

# REGIONAL News

## BRITISH COLUMBIA News

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### Does Science Matter Anymore in Canada's Business-minded Fantasy Conservation Policies?

*"A shallow, but presently very powerful environmental movement, and a deep, but less influential movement compete for our attention." (Arne Naess, 1973)*

Arne Naess' early insight that the environmental movement was dominated by shallow-minded self-promoters only too willing to comply with the corporate desires of government to enhance their careers, is a useful guide to understanding the 30-years failure of Canada's conservation and climate change programs, which the Commissioner of the Environment and Sustainable Development, Jerry DeMarco, aptly summarized, and to which the Minister of the Environment, Steven Guilbeault, took personal offense.<sup>1</sup> The depth of commitment one has to the actual protection of nature is a measure of the depth of one's environmental values. Individuals and organizations only too willing to compromise the integrity of ecosystems by making business compromises to maintain and work within the status quo can only expect and accept the shallowness of short-term solutions. The error is to misrepresent shallow environmentalism as a profound environmental shift.

The most important environmental decision taken in British Columbia this decade is likely to be the Roberts Bank Terminal 2 (RBT2) decision announcement in early April 2023, because it reveals the shallowness of the government's environmental rhetoric, even at its most powerful. It came after yet another unsurprising announcement at odds with the government rhetoric and expensive publicity that Canada has not met, and is nowhere near meeting, its climate change and biodiversity objectives and commitments. In many important ways, this political ministerial decision could be the proverbial straw that breaks the camel's back. It is important not just for the calamitous long-term implications for Salish Sea ecology, predicted by the scientific community, most notably by Environment Canada's own scientists who urged Minister Guilbeault to reject the project, but for its social implications. The Impact Assessment Agency's own report, which reviews all considerations (ecological, socio-economic and cultural), strongly recommended that the project be rejected. The decision is also culturally important for what it tells us about the current diminishing status of science in our society.

Roberts Bank is important, not just because of its ecological importance in the Salish sea region, but for the extent to which that ecological significance has particularly been eroded since contact, and particularly so over the past 50 years during which the Vancouver region has seen exponential growth. Notwithstanding the heroic efforts of local biologists, stream-keepers, and naturalists to preserve as much as possible of the

Lower Mainland's natural heritage, given the rapid and intense urbanization of the Lower Mainland, it is difficult not to be aghast at an aerial view of the region. Areas that just 50 years ago were still networks of wetlands, small holdings, and woodlands have disappeared. The fate of regionally endangered species, such as the Nooksack dace (*Rhinichthys cataractae* spp.), speaks volumes.<sup>2</sup> Species populations that were regionally abundant and stable in the 1960s now face a precarious future in 600 to 900 metres of linear habitat, which is eyed by developers, and fair game for municipal infrastructure projects. It is a cumulative disaster zone, as most of the Salish Sea is becoming with population increases and unrelenting development.

What is left of Roberts Bank before the impacts of RBT2 is a critical estuarial migratory stopover on Pacific Coast flyways for shorebirds, whose numbers have already been in steep decline globally since 1970, and which are already some of the most threatened bird species. The banks provide an irreplaceable and already limited supply of rich microbial biofilm, the loss of which already correlates with well-documented bird declines since 1970. The area is home to 119 species at risk in a transboundary ecosystem that spans BC and Washington. The project will negatively affect 19 critically endangered populations of Chinook salmon, sockeye salmon, southern resident killer whales, basking shark, northern spiny dogfish, Pacific ocean perch, and Baird's beaked whale. Given its location and seasonal importance for organisms on migratory cycles, the demise of species at Roberts Bank will impact not just Roberts Banks, but the entire distribution of species throughout the Salish Sea and the Pacific Coast. This is not just a matter—important as these concerns are—of controlling vessel traffic and noise and the potential for oil pollution. It is a brutal "rivet-removal" question of highly vital productive area loss in a web-of-life mosaic, with a potential for domino collapse effects. At what point will we have removed the last irreplaceable rivet?

That question becomes particularly urgent when we realize that decisions are guided by an *Oceans Protection Act* that makes no reference to climate change, as climate change and ocean changes surge. While governments appear to be mainly concerned with the problem that arctic and antarctic ice melting rates pose for sea-level rises threatening urban infrastructure, fisheries scientists are becoming more concerned with the much greater problem of de-oxygenation across large areas of the ocean since 1960. For British Columbia, this must be a matter of concern since the data show that since 1960 the Pacific Northeast alone, which plays a critical role in our salmon fisheries, has experienced a 15% drop in ocean oxygen levels.<sup>3</sup> The global drop in oxygen levels associated with the rise in ocean temperatures since 1960 is illustrated in Figure 1. As Daniel Pauly has pointed out, a drop in oxygen of this magnitude corresponds to a re-organization of ecosystems



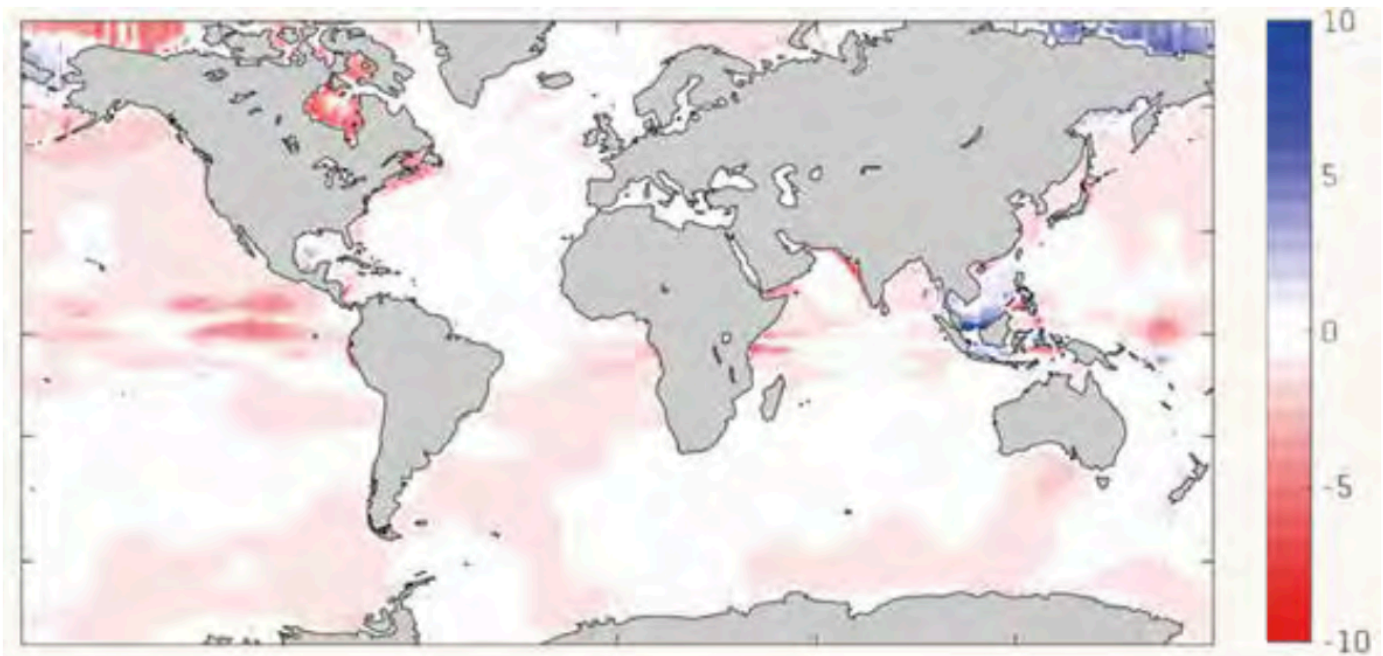


Figure 1: Changes in ocean oxygen levels associated with productivity decline and ecosystem re-organization (Nicola Jones. May 2023. "As Oxygen Levels Dip Fish Face an Uncertain Future." *Yale Environment* 360.)

and a decrease in productivity and fish biomass available for all of mankind. Maintaining the integrity and connectivity of existing biotic systems is more urgent than ever and should be a government priority.

The rise in ocean temperatures is consistent with recent reports that indicate that we are likely to see new and more frequent spikes in global temperatures, with record heat predicted over the next three years.<sup>4</sup> With a switch to an El Niño cycle, the season has begun with an unprecedented number of early season forest fires, 88 in British Columbia (47 evacuation orders). As forecast in February 2022 in the United Nations report *Spreading Like Wildfire: The Threat of Extraordinary Landscape Fires*<sup>5</sup>, and confirmed by Environment Canada's Nathan Gillet – "studies have examined climate change's effects on wildfires in both Alberta and B.C. and found it upped the risk in both provinces."<sup>6</sup> Climate change is present and is changing everything, from bird migration patterns and routes, species behaviours, and population dynamics;<sup>7</sup> and as discussed above, to ocean and mountain biodiversity, where climate change is linked to accelerated forest loss amplified by the BC's Ministry of Forests' poor management and destructive practices. Yet, Canada prioritizes the development of a carbon economy that is the principal driver of climate change, with 12 "carbon bombs," most of which are located in BC and Alberta, that negate the seriousness of its much touted climate plan.<sup>8</sup>

How bad is it? We teach elementary school children that life on this blue planet is made possible by its water. We are an ocean planet. Most people stop there. Outside of the scientific world, there does not seem to be a realization that the ocean is in deep trouble and is changing rapidly. The observed and forecast decline in ocean productivity poses serious challenges for the future of mankind itself. In arcane scientific circles, there is a growing concern that ice sheets are melting at 600 m a day, far faster than previously feared. This is likely to drive rising sea

levels and contribute to increases in extreme weather. While for the last thirty years there has been concern that arctic melting could stall the North-Atlantic conveyor system, there is now concern that a similar and equally devastating phenomenon might be triggered in the Antarctic.<sup>9</sup>

We are entering a new period of climate and biodiversity deregulation consistent with assessments that strongly suggest that we are likely to exceed the Paris 1.5°C target and trigger tipping points, if we have not done so already. Increasingly, the public understands that climate change is no longer a remote event to be faced by future generations, but a present unavoidable phenomenon that requires a reassessment of our economic priorities. Belated talk of "adaptation" belongs in the make-believe world of shallow environmentalism, which pretends that we can now continue business-as-usual, if only we adapt. The rate of ocean changes are likely to outstrip our ability to adapt. We need to change.

BC's climate budget, which was assessed as a "mixed bag," shows that politicians, many of whom are scientifically illiterate, are profoundly out of touch with the unfolding climate and biodiversity emergency. BC's budget is like Canada's *Ocean Protection Act*, or like the physics of nineteenth-century astronomy before the theory of relativity and quantum physics. It pretends that the universe is static, that the conditions of the planet are unchanging and will be the same 10 years from now, if only every consumer drives an electric vehicle and uses a blue box. Everything in science today points to a major re-organization of the conditions and productivity of life on earth. Environmental and biodiversity protection must be the top priority if humanity is to muck through this mess. Only people oblivious to scientific research and its implications can pretend to maintain the economic status quo.

The Minister of Environment is no exception. Minister Guilbeault chose not to heed his own scientists, but follow the whims of corporate Canada, represented by the Port Authority of Vancouver, which is a federal agency responsible for “supporting Canada’s trade objectives.”<sup>10</sup> At a time when ecosystems are being deregulated by the climate emergency and biodiversity is more than ever under threat, the protection of key biodiversity habitats is more urgent than ever. By definition, the business of the Minister of Environment is not—and should never be—“Canada’s trade objectives.” We have the less honourable calling of the Minister of Natural Resources, Jonathan Wilkinson, for that. In the context of this decision, and others, the Minister of Environment appears to be doing the Minister of Natural Resources’ bidding. From the perspective of trade and commerce, environmental objectives are secondary and merely cosmetic, and so is science. The public expectation is that the Minister of Environment will prioritize the environment. The minister’s level of arbitrariness in recent decisions alters public trust in the impartiality of the processes that are supposed to provide impartial institutional guidance.

It begs the question: “Where is the impartiality that acts as the democratic social glue?” Environmental decisions are part of the social contract by which the state commits to protect the public interest in natural heritage and the benefits accrued from it for future generations, based on objective information. In this instance, the minister has rejected and bypassed the findings and recommendations of the environmental impact assessment reports that sat on his desk for three years. The magnitude of this breach of the social contract cannot be minimized, even if it is not immediately apparent to the public, and poorly, if at all discussed in the media, which is, after all, controlled by corporate Canada.

This decision comes in a growing string of government decisions made counter to the advice of the scientific community. The objective ground for social license has always been science. If science is no longer understood to guide public policy, or is seen merely to be used as lip service and window-dressing, then public trust is not just eroded, it is eclipsed. This is not an exaggeration. Those who care to follow public reaction to these announcements will note that government prioritization of the needs of industry over the environment increasingly leads observers to conclude that government decisions are not just incoherent with stated government policy and objectives, but are simply manifestations of a deep-seated duplicitous cynicism.<sup>11</sup> This is the stuff that gives rise to and legitimizes the lamentable growing trend in conspiracy theories, and public disinterest in representative government.

It is no coincidence that our democratic institutions came out of the same Enlightenment foundations as science. Both are an expression of reason. If one is diminished, so is the other. Corporate interest is not synonymous with public interest. Public trust is needed to gain social license for any environmental decisions. That trust comes from impartial facts inherent in good science. Impartial science is the social glue.

Socially, this is a growing problem. The impartiality of science appears to be under attack from both the political left and right. A recent paper, “*In Defense of Merit in Science*,” written by 29 authors, two of whom are Nobel laureates, makes this point. Ideology and identity politics have promoted relativist thinking

to a point where it has become common to simply toss out the inconvenient reality of factual rigour in science. “Alternative ways of knowing,” “multiple narratives,” “lived experience,” and other fashionable vacuous phrases of identity politics serve to substitute personal fantasies for the hard shared experience of reality impartially described by science. There are only facts, no “alternative facts.” Truth and reason are not relative commodities exclusively adjusted to ideological preferences.

There is no point for the Canadian taxpayer to pay and maintain research scientists and facilities to inform the onerous processes of provincial and federal environmental impact assessments if the product of that work is to be treated as something of relative value to be dismissed and overridden by a predetermined ideological bias and interest. Yet, that is the position that a minister responsible for the environment effectively takes when he or she tosses out independent scientific evidence painstakingly gathered by Environment Canada’s best scientists, in favour of industry-generated “mitigating conditions.”

What following the interests of industry and lowering environmental requirements means in our rapidly changing world is self-evident in the unfolding pollution disaster recently reported in *Nature Communications*.<sup>12</sup> For decades, clean-up requirements across the Arctic have kept costs low by assuming that the permafrost would remain, as its name suggests, permanently frozen. Governments, therefore, have allowed natural resource companies to bury waste in the permafrost on the assumption that contaminants would remain locked in forever. With climate change, this waste creates a vast network of tens of thousands of drilling-fluid disposal sumps that are now releasing contaminants throughout arctic freshwaters and oceans. As noted by Dr. Christopher Burns (Carleton University), “There are very few sites where there is no contamination. They are everywhere.”<sup>13</sup> It is not just that the cost of remediation will ultimately have to be borne by the taxpayer, the magnitude of the clean-up is best expressed by the unreality of the engineering solutions seriously considered, and underway. At Yellowknife, the historic burial of 237,000 tonnes of arsenic trioxide dust associated with the Giant gold mine, which closed in 2004, representing an environmental liability; removal of the arsenic is not feasible. The “cheap” engineering solution involves building 858 thermosiphons to keep ground temperature below -5°C, a new power plant, and a new water treatment plant. As engineers note, this project has hardly started, but the costs keep rising.<sup>14</sup> How long is this giant Meccano set to last? The contamination will last thousands of years. Will this solution last until the next power outage? This is the real cost of prioritizing business interests. And now that this problem can be found throughout the Arctic, will we engineer “freezing the Arctic.” There is already talk of geo-engineering projects to do just that, and they will all create thousands of jobs and are all “good for business.”<sup>15</sup>

The RBT2 decision is especially significant for what it means from an environmental policy point of view, and for what “protected areas” really means to people in power, the politicians and their corporate backers. It suggests to the public that environmental policy can be developed independently of science to favour economic and corporate interests. As with several recent key federal decisions, permitted by ministerial fiat, the decision is tempered with a long string of nominal “legally

binding” mitigating conditions. In the past five years, British Columbians have seen a growing number of major controversial projects such as Site C, TMX (Transmountain Pipeline Project), Coastal Gaslink, and associated projects undergo extensive environmental impact assessments, only to come out wanting. Yet, these controversial projects are always approved with an ever-increasing litany of “legally-binding” conditions that in practice are dubiously complied with and enforced.

Should anyone have illusions about the enforcement and compliance surrounding conditions set, the history of the Polley Mine permit, the subsequent disastrous impacts,<sup>16</sup> and the recent revelations of harm done to rivers by the development of the Coastal Gaslink Project,<sup>17</sup> should be edifying. The reality is that these nominally stringent conditions are just seen as part of the cost of doing business. The irreversible damage associated with them is just part of a general public amnesia, trusting political institutions that peddle the illusion of environmental stewardship. This can only last as long as the camel’s back can bear it, but even that wears thin. The Coastal Gaslink situation has already gotten sufficiently so bad that after issuing over 50 warnings and over \$450,000 in fines, the normally somnolent BC Environmental Assessment Office Compliance and Enforcement Branch has found that violations were so numerous that it had to issue a general stop-work order.<sup>18</sup> That just means that there will be more tinkering, polite knuckle-rapping for public perception, and ultimately conditions will be softened, or bypassed to facilitate project completion. In the end, it is not the environment or science that matters, it is business, and the needs of business must always be appeased. The caustic social implications of this charade are as cumulative as the environmental impacts.

Permit conditions are no substitute for the stringent application of the precautionary principle. To pretend that mitigating measures will minimize actual impact is to pretend that an artificial wetland is an equivalent to a natural wetland, or that a monocultural tree plantation, or “working forest” is “old-growth,” as our Ministry of Forests is wont to claim. The facts do not seem to matter. Once environmental damage is accepted, the practical implementation and enforcement of these conditions is always an afterthought. These conditions are simply ministerial grand-standing intent on mesmerizing the trusting public. For better or for worse, the old adage stands: “You can fool the public some of the time, but not all of the time.” The social contract is broken with the perception of government cynicism.

The success of the imposition of “conditions” relies entirely on the principle of a “vanishing baseline.” It relies on public ignorance and forgetfulness of the state of the environment before the project was conceived, and on the eventual public amnesia to the magnitude of what was lost. The lay public easily accepts that an impoverished field of weeds is a state of wilderness. However, climate change, like wildfires, serves as a constant reminder of realities distinct from the official narrative.

And, so it is for our parks and the entire much ballyhooed Canadian 30 X 30 Strategy, as a scandalous recent admission by Steven Guilbeault confirms.

The Minister of Environment announced his approval of the expansion Robert Bank Terminal 2 April 6, 2023 with 360 “legally-binding” conditions. Last year, at about the same

time, on April 20, 2022, Guilbeault approved Equinor’s equally-controversial offshore “Bay du Nord” oil megaproject in Newfoundland with 165 “legally-binding” conditions. He gave his approval also against the advice and exhortation of the scientific community. What this approval implies in practice for Roberts Bank—and all protected areas in Canada—is now self-evident from what is unfolding in the Bay du Nord Project. This is the practical articulation of Canadian policy vis-à-vis the federal “30X30 Strategy.” What is unfolding raises a simple question: Are “protected areas” under Canadian jurisdiction really protected?

Through the agency of the Canadian-Newfoundland Offshore Petroleum Board (C-NLOPB), the federal and provincial governments granted 47 exploratory drilling licences in January 2023. At least 14 of these licenses are in established “marine protected areas.” These areas were so designated in 2019 to reach Canada’s 2020 Biodiversity targets for the protection of their biodiversity values, because they are critical habitat for communities of rare and endangered species. At the beginning of May 2023, British Petroleum, the same company responsible for the world’s worst oil disaster, the 2010 Deepwater Horizon spill in the Gulf of Mexico, began drilling in an officially designated “marine protected area,” of course, with “stringent legally-binding conditions.”

What does “stringent legally-binding conditions” mean to the ministers responsible? First, they are self-contradictory, and second, they are ineffective. On the one hand, the conditions require that should a blow-out occur in the Bay du Nord, the proponents “must act immediately.” However, because the industry feels that there is only a low risk (only 16%) of a blow-out, the ministers have chosen not to require that an oil-capping system be in place to minimize impacts. There is no oil-capping system available in Canada for the technology used by the proponent. In case of an emergency, Equinor and BP would have to bring one from either Brazil or Norway. Experts estimate that it would take 18 to 36 days to bring the disaster under control—a problem that concerns neither ministers Jonathan Wilkinson nor Steven Guilbeault. The reason given by the ministers for not requiring that a capping system be in place is that, in the eventuality of an accident, it would require 10 to 16 days work to prepare the site “independently from the place from which the capping system is acquired.”<sup>19</sup> So should an accident, considered unlikely by BP, occur, it would take more than a month to staunch the flow of oil in a “marine protected area.” For memory’s sake, the Deepwater Horizon equally unlikely accident occurred April 20th, and the well was not capped until September 19th.

When asked publicly how he can justify drilling in a “marine protected area,” Steven Guilbeault’s glib answer was: “In terms of the development of protected areas and meeting our objectives, we are following the guidelines set out by the International Union for the Conservation of Nature (IUCN).” This is at odds with the facts. As marine scientists involved in MPA assessments, such as Dr. Lyne Morissette, have noted, the answer is disingenuous and deliberately misleading. The IUCN’s Guidelines for Marine Protected Areas, published in 2019, review the state and status of various nationally developed marine protected areas.<sup>20</sup> The authors identify six categories of “protection,” only to note that the majority only have very limited, if any protection. That is the “standard” that Guilbeault appeals to. What he is effectively



saying is that Canada is following the international standard for pathetic performance. What the international Guidelines say at page 28, Box 3.1, item 2, contradicts the minister: "Exploration and extraction of mineral resources are incompatible with the purposes of protected areas corresponding to IUCN Protected Area Management Categories I to IV, and should, therefore, be prohibited by law or other effective means." Even in Categories V and VI, which are protected for landscape and sustainable use, the IUCN requires that an environmental assessment for each project be carried out to determine possible impacts. In the Bay du Nord project, both the federal and provincial governments have waived the standard EIA requirement in order to accelerate the authorization process: "Afin d'accélérer l'autorisation des futurs forages, Ottawa a aboli le processus d'évaluation environnementale qui était jusqu'ici en vigueur."<sup>21</sup>

What has emerged so far from the Ministry of Environment's handling of the Bay du Nord project provides a window into what "Protected Area" and "30x30 Strategy" mean in Canada. It defines Ottawa's actual commitment to the environment when it comes to the Roberts Bank Terminal 2 Project. Neither meet IUCN scientific standards. The facts do not seem to matter if they are at odds with business interests. As the Commissioner of the Environment and Sustainable Development's report on Canada's Climate Change performance pointedly noted, it is nowhere in keeping with public representations made by the minister. As the Commissioner also pointed out in separate reports, nor is there any action on endangered species, and nor is the federal government anywhere near planting the two billion trees by 2030 promised by Jonathan Wilkinson.<sup>22</sup> This is the shallowest form of environmentalism, devoid of substance. If hard development is allowed in a designated "protected area", then what is being protected anywhere else outside of the business interests of stockholders? When it comes to the environment, there is no commitment, federal or provincial, to the effective protection of nature if at any future point business finds an interest and opportunity in a protected area. Business is the only priority. The environment and biodiversity are apparently disposable at will.

This approach to science in environmental concerns unfortunately dominates political discourse on both the right and the left. In provincial politics in BC, we have seen NDP governments over the past six years renege on key environmental commitments they made out of office, notably on the Site C Hydro project, fish farms, alternative energy, endangered species legislation, and on old-growth, and promote the pro-business agenda of their predecessors. It therefore came as no surprise that John Horgan quietly and very comfortably stepped onto the board of Canada's most notorious polluter, the coal giant, Teck Resources.<sup>23</sup> One should fully expect David Eby, Jonathan Wilkinson, and Steven Guilbault to do the same on their retirement, given the depth of their environmentalism and deep devotion to business.

Science has very little real place in this political charade, unless it can be used in service of business. The tragedy is that this logic is becoming a global norm. The scientific community and climate change campaigners have been in an uproar over the last year at the choice of location and presidency for COP28 in Dubai. As Dr. Bill McGuire has succinctly put it; "COPs have always been complete circuses. Now they are complete jokes."<sup>24</sup> The president, the UAE Minister of Industry and Advanced Technology, Dr.

Sultan Al Jaber, who remains CEO of the national oil company, has clearly stated what his mission is "the world needs a business mindset to tackle the climate crisis."<sup>25</sup> The proposal that Al Jaber is making is essentially like developing a destructive project in an environmentally sensitive Canadian location. The oil companies will self-regulate, develop untested mitigating technology and follow many "legally-binding conditions." It sounds awfully like the business mindset that has dominated the past 50 years. In other words, it will be business as usual, with much window dressing, just as in Canada.

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