

must also take into account marine transportation and protection regimes in the United States.

Offshore Energy and Mineral Resource Development

Interest in exploring and developing offshore oil and gas resources has increased significantly and has the potential to generate significant economic benefits. Projects such as the Hibernia and Terra Nova projects on the Grand Banks off Newfoundland and the Sable Offshore Energy Project on the Scotian Shelf provide significant employment opportunities to local communities and revenue to the pertinent provincial governments. Interest in exploring in the Gulf of St. Lawrence and offshore British Columbia has also increased noticeably. However, there are potential environmental threats associated with such development, including excessive noise from geophysical seismic surveys and drilling, seabed disturbances from development infrastructure (such as pipelines), disposal of drilling fluids, and accidental petroleum discharges.

Offshore mineral development in Canada is not at the same level of maturity as oil and gas development, but federal and provincial geological surveys, as well as the minerals industry, indicate that significant mineral potential exists. Placer deposits that contain either proven or potential commodities exist at technologically exploitable depths, as do large reserves of aggregate. Interest in developing aggregates continues to be expressed, and placer deposits of gold and other minerals may be developed in the future. Many of the provinces and territories contiguous to Canada's marine areas are eager to work with the federal government to develop a management regime for offshore mineral resources.

Climate Change

The oceans play an integral role in the earth's climate. Climate change will affect the availability of freshwater, influence sea temperatures and levels, and directly impact coastal areas, such as the Vancouver basin. The planet's food supply, the distribution of pests and disease vectors, the survival of species, the fisheries and forest industries, and the occurrence of natural disasters will all be affected. The understanding of the impact of climate change is of fundamental importance to the security and economic well-being of Canada and of all states.

The United Nations Framework Convention on Climate Change was one of the intergovernmental outcomes of the United Nations Conference on Environment and Development. The subsequent negotiations on the

For more than a year, beginning in October 1997, scientists and crew aboard the Canadian Coast Guard icebreaker Des Groseilliers were frozen in the ice of the Canada Basin while participating in the most complex and broadly based ocean study ever undertaken in the Arctic. SHEBA (Surface Heat Budget of the Arctic Ocean) was an international initiative involving the work of three ships, more than fifty universities, and approximately one hundred principal investigators.