B.C. Offshore Hydrocarbon Development: Environmental Risks and Policy Perspectives

Notes for Remarks
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The overall **policy problem***

- Offshore resources offer potentially great but highly uncertain economic benefits in a highly volatile market setting
- If (and only if) all precautionary measures are taken and all regulatory constraints are respected, production and environmental risks may not be "unacceptably" great
- This is a standard risk/return problem, a standard task in project appraisal or investment decision. Why is it not simple?

* BC Offshore Hydrocarbon Development: Issues and Prospects. A Background Report Prepared by the Maritime Awards Society of Canada (Douglas Johnston and Erin Hildebrand, eds) October, 2000

The issue is not simple because there is:

- *Vast uncertainty around the returns* and the distribution of returns
- *Profound uncertainty around the risks* and the distribution of risk burdens
- *Widely varying perceptions* of risks
- Unknown risks of *possibly irreversible impacts*

Together all these create another layer of complexity in dealing with environmental concerns

- The distribution of benefits is at issue – jurisdiction, ownership and revenue-sharing problems raise fundamental questions of ‘fairness’ and justice, particularly with respect to First Nations
- The distribution of benefits is also diffuse—they show up as wages for some, lower fuel bills for others,…
- Other questions of social risk arise – development poses serious threat to ‘cultural sustainability’ for some in remote communities, First Nations

- Risks and returns are not aligned--the distribution of risks will be very different from the distribution of benefits
- Perceptions of the magnitudes of these risks will differ dramatically from statistical estimates
- Cumulative risks, possibly enduring or irreversible, to food webs or ecosystem integrity will be hard to estimate
- The precautionary principle will be invoked, but will be hard to apply

- The problem of risk perceptions is crucial—we don't reason well about risk
- Perceptions of *likelihood* or frequency of risks are distorted, but through discussion might be brought to converge toward statistical estimates
- Perceptions of the *magnitude* of risks hinge on many characteristics, differ widely among people, and can not readily be brought into line with quantitative estimates. (E.g., almost ten times as many people die in traffic accidents every year in the US as died due to terrorist actions last month—but the response is not proportional)

- Overhanging all is the question of global change, climate warming, greenhouse gas emissions
- There have been international commitments to stabilize GHG concentrations in the atmosphere at levels that do not pose risk of dangerous consequences for humans
- As a first step toward that goal, the Kyoto protocol established targets for reductions of GHG—but impassable implementation problems remain

- And now, overhanging even issues of global atmospheric risks, are rising geopolitical conflicts and emerging imperatives of continental energy policy
- If there is no escaping the need to feed the US demand for fossil fuels, perhaps Canadians would be safer feeding it from here than by supporting continued US demands for unrestricted access to supplies everywhere else in the world, especially the Middle East
- That is, perhaps BC will have to make some unilateral sacrifices to reduce the North American ecological footprint

So, in the medium-term, our provincial government seems to face a choice between

- possibly massive economic returns from extraction and export of oil and gas

and

- a social commitment to responsible behaviour in moving off fossil fuels and hydrocarbon energy sources towards alternative renewable energy

- But then it is unclear which way the decision on the moratorium plays out

- The existing moratoria on exploration and development began as a ploy in a jurisdictional fight; they were left in place in the late 1980s as a result of concern about oil spills from tankers
- Since then they have transmuted, in the public image, into environmental protection measures
- A decision to lift the provincial moratorium, even if accompanied by complementary federal action, would only be a first step in policy measures to frame future private sector decisions

For the government, this introduces an interesting dilemma, the appropriate **choice of instruments** in pursuing the policy goal of a shift ‘off-oil’ and promotion of alternative energy sources

With the existing moratorium in place, one could pursue this policy goal through what is essentially the regulatory instrument: simply leave the moratorium on exploration and development as it stands

- Or one could pursue the same goal through economic instruments or market mechanisms (Ecological Fiscal Reform; Tax Shift):
- introduction of substantial carbon taxes;
- introduction of trading systems which permit purchase of emissions rights, but at potentially high prices;
- introduction of very high royalties and charges to ensure that the value of the resource is reflected in costs to firms and revenues to public resource owners

- Issues of revenue sharing will raise the question whether all owners (federal, provincial, local, and First Nations) are receiving the appropriate return to their ownership (adequate to offset risks assumed); Pacific Accord; Equalization
- High basic charges for the resource, and high penalties for its use as fuel may serve to divert the resource to higher value uses in petrochemicals or as resource inputs into a hydrogen economy (fuel cells and such like?)

- In effect, the government stance could be to promote development of the resource, but only on a *full-cost basis*, taking fully into account all social and environmental costs and risks incurred by use of the resource, as an energy source or otherwise
- (This free-market environmentalism might find favour with many supporters of the present government)

If so, the moral commitment to a clean environment and a medium-term move to alternative energy to support massive reduction in GHG emissions will mean a very high cost track for offshore hydrocarbon development

Hence, ironically, the **decision problem** for the industry may be more difficult than that for the government.

- Realistically, if there is full enforcement of and compliance with all the precautionary regulatory measures requiring best available technologies, there may be relatively little (insignificant, or acceptable) risk to development of offshore resources

BUT: The financial exposure and risk arising from development with very long lags in highly volatile markets, with governments increasingly committed to increasingly activist action on carbon taxes and like measures, may make the necessary investments very risky from a corporate perspective

IN THE END: The basic tensions may be between the *proponents* of rapid development emphasizing the large *aggregate economic benefits*,

and

opponents who see the development as introducing fundamentally *unacceptable human impacts* on a pristine natural world – as, morally or aesthetically, inappropriate human conduct:

'the wrong way to use the oceans'

To resolve that dispute will demand consultation and deliberation, not calculation and (cost-benefit) analysis.

The basic issue is one of value judgments

Not

“Sound Science”

And it raises the question how long one can delay decision while waiting for consensus to emerge

What is perhaps even more difficult, in the present climate, is that it also asks

"Who is 'us'?"

What are the bounds of our community of concern? Who are 'local'?

Who have a claim to be recognized?

Adjacent communities?

Vancouver shipyards and suppliers?

BC residents?

Canadian citizens?

All people, even outside North America?

And what is new now is:
*heightened concern for sustainable development (with a formal commitment set out in the Premier's mandate letter to Ministers);
*increased advocacy of a precautionary approach;
*widespread expectation of greater voice and more inclusive participation; and
*insistence on synthesis of traditional and local ecological knowledge with conventional science

All of these expectations are now entrenched in the legislative and administrative marching orders for governments and public servants

Thus, formally, what is new includes

- Canadian Environmental Assessment Act
- BC Environmental Assessment Act
- Emerging environmental assessment regimes of First Nations (e.g., Nisga'a)
- Joint review panels (e.g. Sable Island)
- Joint environmental assessment process
- Judicial scrutiny (e.g. Tulsequah Chief)
- And another whole layer of scrutiny with the Commission on Environmental Cooperation (e.g. BC Hydro factual records re enforcement of Fisheries Act)

In issues of social risk, broadly participatory deliberative processes are essential to public acceptance of action

The Process Design Team report and the recommendations of Northern Development Commissioner Backhouse have not dampened community expectations about consultations at all

Minister Neufeld announced a legislative committee to design a process, and a scientific panel to review the issues; it remains to be seen what emerges

But with corporate bottom lines more starkly drawn, and public expectations about scrupulous attention to ecological integrity and sustainability more strongly entrenched, and new legislation insisting on synthesis of traditional ecological knowledge in project appraisal, and government commitments to openness if not participation,

it is perhaps unrealistic to expect oil or gas to flow from below the waters off British Columbia any time soon