SSOAR

Open Access Repository
www.ssoar.info

Governability of Regional Challenges: The Arctic Development Paradox

Łuszczuk, Michał; Götze, Jacqueline; Radzik-Maruszak, Katarzyna; Riedel, Arne; Wehrmann, Dorothea

Veröffentlichungsversion / Published Version
Zeitschriftenartikel / journal article

gesis
Leibniz-Institut
für Sozialwissenschaften

Mitglied der
Leibniz-Gemeinschaft

Article

Governability of Regional Challenges: The Arctic Development Paradox

Michał Łuszczuk [1,*], Jacqueline Götze [2], Katarzyna Radzik-Maruszak [3], Arne Riedel [4], and Dorothea Wehrmann [2]

[1] Department of Social and Economic Geography, Maria Curie-Skłodowska University, Poland
[2] German Institute of Development and Sustainability (IDOS), Germany
[3] Faculty of Political Science and Journalism, Maria Curie-Skłodowska University, Poland
[4] Ecologic Institute, Germany

* Corresponding author (michal.luszczuk@mail.umcs.pl)

Abstract
The advancement of governance architecture in the Arctic region and dealing with the "Arctic development paradox" have been among the most significant challenges of the circumpolar North for decades. The common denominator of both issues is the growing necessity to frame solutions that credibly and effectively support the Arctic's social and environmental systems in the face of climate change and globalisation. The current status quo seems deficient, which is why understanding the main impediments is subject to public and academic discussion. This article contributes to these debates by referring to the concept of governability to demonstrate how transregional activities advance the development of more coherent governance in the Arctic. The article explores approaches applied by transregional organisations and cooperation programmes that constitute the governance system in the European Arctic. Specifically, it scrutinises governing interactions developed by the Barents Regional Council and the Northern Periphery and Arctic Programme to overcome the normative trap of the Arctic development paradox. This research follows a semi-structured, exploratory approach, which facilitates identifying key elements of a structurally and conceptually led response that resounds in each case. Combined with a synoptic literature review, this article answers two questions: First, how do the transregional actors approach the Arctic development paradox in their cooperation strategies and programmes, and to what extent do these approaches differ? Second, what kind of recommendations do they provide to overcome the Arctic development paradox?

Issue
This article is part of the issue "Constructing Ocean and Polar Governance" edited by Dorothea Wehrmann (German Institute of Development and Sustainability) and Hubert Zimmermann (Philipps University of Marburg).

1. Introduction

Are our world's current problems too immense to be governed? While global challenges such as climate change and the Covid-19 pandemic require concerted actions across regions and policy fields, they illustrate the difficulty of agreeing on joint approaches at political levels that win broad support within societies. This observation also applies to the Arctic development paradox (ADP) and how it is addressed in the Arctic, which is "a region of regions" (Gamble & Shadian, 2017, p. 143) consisting of three parts: the European Arctic, comprising Iceland, Greenland (Denmark), and the northern territories of Norway, Sweden, and Finland; the American Arctic, comprising Alaska (the United States) and the northern territories of Canada; and the Russian Arctic (Teräs et al., 2018).

After the Cold War, it was agreed in most regional Arctic governance settings to exclude security issues. This changed in 2022. As a reaction to the Russia–Ukraine war, regional governance fora such as the Arctic Council and the Barents Regional Council (BRC) decided to pause activities with Russia. Given the current dynamic situation, a

clear path forward for these fora with Russian involvement is lacking, but it is evident that different socio-economic and ecological circumstances will continue to pose many challenges for Arctic governance. One of them is described by the ADP, a phenomenon capturing the intertwined spheres of economic development and environmental protection in Arctic development. In general terms, the ADP illustrates the normative trap of prioritising access to resources and socio-economic development at the expense of the environment, or vice versa, protecting the environment by limiting economic prosperity. Framing the European Arctic as a region with shared governance challenges, our analysis is focused on two transregional actors—the BRC and the Northern Periphery and Arctic Programme (NPA)—to showcase how two exemplary cases of transregional governance address the ADP. It should be emphasised that both entities are open to cooperation with external partners—the BRC includes Russia and the NPA includes non-Arctic states.

Based on the assumption that transnational forms of transregional cooperation contribute to Arctic governance, this article addresses the following two questions: How do transregional actors approach the ADP in their cooperation strategies and programmes, and to what extent do these approaches differ? What kind of recommendations do they provide to overcome the ADP?

We first introduce the theoretical framework of governability that drives our case studies' analyses by addressing the "governance system," the "system-to-be-governed," and "governing interactions." The concept of governability considers all three as being essential for understanding how policy priorities are set. We use this concept to identify factors that enhance or limit the governance of the ADP. We then focus on the European Arctic as a region through the lens of the governability concept, which describes the European Arctic governance system (EAGS) and the European Arctic system-to-be-governed (EASG). Later, by analysing programmes developed by the BRC and the NPA, we shed light on European Arctic governing interactions (EAGIs). In conclusion, we discuss how the limited governability of the ADP at the level of governance systems in the Arctic broadens the conceptual debates.

2. Introducing the Governability Concept

Complex policy issues challenge geographical, societal, governmental, jurisdictional, and functional boundaries (Koppenjan & Klijn, 2004), creating new needs in the sphere of governance (Hale & Hale, 2011; Levi-Faur, 2014). The expanding field of governance studies (Ansell & Torfing, 2016; Morin & Orsini, 2021) has invoked many theoretical concepts that offer different analytical perspectives to develop suitable theoretical frameworks for addressing new research issues, including normative traps such as the ADP.

The concept of governability is based upon and follows up on the interactive governance theory (Kooiman, 2003). It has been developed and applied in recent studies, most often being dedicated to the governance of fisheries, aquaculture, and coastal zones (Bavinck et al., 2013; Jentoft, 2007; Kooiman, 2003, 2008, 2010; Kooiman et al., 2008; Kooiman & Chuenpagdee, 2005). As defined by Kooiman and Chuenpagdee (2005), the theory of interactive governance highlights an integrated, communicative, and politically informed approach to governance as a practice in which the involvement of various stakeholders is essential. Moreover, interactive governance "holds basic social values and ethical principles to be issues of consideration and decision-making, and is appreciative of contextual factors and local knowledge" (Jentoft, 2007, p. 360; cf. Torfing et al., 2012).

Governability pertains to the governance system, the system-to-be-governed, and the governing interactions between them (Kooiman, 2003). Interactive governance considers governability to be a function of the governance system and the system-to-be-governed as well as interactions between the two. The governance system consists of institutions, steering instruments, and mechanisms, and, as such, it is always a socially constructed system. In turn, the system-to-be-governed can be partly natural and partly social, mainly when it consists of two sub-systems: first, an ecosystem with its natural resources, and second, a system of users and stakeholders. In addition to these systems, attention is paid to the governing interactions between them, which form a system in their own right.

When considering the social and the natural systems, the social system may cause changes in the natural system, but it is also dependent on—and therefore vulnerable to—these changes since they may, to varying degrees, set limits on the users of natural resources. As Jentoft (2007, p. 361) points out, "this interaction is co-evolutionary but not necessarily linear." Instead, it is more likely that interactions are diverse, complex, dynamic, and vulnerable. The governance system, by definition, aims to influence the interactions between the social and the natural sub-systems that are to be governed. To protect the natural sub-system and prevent ecological degradation, for instance, the governance system must act with and through the social sub-system. According to interactive governance theory, the relationship between the governance system and the social sub-system of the system-to-be-governed demands structural adjustments within and between both systems to be effective. It means then that the systems must be compatible enough to be mutually responsive and efficient. As Jentoft (2007, p. 361) argues, "this is not a matter of natural mechanism, but of deliberate intervention, planning and institutional design by societal actors such as legislative bodies, planning agencies and civic organisations—alone or, according to governance theory, preferably in concert.''

Getting the social systems and their institutions to work successfully in such a configuration undoubtedly constitutes a challenge, partially due to the abundance of values, needs, and interests that must be considered.

Moreover, the developed measures should be effective and widely accepted, which means they also have to be embedded in particular social, cultural, and political contexts. At the same time, there are structural qualities or general attributes of the system-to-be-governed that have substantial implications for the whole design of the governance system. According to the concept (Jentoft, 2007; Kooiman & Bavinck, 2005), the natural and social sub-systems-to-be-governed comprise several properties, including:

1. diversity, as it relates to spatial variability in natural, social, and cultural conditions;
2. complexity, which refers to the fact that system elements are interactive, overlapping, interdependent, or even conflicting;
3. dynamics, which occur as a result of tensions within a system and/or between systems;
4. vulnerability, which refers to the fact that systems-to-be-governed are fragile.

The governance system has to consider all of the above-mentioned properties since they establish the conditions under which the governance system operates. Simultaneously, the governance system does not necessarily have to deal with these properties as a given—it may try to change them, which means that they may also be outcomes of governance system actions. Whereas the four properties of the system-to-be-governed mentioned above must be taken largely as they are, the governance system is a matter of institutional choice and planning.

Assessing governability thus provides insights into factors that enhance or limit governance. These insights help to streamline "expectations about what is achievable and to increase the inclusiveness and transparency of processes, and thereby enhancing the legitimacy of the resulting governance arrangements" (Chuenpagdee et al., 2008, p. 2). In our study, we apply it to the analysis of the ADP. In this context, the systems-to-be-governed are both parts of the paradox, namely environmental protection and economic development; the governance systems are transregional institutions involved in and responsible for regional development in the European Arctic, in this case, the BRC and the NPA. Both are embedded in a broader governance architecture in the Arctic. Through the lens of governability, the Arctic governance architecture is the governance system and the ADP constitutes the system-to-be-governed, which are presented in the following section.

3. Arctic Governance and the Arctic Development Paradox Through the Lens of Governability

3.1. Governance in the Changing Arctic

One of the features of the Arctic is the significant scale as well as the high pace of transformations occurring due to climate change, technological development, and glob-alisation. This dynamism presents many challenges and opportunities for governance (Young, 2016). While it is recognised that Arctic governance is a complex field—though its uniqueness might be disputable (Durfee & Johnstone, 2019; cf. Käpylä & Mikkola, 2019)—it is also justified to claim that the Arctic may tell a lot "about narratives of governance in an era of change" (Durfee & Johnstone, 2019, p. 20).

It has been noted that there is no universally accepted definition of "Arctic governance" (Loukacheva, 2010, p. 125). This term refers to the "evolving concept [that] has been given multiple interpretations by the various stakeholders interested in the subject" (Loukacheva, 2010, p. 125). One of the most established understandings is the one proposed by Young (2005), who coined the term "Arctic governance mosaic" to describe the Arctic governance regime complex (see also Pelaudeix, 2014). According to this idea, Arctic governance is characterised by a multitude of different governance arrangements, which together create a mosaic-like framework of (a) global agreements pertinent to the Arctic, (b) the Arctic Council, (c) regional management mechanisms, (d) public-private partnerships, (e) informal venues, and (f) all-hands gatherings (Young, 2016).

Governance in the Arctic has evolved gradually as a response to practical needs and opportunities. During the Cold War, the only multilateral arrangements in the Arctic were the 1920 Svalbard Treaty and the 1973 Polar Bear Convention. The ratification of the United Nations Convention on the Law of the Sea by most Arctic states in 1982 became a milestone for "the legal harmonisation of interests amongst the Arctic coastal states" (Wilson Rowe, 2018, p. 28). With the end of the 1980s, the impetus for pan-Arctic collaborations gained momentum. New pieces in the governance mosaic were brought in, including, inter alia, the International Arctic Science Committee (1990), the Arctic Environmental Protection Strategy (1991), the Northern Forum (1991–1993), the Barents Euro-Arctic Council and Barents Regional Council (1993), the Standing Committee of the Parliamentarians of the Arctic Region (1993), and, finally, the Arctic Council (1996). They all remain central elements of the Arctic governance system today (Young, 2016). Additionally, a few more bodies are also now engaged, such as the Nordic Council and the European Union (inter alia through the NPA). The Arctic has also attracted considerable global interest; there are many non-Arctic states as well as intergovernmental, inter-parliamentary, and non-governmental organisations to act as observers to the Arctic Council or that are aspiring for this status (Wehrmann, 2017).

These developments have created an Arctic governance that is "divided among federal, national, regional, international and global levels of regulation and is split into partly overlapping sectoral domains" (Humrich & Wolf, 2012). This multi-level governance environment is populated not only by national and intergovernmental organisations but also increasingly by new actors,

including transnational and non-governmental organisations, with the Arctic Indigenous Peoples' organisations at the forefront, in addition to supra-national governments and bodies as well as regional and local governments (Sergunin, 2019; Wilson, 2020). The Arctic governance system, which looks more like "a fragmented rather than a properly integrated multi-level system" (Humrich & Wolf, 2012, p. 2), or is even characterised by "bazaar-like features" (Depledge & Dodds, 2017), has repeatedly provoked debates about the need to create a comprehensive Arctic Treaty (Koivurova, 2008; Rahbek-Clemmensen, 2019). It has also inspired opinions about its advantages, such as relative inclusiveness and adaptive capacity (Young, 2016), as well as disadvantages, such as limited "reliability with regard to maintaining peace, its effectiveness in implementing sustainable development, and its contribution to the self-determination and freedom of Arctic indigenous peoples" (Humrich & Wolf, 2012, p. 2).

As Dodds and Woodward (2021) argue, the five most critical current drivers of the Arctic transformation are ongoing climate change, the return of geopolitical competition between great powers, the empowerment of Indigenous autonomy, the development and application of new technologies, and the growth of international trade. Although most of them are intertwined, they also follow different logics, refer to conflicting interests, or are driven by contrasting needs, which makes managing and governing such spheres a demanding task in many ways (Coates & Holroyd, 2020; Rottem, 2020). While searching for a successful way forward, it is advised, among other things, to "emphasise the importance of paying attention to the idea of stewardship in orchestrating efforts to maintain the integrity of the Arctic's biophysical, economic and cultural systems" (Young, 2019, p. 7). It is worth considering this proposal in the context of the possibility of dealing with the ADP, which is the subject of this study and is characterised in the following section with a particular focus on the European Arctic context and two relevant transregional governance actors, the BRC and the NPA.

3.2. The Arctic Development Paradox

Different circumstances define the socio-economic landscapes of the most northern regions of the Arctic states. At the same time, they all belong to one of the regions in the world that are most affected by climate and environmental change (IPCC, 2014). The temperature rises in the region lead, inter alia, to disappearing sea ice, which in turn makes the Arctic more accessible, and thus more attractive for resource extraction, shipping, and tourism (Meredith et al., 2019). Some of the changes and their impacts are more long-term and incremental, others are more immediate.

Therefore, economic activities also shift over time, with some becoming less profitable or more complicated due to changing environmental and climatic conditions. Simultaneously, the Arctic ecosystem is sensitive and vulnerable to externally induced changes. These conditions determine the everyday lives of the people who live there, with around 10 percent being Indigenous Peoples, who are recognised "to be the most vulnerable and at risk human communities in the world" (Morgan, 2016, p. 1). Most of the causes for the climate crisis in the Arctic can be identified outside the region (Meredith et al., 2019). Moreover, environmentally degrading resource extraction in the Arctic often leads to economic profits that are made outside the region. This context determines the framework for the actors of the governance system and also for the ADP itself (system-to-be-governed).

The ADP exemplifies the interconnectedness of economic and environmental issues in the Arctic (Lovecraft & Cost, 2021). It describes the complex, perplexing situation of an intertwining economic and environmental sphere, a situation in which the Arctic "is caught in the conflicting pressures of global climate change and resource exploitation" (Dodds & Woodward, 2021). On the one hand, a type of economic development is promoted that harms the climate and the environment, while on the other hand, governments seek to protect the climate and the environment from the negative impacts of these economic developments (Lovecraft & Cost, 2021).

With the green transition, the paradox reveals yet another dimension. The transition to a carbon-free economy needs certain resources, also from the Arctic—for example, critical raw materials that are essential for batteries used for e-mobility (Saami Council, 2021). Moreover, the demand for electricity from renewable energies will rise, which translates into more facilities on and offshore, such as wind parks and water dams (European Commission, 2019, pp. 14, 23). As a remote, rural, and only sparsely populated area, the Arctic shows particular potential for renewable energy facilities, which can generate new risks and conflicts as a result of other forms of land use. In this context, the centre and periphery lens is useful to understand these dynamics in a broader development context. In the Arctic, framed as a peripheral region, resources are extracted to enable more resource-intense lifestyles, particularly in the urban centres. With the green transition and the aim to build CO2-neutral economies, a narrative is being promoted about using technical solutions to tackle the climate crisis. Thus, the Arctic case "exemplif[ies] the multiple conflicts arising from resource-based development in sparsely populated areas" (Rizzo & Sordi, 2020, p. 2).

By looking at the actors involved in the Arctic governance system and how they interact with the paradox, varying political agendas and promoted activities (such as shipping, resource extraction, (eco-)tourism, etc.) are conceivable, but they often only indirectly reflect on the ADP and try to combine "both worlds" by using the political concept of sustainable development. By merging

environmental and development discourses (Pram Gad & Strandsbjerg, 2019), sustainable development is often utilised to bridge the two spheres of "economic development" and "environmental protection." In the Arctic context, sustainable development, as a political concept, has a tradition that started in the 1990s and has been shaping Arctic policies ever since (Wehrmann et al., in press). However, apart from serving as a bridge, it can also be applied to involve different interests by including diverse interpretations of what is sustainable. By doing that, it can also unveil the tensions captured by the ADP concept (Chuffart et al., 2021).

Against this background, the question arises as to what extent sustainable development is achievable, and if so, how can the process be governed. In other words, is the ADP governable? We argue that the governability lens helps to answer this complex question. To apply the governability concept to the European Arctic, the following section introduces the terminology developed by the theory to our specific case.

3.3. Applying the Governability Concept to the European Arctic

Although the Arctic governance system and the ADP pertain to the entire circumpolar region, any study of the approaches of governing institutions to the paradox between economic development and environmental protection requires a more focused perspective. In our case, such a position is justified, both in the context of ontology (the diversity and heterogeneity of the Arctic) and the applied analytical framework: The governability concept clearly emphasises the importance of the specificity of the scrutinised systems (Kooiman, 2008). In our study, we focus on Fennoscandia—consisting of northern Norway, northern Sweden, northern Finland,

and North-West Russia—because of its well-developed transnational governance system (Biedermann, 2020). Furthermore, including North-West Russia is a result of the spatial dimensions established during the Barents region collaboration in the 1990s. In addition, the ADP plays an essential role in the socio-economic processes in this part of the Arctic.

Following the analytical model applied in the governability concept, we identify the EAGS and the EASG. The EAGS encompasses components of the "governance European Arctic mosaic" (Biedermann, 2020; cf. Vylegzhanin et al., 2018). It includes intergovernmental and transnational bodies such as, for example, the Barents Euro-Arctic Council (BEAC), the BRC, the "Northern Dimension," as well as other forms of transnational collaboration such as the NPA. The EASG covers a geographically defined ecosystem and the social sub-systems. These sub-systems comprise many users and stakeholders involved in or affected by the ADP and contain complex links between nature and the economy. These entities operate on a local, regional, and national level. Moreover, they are also involved in transnational collaborations, which are essential to handle cross-boundary challenges such as climate change adaptation and mitigation (Wehrmann, 2020). Figure 1 illustrates this framework for the governability of the ADP in the European Arctic.

To answer the research questions, our focus is on exploring EAGIs between these two systems, and particularly how the EAGS approaches the ADP, which is embedded in the EASG. Our study focuses mainly on how two selected components of the EAGS refer to the EASG, which is only one part of EAGIs.

In the following section, we present and discuss findings from a qualitative content analysis of primary documents from two case studies in the field
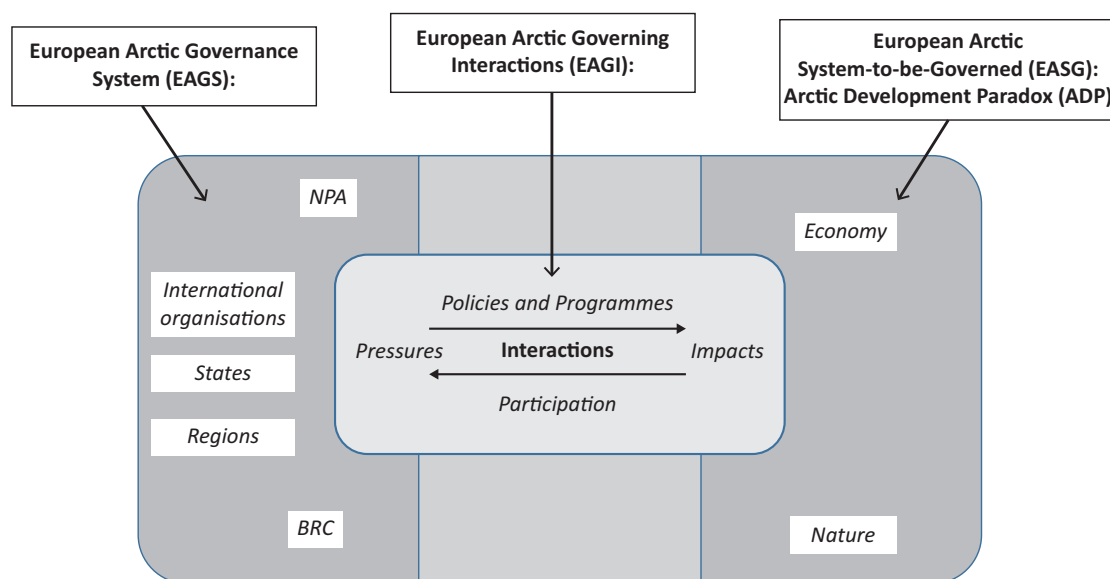

Figure 1. Integrated framework for governability in the European Arctic. Source: Authors' compilation based on Kooiman (2008, p. 174).

of European transnational governance, the BRC and the NPA. We applied a qualitative content analysis by coding the programs' documents using the software MAXQDA. The codes were developed inductively and deductively, with "ADP"—with the EASG as the main code and three different types of EAGIs as sub-codes. The first sub-code framed as one possible EAGI ("ADP recognised") describes a situation in which both economic development and environmental protection are mentioned and their interrelated, paradoxical relations are recognised. The second sub-code ("ADP not recognised") is applied when both economic development and environmental protection are mentioned but not linked. The third sub-code ("ADP neglected") is used when either economic development or environmental protection is clearly dominant. Moreover, "economic development" and "environmental protection" as the main dimensions of the ADP were developed as sub-codes as well (EASG). Additionally, the code "general information BRC/NPA" was generated to look for facts and figures on the BRC and the NPA Cooperation Programme, such as funding, the programme's scope, and partners (EAGS).

4. Case Study Analysis and Findings

4.1. The Barents Regional Council

This case study investigates how the BRC interacted with the ADP between 2014 and 2021. It looks at the interactions between these two systems (EAGIs) while particularly focussing on how the EAGS refers to the EASG, which only represents one element of EAGI.

The BRC is a cross-border platform that has developed since 1993 to support and promote cooperation and development in the Barents region, the core part of the European Arctic (Biedermann, 2020; Hasanat, 2010). This organisation gathers representatives of 13 participating regions and representatives of Indigenous Peoples—Saami, Nenets, and Vepsians—from the northernmost parts of Finland, Norway, Sweden, and North-West Russia (BRC, 2022). The BRC, as a forum for transregional cooperation, supplements the intergovernmental activities of the BEAC.

Although Barents cooperation does not have its own subsidies to finance the activities required to attain common objectives and priorities (BRC, 2014), there are various financial mechanisms available and recommended by the BRC to support multilateral project cooperation in the region. The most important sources are the national and regional budgets of the Barents countries, various EU programmes, and the Nordic Council of Ministers (BEAC, 2015). The BRC's works are guided by the four-year Barents Programmes and the two-year chairmanship programmes, thematic cooperation programmes, and detailed plans of action of 12 Barents working groups. We scrutinised the Barents Programmes and chairmanship programmes to identify priority areas of work for each period and to explore how the BRC approaches the

ADP. Although the programmes do not refer directly to the ADP as such, they communicate and highlight the significance of the phenomenon when stating, for example:

> To be an attractive region, not only for economic investments, consideration needs to be taken regarding the living environment and natural resources. When developing the region, it must be made with concern to preserving the environment, mitigating and adapting to climate change, and fostering good and healthy living conditions for the people. (BRC, 2014, p. 6)

At the same time, in both Barents Programmes (2014–2018 and 2019–2023), the priority area and aims are oriented towards business development and economic cooperation. Environmental issues only come in second place. Moreover, most of the priority goals are not related to the ADP. Additionally, the goals that can be associated with the ADP sound very general. For instance, the programme proclaims "to lay the foundation for an environmentally sustainable economic and social development in the region with emphasis on an active and goal-oriented management of natural resources" (BRC, 2018, p. 5).

Interestingly, in the SWOT (strengths, weaknesses, opportunities, threats) analysis presented in the Barents Programme 2019–2023, the strengths that are stressed are a globally unique nature with boreal forests, clean oceans, lakes and rivers, northern lights, and four seasons, and rich natural resources and renewable energy sources (BRC, 2018, p. 16). As for weaknesses, environmental "hot spots" (regional major polluters or ecological risk issues) are identified. Moreover, there is mention of "different levels of environmental awareness and sustainable way of life" (BRC, 2018, p. 16). Under opportunities, the programme addresses "the potential to develop Barents region jointly as an attractive nature and cultural heritage tourism destination" (BRC, 2018, p. 16). Lastly, under threats, it identifies: (a) the economic and social regression of remote and sparsely populated areas, (b) competition for natural resources, and (c) the negative effects of climate change, the melting of permafrost, and loss of biodiversity (BRC, 2018, p. 16).

Looking at the chairmanship's priorities in the years 2013–2021, the ADP is only indirectly mentioned and often framed in terms of the coexistence of economic and ecological needs. For example, a "network of specially protected natural sites is the only way to provide sustainable industrial development of the Barents region, to preserve [a] favourable environment for present and future generations" (BRC, 2019, p. 2). There is an inclination towards economic development in some of the chairmanship's programmes. The Kainuu region (Finland) proposed to focus on "economic cooperation, labour mobility, project export as well as connections between enterprisers across borders" as well as on "mineral industry, forest sector, bio economy and tourism" (BRC, 2015, p. 5).

Strikingly, the same region declared that "protecting the environment, supporting sustainable development and controlling climate change are particular goals on the national level" (BRC, 2015, p. 9). Whereas Finnmark (Norway) suggested that challenges linked to transport connections and climate change remain high on the agenda, it did not explain these ideas in the context of the regional potential for green energy. Against this background, the proposals presented by Västerbotten (Sweden), though still general, seem to show a greater awareness of the fact that "the environment and climate know no boundaries or borders" and "challenges in these areas concern everyone in the Barents region and affect all fields of cooperation" (BRC, 2019, p. 5).

4.2. The Northern Periphery and Arctic Programme

The second case study analyses the NPA with a special focus on its Cooperation Programme (2014–2020) and how it interacts with the ADP. Like the BRC study, this case also looks at the interactions between these two systems (EAGIs) while particularly concentrating on how the EAGS refers to the EASG, which is, again, only one part of the broader field of EAGIs.

The NPA Cooperation Programme is the work plan of the NPA for the period from 2014 until 2020 and is framed for this analysis as the EAGS. The Cooperation Programme forms part of the European Territorial Cooperation Objective under the Cohesion Policy and is supported financially by the European Regional Development Fund. Around 56 million euros were available for projects, with a maximum project budget of 2 million euros (NPAP, 2016, p. 6). The programme area included nine partner countries: Finland, Ireland, Sweden, the United Kingdom, the Faroe Islands, Iceland, Greenland, and Norway. This geographical scope reflects diversity in representation as well as certain shared characteristics that also inform the ADP, such as "low population density, low accessibility, low economic diversity, abundant natural resources and high impact of climate change" (NPAP, 2016, p. 6).

The programme's rationale is that these joint challenges and opportunities "can be best overcome and realised by transnational cooperation" (NPAP, 2016, p. 6). The most important sections of the Cooperation Programme for analysing how the EAGS interacts with the EASG (meaning EAGIs) are the executive summary, the programme area (including the SWOT analysis), the programme strategy, and the priorities, which are dealt with in the following in more detail.

Although the Cooperation Programme does not mention the term ADP as such, it reflects on the challenges of the phenomenon indirectly by addressing the potential of new economic development on the one hand, and the need for environmental protection on the other. The ADP is expressed as a "combination of features [that result] in joint challenges and joint opportunities" (NPAP, 2016, p. 6), as issues being "interrelated" (p. 11),

as climate change having "mixed effects," with "increasing environmental challenges, but also new opportunities for regional economies" (p. 11). In addition, the notion of the ADP can be identified in sections such as "tensions between economic, social and environmental interests" (p. 10), "globalisation processes and climate change, both will shape the area's development challenges and opportunities—both positively and negatively" (p. 16), and "complex development issues linked to the balanced utilisation of natural resources and climate change adaptation" (p. 17).

By conducting a SWOT analysis (NPAP, 2016, p. 11), the programme identifies the main elements of the ADP and their links and trade-offs with each other. Particularly striking in the SWOT analysis—with a view to the interactions with the ADP (EAGI)—is how it is developing the programme's thematic objectives and investment priorities based on an analysis of the region's strengths, weaknesses, opportunities, and threats as well as challenges and potentials. The thematic objectives and investment priorities "supporting the shift towards a low-carbon economy in all sectors" and "preserving and protecting the environment and promoting resource efficiency" (p. 21) showcase that the programme addresses the ADP and identifies green economic solutions to deal with the paradoxical dimensions of the phenomenon.

The priority axes of the programme—namely "innovation," "entrepreneurship," "renewables and energy efficiency," and "natural and cultural heritage" (NPAP, 2016, pp. 31–43)—also display certain links to the concept of the ADP. For instance, under "entrepreneurship," it is stated that:

> The Programme area's unique cultural and natural heritage is a basis for tourism and experience industries based on the area's unique natural environment, Indigenous lifestyles, and creative industries. This also includes environmentally sustainable business opportunities offered by the Green Economy and Blue Growth. (NPAP, 2016, p. 38)

Moreover, under "natural and cultural heritage," the Cooperation Programme mentions "balancing environmental, economic and social interests in remote and sparsely populated areas. In particular, this shall be seen in relation to exploitation of natural resources and large new investments, for example within the mineral and renewable energy sectors" (NPAP, 2016, p. 43). For achieving this so-called balancing, it is necessary to develop "new management processes and competence development activities within public authorities" (p. 43). In more detail, these processes shall enable "sustainable environmental management to address the economic, environmental and social tensions arising from major developments (often accessing natural resources) and to derive socioeconomic benefit from such developments'' (p. 43).

Although the programme identifies the ADP in certain sections, it also presents arguments that do not address its inherent complexities. As a path to overcoming the paradoxical situation of Arctic development, the programme often presents economic-driven approaches, for instance, green economy and blue growth. Moreover, the promotion of renewables is only seen in a positive light without reflecting on the negative impacts on other forms of land use, such as reindeer herding; moreover, sustainable ways of exploiting natural resources are assessed as being possible. Despite stressing the necessity of balancing different spheres of regional development—social, environmental, and economic—the economic dimension is the one that often dominates, particularly in the area of natural resources and assumptions about potentially sustainable ways to exploit them (opportunities outweigh challenges). Sustainability is very much framed as an environmental approach, and fewer projects are funded under the priorities of "energy efficiency" and "sustainability" than "entrepreneurship" and "innovation" (NPAP, 2021). By looking at the programme also with a quantitative lens and analysing which EAGI code appears the most, the "ADP neglected" code can be found 20 times, the "ADP recognised" 17 times, and the "ADP not recognised" three times. These numbers indicate a slight dominance of non-recognition and a neglect of the phenomenon.

The new Barents Programme (2021–2027) was presented during the NPA's annual meeting in 2021. The main difference concerning how the programme interacts with the ADP (EAGI) is its more integrated approach towards sustainability (Northern Periphery and Arctic Secretariat, 2021), namely by mainstreaming the former priority of "protection of natural and cultural heritage" into other priorities ("innovation capacity," "climate change and resource sufficiency," and "cooperation opportunities"). The funding shall be divided into 45 percent for "innovation capacity" and "climate change and resource sufficiency," respectively, and 10 percent for "cooperation opportunities." Following the logic of governability, the EAGS is applying a dynamic approach for interacting with the EASG by shifting its conceptualisation of sustainability into all priority areas, which potentially could improve interactions with the ADP.

4.3. Findings

Regarding our first research questions ("How do transregional actors approach the ADP in their cooperation strategies and programmes, and to what extent do these approaches differ?"), our case study indicates that the ADP phenomenon is recognised. However, the official documents of the examined institutions only indirectly reflect on its challenges, which are understood as a normative trap involving the co-occurrence of conflicting aspirations and interests based on inconsistent or even conflicting systems of values and norms. The scrutinised documents reveal that the ADP indeed embodies the interconnected trajectories of economic development and environmental protection in the Arctic, which is facing the growing impacts of climate change and globalisation.

Certain differences can be discerned between the institutions studied. These differences are conditioned by the degree of reference to more recognised international concepts of economic and social development that respect ecological needs and conditions. Through institutional links with the European Union, the NPA seems to be more open to recognising the ADP, and it has its pro-ecological and somewhat more clearly outlined preferences for solving the paradox. In the next programme phase of the NPA, for instance, they integrated the sustainability dimension to all priority areas, which could also favour a more integrated approach in dealing with the ADP (NPAP, 2021). On the other hand, the BRC documents show a more significant understanding of the regional and local needs of the population, their expectations, and their limited capacities.

Addressing the second question ("What kind of recommendations do they provide to overcome the ADP?"), we argue that the ways in which environmental protection and the use of natural resources are linked to advancing the economic development of the European Arctic are often superficial and sometimes even unclear. There are many different postulates of a normative nature, but they are not translated into unambiguous guidelines or objectives. The programmes mainly feature economic-driven solutions and often frame sustainability only from an environmental perspective. There are no clear solutions, or even proposals, for how these institutions might intend to combine economic development with environmental protection. Such an approach is undoubtedly a consequence of the severe difficulties in reconciling conflicting interests in order to secure comprehensive development without closing off either path. The ADP phenomenon is also evident in the SWOT analyses carried out in the studied cases, however, they do not lead to a clear statement of preferences on how this paradox might be overcome.

Next, we bundle our results to identify the overarching patterns by also reflecting on the theory of governability with a view to our cases and draw broader conclusions for further research.

5. Conclusion

Our observations indicate that the governability of the ADP is limited at the level of governance systems, which apparently have little ability to perceive, understand, or process signals from systems entangled with the ADP. The EAGIs are clearly impaired and frail for this reason. Furthermore, the analyses of the programmes clearly show that the EAGSs have only a very limited ability to formulate proposals and objectives that would respond to emerging challenges and prepare the EASG for upcoming challenges.

Following the governability concept in our research, we observed the critical elements concerning how the ADP is approached in EAGIs, which do not seem to be adequate for the urgency of the situation resulting from the climate crisis. We noted that the BRC and the NPA recommendations related to the ADP are insufficient; both institutions are rather normatively trapped themselves instead of offering clear guidelines and objectives. This situation is worrying because the documents examined are intended to be programme documents and not political declarations or statements. According to interactive governance theory, the relationship between the governance system and the social sub-system of the system-to-be-governed should include not only deliberate intervention by the system-to-be-governed but also responsive and efficient actions from the governance system. The governance system, by definition, is obliged to influence the interactions between the social and the natural sub-systems that are to be governed following specific political decisions. The lack of such decisions makes the systems even more vulnerable to further shocks or impacts from crises. Regarding the governability of the ADP, these dynamics are conceivable in the European Arctic. The question that arises in this context is: What is the reason for such a situation? Is it a question of the regional authorities' political perspectives, a communication style, a manifestation of broader trends, or perhaps a tendency to duplicate the style of declarations often issued by states in international fora? This issue is certainly worth additional inquiry, as transparent decision-making and communication are the main conditions for efficient management and governance, not only in the European Arctic.

Moreover, we identify a need to complement our research with studies focused on how the EASG influences the EAGS. Further research could also go beyond the regional scope of the European Arctic and investigate how the governance system interacts with a phenomenon such as the development paradox in other resource-intense peripheral world regions (cf. Rizzo & Sordi, 2020). Against the background of the green transition and its multidimensional consequences, such a research focus is needed due to the increasing relevance of economic developments in the Arctic and other regions with potential for renewable energies, unexploited critical minerals, and sparsely populated lands.

Finally, prospective research also needs to consider the impact of the Covid-19 pandemic. First, its impact on the scale of transnational cooperation and governance, as openly admitted in the BRC, revealed that the "pandemic significantly limited international cooperation at all levels in 2020–2021. Long period[s] of isolation will require additional actions and resources to re-establish contacts and develop sustainable forms of cooperation" (BRC, 2021, pp. 2–3). Secondly, on a more general level concerning public and political perceptions of existing threats and normative traps, there needs to be a reflection on the transformation of previously applied approaches and opportunities in order to improve the governance systems.

Conflict of Interests

The authors declare no conflict of interests.

References

Ansell, C., & Torfing, J. (Eds.). (2016). *Handbook on theories of governance*. Edward Elgar Publishing. https://doi.org/10.4337/9781782548508

Barents Euro-Arctic Council. (2015). *Financing of Barents cooperation: Report of the BEAC ad hoc working group on financial mechanism study*. Ministry for Foreign Affairs of Finland. https://www.barentsinfo.fi/beac/docs/LOW_UM_Barents_eJulkaisu_A5.pdf

Barents Regional Council. (2014). *The Barents Programme 2014–2018*. Barents Regional Council. https://www.barents-council.org/document/Barents_Programme_2014_2018_adopted_2_June_2013.pdf

Barents Regional Council. (2015). *Kainuu Region Chairmanship Program 2015–2017*. https://www.barents-council.org/document/Kainuu_barents_2015-17-eng_Archive.pdf

Barents Regional Council. (2018). *The Barents Programme 2019–2023*. Barents Regional Council. https://www.barents-council.org/document/Barents_program_2019-2023_adopted_24_May_2018.pdf

Barents Regional Council. (2019). *Västerbotten Region's Barents Regional Council chairmanship priorities 2019–2021*. https://www.barents-council.org/document/Barents_Regional_Council_Vasterbotten_Chairmanship_Program_2019-2021.pdf

Barents Regional Council. (2021). *Nenets region's Barents Regional Council chairmanship priorities 2021–2023*. https://www.barents-council.org/img/BRC_Nenents_Chairmanship_Booklet_Eng_2021-11-03-144650_rdtx.pdf

Barents Regional Council. (2022). *The Barents Regional Council*. https://www.barentscooperation.org/en/Barents-Regional-Council

Bavinck, J. M., Chuenpagdee, R., Jentoft, S., & Kooiman, J. (Eds.). (2013). *Governability of fisheries: Theory and applications*. Springer.

Biedermann, R. (2020). Adapting to the changing Arctic? The European Union, the Nordics, and the Bar-

ents governance mosaic. *Journal of Contemporary European Studies*, *28*(2), 167–181. https://doi.org/10.1080/14782804.2019.1693352

Chuenpagdee, R., Kooiman, J., & Pullin, R. S. V. (2008). Assessing governability in capture fisheries, aquaculture and coastal zones. *The Journal of Transdisciplinary Environmental Studies*, *7*(1), 1–20. https://journal-tes.dk/vol_7_no_1/no_3_Ratana.pdf

Chuffart, R., Raspotnik, A., & Stępień, A. (2021). Our common Arctic? A more sustainable EU–Arctic nexus in light of the European Green Deal. *The Polar Journal*. Advance online publication. https://doi.org/10.1080/2154896X.2021.1978757

Coates, K. S., & Holroyd, C. (Eds.). (2020). *The Palgrave handbook of Arctic policy and politics*. Springer. https://doi.org/10.1007/978-3-030–20557-7

Depledge, D., & Dodds, K. (2017). Bazaar governance: Situating the Arctic circle. In K. Keil & S. Knecht (Eds.), *Governing Arctic change* (pp. 141–160). Palgrave Macmillan.

Dodds, K., & Woodward, J. (2021). *The Arctic: A very short introduction*. Oxford University Press.

Durfee, M., & Johnstone, R. L. (2019). *Arctic governance in a changing world*. Rowman & Littlefield.

European Commission. (2019). *The European Green Deal. Communication from the Commission to the European Parliament, the European Economic and Social Committee and the Committee of the Regions*. https://eur-lex.europa.eu/resource.html?uri=cellar:b828d165-1c22-11ea-8c1f-01aa75ed71a1.0002.02/DOC_1&format=PDF

Gamble, J., & Shadian, J. (2017). One Arctic… But uneven capacity: The Arctic Council permanent participants. In P. W. Lackenbauer, H. Nicol, & W. Greaves (Eds.), *One Arctic: The Arctic Council and circumpolar governance* (pp. 142–156). Canadian Arctic Resource Committee/Centre on Foreign Policy; Federalism.

Hale, T., & Hale, D. (Eds.). (2011). *Handbook of transnational governance: Institutions and innovations*. Polity Press.

Hasanat, W. (2010). Cooperation in the Barents Euro-Arctic Region in the light of international law. *The Yearbook of Polar Law Online*, *2*(1), 279–309. https://doi.org/10.1163/22116427-91000039

Humrich, C., & Wolf, K. D. (2012). *From meltdown to showdown? Challenges and options for governance in the Arctic*. Hessische Stiftung Friedens- und Konfliktforschung; Peace Research Institute Frankfurt (PRIF).

IPCC. (2014). *Climate change 2014 synthesis report. Contribution of working groups I, II and III to the fifth assessment report of the intergovernmental panel on climate change*. https://www.ipcc.ch/site/assets/uploads/2018/02/SYR_AR5_FINAL_full.pdf

Jentoft, S. (2007). Limits of governability: Institutional implications for fisheries and coastal governance. *Marine Policy*, *31*(4), 360–370. https://doi.org/10.1016/j.marpol.2006.11.003

Käpylä, J., & Mikkola, H. (2019). Contemporary Arctic meets world politics: Rethinking Arctic exceptionalism in the age of uncertainty. In M. Finger & L. Heininen (Eds.), *The global Arctic handbook* (pp. 153–169). Springer.

Koivurova, T. (2008). Alternatives for an Arctic Treaty—Evaluation and a new proposal. *Review of European Community & International Environmental Law*, *17*(1), 14–26. https://doi.org/10.1111/j.1467-9388.2008.00580.x

Kooiman, J. (2003). *Governing as governance*. SAGE. https://doi.org/10.4135/9781446215012

Kooiman, J. (2008). Exploring the concept of governability. *Journal of Comparative Policy Analysis: Research and Practice*, *10*(2), 171–190. https://doi.org/10.1080/13876980802028107

Kooiman, J. (2010). Governance and governability. In S. P. Osborne (Ed.), *The new public governance?* (pp. 72–86). Routledge.

Kooiman, J., & Bavinck, J. M. (2005). The governance perspective. In J. Kooiman, J. M. Bavinck, S. Jentoft, & R. Pullin (Eds.), *Fish for life* (pp. 11–24). Amsterdam University Press.

Kooiman, J., Bavinck, J. M., Chuenpagdee, R., Mahon, R., & Pullin, R. (2008). Interactive governance and governability: An introduction. *The Journal of Transdisciplinary Environmental Studies*, *7*(1), 1–11. https://journal-tes.dk/vol_7_no_1/no_2_Jan.pdf

Kooiman, J., & Chuenpagdee, R. (2005). Governance and governability. In J. Kooiman, J. M. Bavinck, S. Jentoft, & R. Pullin (Eds.), *Fish for life* (pp. 325–349). Amsterdam University Press.

Koppenjan, J., & Klijn, E.-H. (2004). *Managing uncertainties in networks*. Routledge. https://doi.org/10.4324/9780203643457

Levi-Faur, D. (Ed.). (2014). *Oxford handbook of governance*. Oxford University Press.

Loukacheva, N. (2010). Arctic governance. In N. Loukacheva (Ed.), *Polar law textbook* (pp. 125–146). Nordic Council of Ministers.

Lovecraft, A. L., & Cost, D. (2021). Policy paradoxes: Challenges confronting the contemporary Arctic. In D. C. Nord (Ed.), *Leadership for the north. The influences and impact of Arctic Council chairs* (pp. 13–32). Springer.

Meredith, M., Sommerkorn, M., Cassotta, S., Derksen, C., Ekaykin; A., Hollowed, A., Kofinas, G., Mackintosh, A., Melbourne-Thomas, J., Muelbert, M. M. C., Ottersen, G., Pritchard, H., & Schuur, E. A. G. (2019). Polar regions. In H.-O. Pörtner, D. C. Roberts, V. Masson-Delmotte, P. Zhai, M. Tignor, E. Poloczanska, K. Mintenbeck, A. Alegría, M. Nicolai, A. Okem, J. Petzold, B. Rama, & N. M. Weyer (Eds.), *IPCC special report on the ocean and cryosphere in a changing climate* (pp. 203–320). Cambridge University Press. https://doi.org/10.1017/9781009157964.005

Morgan, R. (2016). *Transforming law and institution. Indigenous Peoples, the United Nations and human*

rights. Routledge. https://doi.org/https://doi.org/10.4324/9781315550084

Morin, J.-F., & Orsini, A. (Eds.). (2021). *Essential concepts of global environmental governance* (2nd ed.). Routledge. https://doi.org/10.4324/9780367816681

Northern Periphery and Arctic Programme. (2016). *Northern periphery and Arctic Cooperation Programme 2014–2020*. European Regional Development Fund. https://www.interreg-npa.eu/fileadmin/Programme_Documents/Approved_Cooperation_Programme_Jan2016.pdf

Northern Periphery and Arctic Programme. (2021). *Annual implementation report with the European territorial cooperation goal for the northern periphery and Arctic Programme 2014–2020*. https://www.interreg-npa.eu/fileadmin/Programme_Documents/Annual_Implementation_Reports/AIR_2020_FINAL.pdf

Northern Periphery and Arctic Secretariat. (2021). *Interreg northern periphery and Arctic 2021–2027*. https://www.interreg-npa.eu/interreg-npa–2021–2027

Pelaudeix, C. (2014). What is "Arctic governance"? A critical assessment of the diverse meanings of "Arctic governance." *The Yearbook of Polar Law Online*, *6*(1), 398–426. https://doi.org/10.1163/1876-8814_015

Pram Gad, U., & Strandsbjerg, J. (2019). *The politics of sustainability in the Arctic. Reconfiguring identity, space, and time*. Routledge.

Rahbek-Clemmensen, J. (2019). When do ideas of an Arctic Treaty become prominent in Arctic governance debates? *ARCTIC*, *72*(2), 116–130. https://doi.org/10.14430/arctic68285

Rizzo, A., & Sordi, J. (2020). Resources and urbanization in the global periphery: Perspectives from urban and landscape studies. *Cities*, *100*. https://doi.org/10.1016/j.cities.2020.102647

Rottem, S. V. (2020). *The Arctic Council: Between environmental protection and geopolitics*. Palgrave Macmillan. https://ebookcentral.proquest.com/lib/kxp/detail.action?docID=5843030

Saami Council. (2021, 15 October). *EU has launched its new Arctic strategy* [Press release]. https://www.saamicouncil.net/news-archive/eu-has-launched-its-new-arctic-strategy

Sergunin, A. (2019). Subnational tier of Arctic gover-

nance. In M. Finger & L. Heininen (Eds.), *The global Arctic handbook* (pp. 269–287). Springer.

Teräs, J., Salenius, V., Fagerlund, L., & Stanionyte, L. (2018). *Smart specialisation in sparsely populated European Arctic regions*. Publications Office of the European Union. https://doi.org/10.2760/960929

Torfing, J., Peters, B. G., Pierre, J., & Sørensen, E. (2012). *Interactive governance advancing the paradigm*. Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199596751.001.0001

Vylegzhanin, A. N., Young, O. R., & Berkman, P. A. (2018). Governing the Barents Sea Region: Current status, emerging issues, and future options. *Ocean Development & International Law*, *49*(1), 52–78. https://doi.org/10.1080/00908320.2017.1365545

Wehrmann, D. (2017). Non-state actors in Arctic Council governance. In K. Keil & S. Knecht (Eds.), *Governing Arctic change* (pp. 187–206). Palgrave Macmillan.

Wehrmann, D. (2020). The Arctic Council as a success case for transnational cooperation in times of rapid global changes? *Arctic Yearbook*, *9*, 425–442.

Wehrmann, D., Łuszczuk, M., Radzik-Maruszak, K., Riedel, A., & Götze, J. (in press). Transnational cities alliances and their role in policy making in sustainable urban development in the European Arctic. In N. Sellheim & D. Menezes (Eds.), *Non-state actors in the Arctic*. Springer.

Wilson, G. N. (2020). Indigenous internationalism in the Arctic. In K. S. Coates & C. Holroyd (Eds.), *The Palgrave handbook of Arctic policy and politics* (pp. 27–40). Springer.

Wilson Rowe, E. (2018). *Arctic governance: Power in cross-border cooperation*. Manchester University Press.

Young, O. R. (2005). Governing the Arctic: From Cold War theater to mosaic of cooperation. *Global Governance*, *11*(1), 9–15. https://doi.org/10.1163/19426720-01101002

Young, O. R. (2016). Adaptive governance for a changing Arctic. In L. Lunde, J. Yang, & I. Stensdal (Eds.), *Asian countries and the Arctic future* (pp. 15–33). World Scientific.

Young, O. R. (2019). Is it time for a reset in Arctic governance? *Sustainability*, *11*(16), 1–12. https://doi.org/10.3390/su11164497

About the Authors

Michał Łuszczuk is an associate professor in the Department of Socio-Economic Geography at Maria Curie-Skłodowska University in Lublin, Poland. He is also deputy chair of the Committee on Polar Research of the Polish Academy of Sciences (2019–2022) and co-leads the research project Sustainable Urban Development in the European Arctic (SUDEA).

Jacqueline Götze is a researcher at the German Institute of Development and Sustainability. She holds a Master of Arts in political science and is part of the SUDEA project.

Katarzyna Radzik-Maruszak is an associate professor in the Faculty of Political Science and Journalism at Maria Curie-Skłodowska University in Lublin, Poland. She holds habilitation in political science and is a co-investigator in the SUDEA project. Her research interest focuses on comparative local governance, citizens' participation, and sustainable local development.

Arne Riedel is a lawyer and senior fellow at the Ecologic Institute in Berlin, Germany. He is working on Arctic governance and legal frameworks and supports the SUDEA project with legal expertise.

Dorothea Wehrmann is a senior researcher at the German Institute of Development and Sustainability. She holds a PhD in political science and co-leads the SUDEA project.