





BC Offshore Oil & Gas Gallery

Historical Publications and Maps

March 2012 (links updated 2019)

Reports

- [Petroleum Resource Potential of the Tofino Basin](#). Prepared by UVIC and MEMPR, December 2008.
- [Statement of Canadian Practice with respect to the Mitigation of Seismic Sound in the Marine Environment](#). Prepared in May 2008.
- [The Pacific Coast Integrated Management Area: Moving Towards Modern Ocean Management](#). Prepared by Joy Hillier and Dale Gueret, Department of Fisheries and Oceans ( 460kB).
- [Environmental Impacts of Air-Gun Survey on Glass Sponges](#). Prepared by UVIC and MEMPR.
- [An Expanded Estimate of Oil and Gas Revenue in the Queen Charlotte Basin](#). Prepared by Wade Lock Economic Consulting and MEMPR, January 2009.
- [Potential Benefits of Offshore Oil and Gas Development in Queen Charlotte Basin](#). Prepared by John Schofield, UVIC and Ilkley Education Services; Wade Locke Economic Consulting; G.S. Sandhu and Associates; Mark Shrimpton and Jacques Whitford Ltd., July 2008.
- [Union of BC Municipalities Working Group on Offshore Oil and Gas](#). Prepared by UBCM Working Group, September 2009.
- [Economic Contribution of the Oceans Sector in British Columbia](#). Prepared by G.S. Gislason & Associates Ltd. Vancouver B.C., April, 2007 ( 1418 KB).
- [Summary of a recent study of seismic airgun survey noise propagation in Queen Charlotte Basin](#). Prepared by Alexander MacGillivray, published in the CSEG Recorder, March, 2007 ( 565 KB).
- [Petroleum Resource Potential of Queen Charlotte Sound within the Scott Islands Marine Wildlife Study Area](#). Prepared by Torge Schuemann and Michael Whiticar, June 2007. ( 15 MB).
- [Ocean Management of Queen Charlotte Basin](#). British Columbia, Canada. This report was prepared by J. Vaughn Barrie and Kim W. Conway, Geological Survey of Canada (Pacific) in 2007. ( 793 KB).
- [2007 Offshore Directory](#). A profile of organizations that participated in OTC 2007.
- [Economic Overview of Oil and Gas Resources Found in the Queen Charlotte Basin](#). This report was commissioned by Natural Resources Canada in 2006 to provide information regarding the potential economic value of oil and gas resources in the Queen Charlotte Basin (QCB). The analysis presented in the report demonstrates that at mid-price ranges (\$45 US/bbl for oil and \$6/MCF for natural gas), the economic value of the oil and gas resources in QCB range between \$80 and \$120 billion Cdn for oil and between \$40 and \$60 billion Cdn for gas ( 1.45 MB).
- [Field Collection and Geochemical Characterization of Potential Mesozoic Source Rocks on Northern Vancouver Island and the Queen Charlotte Islands](#). This report was prepared by Torge Schuemann and published in 2005. The focus of the report is to establish better knowledge of kerogen kinetics in Mesozoic source rocks that have been sampled onshore. ( 3.11 MB).
- [Untapped Potential: Offshore Oil and Gas Resources Inaccessible to Leasing](#). This report was prepared by the Interstate Oil and Gas Compact Commission's North American Coastal Alliance and published in March 2006. It focuses on providing a comprehensive overview of offshore oil

















and natural resources of North America that are unavailable for leasing or development. ( 8.75 MB).

- [Results from an Acoustic Modelling Study of Seismic Airgun Survey Noise in Queen Charlotte Basin](#). Prepared by Alexander O. MacGillivray and N. Ross Chapman. December, 2005. ( 5.6 MB).
- [Petroleum Industry Transforms Provincial Economy of Newfoundland and Labrador](#). The [Petroleum Research Atlantic Canada \(PRAC\)](#) has released a study documenting how the oil and gas industry is transforming their economy.
- [Statement of Canadian Practice](#) on the mitigation of potential seismic impacts in the marine environment released by The Government of Canada and the Provinces of British Columbia, Newfoundland and Labrador and Nova Scotia.
- [Review of the Federal Moratorium on Oil and Gas Activities Offshore British Columbia](#). These reports attempt to represent the views of British Columbians, including coastal First Nations, on the federal moratorium. November 2004.
- [Analysis of Petroleum Potential in the Queen Charlotte Basin](#) by Dr. Michael J. Whiticar et al, School of Earth and Ocean Sciences, University of Victoria. ( 14.0 MB)
- [Report of the Public Review Panel on the Government of Canada Moratorium on Offshore Oil and Gas Activities in the Queen Charlotte Region British Columbia](#). This report attempts to capture the views expressed at a series of public hearings. Prepared by the Public Review Panel that was chaired by Roland Priddle. Published October 2004.
- [A Review of the State of Knowledge of Marine and Shoreline Areas in the Queen Charlotte Basin](#). Prepared by the Northern Coastal Information & Research Program in partnership with LGL Ltd. Environmental Research Associates. September 2004.
- [Industrial Development in British Columbia's Offshore Oil and Gas Industry](#). Prepared by Jacques Whitford Environment Limited for the BC Innovation Council, August 2004. ( 554 KB).
- [Future Human Resources Development in British Columbia's Offshore Oil & Gas Industry](#). Prepared by Human Capital Strategies for BC Innovation Council, June 2004. ( 2 MB).
- [Offshore Oil and Gas Study Team Report](#). Prepared by the Simon Fraser University School of Natural Resource Management for the Coastal First Nations, May 2004. ( 3.8 MB).
- [British Columbia Offshore Oil and Gas: Socio-Economic Issues Paper](#). This report was prepared by the Science, Technology and Environment Division of Royal Roads University, in Association with G.E. Bridges and Associates, to advance public knowledge of the potential social and economic benefits from the development of BC's offshore oil and gas resources, May 2004.
- [Report of the Expert Panel on Science Issues Related to Oil and Gas Activities, Offshore British Columbia](#). Prepared by the Royal Society of Canada, April 2004. ( 4.9 MB).
- [The Province of British Columbia's Perspective on the Federal Moratorium on Oil and Gas Activities Offshore British Columbia](#). Submitted to the Public Review of the Federal Moratorium on Oil and Gas Activities, Offshore British Columbia, April, 2004 ( 195 KB).
- [Canada's Evolving Offshore Oil and Gas Industry: Energy Today, and Tomorrow](#). This guide by the Canadian Centre of Energy Information, provides an excellent overview of the offshore oil and gas industry in Canada, March 2004 ( 6.1 MB).
- [Development Action Plan for the Pacific Ocean Technology Cluster](#). Prepared by Chris M. Campbell. January 2004 ( 862 KB).
- [Analysis of Petroleum Potential in the Queen Charlotte Basin](#) by Dr. Michael J. Whiticar et al, School of Earth and Ocean Sciences, University of Victoria. Using state of the art computer modeling programs, this two-phase project – Phase I: “Broad-Scale Basin Characterization” and Phase II: “2D Petroleum Systems Modeling” – analyzes existing geophysical, geological and geochemical information to better identify the factors that influence hydrocarbon formation

and accumulation in the basin. June 2003.


- [Opening Up British Columbia - Serving the Offshore Industry](#). Prepared by the Ministry of Energy and Mines and the Ministry of Competition, Science and Enterprise, May 2003 ( 1.7 MB).
- [Report of the Offshore Oil and Gas Task Force](#). Prepared by sub-committee of the BC Government Caucus and presented to the Hon. Richard Neufeld, Minister of Energy and Mines, January 15, 2002 ([63.47KB](#)); [Appendix 1 - Written Submissions \(24.79KB\)](#); [Appendix 2 - Oral Presenters \(42.70KB\)](#).
- [British Columbia Offshore Hydrocarbon Development: Report of the Scientific Review Panel, Vols, I and II](#). Prepared by Strong, David, Patricia Gallagher and Derek Muggeridge, January 2002.
- [Offshore Oil and Gas Technology Update](#). Prepared by Jacques Whitford Environment Limited, October 2001.
- [The Maritime Awards Society of Canada](#)
 - » [Revisiting the Law of the Sea \(2003\)](#). Report on the 'Meeting of Experts' held at Dunsmuir Lodge. May 2003 ( 427 KB).
 - » [B.C. Offshore Development Issues](#): Dunsmuir 11 Symposium on Offshore Science and Technology, Energy Policy Options, First Nations Claims and Revenue Sharing Entitlements. August 2002 ( 586 KB).
 - » [British Columbia Offshore Hydrocarbon Development: Issues and Prospects](#). Report on Workshop held at Dunsmuir Lodge. July 2001 ( 1 MB).
- [Potential Marine Geohazards in the Hecate and Queen Charlotte Basins](#). Report prepared by Terra Remote Sensing Inc for the BC Ministry of Energy, Mines and Northern Development. October, 1999. ( 11 MB)
- [Review of Offshore Development Technologies](#). Submitted to Information Science and Technology Agency, by AGRA Earth & Environmental Limited, December 1998 ( 484 KB).
- [Assessment of Progress in Scientific, Technological and Resource Management Issues Related to the 1986 Review of Offshore Petroleum Exploration in British Columbia Waters](#). Submitted by The Canadian Oceans Frontiers Research Foundation, March 1996 ( 4.1 MB).
- [Ocean Opportunities for West Coast Canada - Strategic Framework Overview Report](#). This report was prepared for the Science Council of BC. It outlines the potential economic and technological opportunities that could arise from ocean related activities, including offshore oil and gas development. April 1993 ( 6 MB).
- [Report to the Premier on Oil Transportation and Oil Spills](#). Prepared by David Anderson, Special Advisor, November 1989 ( 11 MB).
- [Report and Recommendations of the West Coast Offshore Exploration Environmental Assessment Panel](#). Prepared by the West Coast Offshore Exploration Environmental Assessment Panel, April 1986.
- **Coastal Zone Management Conference**. Held by the Offshore Alliance of Aboriginal Nations (OSAAN). Site contains presentations and background documentation. September 1986.
- [Previous Coastal Zone Management Proceedings](#) - Here you can view extended abstracts submitted for past conferences.
- [West Coast Oil Ports Inquiry Statement of Proceedings](#) by Andrew R. Thompson, Commissioner. February 1978 ( 6.7 MB).

Presentations


- [Presentation to Ocean Industry BC Conference](#). Powerpoint Presentation by Susan Kelly, October 12, 2007 ( 8.3MB).
- [Offshore Oil and Gas Provincial Context: UBCM Offshore Working Group](#). PowerPoint Presentation by Jean Dragushan, May 29, 2006 ( 3.5 MB).
- [British Columbia's Offshore Resources: Update & Outlook](#). PowerPoint Presentation by Patrick O'Rourke, April 12, 2006 ( 1.13 MB).
- [British Columbia's Offshore Resources: Update & Outlook](#). PowerPoint Presentation by Patrick O'Rourke, March 25, 2006 ( 2.36 MB).
- [Offshore Oil and Gas Provincial Context: UBCM Offshore Working Group](#). PowerPoint Presentation by Jean Dragushan, February 17, 2006 (PPT 9.49 MB).
- [Offshore Oil and Gas Update to the Native Economic Development Advisory Board](#). PowerPoint Presentation by Jean Dragushan, January 17, 2006 (PPT 9.48 MB).
- [Oil spill risks in British Columbia from offshore hydrocarbon exploration and development: Separating myth from reality](#). PowerPoint Presentation by Mark Zacharias, October 21, 2005 ( 1.36 MB).
- [Waves of Opportunity Conference: Government Reports](#). PowerPoint presentation by Patrick O'Rourke, October 21, 2005 ( 176 KB).
- [Smart Regulation of BC's Offshore Oil and Gas](#). Presented by Patrick O'Rourke to the Smart Regulations at work in BC conference, March 16, 2005, Victoria ( 512 KB).
- [Developing BC's Offshore Oil and Gas Resources](#). PowerPoint Presentation by Patrick O'Rourke, February 23, 2005 ( 640 KB).
- [BC's Offshore Petroleum: Recent Developments](#). Presented by Ron Smyth to the Canadian Society of Petroleum Geologists, November 4th, 2004, Calgary ( 1.1 MB).
- [The First Alaskan Oil & Gas Experience The Cook Inlet Basin](#). PowerPoint presentation by Union of BC Municipalities Offshore Workshop panelist Bill Popp, September 21, 2004 ( 1.4 MB).
- [Charting the Course BC Offshore Atlantic Experience Environmental Assessment and Monitoring](#). PowerPoint presentation by Kathy Penney at the Union of BC Municipalities Offshore Workshop, September 21, 2004 ( 3.5 MB).
- [Greater Victoria Chamber of Commerce, Offshore Forum](#). PowerPoint presentation by Patrick O'Rourke, British Columbia Offshore Oil and Gas Team, September 14, 2004 ( 378 KB).
- [Developing Oil & Gas Resources in British Columbia](#). PowerPoint presentation by Ross Curtis, presented in Anchorage, Alaska for the Alaska State Chamber of Commerce on June 22, 2004 ( 2.9 MB).
- [Developing British Columbia's Offshore Resources](#). PowerPoint presentation by Jack Ebbels, presented in Calgary, Alberta in June 2004 ( 2.9 MB).
- [An Exploration & Production Perspective on the West Coast Offshore](#). Presented May 2003, by Shell Canada Ltd. at the *BC Natural Gas Symposium*. Produced by Shell Canada Ltd. ( 1 MB).
- [Developing British Columbia's Offshore Oil and Gas, Nisga'a Nation Special Assembly](#). PowerPoint presentation by Jack Ebbels, British Columbia Offshore Oil and Gas Team, April 23, 2004 ( 287 KB).
- [Offshore Oil and Gas in British Columbia - Will it Happen? When?](#) PowerPoint presentation at Canadian Energy Research Institute (CERI) North American Natural Gas Conference & Calgary Energy Show. Produced by Patrick O'Rourke, British Columbia Offshore Oil and Gas Team,

- March 2003 ( 900 KB,  [with notes](#) 376 KB).
- [West Coast Offshore: What Explorers and Producers Need to Move Forward](#). Presented at the Canadian Institute *BC Energy Law Conference*, by Shell Canada Ltd. Produced by Shell Canada Ltd, December 2002 ( 856 KB).
 - [Doing business in a strictly regulated sector](#). Presentation at a public forum during the visit of the Norwegian Delegation. Produced by Norsk Hydro, November, 2002 ( 5.1 MB).
 - [Health, Safety and Environmental Issues](#). Presentation at a public forum during the visit of the Norwegian Delegation. Produced by Statoil, November, 2002 ( 7.9 MB).
 - [High Technology, Technology Transfer and the Establishment of a Local Supply Industry](#). Presentation at a public forum during the visit of the Norwegian Delegation. Produced by FMC Energy Systems, November, 2002 ( 2.2 MB).
 - [Impact of Oil and Gas Development on Coastal Communities in Norway](#). Presentation at a public forum during the visit of the Norwegian Delegation. Produced by the Former Mayor of Stavanger, November, 2002 ( 2.2 MB).
 - [Marine Seismic Acquisition](#). Presentation at a public forum during the visit of the Norwegian Delegation. Produced by Fugro Geoscience, November, 2002 ( 12.1 MB).
 - [Maximizing Benefits from Resource Development](#). Presentation at a public forum during the visit of the Norwegian Delegation. Produced by the Ministry of Petroleum and Energy of Norway, November, 2002 ( 389 KB).
 - [Oil and Gas Development from an Environmental Perspective](#). Presentation at a public forum during the visit of the Norwegian Delegation. Produced by the Ministry of Petroleum and Energy of Norway, November 2002 ( 175 KB).
 - [Review of Current Status \(2002\) of Offshore Oil and Gas Development in British Columbia](#). Presentation at a public forum during the visit of the Norwegian Delegation. Produced by Offshore Oil and Gas Team, November 2002 ( 329 KB).

Educational Material

- [Offshore BC - Status as of March 2007](#). This article provides an update on the status of the BC Offshore. Prepared by Bill Phelan, published in the CSEG Recorder, March 2007 ( 757KB).
- [Pioneer Geology in the Canadian Cordillera - British Columbia's Hydrocarbon Hunt](#). This Open File (OF1992-19) describes the history of oil & gas exploration in British Columbia dating back to 1875.
- **Where No One Has Gone Before**. This article provides a generalization of past and present offshore oil and gas exploration with reference to new and evolving technologies. Produced by OTC .06/Expro International Group, May 2006 (LINK). All publications from Offshore Technology Conferences are now available through [OnePetro](#).
- [Stalled Offshore](#). This article summarizes the history of BC offshore oil and gas, including the three-part Federal Review of the BC Moratorium completed in 2004. Published in Oilweek, October 2005 ([254 KB](#)).
- [Energy BC](#). This site contains information about the geology and geophysics, and the myriad of environmental, social, and jurisdictional issues surrounding West Coast offshore oil and gas.
- [Seismic Survey Operations: Impacts on Fish, Fisheries, Fishers and Aquaculture](#). This briefing paper seeks to answer some of the basic questions about seismic survey operations in the offshore environment and their impacts on fish, fisheries, fishers and other industry employees (such as divers) and aquaculture ([212KB](#)).
- [Glass Sponges and Sponge Reefs in British Columbia Waters](#). This laypersons guide to the glass

sponge reefs off the BC coast report discusses where and why glass sponges are found off the BC coast and where else in the north Pacific Ocean they might exist. It contains links to other useful web sites on glass sponges ([332KB](#)).

- [Canada's Evolving Offshore Oil and Gas Industry: Energy Today, and Tomorrow](#). Recently updated by the Canadian Centre of Energy Information, this guide provides an excellent overview of the offshore oil and gas industry in Canada ([6.1MB](#)).
- [Reference List of the Following Topics](#): Aggregate economic impacts, BC-related issues, Energy supply and demand (reports, stats), Fiscal systems, Trade-related issues, Atlantic Canada, Benefits planning, Legal precedence (NAFTA lawsuits), Aboriginal issues, Legislation ([231KB](#)).
- [Other Maps](#).
- [Hopes Soaring - An Industry Struggles to be Born Offshore of British Columbia](#). Two general reports can be found at this link. The first by James Haggert of the Geological Survey of Canada reviews the geology and resource potential. The second by Tony Fogarassy of Clark, Wilson, Barristers and Solicitors summarizes issues around environmental law, jurisdiction and ownership of oil and gas, and the role of First Nations ([936KB](#)).
- [Ocean Energy](#). This is an excellent site. It provides an overview of the various types of ocean energy including oil and gas, natural oil and gas seeps in the sea, methane hydrates, solar energy, wind energy, wave and tidal energy.
- [Seismic versus Sonar: What are the Differences?](#) Produced by the Ministry of Energy and Mines ( 309kB).
- [B.C.'s Offshore Oil and Gas: A Guide to the Geology and Resources](#). 9-page paper, April 2003. Produced by the BC Ministry of Energy and Mines ([250KB](#)).
- [Britain's Offshore Oil & Gas 3rd edn](#). This is a superb layperson's guide to Offshore Oil and Gas. It is richly illustrated and explains why oil and gas is found around the margins of the world's continents and the techniques used to explore and develop it. It covers all phases of the industry from geology, exploration, development, production to sustainability, safety and environment. It can be viewed online or purchased from the [UK Offshore Operators Association](#).
- [Glossary of Oil and Gas \(Univ. of Texas Austin\)](#). Did you see a word you don't understand? Look it up in this handy glossary of Oil and Gas terms produced by the University of Texas at Austin ([54KB](#)).
- [Atlantic Oil and Gas Works Online](#). This 3 page article describes in simple terms how oil companies explore for offshore oil and gas, the changes in exploration technology over the past 40 years, and how exploration can effect the environment. Atlantic Canada examples and regulations to minimize impacts are described.
- [Society of Petroleum Engineers](#).
- [Learn About Energy](#). This site provides links to 19 world wide organizations that provide excellent educational materials around oil and gas. The materials are rated as suited for primary students, secondary students and adults. You must have a OnePetro login (separate from the SPE login) to purchase this paper or others through OnePetro. Please see www.onepetro.org.
- [Introduction to Oil and Gas](#)
This site contains 8 articles on the following topics:
 - >> Why Do We Need Oil and Gas?
 - >> What is an Oil and Gas Reservoir?
 - >> How Does the Industry Find Oil and Natural Gas?
 - >> How are Oil and Gas Produced?
 - >> Where are Oil and Gas Produced?
 - >> How Much Oil and Gas is Left?
 - >> What is the Role of Technology in Oil and Gas Production?
 - >> How is the Industry Working to Protect the Environment?

Protocols & Memoranda of Understanding

- [Memorandum of Understanding on Consultation in Respect of Offshore Oil and Gas Development \(PDF 231KB\)](#).
- [Nisga'a Nation - Offshore Oil & Gas Agreement \(PDF 523KB\)](#).