society (UW EARS) is a student-run Waterloo Undergraduate Student Association (WUSA) club. We represent students passionate about environmental assessment and its role as a pathway for sustainable development in Canada. We work collaboratively across faculties to review current high-profile assessments and environmental/social justice projects to submit formal comments during commenting periods based on our expertise in assessment and related fields. Our greater goal is to foster the next generation of assessment practitioners while contributing to the assessment field and raising awareness of evolving assessment practices in Canada. Comments are developed in consultation with students from the University of Waterloo but do not represent the official stance of the University on the project.