

# **Oil and gas activities, offshore British Columbia: the Royal Society of Canada review of science issues**

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## **ABSTRACT**

The Government of British Columbia has asked the federal government if it might be prepared to lift the moratorium on oil and gas activities offshore British Columbia (BC). The Minister of Natural Resources Canada has instituted a three-stage process to consider this matter. The first stage was a science review, to be conducted at arm's length from government by an Expert Panel of the Royal Society of Canada (RSC). The review was completed in February 2004, and provides input to the succeeding stages of public consultation and discussions with First Nations. As mandated by the Minister, the Queen Charlotte Basin was the focus of the review.

The review identified science gaps that should be filled before the various stages of oil and gas development take place. The precautionary principle was used in assessing the needs for safety of people operating in oil and gas development, and for safety of the environment. The Panel also made assumptions about the regulatory regime that might be put in place, using best practices from other jurisdictions. The oil and gas industry is used to operating in harsh environmental conditions in other parts of the world: the Queen Charlotte Basin offers nothing new except for the specifics, which need better determination for optimal design of safe operations. Aspects of information on winds, waves, currents, the seabed and earthquakes need to be enhanced. While there is good general knowledge of the biota present in the basin, including species listed as endangered, there is not yet sufficient information on the space-time-activity distributions of valued ecological and economic components. All the gaps identified can be filled either prior to regional strategic environmental assessment or prior to the permitting of specific activities.

Given the stringent regulatory regime assumed, the consequences of not filling those gaps are either prohibition of activity, or designing structures and operations with allowances for the greater uncertainties. The impact of the latter would primarily lie in extra costs for projects.

The review also commented on exclusion zones, including Protected Areas and coastal strips from which oil and gas activities should normally be prohibited. The Panel recommended including assessments of natural resources—both renewable and non-renewable—in determining the optimal locations of protected areas, and was especially keen to see the unique siliceous sponge reefs

protected. Seismic surveys should be excluded from near shore and shallow areas, and from areas of critical habitat: exceptions such as transition zone surveys would need special assessment.

In identifying who should be responsible for filling the science gaps, the Panel used the principle of prime beneficiary pays—thus science which is valuable in assessing oil and gas activities, but which has generic public-good value, should be the responsibility of government, while that which is needed solely to assess safe practice of exploration and production should be the responsibility of industry.

Given a 10-20 year time frame for the development of an oil and gas industry offshore BC, there is time for the many baseline and monitoring studies needed to assess the environment, but these should be started soon, if a decision is taken to lift the moratorium.

Provided a strong regulatory regime is in place, the Panel concluded that there were no science gaps that needed filling for a decision to be taken on lifting the moratorium. The exclusion of transiting tanker traffic from the inshore areas should be maintained until risk assessment demonstrates that it is now safe to relax the current restriction.