

In the Shadow of the Mountain: Assessing early impacts on community development from two mining prospects in South Greenland

The study presented in this paper explored how people in South Greenland perceive their future prospects and the role of mining in this regard. This region hosts two important mining projects still in relatively early stages. The study further investigated how mining projects influence local decisions about individual and community development. The study is based on qualitative interviews with people from the towns of Narsaq and Qaqortoq and from a sheep farm near Narsaq, during a fieldtrip in May 2017. The authors found that the mining projects, even though they are still in the exploration phase, have already had great impact on local expectations for future development and on decision-making and planning in people's daily lives and thereby the development of the communities. Further, although located relatively close together in the same region, there are significant differences between the towns and their relations to the neighboring mining projects. There is both support and opposition towards the projects, which triggers division between individuals, between groups and between the towns. However, all agree on a need for more transparent processes and for timelines to inform people of when they can expect decisions to be made and activities to take place.

Forfatter: Anne Merrild Hansen; Rachael Lorna Johnstone **Type:** Article | Artikel **Årstal:** 2019 **Emner:** South Greenland; Mining; Social impact assessment; Uranium **Titel på tidsskrift:** The Extractive Industries and Society **ISSN nummer:** 2214-790X

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Does Indigenous Knowledge Occur in and Influence Impact Assessment Reports? Exploring Consultation Remarks in Three Cases of Mining Projects in Greenland

Mineral extraction is pursued in Greenland to strengthen the national economy. In order that new industries promote sustainable development, environmental impact assessments and social impact assessments are legally required and undertaken by companies prior to license approval to inform decision-making. Knowledge systems in Arctic indigenous communities have evolved through adaptive processes over generations, and indigenous knowledge (IK) is considered a great source of information on local environments and related ecosystem services. In Greenland the Inuit are in the majority, and Greenlanders are still considered indigenous. The Inuit Circumpolar Council stresses that utilizing IK is highly relevant in the Greenland context. Impact assessment processes involve stakeholder engagement and public participation, and hence offer arenas for potential knowledge sharing and thereby the utilization of IK. Based on the assumption that IK is a valuable knowledge resource, which can supplement and improve impact assessments in Greenland thus supporting sustainable development, this paper presents an investigation of how IK is utilized in the last stages of an impact assessment process when the final report is subject to a hearing in three recent mining projects in Greenland.

Forfatter: Parnuna Egede Dahl; Anne Merrild Hansen **Editor:** Noor Johnson **Type:** Article | Artikel **Årstal:** 2019 **Emner:** Arctic; Greenland; EIA; SIA; Extractive industries; Indigenous knowledge; Traditional knowledge; Impact assessment **Titel på tidsskrift:** Arctic Review on Law and Politics **Volume på tidsskrift:** 10 **Udgiver:** Cappelen Damm **ISSN nummer:** 2387-4562

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Social and Environmental Impact Assessments in the Arctic

The Routledge Handbook of the Polar Regions is an authoritative guide to the Arctic and the Antarctic through

an exploration of key areas of research in the physical and natural sciences and the social sciences and humanities. It presents 38 new and original contributions from leading figures and voices in polar research, policy and practice, as well as work from emerging scholars.

This handbook aims to approach and understand the Polar Regions as places that are at the forefront of global conversations about some of the most pressing contemporary issues and research questions of our age. The volume provides a discussion of the similarities and differences between the two regions to help deepen understanding and knowledge. Major themes and issues are integrated in the comprehensive introduction chapter by the editors, who are top researchers in their respective fields. The contributions show how polar researchers engage with contemporary debates and use interdisciplinary and multidisciplinary approaches to address new developments as well as map out exciting trajectories for future work in the Arctic and the Antarctic.

The handbook provides an easy access to key items of scholarly literature and material otherwise inaccessible or scattered throughout a variety of specialist journals and books. A unique one-stop research resource for researchers and policymakers with an interest in the Arctic and Antarctic, it is also a comprehensive reference work for graduate and advanced undergraduate students.

Forfatter: Anne Merrild Hansen; Sanne Vamme Larsen ; Bram Noble **Editor:** Mark Nuttall; T. Christensen ; M. Siegert **Type:** Contribution to book/anthology | Bidrag til bog/antologi **Årstal:** 2018 **Emner:** Social; Environment; Arctic; Impact assessments **Værtpublikationens hoved- & undertitel:** The Routledge Handbook of the Polar Regions **Forlag:** Routledge

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Research | Forskning - peer review > Contribution to report | Bidrag til rapport

Health and well-being

Residents across the Baffin Bay/Davis Strait (BBDS) region have experienced common challenges in relation to rapid development and changes in living conditions, and they continue to adapt to the legacy of colonization. However, there are still significant symptoms of social problems and mental vulnerability. The strong relation to nature and the importance of artistic creativity and cohesion remain central to the life of Inuit. These factors are of great importance for mental health and well-being.

Forfatter: Anne Merrild Hansen; Linnea Ingebrigtsen ; Sharon Edmunds-Potvin **Editor:** Anders Mosbech ; Mickaël Lemay ; Malene Simon ; Flemming Ravn Merkel ; Tom Christensen ; Rikke Becker Jacobsen ; Parnuna Egede Dahl; Knud Falk **Type:** Contribution to report | Bidrag til rapport **Årstal:** 2018 **Emner:** Health; Well-being; Arctic **Udgivelsessted:** Oslo **Udgivelsesland:** Norway **Værtpublikationens hoved- & undertitel:** AMAP 2017 Adaptation Actions for a Changing Arctic: Perspectives from the Baffin Bay/Davis Strait Region **Forlag:** Arctic Monitoring and Assessment Programme (AMAP) **ISBN nummer:** 978-82-7971-105-6

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Research | Forskning - peer review > Contribution to report | Bidrag til rapport

Non-living resources

Commodity prices, together with extraction prices and technology development – not climate change effects – are the main drivers of change in the Baffin Bay/ Davis Strait (BBDS) non-living resources sector. The commodity prices of mineral resources are expected to decline in the coming years.

Forfatter: Susse Wegeberg ; Chris Southcott ; Peter Aastrup ; Anne Merrild Hansen; Pelle Tejsner **Editor:** Anders Mosbech ; Mickaël Lemay ; Malene Simon ; Flemming Ravn Merkel ; Tom Christensen ; Rikke Becker Jacobsen ; Parnuna Egede Dahl; Knud Falk **Type:** Contribution to report | Bidrag til rapport **Årstal:** 2018

Emner: Non-living resources; Arctic **Udgivelsessted:** Oslo **Udgivelsesland:** Norway
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ISBN nummer: 978-82-7971-105-6

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Summary of adaptation options for the BBDS region

The following sections summarize the main adaptation options from this report, consider and consolidate the sectoral responses outlined in previous chapters, and add relevant adaptation options from other sources, including Arctic Council reports.

Forfatter: Clive Tesar ; Knud Falk ; James Ford ; Maria Ackrén; Merete Watt Boolsen ; Sharon Edmunds-Potvin ; Anne Merrild Hansen; Linnea Ingebrigtsen ; Thomas Ingeman-Nielsen ; Mickaël Lemay ; Flemming Ravn Merkel ; Thierry Rodon ; Chris Southcott ; Jean-Éric Tremblay ; Susse Wegeberg **Editor:** Anders Mosbech ; Mickaël Lemay ; Malene Simon ; Flemming Ravn Merkel ; Tom Christensen ; Rikke Becker Jacobsen ; Parnuna Egede Dahl; Knud Falk **Type:** Contribution to report | Bidrag til rapport **Årstal:** 2018 **Emner:** BBDS region; Arctic; Adaptation **Udgivelsessted:** Oslo **Udgivelsesland:** Norway **Værtpublikationens hoved- & undertitel:** AMAP 2017 Adaptation Actions for a Changing Arctic: Perspectives from the Baffin Bay/Davis Strait Region **Forlag:** Arctic Monitoring and Assessment Programme (AMAP) **ISBN nummer:** 978-82-7971-105-6

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Research | Forskning - peer review > Contribution to book/anthology | Bidrag til bog/antologi

Improving Public Participation in Greenland Extractive Industries

This contribution is based on a seminar and workshop on public participation processes related to extractive industries in the Arctic, organized by the Arctic Oil and Gas Research Centre at Ilisimatusarfik (University of Greenland) on October 17th and 18th 2017. The seminar was led by experts on extractive industries, indigenous peoples, impact assessments, law, and public participation. They came from Greenland, Denmark, Iceland, Norway, Russia, Scotland, England and Brazil. The seminar was open to the public and was well attended by representatives from the ministries, municipal governments, academic and research institutes, NGOs and others. A select group of invited experts and a group of graduate students from Ilisimatusarfik took part in the workshop.

Forfatter: Anne Merrild Hansen; Rachael Lorna Johnstone **Editor:** Kamrul Hossain ; Anna Petrétei **Type:** Contribution to book/anthology | Bidrag til bog/antologi **Årstal:** 2018 **Emner:** Public participation; Greenland; Arctic; Extractive industries **Værtpublikationens hoved- & undertitel:** Current Developments in Arctic Law **Volume:** 5 **Forlag:** University of Lapland

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Research | Forskning - peer review > Article | Artikel

The Future of Hydrocarbon Development in Greenland: Perspectives from Residents of the North Slope of Alaska

Although Greenland has pursued hydrocarbon development over the last four decades, no viable reserves have been found to date. Therefore, local Greenland communities have little experience or knowledge of how such development might affect their way of life or how to influence project development and outcomes should a significant reserve be found. On the North Slope of Alaska, in contrast, hydrocarbon extraction was

commercialized in the 1970s, and the industry is now highly developed. North Slope residents have experienced dramatic influences on their everyday lives and well-being as a result of large-scale hydrocarbon projects. Some consequences have been welcomed, such as economic development and higher employment rates; however, other impacts are harmful, such as reduced ability of local peoples to maintain subsistence hunting practices. The villages on Alaska's North Slope share many features in common with settlements in Greenland, such as small size, isolation, and limited political influence. In this study, we explore how Greenlanders might learn from the Alaska experience by examining the comments of North Slope residents. We propose that increased local-to-local recommendation- sharing across the Arctic would better guide sustainable development practices and benefits into potential future projects in Greenland. We conclude that an Arctic "Community Guide" and the process to create one could improve planning and implementation of hydrocarbon projects across the Arctic and promote locally appropriate sustainable development in the affected communities.

Forfatter: Anne Merrild Hansen; Ross A. Virginia **Type:** Article | Artikel **Årstal:** 2018 **Emner:** Hydrocarbon; Oil and gas; Sustainable development; Arctic; FPIC; Public participation; Community guide
Titel på tidsskrift: Arctic **Volume på tidsskrift:** 71 **Nummer på tidsskrift:** 4 **Udgiver:** Arctic Institute of North America **Udgivelsesland:** USA **DOI nummer:** <https://doi.org/10.14430/arctic4750>

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Petroleum as a challenge to arctic societies: Ontological security and the oil- driven 'push to the north'

This paper uses the 2014–2015 plunge in oil prices as a linchpin for understanding how petroleum development represents a challenge to Arctic societies. Analysis of media discourses, grey literature and fieldwork material from 2013 to 2017 compared with previous work in the region shows that the 75% price decrease in oil price brings into stark relief the perceived level of ontological security that future petroleum economies in Northern Norway, Alaska and Greenland provides. The findings reveal that while the communities in each location find themselves along different timelines of the petroleum economy, there are transferable insights that can benefit other communities influenced by (the potential for) petroleum development in both the Arctic and beyond, in particular concerning the way in which specific ideas about oil and oils future features as contributing to or diminishes ontological security perceptions on the ground. The goal of this paper is to deepen the comparative analysis of research on tensions in Arctic communities as petroleum is perceived as either strengthening or threatening future ontological security in the region. The discussion considers the consequences of path dependent petroleum economies, and how perceptions on alternative futures can fruitfully be introduced into petroleum-dominated narratives about viable Arctic futures.

Forfatter: Brigit Dale ; Siri Veland ; Anne Merrild Hansen **Type:** Article | Artikel **Årstal:** 2018 **Emner:** Ontological security; Arctic futures; Offshore oil; Alaska; Greenland; Norway; Path dependency **Titel på tidsskrift:** The Extractive Industries and Society **DOI nummer:** <https://doi.org/10.1016/j.exis.2018.10.002>

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Research | Forskning - peer review > Article | Artikel

How three key factors are driving and challenging implementation of renewable energy systems in remote Arctic communities

Challenges related to access and supply of fossil fuel generated energy in Arctic communities, together with a global agenda to fight the climate change, including through promoting renewable energy systems as alternatives to fossil fuels, are motivating implementation of renewables in the Arctic Region, as in the rest of the world. Various benefits are anticipated in relation to implementation of renewables in Arctic communities, a fact that is driving interest in an appraisal of the state of energy production in the Arctic toward a transition

from fossil fuel generated electricity and heating, to an Arctic energy system based on renewable energy sources. To understand and promote the potential for increased implementation of renewable energy solutions, it is important to investigate the role of key factors such as the economy, infrastructure and technology for the transition process. This article is based on an explorative study and analysis of how these three key factors are driving and challenging implementation of renewables. It aims at contributing to the debate on how to promote renewables in the four Arctic areas: Alaska, Canadian Arctic, Greenland and Russian Arctic. Key findings are discussed and recommendations to tackle some of the identified challenges are provided.

Forfatter: Lucia Mortensen ; Anne Merrild Hansen; Alexander Shestakov **Type:** Article | Artikel **Årstal:** 2017 **Emner:** Renewable energy; Arctic; Remote communities; Sustainable development **Titel på tidsskrift:** Polar Geography **Udgiver:** Taylor & Francis **DOI nummer:** 10.1080/1088937X.2017.1329758

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Research | Forskning - peer review > Contribution to book/anthology | Bidrag til bog/antologi

Arcticness insights

Climate change and globalisation are opening up the Arctic for exploitation by the world – or so we are told. But what about the views, interests, and needs of the peoples who live in the region? What about the myriad of other factors affecting the Arctic and its peoples? This book explores opportunities and limitations in engaging with the Arctic under change, and the Arctic peoples experiencing the change, through the lens of understanding Arcticness: what the Arctic means to Arctic peoples socially and physically. The chapters bring together a variety of disciplines, such as law, politics, geography and the arts, to examine what Arctic peoples could learn from and teach elsewhere, across disciplines and across locations. The authors reflect on philosophies of change in tandem with philosophies of the Arctic, particularly as represented by everyday experiences, memories and geographical imaginations.

Forfatter: Anne Merrild Hansen **Editor:** Ilan Kelman **Type:** Contribution to book/anthology | Bidrag til bog/antologi **Årstal:** 2017 **Emner:** Arctic; Climate Change **Udgivelsessted:** London **Udgivelsesland:** England **Værtpublikationens hoved- & undertitel:** Arcticness: Power and Voice from the North **Forlag:** UCL Press **ISBN nummer:** 978–1–787350–13–7

[Åben publikation](#)

Research | Forskning - peer review > Contribution to book/anthology | Bidrag til bog/antologi

Imagining the future: Local perceptions of Arctic extractive projects that didn't happen

External imaginings of the future Arctic range from protected wilderness to booming oil and gas province, and proponents of different visions frequently clash in global public arenas. At the same time, external perceptions, whether pro-development or pro-conservation, frequently fail to reflect the realities of living in the Arctic, or to incorporate the views (and imaginings) of local inhabitants – those most affected by Arctic resource projects. The Arctic region does have significant resource potential. The United States Geological Survey estimated that 25 per cent of the world's undiscovered petroleum reserves were to be found in the Arctic.¹ The Arctic also represents around 10 per cent of the global nickel, cobalt and tungsten markets, 26 per cent of diamond gem stones and up to 40 per cent of the global production of palladium.² Yet uncertainty about the viability of natural resource projects is ever-present. Companies may be highly visible and a project intensely debated long before it is clear whether natural resource deposits, national-level negotiations and global markets will result in actual extraction for the market. Often local communities have very little information available at this point and yet the very prospect of an industrial project can transform the way a local community imagines – and prepares for – its own future.

Forfatter: Emma Wilson ; Anne Merrild Hansen; Elana Wilson Rowe **Editor:** Ilan Kelman **Type:**

Contribution to book/anthology | Bidrag til bog/antologi **Årstal:** 2017 **Emner:** Arctic; Climate Change; Extractive **Udgivelsessted:** London **Udgivelsesland:** England **Værtpublikationens hoved- & undertitel:** Arcticness: Power and Voice from the North **Forlag:** UCL Press **ISBN nummer:** 978-1-787350-13-7

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Research | Forskning - peer review > Article | Artikel

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Forfatter: Lucia Mortensen ; Anne Merrild Hansen; Alexander Shestakov **Type:** Article | Artikel **Årstal:** 2017 **Emner:** Arctic; Renewable energy **Titel på tidsskrift:** Polar Geography **Volume på tidsskrift:** 40 **Nummer på tidsskrift:** 3

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Research | Forskning - peer review > Article | Artikel

Why cumulative impacts assessments of hydrocarbon activities in the Arctic fail to meet their purpose

The Arctic Region is characterised by vulnerable ecosystems and residing indigenous people, dependent on nature for subsistence fishing and hunting. The Arctic also contains a wealth of non-living natural resources such as minerals and hydrocarbons. Synergies between increased access and growing global demand for the Arctic resources influence the level and nature of human activity and its influence on the environment. It is therefore essential to assess and mitigate the cumulative impacts from these activities. Environmental Assessment (EA) is a common tool applied by the Arctic nations to secure that environmental considerations are included in decision-making when new plans and projects are implemented. However, recent research has indicated that assessment of cumulative impacts in EAs is inconsistent and the practises ambiguous. This article explores this phenomenon further by reviewing and analysing current practices of assessing cumulative impacts in EAs in relation to offshore oil and gas activities in the Arctic. It is found that cumulative impacts assessments are generally lacking. The practitioners involved explain this with reference to the challenge of addressing and assessing cumulative impacts due to their complex nature. They further point at lacking methodological guidelines as well as lack of resources during the impact assessment process.

Forfatter: Trine Skovgaard Kirkfeldt ; Anne Merrild Hansen; Pernille Olesen ; Lucia Mortensen ; Kameliya Hristova ; Alexander Welsch **Editor:** James Ford **Type:** Article | Artikel **Årstal:** 2017 **Emner:** Environmental; Impact; Assessment; Strategic; Cumulative impacts; Offshore oil and gas; Arctic **Titel på tidsskrift:** Regional Environmental Change **Volume på tidsskrift:** 17 **Nummer på tidsskrift:** 3

Udgiver: Regional Environmental Change

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Research | Forskning - peer review > Working paper/preprint | Working paper/arbejdspapir/preprint

Benchmarking af miljøvurderingslovgivning for olieaktiviteter i Grønland - Bilagsrapport 1 - Opsamling fra Workshop 1

Forfatter: Anne Merrild Hansen; Sanne Vammen Larsen **Type:** Working paper/preprint | Working paper/arbejdspapir/preprint **Årstal:** 2016 **Emner:** Benchmarking; Miljøvurderingslovgivning; Olieaktiviteter; Grønland **Udgiver:** Institut for Planlægning, Aalborg Universitet **Udgivelsesland:** Danmark

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Research | Forskning - peer review > Working paper/preprint | Working paper/arbejdspapir/preprint

Benchmarking af miljøvurderingslovgivning for olieaktiviteter i Grønland - Bilagsrapport 1 - Opsamling fra Workshop 2

Forfatter: Anne Merrild Hansen; Sanne Vammen Larsen **Type:** Working paper/preprint | Working paper/arbejdspapir/preprint **Årstal:** 2016 **Emner:** Benchmarking; Miljøvurderingslovgivning; Olieaktiviteter; Grønland **Udgiver:** Institut for Planlægning, Aalborg Universitet **Udgivelsesland:** Danmark

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Research | Forskning - peer review > Contribution to report | Bidrag til rapport

Traditional Knowledge and Industrial Development

There is currently a growing interest in industrial initiatives and development in the general Greenlandic population. Numerous scenarios for the establishment of industries that are based on natural resources such as minerals, fish and oil are pursued in this regard. In considering the growing activities in the area of industrial development, existing informal knowledge in Greenland may become a useful human resource and a societal institution in the gradual process of transition from traditional to modern industries. This chapter acknowledges and examines the potential benefits of informal knowledge in relation to capacity building, sustainable development and employment opportunities within industry in Greenland. In acknowledging such potential, we will discuss if possessing traditional knowledge (also called local knowledge and here from referred to as TK), can be viewed as complementary qualifications and useful competences when it comes to proposed industrial development in Greenland. The chapter will focus on how TK can be used to access relevant competences in the development and ongoing transitions that are taking place in Greenlandic society today, by emphasising the possibility of either promoting local content or securing local benefits through derived opportunities. We perceive these transitions - not necessarily according to a western model of society - but, rather as a unique course towards a modern Inuit society where activities may be combined without compromising the opportunity to continue traditional activities.

Forfatter: Anne Merrild Hansen; Pelle Tejsner ; Parnuna Egede Dahl **Editor:** R. Knudsen **Type:** Contribution to report | Bidrag til rapport **Årstal:** 2016 **Emner:** Traditional knowledge; Industrial development; Arctic; Greenland **Udgivelsessted:** Copenhagen **Udgivelsesland:** Denmark **Værtpublikationens hoved- & undertitel:** Perspectives on skills - an anthology on informally acquired skills in Greenland **Forlag:** Greenland Perspective **ISBN nummer:** 978-87-87519-84-7

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Offshore oil exploration and impact assessment in Greenland

According to the United States Geological Survey, the Greenland basin is estimated to contain 17 billion barrels of oil and potentially 138 billion cubic feet of natural gas (Bird et al. 2008). Other, more moderate, models predict that Greenland contains "substantial reserves" (see eg. Cavallo 2002, Geuns 2012). Oil development is therefore high on the agenda in Greenland. It is being pursued both as the means to grow the economy and as a path to increased economic and political independence from Denmark (Østhagen 2012).

Oil projects are expected to produce benefits for Greenlanders, but these benefits cannot be achieved without careful planning and project management. To ensure that negative impacts are mitigated and that positive outcomes are achieved, Impact Assessments (IA) have been implemented to promote sustainable development in the sector. Additional Impact Benefit Agreements (IBA) have to be negotiated between the affected communities, the government, and oil companies to ensure that social investments are made to secure long-term benefits for local communities.

Forfatter: Anne Merrild Hansen **Type:** Article | Artikel **Årstal:** 2016 **Emner:** Offshore oil exploration; Impact assessment; Greenland **Titel på tidsskrift:** Northern Public Affairs

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