For decades, a post–Cold War narrative heralded a “new Arctic,” with melting ice and snow and accessible resources that would build sustainable communities. Today, large parts of the Arctic are still trapped in the path dependencies of past resource extraction. At the same time, the impetus for green transitions and a “new industrialism” spells opportunities to shift the development model and build new futures for Arctic residents and Indigenous peoples.

This book examines the growing Arctic resource dilemma. It explores the “new extractivist paradigm” that posits transitioning the region’s longstanding role of delivering minerals, fossil energy, and marine resources to one providing rare earth elements, renewable power, wilderness tourism, and scientific knowledge about climate change. With chapters from a global, interdisciplinary team of researchers, new opportunities and their implications for Arctic communities and landscapes are discussed, alongside the pressures and uncertainties in a region under geopolitical and environmental stress. This title is also available as Open Access on Cambridge Core.

SVERKER SÖRLIN is a defining voice in environmental history and a prize-winning author of scholarly and nonfiction books on intellectual history and on the history and politics of climate change. He has a career-long interest in natural resource extraction politics and history, and has chaired Sweden’s national committee for the International Polar Year 2007–2009.
RESOURCE EXTRACTION AND ARCTIC COMMUNITIES

The New Extractivist Paradigm

Edited by

SVERKER SÖRLIN

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Preface

In this book, three big topics meet: resource extraction, local communities, and the Arctic. When we set out on a major research enterprise together in 2016 as part of the NordForsk initiative Responsible Development of the Arctic – Opportunities and Challenges – Pathways to Action, we already knew that all three were undergoing profound change and were under considerable stress due to a confluence of several factors. These did not just include environmental and climate change but also an increased political focus on sustainability and Indigenous rights, conflict on the ground over mining and renewable energy production, and mounting geopolitical tension around oil and gas, rare earth metals, and marine resources.

Environments of the Arctic were changing rapidly, especially climate due to the well-established “Arctic amplification.” Based on then-recent scientific work, the rule of thumb used to be that climate change was twice as fast in the Arctic compared to the global average. Just a decade later, by 2021, the most recent research, and reports from the IPCC, had increased Arctic amplification up to treble or quadruple the rise in global temperature, with the rapid loss of summer sea ice, shrinking snow cover of shorter seasonal duration, and increased amount of anthropogenic soot as some of the crucial drivers. To the increased heat absorption is added an accelerated influx of northbound heat from tropical and temperate regions.

Arctic resource extraction has a history of hundreds of years, with the bulk of it pursued by southern states, often in a colonial fashion with little profit staying in the region. Mining covers a good deal of that period, but the quantities of extraction, minerals, oil, and gas have never been bigger than in the last two decades, and amplitudes between years have never been wider, with a boom in the beginning of the twenty-first century. Prospecting, terrestrial and maritime, has never been more intense following liberalization policies from the end of the Cold War, rising globalization, and the rapidly increased demand for steel and rare earth
metals in China and other growing economies. A much-cited 2008 study by the United States Geological Survey, indicating that the region held as much as 30 percent of the world’s undiscovered oil and gas, did much to animate the Arctic as a resource space for the future.

We also knew that Arctic communities for a long time had lived in complicated relationships with environmental and economic change, some clearly unhelpful to building and strengthening resilient local livelihoods. Our ambition was to research opportunities for these northern Indigenous and settler communities to find continued or even expanded resource extraction more useful, hopefully desired. We were eager to lay out a brighter future for Arctic communities under a reformed regime of resource extraction, with a more critical process of selecting mining sites and where more consultation, social licensing, and revenue sharing was the norm. The backdrop was a checkered history of extractive industries in the Arctic, certainly with a lot of variation between periods and between states and regions; and a complicated relationship with a climate emergency that was looking to the Arctic region, itself a prime victim of the emergency, for critical metals and renewable energy that could help underpin a sustainability transition. The Arctic, all of a sudden, ranked high in virtually all critical dimensions of global change.

Finally, we also knew that the Arctic wasn’t one, but several Arctics. We looked in particular to the European Arctic, which means that the Nordic countries, including Greenland, took a central position, but we also had members of our research team covering Russia, Canada, and the United States.

That was the remit, and the spirit, of the NordForsk Responsible Development of the Arctic program that has funded our research in a Center of Excellence called REXSAC – Resource Extraction and Sustainable Arctic Communities – from 2016 through to 2022. REXSAC as a whole comprised more than fifty researchers and research staff, including ten PhD students and collaborating members of Indigenous communities. Altogether we represented about a dozen scientific specialties in fifteen universities and institutes located in seven countries.

To research these challenging issues has been extremely stimulating and at times discombobulating. It has made us think in new ways, break from old assumptions, and discover new connections. We have found some progress and reasons for hope. We have explored ways of transitioning from extraction to post-mining futures and wiser forms of collaboration and consultation. We have seen alliances form between multiple actors to find new ways forward for sustainable development, and a growing awareness of the acute danger that comes with climate change.

However, we have also seen inertia, inaction, and a resistance to accept caution, restraint, and responsibility. The empirical realities we have observed have not always been consistent with hopes we held at the outset. We have rather found that
resource extraction so far tends to continue a path-dependency of producing and reinforcing pressures on local, especially Indigenous, communities. Technological advances, environmental regulation, and local partnerships have had positive effects, and some of the ongoing extraction stands a good chance of assisting in the decarbonizing effort. But it is far from obvious that these advances will outweigh the insensitive interventions into virgin environments and the high demands on resources, landscapes, cultures, and livelihoods that the expanding extraction creates.

All in all, we see a more complex and problematic Arctic than many envisioned when the Cold War ended, but one that is even more solidly central to the future of both the planet and the world.

Sverker Sörlin
Stockholm, September 2022
Acknowledgments

This book is the result of a great team effort lasting over seven years, from developing the original research design through a long period of research in the field, in archives and libraries, and including many small and large publishing endeavors, through to this volume. It tries to bring a mass of results together into a more coherent image of state-of-the-art knowledge on Arctic resource extraction. As editor, I would like to acknowledge the research that lies behind all chapters. I am deeply grateful to all authors for the effort they have put in. I also owe a big and heartfelt thanks to my editorial assistant, Élise Lépy, herself a scholar and contributor to two of the chapters. In addition, Élise has worked with me for more than a year, making sure that maps, illustrations, and captions were organized appropriately, and that orthographical principles and style guide instructions were duly observed. On top of that, it has been a pleasure!

As a collective, all authors have been, directly or indirectly, dependent on the generous support of NordForsk, our primary funding agency for the research undertaken toward this volume. The bulk of our work has been carried out under the NordForsk Center of Excellence, REXSAC – Resource Extraction and Sustainable Arctic Communities, with KTH Royal Institute of Technology in Stockholm as the hosting institution. At NordForsk in Oslo, then-Director Gunnel Gustasson worked tirelessly over several years to mobilize funds for the NordForsk Arctic program, Responsible Development of the Arctic – Opportunities and Challenges – Pathways to Action. The program was launched in 2015 with a total budget of some 12 million Euros, a tremendous achievement from which the REXSAC CoE benefitted, along with three other CoEs working in parallel.

Key to the success was the constructive support from the NordForsk program officers, Marianne Røgeberg in the preparatory and start-up phases, and since 2018 Kyösti Lempää. An additional source of inspiration and support – and challenge! – was the international Scientific Advisory Board, chaired by Professor Douglas
C. Nord, Umeå University, Sweden. En route, Doug took it upon himself to coordinate and edit a NordForsk Arctic program–wide collection, entitled Nordic Perspectives on the Responsible Development of the Arctic: Pathways to Action (Springer Nature, 2021), a book that allowed us to get our heads together and test some of the ideas that we have explored in depth in the present volume.

Outside the team of authors, several members of the CoE as a whole have contributed to the work in myriad ways. In different constellations, the authors and other REXSAC co-workers, including Indigenous and community representatives, have conducted fieldwork, PhD training courses, and excursions to multiple locations of mining, energy production, and other forms of resource extraction and their surrounding communities. On such occasions, we have been thoughtfully and convivially taken care of by colleagues and local experts. Among those were Britt Kramvig in Alta and Urban Wråkberg in Kirkenes, Norway; Malin Brännström in Arjeplog, Åsa Allan in Pajala, Anders Forsgren in Gällivare, and Nina Eliasson, Clara Nyström, and Niila Inga in Kiruna, all in Sweden; Vili Kurki, Mikko Lipponen, Jaana Koivumaa, Élise Lépy, and Hannu I. Heikkinen in Kolari, Finnish Lapland; Joan Nymand Larsen and Jón Haukur Ingimundarson in Akureyri, Iceland; Mark Nuttall, Lene Kielsen Holm, and Erik Kielsen in Narssassuaq, Narsaq, Arsuk, Ivittuut, and Josva, Greenland; Thierry Rodon, Aude Therrien, Jean-Sébastien Boutet, and Arn Keeling in Schefferville and Labrador City, Québec, and Réal Mckenzie, Matimekush Lac-John, all in Canada.

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Sverker Sörlin