

## Special Section Introduction

# Science Based Governance and Regulation of Arctic Energy Installations

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This section of the Arctic Yearbook has its roots in a network established with the support of the UK Arts and Humanities Research Council: The Science Based Governance and Regulation of Arctic Energy Installations Network (SciBAR Installations) ([www.scibarinstallations.org.uk](http://www.scibarinstallations.org.uk)). The network and this section of the Yearbook are designed to develop an overview of the potential risks and impacts associated with the construction and operation of offshore installations in the Arctic drawing on expertise from a range of disciplines. Thus we have contributions from law (Basaran, Vinogradov & Azubuike, and Kirk & Miller), environmental science (Kirk & Miller) management (Andræsen, Borch & Ikonen) and politics (Poppel).

The papers give some indication of the range of relevant disciplines and issues to be addressed if we are to ensure a 360 degree review of the regulation of offshore energy installations in the Arctic. Thus Vinogradov & Azubuike take a traditional legal approach in assessing the current global and regional regulations relating to pollution from offshore petroleum operations in the Arctic and propose solutions to identified gaps in the existing Arctic regime in the form of a regional intergovernmental framework or an industry-wide compensation scheme. Kirk & Miller provide an interdisciplinary analysis of the ways in which gaps in scientific understanding of the potential impacts from oil and gas installations on the marine environment may raise legal questions such as what “significant transboundary pollution” means in the Arctic context. Poppel’s paper also directly links to oil and gas activities, but focuses more on the impacts or potential impacts on the political discourse in Greenland.

Two of the papers range slightly more widely, in that they address topics which encompass issues pertaining to Arctic offshore energy installations as well as broader issues. Thus Basaran’s paper on civil liability for oil pollution has potential implications for the transit passage of oil tankers as well as pollution from shipping transporting oil from Arctic installations. Similarly, Andræsen, Borch & Ikonen’s analysis of Arctic marine emergency response draws out how Arctic operational conditions add to inter-organizational coordination challenges in delivering emergency response to all maritime operations, not just those relating to offshore energy installations.

In this collection of papers we begin then to demonstrate the breadth and depth of research needed if we are to fully understand the issues that regulators must address if we are to attend to all threats and impacts from and to offshore installations in the Arctic. As the papers demonstrate these range from socio-political impacts, to impacts on human health and safety, to impacts on the marine environment. The responses required range from the development of monitoring and management techniques, to changes in law.