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Nota di contenuto	Part 1 – ARCTIC ECOSYSTEMS AND SUSTAINABILITY. Chapter 1 – Sustainability in an Arctic context: Resilience of the Arctic marine environment(Eva Pongrácz) -- Chapter 2 – Thinking like an ocean: A climate ethic for the Arctic marine environment (Øyvind Stokke) -- Chapter 3 - Arctic marine ecosystems, climate change impacts, and governance responses: an integrated perspective from the Barents Sea

(Stefan Koenigstein) -- Chapter 4 – Oil vulnerability index, impact on Arctic bird populations (Proposing a method for calculating an oil vulnerability index for the Arctic Seabirds) (Nina J. O’Hanlon, Alexander L. Bond, Neil A. James and Elizabeth A. Masden) -- Chapter 5 – Conflicts between Arctic industries and cetaceans (Charla Barsan and Marianne. H. Rasmussen) -- Part 2 – Transport infrastructure. Chapter 6 – Social responsibility practice of the evolving nature in the sustainable development of Arctic maritime operations (Antonina Tsvetkova) -- Chapter 7– Miles and meters matter: political effects on the shipping routes of measurement techniques in the Arctic (Eda Ayaydin) -- Chapter 8 – Black carbon, maritime traffic and the Arctic (Tommi Inkinen, Olli-Pekka Brunila, Esa Hämäläinen, Vappu Kunnaala-Hyrkki and Katariina Ala-Rämi) -- Chapter 9 – Impact of the Potential Implementation of Unmanned Aerial Vehicles on the Northern Sea Route Safety Monitoring (Nikita Kuprikov, Mihail Kuprikov, Maxim Shishaev, Maxim Polishchuk) -- Part 3 – oil and gas. Chapter 10 – Handling the preparedness challenges for maritime and offshore operations in Arctic waters (Kay Fjortoft and Tor Einar Berg) -- Chapter 11 – Arctic oil spill response technologies: challenges and limitations (Victor Pavlov) -- Chapter 12 – The role of supply vessels in the development of offshore field projects in Arctic waters (Antonina Tsvetkova) -- Chapter 13 – Special rules for the Arctic? The analysis of Arctic-specific safety and environmental regulation of offshore petroleum development in the Arctic Ocean States (Daria Shapovalova) -- Part 4 – LOCAL communities. Chapter 14 – Increasing shipping in the Arctic and local communities’ engagement: A case from Longyearbyen on Svalbard (Julia Olsen, Grete Kaare Hovelsrud and Bjørn Petter Kaltenborn) -- Chapter 15 – Arctic search and rescue: A case study for understanding issues related to training and human factors when working in the North (Derek. D. Rogers, Michael King and Heather Carnahan) -- Chapter 16 – The possibilities and limitations of tourism development in Greenland to contribute to personal socio-economic wellbeing for coastal communities: (Vishakha Tay) -- Chapter 17 – Marine tourism development in the Arkhangelsk region, Russian Arctic: Stakeholder’s perspectives: (Julia Olsen, Marina Nenasheva, Karin Andrea Wigger, Albina Pashkevich, Sonja H. Bickford and Tatiana Maksimova) -- Chapter 18 – Finnish Sami: Is tourism a preservation of indigenous culture? (Samim Akgönül, and Eda Ayaydin) -- Part 5 – sustainable governance. Chapter 19 – Regulation of cargo shipping on the Northern Sea Route: a strategic compliance in pursuing Arctic safety and commercial considerations: (Antonina Tsvetkova) -- Chapter 20 – Resource use conflicts in Arctic waters: A legal perspective: (Amber Rose Maggio) -- Chapter 21 – Red dragon enters the waters of the High North: The making of China-Arctic shipping corridor: (Liisa Kauppila and Tuomas Kiiski).

Sommario/riassunto

This book presents the latest scientific views on resource use conflicts in the Arctic seas. The main areas of focus are the biological resources of Arctic seas vs. exploitation of oil and gas resources, and the conflicts in between. In addition, climate change is presented as a stressor, which both limits and facilitates the economic availability of resources in the Arctic. The book is divided into five parts. Part 1 examines Arctic ecosystems, resilience of the marine environment and possible conflicts between industrial sector and biological world. The focus of Part 2 is on transport infrastructure along the northern routes. Issues such as Arctic maritime operations, black carbon and unmanned aerial vehicles are considered. Part 3 focuses on resource use conflicts in Arctic seas and on the most recent threats in terms of Arctic oil and gas exploration, offshore logistics operations as well as transportation of oil and oil

products. Discussions in Part 4 of the book are concentrated around social aspects and involvement of local communities. Tourism development, preservation of indigenous culture, engagement of communities on relevant Arctic issues, search and rescue in the cold marine environment are examples of questions raised. The book reviews Arctic-specific petroleum regulations, the state of preparedness to oil spill accidents in the region as well as the latest developments in oil spill response technologies and their limitations. Search and rescue operations are reviewed and how working in this harsh Arctic environment affects the ability of rescue technicians to perform the required technical skills. Part 5 considers the sustainability challenges arising from the marine resource exploitation. The focus is on the vulnerability of Arctic ecosystems to disturbance – both natural and anthropogenic.
