



Sustainable Development of the Russian Arctic: Legal Implications

Elena Gladun¹

Sustainable development has increasingly entered into the Arctic context. For Russia, the Arctic means enormous natural resources and potential for the country's social and economic well-being. The focus of this paper is the dynamics of environmental and Arctic legislation in Russia; attention is also given to the rationale and justification of legal implications of sustainable development in the Russian Arctic. Specifically, it discusses barriers in transitioning to sustainable development and estimates relevant legal tools used over the last three decades applicable to the Arctic territories. The general idea is that despite strong political will to promote sustainable development, Russia's unstable economy has impeded the country's sustainability development objectives. Consequently, resource-based development is prioritized over environmental concerns and puts environmentally fragile territories, like the Arctic, at great risk. The research methods include context analysis of the Russian federal and regional laws and contextual interviews at the federal and regional government levels. The results of the research are the identification of achievements and deficiencies in the rule of law related to sustainable development of the Russian Arctic as well as policy recommendations for public authorities. The paper outlines that as long as Russian legislation lacks specific rules addressing sustainability in the Russian Arctic, it would be difficult for the government to implement international principles of sustainable development across this territory.

Key words:

Sustainable development, Arctic, Russia, strategy, legislation, implementation

1. Introduction

The common concept of “sustainability”, which was identified in the middle of the 20th century (Tladi 2007), captures the idea of coordinating human behavior in the natural environment and regulating the consumption of natural resources on

1 Tyumen State University, Tyumen, Russia.

which mankind depends. The classic definition of sustainable development was presented in the Brundtland report: “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland Report 1987).

In 1992, Russia signed a number of international agreements to ensure sustainable development under the national jurisdiction and to contribute to the preservation of the Earth’s ecosystems. The existing literature suggests that the sustainability concept in Russia is addressed with a variety of theoretical perspectives (Andreassen 2016). It is generally considered that sustainable development as a concept first appeared in Russia after the 1992 Rio Declaration (Koptyug et al. 2000). Notwithstanding, the concept of rational nature management was formulated in the country much earlier by the remarkable Soviet scientist David Armand, who was a physical geographer, a landscape specialist and a conservationist. In 1964, his book meaningfully entitled *For Us and Our Grandchildren* (Armand 1964) was first issued and then published repeatedly for many years. Armand was the first in the Russian science literature to detail a scientific approach to the utilization of natural resources as a priority and as one of the eternal values of the human race (Gough and Scott 2008). This idea, 23 years later, was reflected as the main principle of the sustainable development concept in the UN report *Our Common Future* (Barlybaev 2001; Bobylev 2004; Kasimov and Mazurov 2005). In addition, some of the ideas that shaped the view of sustainability came from the works of the Russian scientists Vladimir Vernadsky (Vernadsky 1998), Nikita Moiseev (Moiseev 1995) and their followers who advocated the “rational”, science-driven development that would inevitably lead to a sustainable future (Petrov et al. 2017).

At the end of the 1980s, Mikhail Gorbachev, the USSR leader, suggested a series of policy initiatives compatible with sustainable development considerations put forward by the Brundtland commission. In his Murmansk speech, Gorbachev urged the public to “applaud the activities of the authoritative World Commission on Environment and Development” (Gorbachev 1987). His call for collaboration paved the way for new policies fostering sustainable development in the most fragile territories of Russia (Petrov et al. 2017).

In 1992, Russia joined 178 other states in establishing the agreed policy of the global community for sustainable development. Since the United Nations Conference on Environment and Development in Rio de Janeiro Russia has become a party to many multilateral agreements on the conservation of nature (conventions on climate change, biological diversity, protection of the ozone layer, etc.) based on the sustainable approach (Russian Federation 1992).

The basic regulatory documents addressing sustainable development enacted on the national level include the State Strategy on Environmental Protection and Attainment of Sustainable Development (Presidential Decree 1994); the Concept for Russia’s Transition to Sustainable Development (Presidential Decree 1996); the En-

vironmental Doctrine of the Russian Federation (Order of the Government 2002); and the Federal Target Program of the Russian Federation, “Environment and Natural Resources 2002–2010” (Resolution of the Government 2001). In 1992, a core environmental act – the Law “Protection of the Natural Environment” (RSFSR Law 1992) – was adopted and essentially amended in 2002 (Federal Law 2002), followed by a set of federal and regional laws and bylaws regulating specific environmental issues. Since 1992, a total of over 30 federal laws and approximately 200 bylaws concerning environmental protection and the use of natural resources have become effective in the country (Human Development Report 2005).

The politico-economic context has strongly influenced the development of the sustainability concept in Russia (Andreassen 2016, 78–79). The Russian economy is one of the most energy-intensive ones (Kostin 2010). The Soviet Union, whose tragic environmental legacy Russia inherited, was infamous for its environmentally harmful activities (Udachin et al. 2003) and ecological disasters, including the desiccation of the Aral Sea (Edelstein et al. 2012), the Chernobyl accident (Plokhy 2018), and widespread water and air quality problems arising from enlarging industrialization (Verbitskaya et al. 2002; Abas et al. 2019). Other factors, such as citizen’s attitudes towards the economy and common goods (Gooch 1995; Crotty and Hall 2014), a lack of trust in the state and elites (Crotty 2003; Shlapentokh 2006; Brudna 2017), little public environmental awareness (Riekkinen 2013; Crotty and Hall 2014; Gladun and Zakharova 2017) have impacted Russia’s approach to sustainable development.

Certain regions of Russia are affected by growing industries and natural resource extraction, notably the Arctic region (Newell and Henry 2017). The discourse of sustainability in the Arctic has its own specifics: fragile ecosystems undergoing rapid change (Forbes et al. 2009), world-wide attention to the utilization of land and sea, politically engaged indigenous groups (Petrov et al. 2017), and the major role of the region in the world economy (Laruelle 2014). The composition of the legislation relevant to the Arctic is rather complicated in Russia embracing four groups of documents:

- 1) environmental laws, including laws on the Northern indigenous peoples;
- 2) resource-related laws and regulations on mining and subsoil activities, land use, water, forest and related resources;
- 3) legal regulation of the transportation by the Northern Sea Route;
- 4) strategic documents contouring the Arctic development.

In general, the government prioritizes the utilization of the Arctic as a national strategic resource base in order to meet the socio-economic objectives associated with national growth along with the preservation and protection of the Arctic ecosystems (Order of the President of the Russian Federation 2008; Order of the Government of the Russian Federation 2008; Strategic Action Program 2009). The basic framework for the Russian Arctic is the Strategy for the Development of the

Arctic Zone of the Russian Federation and National Security up to 2020 (Strategy of the Arctic Zone 2013), which was enforced in response to the Fundamentals of Russian Federation Policy in the Arctic until 2020 (Order of the President of the Russian Federation 2008). The Strategy identifies the priority areas for the Arctic: integrated socio-economic development; advancement of science and technology; improvement of infrastructure; environmental security; international cooperation; military security and protection of the state borders in the Arctic.

At the same time, new Arctic policy is not backed up by the national legislation, as it still lacks direct Arctic laws and regulations. The draft law “Russian Arctic Zone Act”, debated more intensively in the recent years (Jensen and Hønneland 2015), was introduced to the State Duma in spring 2017. If adopted, the law will provide a regulatory and legal environment for long-term sustainable development of the Russian Arctic. It will introduce a special regime of funding and management in the Arctic within the economic, environmental and social dimensions. Still its enforcement has been adjourned, basically, by reason of the main Arctic law to be streamlined with the federal Strategy for Spatial Development which has been recently adopted in Russia (Order of the Government of the Russian Federation 2019). Concurrently, the federal legislators are working on the law on “support zones” which are meant to be engines of the country’s economic growth. Since the Arctic support zones are considered one of the key elements of the spatial development strategy, the “Russian Arctic Zone Act”, interlinked with other documents on spatial and regional development, is likely to be discussed for some longer period.

This paper critically examines the legal foundations adopted in the Russian Federation to govern the Arctic use and protection focusing on the sustainability concept. The purpose of this paper is to provide a basis for understanding the success and failures of sustainable development transition in the Russian Arctic. The assumption was that the sustainability approach promulgated in the Concept for Russia’s Transition to Sustainable Development (Presidential Decree 1996) has not found its path in Russia’s Arctic circumstance due to ineffective legal tools and a weak implication of sustainability in the Russian legal science. The research question was: what are the achievements and barriers in Russia’s way to achieve sustainable development in the Arctic? To give an answer to this question, two research methods were employed: context analysis of the Russian federal and regional Arctic-related legislation and contextual interviews at the federal and regional government levels. The analysis included about 50 legislative acts and bylaws in total. This method allowed identifying certain norms in the Russian legislation, which encourage the implementation of sustainability in the Russian Arctic, and deficiencies of the Arctic-related regulations impeding the successful achievement of sustainability in this region. Interviews with representatives of the federal and regional governments made it possible to understand the rationale underlying political decisions in the Arctic and the reasons leading to a detour on the sustainability path. As a result, I suggest that legal tools enabling Arctic governance adhere to the sustainability

approach. The paper is structured as follows: Section 2 illustrates Russia's transition to sustainable development since 1992, revealing challenges and dilemmas of this process. Section 3 presents the specifics of sustainable development in the territories legally defined as the "Russian Arctic zone". The focus of Section 4 is on effective legal tools for approaching sustainability in the Russian Arctic. Furthermore, Section 5 analyzes the deficiencies of the legislation in terms of the application of sustainability priorities in the Arctic. Finally, the conclusion in Section 6 suggests a roadmap for the future sustainable development in the Russian Arctic.

2. Russia's transitioning to sustainable development

Since 1992, the transition to sustainable development in Russia can be compared with "swinging on a swing" between the objectives of the international agenda and the demands of the country's economic growth, which usually dominate over society needs and aspirations. Over the last three decades, Russia has taken two steps towards approaching sustainability: first, strategic directions for environmental protection were finalized; second, legal and regulatory foundations for environmental and social protection were laid. Much environmental legislation and strategic documents for sustainable development have been put into place since the 1990s (Human Development Report 2005). Compliance with environmental interests is seen in article 9 of the Russian Constitution, which stipulates that lands and other natural resources are used and protected in the Russian Federation as the basis of life and activities of its citizens. Environmental rights of Russians are fixed in article 42 of the Constitution (Constitution 1993). These constitutional norms are fundamentals for the legal regulation of natural resource use and environmental protection.

Since the Constitution of the country entered into force in 1993, the evolution of environmental legislation and management in Russia transitioning to sustainable development has had several distinct phases. In the mid and late 1990s, regulatory and institutional frameworks rapidly expanded. In 1994, a Presidential Decree regarding the State Strategy on Environmental Protection and Attainment of Sustainable Development was issued (Presidential Decree 1994) and the Concept for Russia's Transition to Sustainable Development was introduced (Presidential Decree 1996). The transition to sustainable development was planned out in three steps: (1) to find solutions for existing social and economic problems; (2) to conduct environmentally oriented structural transformations in economy and the social sphere; (3) to harmonize the society and the nature. The layout was rather ambitious and generalized, and, unfortunately, these strategic documents to date have not been backed up by relevant governmental decisions. However, the Concept played a positive role, showing Russia's adherence to the principles formulated at the Rio conference in 1992.

The main barriers of the first stage of transition towards sustainable development appeared due to the inefficient Russian economy during its period of reforms. Paradoxically, Russia's deep socio-economic crisis in the 1990s had a favorable effect on the natural environment: the sharp recession in industry, agriculture, timber industry and other sectors reduced emissions and discharges of polluting substances into air and water; the rates of natural-resource depletion and degradation were reduced as well (Bobylev and Alexandrova 2005). However, this "respite" for the environment ended as the Russian economy began to grow in 1999. As the experts believe, unsustainable trends in Russian development are related in many respects to the underestimation of the environmental factor in the macroeconomic strategy, leading to a further degradation of the environment and a depletion of natural resources (Bobylev and Perelet 2013). The rise of the economy based on high environment exploitation, raw materials and polluting industries in 2000s aggravated these processes (Bobylev and Alexandrova 2005).

However, there has been active promulgation of sustainable development principles in environmental legislation – the federal laws "Environmental Impact Assessment Act" (Federal Law 1995a), "Specially Protected Natural Areas Act" (Federal Law 1995b), "Wild Animals Act" (Federal Law 1995c), "Air Protection Act" (Federal Law 1999a). The social dimension of sustainable development was covered in documents regulating indigenous issues, among others. For example, the Federal Law "Guarantees of Rights of Indigenous Peoples in the Russian Federation" was adopted in 1999 as a basic law determining the status of indigenous peoples in Russia and protecting their rights and interests (Federal Law 1999b). During the same period, activism of the non-governmental sector was encouraged and NGOs were actively involved in environmental and social issues. At that time, the federal government recognized the importance of the principles of sustainable development. Environmental and social policies were largely guided by the international environmental agenda (Environmental Policy and Regulation in Russia 2006).

However, in 2000–2004, the need for economic revival was considered more important than environmental goals. Experts and civil society were concerned about the disregard for environmental matters. Such concerns stemmed from the government's focus on large-scale use of natural resources and the commodity-based character of the economy. During that period the State Committee for Ecology and its sub-national units were dissolved, radioactive wastes were imported in the country, and some other environmentally adverse activities took place (Environmental Policy and Regulation in Russia 2006). During that period, several controversial pieces of domestic legislation entered into force. For example, the Land Code was adopted in 2001 after 8 years of heated debate in the Russian society. Although its main task was to provide for sustainable use of lands, the Code, basically, regulated the land-privatization process and the allocation of land plots for the needs of the developing economy (Land Code 2001).

In 2002, the Environmental Doctrine of the Russian Federation was approved prioritizing sustainable use of natural resources, biodiversity, reduction of environmental pollution, environmental safety, quality of life and health of the population, prevention and mitigation of adverse impacts on the natural environment (Order of the Government 2002). The Doctrine was heavily criticized, as it remained declarative and achieved little progress in terms of enforcement instruments. The lack of concrete and mandatory requirements diminished the effectiveness of both legal acts and target federal programs, such as the “Ecology and Natural Resources of Russia (2002–2010)”. Legislation enacted at that time performed poorly also due to inadequate financing and weak coordination (Oldfield 2005; Tynkkynen 2014).

International social and environmental awareness prominently influenced economic activities and civil-society endeavor at the beginning of the 2000s. For example, the United Nations responded to the new challenges posed by the increasing power of large transnational corporations and initiated the Global Compact (Thérien and Pouliot 2006). Though the Global Compact is defined as an essentially voluntary program and not a regulatory instrument, it has attracted over five thousand participants in its network today, including individual business companies, business associations, NGOs, universities, and others, in more than 120 countries. The initiative is seen as a way to establish trust and gain social capital, which are considered to be indispensable for the sustainability of economic development. Based on the search for “accountability, transparency, and the interests of corporations, labor and civil society,” the Global Compact aims to guide entrepreneurial activities according to its ten principles and to create a network which allows participants and stakeholders to meet, to get involved and to share successful socially responsible corporate practices (Gomes et al. 2017). The ten principles of the Global Compact focus on human rights, labor rights, concern for the environment and corruption and are taken directly from commitments made by governments at the UN: the Universal Declaration of Human Rights (1948); the Rio Declaration on Environment and Development (1992); the International Labor Organization’s Fundamental Principles and Rights at Work (1998); and the UN Convention Against Corruption (2003) (Williams 2004).

In Russia, the principles of the Global Compact are promoted both by companies and by non-profit organizations, including those that unite the business community. In 2004, at the initiative of the Russian Union of Industrialists and Entrepreneurs (RUIE), the Social Charter of the Russian Business (Social Charter of the Russian Business 2004) was adopted as a set of fundamental principles of socially responsible business practices that are applicable to the daily activities of organizations of any type. The Charter is a document open to access by any organization that is an employer or promotes its principles. This was a voluntary initiative of Russian business based on the understanding and recognition of the active role of business in social development by representatives of the business community. In 2007, Russia adopted the WOC-CSR-2007 standard “Social Responsibility of the

Organization. Requirements” and approved the Concept for the Development of the National System of Standardization until 2020, taking into account the best international quality management practices. According to the data published on the UN Global Compact official website, 48 companies have joined the Global Compact in the Russian Federation (United Nations Global Compact 2017).

In 2006–2010, there have been significant changes in environmental and recourse legislation expanding its scope and integrating new compliance mechanisms. For example, enacted in 2006, the Forest Code (Forest Code 2006) and the Water Code (Water Code 2006) of the Russian Federation introduced a new system of natural-resource management of forests and water resources respectively, largely based on sustainable development principles. The Climate Doctrine of the Russian Federation, approved in 2009 (Order of the President 2009), marked a crucial achievement in Russia’s recognition of sustainability principles and measures for reducing emissions. Although not legally binding, the Climate Doctrine became a strong statement of intent. It sets strategic guidelines and targets and serves as a foundation for developing and implementing climate policy, covering issues related to climate change and its consequences (Nachmany et al. 2015). After the adoption of the Climate Doctrine, a series of amendments to environmental legislation were introduced, aiming to achieve the commitment to reduce emissions (Federal Law 2013).

During the 2008 economic recession, rising inflation resulted in economic dissatisfaction in many Russian regions (Economist 2014). Politico-economic reforms of that period aimed at modernizing key economic sectors; however, the application of sustainability principles was rather selective (Andreassen 2016). The lack of sustainability-focused reforms was due to Russia’s industrial policy of pushing economic growth via raw materials’ extraction (Bobylev and Perelet 2013). Natural resources, including the rich resources of the Arctic region, were declared the foundation of Russia’s “economic future”. Environmental and nature-resource priorities in the initial Concept for Russia’s Transition to Sustainable Development have been significantly supplemented only in recent times. Interestingly enough in Russia’s case, sustainability began to be interpreted as “security and development”. On 12 May 2009, the National Security Strategy of the Russian Federation until 2020 noted: “The concept of national security is based on social and economic development of the Russian Federation” (Presidential Decree 2009). In this way, the National Security Strategy introduced a new important notion of sustainable development, prioritizing energy security and the development of energy resources which can stabilize the country’s economy and contribute to national security.

In that period, certain social groups were deprived of some rights which they had enjoyed before. Indigenous peoples after repealing a number of norms from the Federal Law “Guarantees of Rights of Indigenous Peoples in the Russian Federation” (Federal Law 2004) were not guaranteed any legal tools to express

their concern about the development, utilization or exploitation of mineral resources; they became unable to participate through quotas in local legislative and executive bodies and, as a result, became less involved in the decision-making process on the matters which would affect their lands and resources (Gladun and Chebotarev 2015).

In 2012–2016, several new approaches to sustainable development were adopted. The big step towards sustainable development was undertaken in the strategic document called “State Environmental Policy for the Period up to 2030”, approved by the President in 2012 (Order of the President 2012). The Policy objective was to rethink the state’s strategic goals in environmental protection and environmental security and, more importantly, to establish mechanisms for their implementation. To enforce the new Environmental Policy, changes were made in environmental legislation. For example, a new system of environmental standards was introduced in the articles 19–28, 28.1 of the ‘Environmental Protection Act’ (Federal Law 2002).

The next attempt to mitigate climate change and take measures to reduce ozone-depleting substances was made. The Federal Law “Environmental Protection Act”, the Energy Strategy of Russia for the period up to 2030 (Order of the Government 2009) and the Climate Doctrine (Order of the President 2009) were harmonized with international standards by introducing climate monitoring and the adoption of more rigorous environmental standards and energy-efficiency and energy-saving measures. On 31 March 2015, the Russian Federation submitted to the United Nations its Intended Nationally Determined Contributions (INDC), proposing to reduce its emissions of net GHG by 25 % to 30 % below the 1990 level by 2030.

However, the ambitious goals announced by the Russian Federation are not supported by the current federal legislation. The Climate Doctrine of 2009 and the Comprehensive Plan for the implementation of the Climate Doctrine for the period up to 2020 adopted in 2011 do not contain effective tools to reduce greenhouse gas emissions. Moreover, the Comprehensive Plan is financially provided neither by the federal budget nor by regional budgets and extra budgetary sources (Larsen et al. 2012). State Policy of the Russian Federation in the Field of Environmental Development for the period until 2030 declared a number of global environmental problems associated with the loss of biodiversity, desertification and other adverse environmental processes alongside with the problem of climate change. This document, in analogy with the Climate Doctrine, lacks practical measures and the ways of targets’ achievement are not traced. A few provisions were supplemented to the Federal Law “On Environmental Protection”, defining the ozone-depleting substances in Article 1 and setting the goals of ozone-layer protection and the powers of federal authorities in this issue in Article 54 (Federal Law 2002). These measures cannot be considered sufficient in terms of establishing a legal framework for cli-

mate-change mitigation in the country. To put it short, environmental legislation in Russia has not changed to a big extent in the wording of climate change.

Concurrently, the international community realized the need to reconsider the basic approaches and specify the original sustainability principles on the rapidly changing globe. New political commitment to sustainable development and a common vision of most nations were presented at the 2012 Rio+20 United Nations Conference, which resulted in a focused political document containing precise and practical measures for implementing sustainable development – Sustainable Development Goals. In 2015, the 2030 Sustainable Development Agenda was adopted by the United Nations as an ambitious universal vision, setting 17 global priorities and 169 associated targets attempting to address concerns including health, housing, food security, gender equality, environmental and economic development, access to justice, and equality within and between countries (United Nations Resolution 70/1 2015). New goals are universal in scope and apply to all countries with the intention to be implemented at the national and local levels (Kaufman 2017). In 2015, together with other countries, Russia revised its approaches to sustainability, accepting 17 Sustainable Development. The 2030 Sustainable Development Agenda does not focus on any specific region of the globe, for example the Arctic, but the goals it sets are compatible with the commonly stated commitments to promote sustainability in the North. Due to the fact that the Arctic is both fragile and rich in resources the unique Arctic environment requires special attention. This attention involves considerable domestic efforts to ensure sustainable development through relevant national policies and legislation.

3. Sustainable development in the Russian Arctic zone

Sustainable development in the Arctic closely relates to both environmental protection and stewardship, and economic development. In the Arctic context, sustainability is inextricably linked to resource exploitation, environmentally safe industrial projects, and the socio-cultural well-being of indigenous peoples. Russia has specific conditions, which need to be taken into account when regulating the Arctic territories. Vast territories are still natural landscapes, and natural systems remain stable even in a period of active economic expansion (Antipov et al. 2006). At the same time, while in other Arctic countries concerns of conservation and improvement of territories may prevail over those of socioeconomic development, under Russian conditions, the goals of raising the economy of the country and living standard of its population usually retain priority in the decision-making process.

Russia has always had significant plans for the exploration and development of the Arctic. Since the 1930s, mining, metallurgy, forestry, woodworking, pulp-and-paper production, and other industries as well as the transportation sector were introduced in the country's Northern territories (Strategic Action Program

2009). State-run oil and gas corporations operating in the Arctic since the Soviet period continue to be the major source of environmental risk (Josephson 2016). The increasingly rapid development of the oil and gas sector in the Russian Arctic, including the plans to develop the continental shelf of the Barents and other Arctic seas, intensifies the threat of environmental degradation not only in the region but on the global level, as well.

After the 2000s, the state priorities in the Arctic were defined in two main documents: the Fundamentals of Russian Federation Policy in the Arctic until 2020 (Order of the President 2008) and the Strategy of the Arctic Zone Development and National Security of the Russian Federation and for the Period until 2020 (Strategy of the Arctic Zone 2013). The approach to sustainability is not mentioned in these documents; otherwise, they determine that the region is intended to play a stabilizing role in the economy by means of resource extraction. The 2013 Arctic Strategy is in compliance with sustainability ideas to a greater extent. It announces that the Arctic development is based on the interaction between government, business, NGOs, and civil society and involves implementation mechanisms such as private-public partnerships and state economic incentives. Unfortunately, both documents do not address many sustainability priorities, such as sustainable management of natural resources, prevention of accidents, waste management, healthy environment for the population in urban and rural areas, quality of life in indigenous communities, environmental education (Andreassen 2016). Interests of the government are focused on improving economic activity, ensuring energy and state-budget efficiency. Sustainable management of natural resources is mentioned just in light of technologic development to ensure the balance between energy production, consumption, and export.

In May 2014, the President of the Russian Federation signed the decree which defined the land territories of the “Arctic zone of Russia”. According to this document, such territories are the Murmansk Region, Nenets, Chukotsky, Yamalo-Nenets Autonomous Districts, as well as some municipal territories in the Krasnoyarsk Territory, Arkhangelsk Region, lands and islands located in the Arctic Ocean (Presidential Decree 2014b). The objective is to identify regions which will become outposts for Arctic development. Nevertheless, to date, the “Arctic zone regions” have made little progress in creating specific legislation based on principles of sustainability. Since 2014, no more than 15 regional laws and regulations have been enacted in order to meet the goals of the Arctic Strategy and to ensure conditions of the Arctic zone sustainable development. Most regional laws are limited to the indigenous issues and economic stabilization.

The long-term goals of transitioning to sustainable development in the Russian Arctic are reflected in the SAP-Arctic (Strategic Action Program 2009), including measures for preventing, eliminating, and reducing the consequences of adverse environmental impacts. At the same time, the SAP-Arctic takes into account social

interests, i.e. indigenous peoples of the North. The objectives set in the Program can be grouped into three main blocks:

- 1) prevention of pollution in the coastal and marine areas of the Russian Arctic, including the transboundary transport of pollutants with aquatic and atmospheric flows oil, chemical, and radiation contamination;
- 2) conservation and improvement of the environment quality, ensuring the Northern indigenous peoples' well-being and conditions for traditional activities;
- 3) prevention and mitigation of negative consequences of natural disasters and human activities, as well as of global climate changes.

Since 2017–2018 Russian sustainability approach has been amplified by new dimensions of regional policy. In 2017, the President approved the Fundamentals of Public Policy for Regional Development in the Russian Federation for the period until 2025, focusing on changing national priorities, the country's new strategic goals and aspirations. Thus, the regional vector of state policy is changing towards economic, political and social guarantees of citizens' rights, improving the quality of their lives and ensuring sustainable economic growth. The new policy is aimed at scientific and technological development of the regions, increasing their competitiveness based on the capabilities and potential of each region and local communities. The new regional policy will have a significant impact on the Arctic regions' development, designating them the cornerstones of the Russian economy and social welfare.

The Yamalo-Nenets Autonomous District has taken the lead in setting goals for steady social and economic development. The region's policy is generally in line with the national plans for the Arctic zone development. A coherent system of legal norms is formed in the region, and effective measures are implemented to achieve sustainable social and economic situation (Resolution of the Yamalo-Nenets Parliament 2011). The basic regional regulations provide for energy efficiency and security (Resolution of the Governor 2019), investment strategy (Order of the Governor 2013), and other economic activities. The Yamalo-Nenets Autonomous District is also focusing on solving problems of socio-economic and cultural development of the Northern indigenous peoples, based on the provisions of the Universal Declaration of Human Rights, other norms of international law, the Constitution of the Russian Federation and federal laws (Resolution of the Yamalo-Nenets Parliament 2009).

Favorable legal conditions for social and economic development are arranged in the Murmansk Region. The enacted regulations and target programs encompass legal and economic tools strengthening coordination and ensuring coherent actions of public authorities, civil society, business and scientific community successfully implementing state policy in the Arctic zone (Resolution of the Governor of Murmansk Region 2014).

Due to the coordinated efforts of state authorities, local governments and non-governmental organizations in the Nenets Autonomous District (Order of the Government of Nenets Autonomous District 2013; Resolution of the Governor of Nenets Autonomous District 2016) sustainable development of indigenous peoples is assured through strengthening their social and economic potential, the preservation of an aboriginal habitat, traditional way of life and cultural values. A similar regulatory regime for indigenous population is created in the Yamalo-Nenets Autonomous District (Resolution of the Yamalo-Nenets Parliament 2009; Law of Yamalo-Nenets Autonomous District 2016) and the Murmansk Region (Regional Agenda 2016).

The environmental dimension is scarcely applied by the regional laws. In particular, the Concept of Functioning and Development of the Network of Specially Protected Natural Areas of the Murmansk Region until 2038 (Order of the Murmansk Region Government 2011) and the State Program of the Yamalo-Nenets Autonomous District “Environmental Protection for 2014–2020” (Order of Yamalo-Nenets Autonomous District Government 2013) are the only examples of legal acts addressing environmental goals, rational management of nature and environmental safety in the Arctic regions. Moreover, these documents are action plans, but not mandatory regulations and can be applicable only within the strict limits of the regional budgets. Thus, on the regional level, there is a gap in forming an integral system of legal, economic, and social measures to provide for sustainable development. All Arctic regions need strong and effective local agendas based on sustainable considerations, especially in the period of launching large-scale industrial projects which have been recently approved.²

Recently new financial mechanisms for implementing the Arctic policy have been introduced on the federal level: the governmental target program “Socioeconomic Development of the Russian Arctic Zone up to 2020” (Resolution of the Government of the Russian Federation 2014) with significant amendments added in 2017, other federal target programs, sectoral strategies, and programs of large companies with activities aimed at the comprehensive development of the Arctic zone of the Russian Federation. These programs are in line with Russia’s national priorities and aimed at the economic support of the new objectives of regional development (advancement of science and technology; improvement of infrastructure; environmental security; competitiveness of the Russian regions, international cooperation).

2 For more information see: Report of the Ministry of Economic Development of the Russian Federation of 19 May 2016, No 14605AZ/D29i. “The List of Priority Projects Implemented in the Arctic Zone of the Russian Federation” [Министерство экономического развития Российской Федерации ‘О перечне приоритетных проектов, реализуемых на территории Арктической зоны Российской Федерации’]. Available at <https://www.arctic.gov.ru/FilePreview/9053275b-7821-e611-80cc-e672fe4e8e4e?nodeId=89bd2a3e-dc56-e511-825f-10604b797c23> (last accessed 30 June 2019).

4. Effective legal tools for approaching sustainability in the Russian Arctic

Despite numerous challenges, Russia has taken specific action to establish regulatory frameworks for sustainability in the Arctic. Russia's recognition of the importance and value of sustainability to legal regulations of activities in the Arctic is expressed in the set of policy and strategic documents, as well as in laws and regulations addressing various issues of Arctic use and protection – “Environmental Protection Act”, “Environmental Impact Assessment Act”, “Specially Protected Natural Areas Act”, State Environmental Policy, Energy Strategy, National Security Strategy, Climate Doctrine, the Strategy of the Arctic Zone. Generally, they create a legal framework and guidelines for activities in the Arctic. Starting from 2014, not only regulatory, but also financial instruments (for example, the target program “Socioeconomic Development of the Russian Arctic Zone up to 2020”) are available for the implementation of the national interest in that region.

New Sustainable Development Goals can be interpreted in conjunction with various dimensions of the Arctic development embodied in the three pillars – economic development, environmental protection, and social guarantees. Those foundational dimensions are reflected in the more particularized provisions of Russian strategies, programs and laws on the federal and regional levels. Though the discourse of sustainable development is not visible in Arctic-related documents, deeper analysis reveals stronger adherence of the Russian conceptual strategies and policies to the sustainable approach. The prime reason for this is a different approach to the sustainable development discourse. Russian federal government, numerous regions and municipalities have adopted a rather generalized view on sustainability addressing Sustainable Development Goals in a broader sense. In obligating themselves to sustainability, major decision-makers seldom refer to the “three pillars” holistically, as suggested by the Brutland definition; instead, they address separate development goals focusing on the dominant directions of the Russian policy. Nonetheless, their objectives are compatible with the foundations of sustainability highlighted in the 2030 Sustainable Development Agenda. In adjusting federal and regional laws and strategies to general political course, the federal center, regions and operating companies concentrate more on certain sustainability goals (education, poverty, food security, clean water) and less on others (clean energy, sustainable cities, gender equality).

The new environmental legislation adopted in Russia in 2002–2016 is based on sustainable development principles: the presumption of potential environmental harm caused by any economic activities, the complexity of environmental impact assessment, polluter pays and others (Federal Law 2002, art. 3), and these principles are the basic guidelines for large-scale industrial projects, approved in the Arctic. Several legal mechanisms of implementation have been introduced: environmental protection standards (Federal Law 2002, art. 21–25); ecological surveillance (Fed-

eral Law 2002, art. 64–69); monitoring (Federal Law 2002, ch. X); environmental responsibility (Federal Law 2002, art. 75; Administrative Offenses Code 2001; Criminal Code 1996).

One of positive steps toward sustainable development since 2000 is the new legal order to create national parks and natural reserves in the Arctic. Under the law “Specially Protected Natural Territories Act” many federal and regional marine and coastal protected areas have been established, including state nature reserves (Kandalaksha, Wrangel Island, Nenets, Gydansky, Big Arctic, Taimyr, Ust-Lensk), the national park (Russian Arctic), the state nature reserves (Franz Josef Land, Nenets, Nizhneobsky, Severozemelsky, Polar Circle, Kuzova, Soroksky, the Yang Mammoths, the Chaunskaya Guba), and others (Khludeneva 2016).

Since the 1990s, legislation protecting the Northern indigenous peoples’ rights has been introduced both at the federal and regional levels. This is in line with the Constitution of the Russian Federation of 1993, international conventions³ and public action of the Northern indigenous peoples (Novikova 2016).

During the last decade the policies of oil and gas companies have also been gradually changing, as companies become more aware of their responsibilities for the safe development of the Arctic region. For example, a number of regulatory and legislative acts are adopted in the Yamalo-Nenets Autonomous District regarding relations with extracting companies – General Agreement on cooperation of Yamalo-Nenets Autonomous District administration and Gazprom; Agreement of Yamalo-Nenets Autonomous District administration with the NOVATEK, Rosneft, and Lukoil companies (Murashko 2009). Companies adopt compensatory measures and actively work together with local and indigenous communities.

The new Russian policy of decentralization introduced by the President in 2017–2018 significantly changes the dimensions of regional development, notably the Arctic regions (Presidential Decree 2017, 2018). The core idea is to vest the regions and municipalities of the Russian Federation with more powers, ensuring their self-reliance and self-sufficiency. For example, large-scale national projects in the sphere of education, housing, infrastructural development, health care and other areas will be implemented under the responsibility of the regional authorities. This means more obligations of the regions, on the one hand, and more flexibility and concern for the sustainable development of the territories, on the other hand.

The 2017 edition of the target program “Socioeconomic Development of the Russian Arctic Zone up to 2020” (Resolution of the Government of the Russian

3 The Russian Federation has not ratified Convention No. 169 and has not signed the United Nations Declaration on the Rights of Indigenous Peoples. Even non-ratified international documents on indigenous peoples have much influence on Russian legislation and governmental authorities’ functions: the Russian Constitution guarantees the rights of indigenous peoples “in accordance with generally recognized principles and norms of international law” (Constitution of the Russian Federation 1993, art 69).

Federation 2014) introduced a new approach to spatial and economic development of the Arctic zone. The main idea is the creation of so-called “support zones” which are based not on administrative-territorial division but on transport and energy zoning in the region. Eight support zones are identified in the target program, each with a specific economic background and potential and various objectives for their development. This approach can give rise to a new system of allocation that people, industries and resources provide for comprehensive social and economic development projects aimed at achieving strategic interests and ensuring national security in the Arctic regions.

5. Deficiencies in achieving sustainability in the Russian Arctic

Still, a gap exists between Russia’s formal strategies of the Arctic development and the capacity of legislation to guarantee basic sustainability approaches in the Arctic (Newell and Henry 2017). Most enacted documents are applicable to all Russian territories, and they do not specifically address the Arctic. Enforced legislative acts are not fully integrated into a holistic and coherent system providing for environmental protection, social security and rational natural resource management. The main problem of transitioning to sustainable development is the inefficiency of enforcement mechanisms. For example, environmental protection norms and rules are dispersed among 800 documents; however, 80 percent of these are of recommendatory character (Environmental Policy and Regulation in Russia 2006, 50). Activities in the Arctic are mostly regulated by general rules not focused on the specific Arctic conditions.

Sustainable Development Goals (United Nations Resolution 70/1 2015) have not increasingly entered into the contexts of the Russian Arctic development. Arctic-related documents almost do not address the “sustainable development” in its classic meaning and lack effective legal mechanisms ensuring sustainability as promulgated in the Concept for Russia’s Transition to Sustainable Development. A general overview shows that the majority of documents were worked out prior to 2015, and it seems that new Sustainable Development Goals have had no particular impact on the Arctic legal framework. There is not a single holistic document adopted in Russia since the 2000s which in its title reflects the sustainable development in the Arctic.

The major failure of the Arctic-related and environmental legislation in Russia is that the term “sustainable development” is used in different contexts: “sustainable development of indigenous peoples”, “sustainable development of related industries”. Just few provisions on sustainable development can be found in a number of legal norms regulating the Arctic use and protection. For example, in the target program on the Arctic Socioeconomic development, the word “sustainable” is used

16 times on 140 pages of the text. Analyzing the Arctic-related legislation on the federal and regional levels, it is noticeable that the industrial development and exploitation of Arctic resources is the cornerstone of Russia's Arctic strategy. It has become apparent that Sustainable Development Goals are not integrated into the Arctic-related legal frameworks on the systemic level and not adapted specifically for the Arctic regions. However, the recent political activities of the federal government and some Arctic regions have demonstrated that they are striving for a sustainable approach towards the Arctic.

Besides, Russia's seeming reluctance to explain what sustainable development is and a greater emphasis on the economy can be explained by the existing economic challenges under which the regions need to concentrate on short-term social and economic goals.

At present, the country's economic development relies on the Arctic region more than on the resource base and ignores environmental factors. For example, the Energy Strategy (Order of the Government 2009) is focused on increasing the extraction of fossil fuels and energy capacity and devotes little attention to the development of renewable sources and decentralization of energy supply. A sectoral approach to the land-management system established by the Land Code is criticized as curbing sustainable development in the Arctic (Griewald et al. 2017). The main feature of land-use regulations in the Russian Federation is that lands are categorized by the purpose of their use. According to the Land Code of the Russian Federation, there are seven categories of lands: (1) agricultural lands; (2) settlement lands; (3) lands for industry, energy objects, transport, broadcasting, television, lands for space activity, military objects, and other special purposes; (4) lands of specially protected areas and sites; (5) forest lands; (6) water-covered areas; (7) reserved lands (Land Code 2001). Each federal authority administers its own land category and makes decisions only within the narrow limits of its own environmental, economic or social interests. This results in tremendous distortions between sectoral interests and sustainable needs of the fragile Arctic region (Verheye 2009). For example, if mineral deposits are discovered and subsoil use is considered economically feasible and cost-effective, the category of land can be changed by the decision of the appropriate authority, often without the consideration or joint decision of the other federal bodies. The exploitation of lands in this case is mainly based on economic criteria without taking into account the impact on the environment or on specific elements of the Arctic ecosystem. As a result, the system becomes less sustainable.

Indigenous peoples' territories are almost out of the regulatory scope. The lands used by indigenous peoples may at the same time be used by the oil and gas industry, agriculture industry and landowners (Indigenous Peoples 2011). The main federal law regulating aboriginal land rights is "Traditional Natural Resource Use of Indigenous Peoples in the North, Siberia and the Far East of the Russian Federation" (Federal Law 2001). According to article 10 of this act, land plots and

waters are granted for indigenous peoples within special territories to be used for traditional occupations. Article 11 of the same act sets out the legal regime of traditional territories and refers to other federal laws that regulate the land rights and resource-related rights. However, the law does not set the conditions under which land rights are provided and protected, as this is within the scope of the land legislation. Thus, in spite of the importance of lands and resources for the traditional occupations and lifestyle of indigenous peoples, in Russian legislation there are no norms granting them specific rights (Gladun 2015).

Today, the transition of the Russian Arctic to sustainable development is hindered by a governance crisis, which is evident in the country. The key authorities responsible for formulating and implementing the Arctic policy at the federal level in Russia are environmental bodies, namely, the Ministry of Natural Resources⁴ and two subordinated authorities – the Federal Natural Resources Supervisory Service (Rosprirodnadzor)⁵ and the Federal Environmental, Industrial and Nuclear Supervisory Service (Rostekhnadzor)⁶. They oversee industrial impact and natural resource use, respectively. No specialized public authority is responsible for the Arctic zone keeping its governance unsustainable for more than twenty years.

The State Committee for Northern Affairs, which was the leading authority on Arctic issues since the 1990s ceased to exist in 2000. Since 2002, a permanent body – the Federation Council Committee on Northern Affairs and Indigenous Peoples (Decree of the Federation Council 2002) continued some arctic management dealing with issues of public policy; social and economic development; state support of the Northern indigenous peoples; management of traditional natural resources, crafts; and the use of natural resources in the Northern regions. Subsequently, in 2004 the Government of the Russian Federation introduced the Ministry of Regional Development, which became the federal executive body responsible for developing state policy and regulatory frameworks in the sphere of social and economic development, including the regions of the Far North and the Arctic. However, in 2014 the Ministry was abolished (Presidential Decree 2014a). To date, the specialized authority is the State Commission for the Arctic Development (Presidential Decree 2015), which is a coordinating rather than a decision-making body. The Arctic Commission contributes to the interaction between federal and regional executive bodies, local governments and non-governmental organizations in addressing socio-economic and other tasks related to the development of the Arctic zone of the Russian Federation and ensuring national security.

4 Ministry of Natural Resources and Environment of the Russian Federation. Official website <https://www.mnr.gov.ru/english/> (last accessed 30 June 2019).

5 Federal Natural Resources Supervisory Service. Official website <http://rpn.gov.ru/> (last accessed 30 June 2019).

6 Federal Environmental, Industrial and Nuclear Supervisory Service. Official website <http://en.gosnadzor.ru/> (last accessed 30 June 2019).

Recently, to improve the efficiency of public administration in the development of the Arctic zone, the President made a decision on reforming the Ministry of the Russian Federation for the Development of the Far East, imposing it with additional functions for the formulation of state policy and legal regulation over the Arctic zone. The new authority was named the Ministry of the Russian Federation for the Development of the Far East and the Arctic of the Russian Federation (Presidential Decree 2019). However, the regulatory scope of the renewed Ministry is limited to economic and social dimensions leaving aside the environmental needs of the Arctic zone.

6. Conclusion: The roadmap to sustainable development of the Arctic

The economy of the Russian Federation depends on energy resources, and the Arctic will play a crucial role in national economic development in the future. Sustainable development of the Arctic is seen through the prism of economic needs and the necessity to save its pristine territories for present and future generations. In Russia's case, despite certain achievements, serious drawbacks and gaps are found in the environmental, land and resource legislation. These barriers are preventing the government and industries from implementing sustainable development practices in the Arctic.

Some key recommendations can be suggested for changes in policy and legislation, which, directly or indirectly, could contribute to sustainability in the Arctic.

1. The vital demands of the Russian society and the Arctic development require addressing expanding dimensions of sustainability, as stated in the 2030 Sustainable Development Agenda, including welfare of the Northerners, health-care in the remote arctic territories, housing, transportation and logistics in the communities and businesses, education in the North, etc. Similar dimensions are pronounced as strategic development goals by the international community. Sustainable Development Goals should be considered the basic elements of the Russian Arctic agenda and constitute a specific domestic roadmap according to the Arctic priorities for the next 15 years.
2. The two main documents – the Fundamentals of Russian Federation Policy in the Arctic until 2020 and the Arctic Strategy – have a descriptive character and selectively establish the priorities of sustainable development. Consequently, the main strategic documents emphasize the potential of the Arctic for the country's economic development; however, they are not backed up by sufficient government decisions. As a result, the existing Arctic-related legislation does not encompass many of the sustainable mechanisms it requires.

Thus, a specific law holistically regulating Arctic issues should be enacted in the near future. Its prior task is to establish a legal system for the regions, public

authorities and industries, obligating all actors to environmentally and socially conscious activities. Rather than declarative principles and norms, the major mechanisms should be incorporated:

- requirements and restrictions for large-scale industrial projects in the Arctic,
 - a new system of environmental standards applicable for the Arctic unique environment,
 - knowledge-based innovations,
 - companies' responsibility enforcement measures,
 - effective forms of participation enabling citizens, NGOs and businesses to protect the Arctic environment and ensure social justice for indigenous population.
3. Alongside the federal laws, legal regulations on the regional level become vital for the Arctic sustainable development. Vesting the Arctic regions with broader regulative powers can provide more flexibility and compliance for dynamically developing Arctic territories. Regional laws and regulations are supposed to be applied promptly, locally, without strict adherence to bureaucratized procedure of Russian legislation. Regional legislation tailored for specific projects and unique Arctic conditions can increase the investment attractiveness of the Arctic zone of the Russian Federation for foreign and Russian investors, significantly dynamize the entire process of its development under conditions of limited finance, environment and social constraints.
 4. A sectoral approach to land and resource legislation lacks coherence and sustainability, creating many barriers in using Arctic territories. Sometimes category land planning ends up with the misuse of land, a contradiction between environmental concerns, Northern indigenous peoples' needs and economic demands. This approach needs to be changed in light of the federal Strategy for Spatial Development, which highlights updated priorities of the spatial development in Russia based on capabilities and potential of the territories. The best instrument for coordinating sectoral interests and sustainable needs is landscape planning, which should be prioritized in the Arctic region. Landscape planning is the only instrument aimed to provide regulations taking into account the natural, social and economic potential of the whole territory.
 5. From 1990 to the present, the governance of the Arctic was unsteady and inefficient due to a succession of various authorities lacking the necessary knowledge, experience and aspirations for managing this unique region. It has led to unsustainable governance. The Russian Arctic needs a modernized system of governance based on newly introduced national priorities and taking into account the peculiarities of the region. In this realm, the Arctic governance should be shifted

from the federal level to the regions' authorities, which are able to demonstrate their leadership and responsibility.

6. Being a pillar of Arctic sustainable development, the Northern indigenous peoples should be involved in the policy and decision-making process relevant to their territories and resources. To guarantee their participation in Arctic development according to their traditional values and knowledge in the future, Russia needs to implement regulating mechanisms that existed prior to 2004. Specifically, the representation of indigenous peoples in political, legislative and executive systems; the rights to express their opinions and free and informed consent prior to the approval of projects affecting their territories should be guaranteed by the federal laws and implemented through efficient programs of action in the Arctic regions.

The unbalanced development of the Russian economy and society in the last twenty-five years has created certain barriers for implementing sustainable priorities. The utilization of Arctic territories and resources remains justified as it meets the objectives of economic growth and social stability. Nevertheless, the Arctic requires environmental stewardship and awareness, which can be ensured by gradual changes in national and regional legislation. The existing environmental, social and Arctic-related legislation has already created necessary frameworks and guidelines and, being in line with universally recognized concepts and an international sustainable agenda, provide a good opportunity for a systemic attempt to adapt global goals of sustainability to Russian conditions. The next step is to supplement national laws with effective legal instruments, setting up the sustainable approach to the Russian Arctic.

References

- Abas, Naeem, Muhammad Shoaib Saleem, Esmat Kalair and Nasrullah Khan. 2019. "Cooperative Control of Regional Transboundary Air Pollutants." *Environmental System Research* 8, 10–22.
- Administrative Offenses Code of the Russian Federation. 2002. [Kodeks Rossiyskoy Federatsii ob administrativnykh pravonarusheniyakh]. 30 December 2001 No. 195-FZ. Collection of acts of the Russian Federation 1(1).
- Andreassen, Natalia. 2016. "Arctic Energy Development in Russia: How 'Sustainability' can Fit?" *Energy Research & Social Science* 16, 78–88.
- Antipov, Alexander (ed.). 2006. *Landscape Planning: Tools and Experience in Implementation*. Irkutsk: V. B. Sochava Institute of Geography SB RAS Publishers.
- Armand, David L. 1964. *Nam i vnukam*. Moscow: Mysl.

- Barlybaev, Khalil. 2001. *Put' chelovechestva: samounichtozheniye ili ustoychivoye razvitiye*. Moscow: State Duma Edition.
- Bobylev, Sergei N. 2004. "Ekonomicheskoye razvitiye i ekologicheskiye ogranicheniya dlya Rossii." *Transitioning to Sustainable Development* 26, 5–8.
- Bobylev, Sergei N. and Anastasia L. Alexandrova (eds). 2005. *Human Development Report 2005 for the Russian Federation*. Moscow: Tverskaya Printing-House.
- Bobylev, Sergei N. and Renat Perelet. 2013. "Sustainable Development and the 'Green Economy.'" In Sergei Bobylev and Renat Perelet (eds). *Sustainable Development in Russia*. Berlin, St. Petersburg: Trigger. Medien. Gmbh, 11–18.
- Bruda, Michail A. 2017. "Political Elite of Modern Russia: Crisis of Formation." *Post-Soviet Issues* [Problemy postsovetskogo prostranstva] 4(4), 373–379.
- Brundtland Report. 1987. *Our Common Future: Report of the World Commission on Environment and Development, Towards Sustainable Development*. Chapter 2 UN A/42/427. Available at <http://www.un-documents.net/wced-ocf.htm> (last accessed 25 June 2019).
- Constitution of the Russian Federation. 1993. Available at <http://www.constitution.ru/en/10003000-01.htm> (last accessed 30 June 2019).
- Criminal Code of the Russian Federation. 1996. [Ugolovnyy kodeks Rossiyskoy Federatsii] 13 June 1996 No 63-FZ. Collection of acts of the Russian Federation 25, 2954.
- Crotty, Jo. 2003. "Managing Civil Society: Democratisation and the Environmental Movement in a Russian Region." *Communist and Post-Communist Studies* 36(4), 489–508.
- Crotty, Jo and Sarah Marie Hall. 2014. "Environmental Awareness and Sustainable Development in the Russian Federation." *Sustainable Development* 22 (5), 311–320.
- Decree of the Federation Council of the Federal Assembly of the Russian Federation. 2002. [Postanovleniye Soveta Federatsii FS RF] 30 January 2002 No 100-SF. Collection of acts of the Russian Federation 7, 635.
- Economist*. 2014. "The End of the Line: The Russian Economy." Available at <http://www.economist.com/news/briefing/21633816-more-decade-oil-income-and-consumer-spending-havedelivered-growth-vladimir-putins> (last accessed 25 June 2019).
- Edelstein, Michael R., Astrid Cerny and Abror Gadaev. 2012. *Disaster By Design: The Aral Sea and its Lessons for Sustainability*. Bingley, UK: Emerald Group Publishing Limited.
- Environmental Policy and Regulation in Russia: the Implementation Challenge*. 2006. Paris: OECD Publishing.

- Federal Law. 1995a. Environmental Impact Assessment Act. [Federal'nyy zakon "Ob ekologicheskoy ekspertize"] 23 November 1995 No 174-FZ. Collection of acts of the Russian Federation 48, 4556.
- Federal Law. 1995b. Specially Protected Natural Areas Act. [Federal'nyy zakon "Ob osobo okhranyayemykh prirodnykh territoriyakh"] 14 March 1995 No 33-FZ. Collection of acts of the Russian Federation 12, 1024.
- Federal Law. 1995c. Wild Animals Act. [Federal'nyy zakon "O zhitvotnom mire"] 24 April 1995 No 52-FZ. Collection of acts of the Russian Federation 17, 1462.
- Federal Law. 1999a. Air Protection Act. [Federal'nyy zakon "Ob okhrane atmosfornogo vozdukha"] 4 May 1999 No 96-FZ. Collection of acts of the Russian Federation 18, 2222.
- Federal Law. 1999b. Guarantees of Rights of the Indigenous Peoples in the Russian Federation. [Federal'nyy zakon "O garantiyakh prav korennykh malochislennykh narodov Rossiyskoy Federatsii"] 30 April 1999 No 82-FZ. Collection of acts of the Russian Federation 18, 2208.
- Federal Law. 2001. Territories of Traditional Natural Resource Use of Indigenous Peoples in the North, Siberia and the Far East of the Russian Federation. [Federal'nyy zakon "O territoriyakh traditsionnogo prirodopol'zovaniya korennykh malochislennykh narodov Severa, Sibiri i Dal'nego Vostoka Rossiyskoy Federatsii"]. 7 May 2001 No 49-FZ. Collection of acts of the Russian Federation 20, 1972.
- Federal Law. 2002. Environmental Protection Act. [Federal'nyy zakon "Ob okhrane okruzhayushchey sredy"] 10 January 2002 No 7-FZ. Collection of acts of the Russian Federation 2, 133.
- Federal Law. 2004. [Federal'nyy zakon ot 22.08.2004 No 122-FZ] 22 August 2004 No 122-FZ. Collection of acts of the Russian Federation 35, 3607.
- Federal Law. 2013. Amendments to the Federal Law "Environmental Protection" and Certain Legislative Acts of the Russian Federation [Federal'nyy zakon "O vnesenii izmeneniy v Federal'nyy zakon 'Ob okhrane okruzhayushchey sredy' i otdel'nyye zakonodatel'nyye akty Rossiyskoy Federatsii"] 23 July 2013 No 226-FZ. Collection of acts of the Russian Federation 30(1), 4059.
- Forbes, Bruce C., Florian Stammler, Timo Kumpula, Nina Meschtyb, Anu Pajunen and Elina Kaarlejärvi. 2009. "High Resilience in the Yamal-Nenets Social-Ecological System, West Siberian Arctic, Russia." *Proceedings of the National Academy of Sciences USA* 106(52), 22041–22048.
- Forest Code of the Russian Federation. 2006. [Lesnoy kodeks Rossiyskoy Federatsii] 200-FZ. 2006. SZ RF 50, 5278.

- Gladun, Elena. 2015. "The Development of Constitutional Norms on Indigenous Peoples' Rights for Traditional Use of Lands and Natural Resources." In Rein Müllerson et al. (eds). *20 Years of New Constitutional Reforms in Eastern Europe: Eastern European Experience*. Tallinn: Tallinn University Law School, 113–120.
- Gladun, Elena and Gennady Chebotarev. 2015. "Participation of the Northern Indigenous Peoples in the Management of the Russian Arctic Territories and Its Legal Protection." *NISPACEE Journal of Public Administration and Policy* 8(1), 111–133.
- Gladun, Elena and Olga Zakharova. 2017. "State Environmental Ideology: From Tsarist Empire to Sustainable Russia." *BRICS Law Journal* 4(4), 39–64.
- Gomes, Eduardo, Nadja de Souza, Larisa Zaitseva and Olga Abakumova. 2017. "Corporate Social Responsibility through the Global Compact: between Business and Society." *BRICS Law Journal* 4(4), 93–115.
- Gooch, Geoffrey D. 1995. "Environmental Beliefs and Attitudes in Sweden and the Baltic States." *Environment and Behavior* 27(4), 513–539.
- Gorbachev, Mikhail. 1987. Speech in Murmansk at the ceremonial meeting on the occasion of the presentation of the Order of Lenin and the Gold Star to the city of Murmansk, 1 October 1987. Available at https://www.barentsinfo.fi/docs/Gorbachev_speech.pdf (last accessed 30 June 2019).
- Gough, Stephen and William Scott. 2008. *Higher Education and Sustainable Development: Paradox and Possibility*. Abingdon, U.K.: Routledge.
- Griewald, Yuliana, Gerhard Clemens, Johannes Kamp, Elena Gladun, Norbert Hölzel and Hubertus von Dressler. 2017. "Developing Land Use Scenarios for Stakeholder Participation in Russia." *Land Use Policy* 68, 264–276.
- Human Development Report. 2005. *Russian Federation. Russia in 2015: Development Goals and Policy Priorities*. Portland: Book News, Inc.
- Indigenous Peoples and the Oil and Gas Industry Context: Issues and Emerging Good Practices*. 2011. London: IPIECA.
- Jensen, Leif Christian and Geir Hønneland. 2015. *Handbook of the Politics of the Arctic*. Cheltenham, U.K.: Edward Elgar Publishing.
- Josephson, Paul R. 2016. "Russia, State Capitalism and Arctic Degradation." *Global Environment* 9(2), 376–413.
- Kasimov, Nikolai and Yurii Mazurov. 2005. "V soglasii s prirodoy." *State Management of Resources* 3, 8–11.
- Kaufman, Risa E. 2017. "Localizing Human Rights in the United States through the 2030 Sustainable Development Agenda." *Columbia Human Rights Law Review* 49(1), 99–128.

- Khludeneva, Natalia. 2016. "Perspektivy razvitiya pravovoy okhrany arkticheskikh ekosistem." Available at <http://отрасли-права.рф/article/17248> (last accessed 30 June 2019).
- Koptyug, Valentin A., V. M. Matrosov and V. K. Levashov (eds). 2000. *New Paradigm of Russian Development: Integrated Sustainable Development Problems Research*. Moscow: Academia.
- Kostin, Alexey E. 2010. Russia. In Wayne Visser and Nick Tolhurst (eds). *The World Guide to CSR: A Country-by-Country Analysis of Corporate Sustainability and Responsibility*. Sheffield: Greenleaf, 331–335.
- Land Code of the Russian Federation. 2001. [Zemel'nyy kodeks Rossiyskoy Federatsii] 25 October 2001 No 136-FZ. Collection of acts of the Russian Federation 44, 4147.
- Larsen, A. Kh., O. A. Podosenova, O. N. Senova and A. V. Fyodorov. 2012. *Climate change and the possibility of low-carbon energy in Russia [Izmenenie klimata i vozmozhnosti nizkouglerodnoi energetiki v Rossii]*. Moscow: Russian Socio-Environmental Society (RSCoES).
- Laruelle, Marlene. 2014. *Russia's Arctic Strategies and the Future of the Far North*. Armonk, New York, London: M. E. Sharpe.
- Law of Yamalo-Nenets Autonomous District. 2016. Guarantees of the Indigenous Rights in Yamalo-Nenets Autonomous District [Zakon Yamalo-Nenetskogo avtonomnogo okruga "O garantiyakh prav lits, vedushchikh traditsionnyy obraz zhizni korennykh malochislennykh narodov Severa v Yamalo-Nenetskom avtonomnom okruge"] 2 March 2016 No 1-ZAO. Available at <http://docs.cntd.ru/document/432893608> (last accessed 2 July 2019).
- Moiseev, Nikita. 1995. "Ustoychivoye Razvitiye ili Strategiya Perekhodnogo Perioda." *Green World* 17, 2–12.
- Murashko, Olga (compiler) and Tatjana Nikolayeva (trans.). 2009. *Demonstration Project "Environmental Co-Management of Extracting Companies, Authorities And Indigenous Peoples of the North"*. Moscow: The Batani International Development Fund for Indigenous Peoples of the North, Siberia and the Far East.
- Nachmany, Michal, Sam Fankhauser, Jana Davidová, Nick Kingsmill, Tucker Landesman, Hitomi Roppongi, Philip Schleifer, Joana Setzer, Amelia Sherman, Stolle C. Singleton, Jayaraj Sundaresan and Terry Townshend. 2015. *The 2015 Global Climate Legislation Study: A Review of Climate Change Legislation in 99 Countries: Summary for Policy-Makers*. London, UK: Grantham Research Institute on Climate Change and the Environment, GLOBE International.

- Newell, Joshua P. and Laura A. Henry 2017. "The State of Environmental Protection in the Russian Federation: A Review of the Post-Soviet Era." *Eurasian Geography and Economics*. Available at <http://urbansustainability.snre.umich.edu/wp-content/uploads/2017/02/The-state-of-environmental-protection-in-the-Russian-Federation-a-review-of-the-post-Soviet-era.pdf> (last accessed 30 June 2019).
- Novikova, Natalya. 2016. "Who is Responsible for the Russian Arctic? Co-Operation between Indigenous Peoples and Industrial Companies in the Context of Legal Pluralism." *Energy Research & Social Science* 16, 98–110.
- Oldfield, Jonathan D. 2005. *Russian Nature: Exploring the Environmental Consequences of Societal Change*. Aldershot: Ashgate.
- Order of the Government of Nenets Autonomous District. 2013. State Program of the Nenets Autonomous District "Preservation and Development of Indigenous Peoples of the North in the Nenets Autonomous District" [Postanovleniye Administratsii Nenetskogo avtonomnogo okruga "O gosudarstvennoy programme Nenetskogo avtonomnogo okruga 'Sokhraneniye i razvitiye korennykh malochislennykh narodov Severa v Nenetskom avtonomnom okruge'"] 11 November 2013 No 401-p, docs.cntd.ru/document/494309536 (last accessed 2 July 2019).
- Order of the Government of the Russian Federation. 2002. Environmental Doctrine of the Russian Federation [Rasporyazheniye Pravitel'stva RF "Ob Ekologicheskoy doktrine Rossiyskoy Federatsii"] 31 August 2002 No 1225-p. Collection of acts of the Russian Federation 36, 3510.
- Order of the Government of the Russian Federation. 2008. Concept of the Long-Term Socio-Economic Development of the Russian Federation for Period until 2020 [Rasporyazheniye Pravitel'stva RF "Kontseptsiya dolgosrochnogo sotsial'no-ekonomicheskogo razvitiya Rossiyskoy Federatsii na period do 2020 goda"] 17 November 2008 No 1662-r. Collection of acts of the Russian Federation 47, 5489.
- Order of the Government of the Russian Federation. 2009. Energy Strategy of Russia for the period up to 2030 [Rasporyazheniye Pravitel'stva RF "Ob Energeticheskoy strategii Rossii na period do 2030 goda"] 13 November 2009 No 1715-r. Collection of acts of the Russian Federation 48, 5836.
- Order of the Government of the Russian Federation. 2019. The Spatial Development Strategy of the Russian Federation for the Period until 2025 [Rasporyazheniye Pravitel'stva RF "O Strategiyi prostranstvennogo razvitiya Rossiyskoy Federatsii na period do 2025 goda"] 13 February 2019 No 207-r. Collection of acts of the Russian Federation 7(2), 702.

- Order of the Governor of Yamalo-Nenets Autonomous District. 2013. Investment Strategy Yamalo-Nenets Autonomous District until 2020 [Postanovleniye gubernatora Yamalo-Nenetskogo avtonomnogo okruga “Ob utverzhenii Investitsionnoy strategii Yamalo-Nenetskogo avtonomnogo okruga do 2020 goda”] 25 December 2013 No 203-PG. Available at <http://docs.cntd.ru/document/428667633> (last accessed 2 July 2019).
- Order of the Murmansk Region Government. 2011. Concept of Functioning and Development of Specially Protected Natural Territories in the Murmansk Region until 2018 and for the future until 2038 [Postanovleniye Pravitel'stva Murmanskoy Oblasti “O kontseptsii funktsionirovaniya i razvitiya seti osobo okhranyayemykh prirodnykh territoriy Murmanskoy oblasti do 2018 goda i na perspektivu do 2038 goda”]. Available at <https://mpr.gov-murman.ru/files/konceptiya.pdf> (last accessed 2 July 2019).
- Order of the President of the Russian Federation. 2008. Fundamentals of Russian Federation Policy in the Arctic until 2020 [Osnovy gosudarstvennoy politiki Rossiyskoy Federatsii v Arktike na period do 2020 goda i dal'neyshuyu perspektivu] 18 September 2008 No. Pr-1969.
- Order of the President of the Russian Federation. 2009. Climate Doctrine of the Russian Federation. [Rasporyazheniye Prezidenta RF “O Klimaticheskoy doktrine Rossiyskoy Federatsii”] 17 December 2009 No 861-rp. Collection of acts of the Russian Federation 51, 6305.
- Order of the President of the Russian Federation. 2012. State Policy in the Field of Environmental Development of the Russian Federation for the Period until 2030 [Rasporyazheniye Prezidenta RF “Osnovy gosudarstvennoy politiki v oblasti ekologicheskogo razvitiya Rossiyskoy Federatsii na period do 2030 goda”] 30 April 2012. Available at http://www.consultant.ru/document/cons_doc_LAW_129117/ (last accessed 2 July 2019).
- Order of Yamalo-Nenets Autonomous District Government. 2013. State Program of Yamalo-Nenets Autonomous District “Environmental Protection for 2014–2020” [Postanovleniye Pravitel'stva Yamalo-Nenetskogo avtonomnogo okruga. Ob utverzhenii gosudarstvennoy programmy Yamalo-Nenetskogo avtonomnogo okruga “Okhrana okruzhayushchey sredy na 2014–2020 gody”]. Available at docs.cntd.ru/document/412701017 (last accessed 2 July 2019).
- Petrov, Andrey N., Shauna Burn Silver, F. Stuart Chapin III, Gail Fondahl, Jessica K. Graybill, Kathrin Keil, Annika E. Nilsson, Rudolf Riedlsperger and Peter Schweitzer. 2017. *Arctic Sustainability Research: Past, Present and Future*. London, New York: Routledge, 4.
- Plokhyy, Serhii. 2018. *Chernobyl: History of a Tragedy*. Allen Lane: First Edition.

- Presidential Decree. 1994. State Strategy on Environmental Protection and Attainment of Sustainable Development [Ukaz Prezidenta RF “O gosudarstvennoy strategii Rossiyskoy Federatsii po okhrane okruzhayushchey sredy i obespecheniyu ustoychivogo razvitiya”] 4 February 1994 No 236, <http://www.kremlin.ru/acts/bank/5422> (last accessed 2 July 2019).
- Presidential Decree. 1996. The Concept for Russia’s Transition to Sustainable Development [Ukaz Prezidenta RF “O Kontseptsii perekhoda Rossiyskoy Federatsii k ustoychivomu razvitiyu”] 1 January 1996 No 440. Collection of acts of the Russian Federation 15, 1572.
- Presidential Decree. 2009. The National Security Strategy of the Russian Federation until 2020 [Ukaz Prezidenta RF “O Strategii natsional’noy bezopasnosti Rossiyskoy Federatsii do 2020 goda”] 12 May 2009 No 537. Collection of acts of the Russian Federation 20, 2444.
- Presidential Decree. 2014a. Dissolution of the Ministry of Regional Development of the Russian Federation [Ukaz Prezidenta RF “Ob uprazhnenii Ministerstva regional’nogo razvitiya Rossiyskoy Federatsii”] 8 September 2014 No 612. Collection of acts of the Russian Federation 37, 4934.
- Presidential Decree. 2014b. Land Territories of the Arctic Zone of the Russian Federation [Ukaz Prezidenta RF “O sukhoputnykh territoriyakh Arkticheskoy zony Rossiyskoy Federatsii”] 2 May 2014 No 296. Collection of acts of the Russian Federation 18(1), 2136.
- Presidential Decree. 2015. State Commission for the Arctic Development [Ukaz Prezidenta Rossiyskoy Federatsii “O Gosudarstvennoy komissii po voprosam razvitiya Arktiki”]. 3 February 2015 No 50. Available at <http://government.ru/docs/17319/> (last accessed 2 July 2019).
- Presidential Decree. 2017. Fundamentals of the State Policy of Regional Development of the Russian Federation for the Period up to 2025 [Ukaz Prezidenta RF “Ob utverzhdenii osnov gosudarstvennoy politiki regional’nogo razvitiya Rossiyskoy Federatsii na period do 2025 goda”] 16 January 2017 No 13. Collection of acts of the Russian Federation 4, 637.
- Presidential Decree. 2018. National Goals and Strategic Objectives of the Russian Federation Development for the Period up to 2024 [Ukaz Prezidenta RF “O natsional’nykh tselyakh i strategicheskikh zadachakh razvitiya Rossiyskoy Federatsii na period do 2024 goda”] 7 May 2018 No 204. Available at <http://kremlin.ru/events/president/news/57425> (last accessed 25 September 2019).

- Presidential Decree. 2019. Improving State Governance for the Development of the Arctic Zone of the Russian Federation [Ukaz Prezidenta Rossiyskoy Federatsii “O sovershenstvovanii gosudarstvennogo upravleniya v sfere razvitiya Arkticheskoy zony Rossiyskoy Federatsii”] 26 February 2019 No 78, <https://rg.ru/2019/02/28/ukaz-78-dok.html> (last accessed 2 July 2019).
- Regional Agenda. 2016. Implementation of the Concept of Sustainable Development of the Indigenous Peoples in Murmansk Region in 2016–2025. Available at <https://gov-murman.ru/region/saami/statesupport/> (last accessed 2 July 2019).
- Resolution of the Government of the Russian Federation. 2001. Federal Target Program of the Russian Federation “Environment and Natural Resources 2002–2010” [Postanovleniye Pravitel’sstva RF “O federal’noy tselevoy programme ‘Ekologiya i prirodnyye resursy Rossii (2002–2010 gody)’”] 7 December 2001 No 860. Collection of acts of the Russian Federation 52(2), 4973.
- Resolution of the Government of the Russian Federation. 2014. Socioeconomic Development of the Russian Arctic Zone up to 2020 [Postanovleniye Pravitel’sstva RF “Ob utverzhdenii gosudarstvennoi programmy ‘Sotsial’no-ekonomicheskoye razvitiye Arkticheskoy zony Rossiyskoy Federatsii’”] 21 April 2014 No 366. Collection of acts of the Russian Federation 18(4), 2207. With amendments.
- Resolution of the Governor of Murmansk Region. 2014. Regional Program for Social-Economic Development of Murmansk Region as the Strategic Center of the Arctic Zone of the Russian Federation [Postanovleniye Gubernatora Murmanskoy oblasti “Ob utverzhdenii regional’noy programmy sotsial’no-ekonomicheskogo razvitiya ‘Murmanskaya oblast’: Strategicheskiy tsentr Arkticheskoy Zony Rossiyskoy Federatsii’”]. Available at docs.cntd.ru/document/412386353 (last accessed 2 July 2019).
- Resolution of the Governor of Nenets Autonomous District. 2016. Concept of Sustainable Development of the Northern Indigenous Peoples in Nenets Autonomous District in 2016–2025 [Postanovleniye Gubernatora Nenetskogo avtonomnogo okruga “O Kontseptsii ustoychivogo razvitiya korennykh malochislennykh narodov Severa Nenetskogo avtonomnogo okruga na 2016–2025 gody”] 21 April 2016 No 31-pg, docs.cntd.ru/document/438867980 (last accessed 2 July 2019).

- Resolution of the Governor of Yamalo-Nenets Autonomous District. 2019. Program for the Future Development of Power Industry of Yamalo-Nenets Autonomous District for the Period of 2020–2024 [Postanovleniye Gubernatora Yamalo-Nenetskogo avtonomnogo okruga “Ob utverzhdenii skhemy i programmy perspektivnogo razvitiya elektroenergetiki Yamalo-Nenetskogo avtonomnogo okruga na period 2020–2024 godov”]. Available at <https://www.yanao.ru/documents/projects/24178/> (last accessed 2 July 2019).
- Resolution of the Yamalo-Nenets Parliament. 2009. Concept of Sustainable Development of the Northern Indigenous Peoples of Yamalo-Nenets Autonomous District [Postanovleniye Zakonodatelnogo sobraniya Yamalo-Nenetskogo avtonomnogo okruga “O Kontseptsii ustoychivogo razvitiya korennykh malochislennykh narodov Severa Yamalo-Nenetskogo avtonomnogo okruga”] 9 December 2009 No 1996, docs.cntd.ru/document/444830281 (last accessed 2 July 2019).
- Resolution of the Yamalo-Nenets Parliament. 2011. Strategy of Social and Economic Development of Yamalo-Nenets Autonomous District until 2020 [Postanovleniye Zakonodatelnogo sobraniya Yamalo-Nenetskogo avtonomnogo okruga “O Strategii sotsial’no-ekonomicheskogo razvitiya Yamalo-Nenetskogo avtonomnogo okruga do 2020 goda”] 14 December 2011 No 839. Available at docs.cntd.ru/document/424064239 (last accessed 2 July 2019).
- Riekkinen, Mariya. 2013. “Russian Legal Practices of Citizens’ Involvement in Political Decision-Making: Legal Study of their Genesis under the Influence of International Law.” *The International Journal of Human Rights* 17(1), 79–112.
- RSFSR Law. 1992. Protection of the Natural Environment [Zakon RSFSR “Ob okhrane okruzhayushchey prirodnoy sredy”] 19 December 1991 No 2060–1 (repealed). Available at <http://base.garant.ru/10108049/> (last accessed 2 July 2019).
- Russian Federation. 1992. *Country Profile. Implementation of Agenda 21: Review of Progress Made since the United Nations Conference on Environment and Development*. Available at <http://www.un.org/esa/earthsummit/rusia-cp.htm> (last accessed 2 July 2019).
- Shlapentokh, Vladimir. 2006. “Trust in Public Institutions in Russia: The Lowest in the World.” *Communist and Post-Communist Studies* 39(2), 153–174.
- Social Charter of the Russian Business. 2004. Adopted by the RUIE Conference. Available at <http://eng.rspp.ru/simplepage/860> (last accessed 25 September 2019).

- Strategic Action Program for Protection of the Russian Arctic Environment. 2009. Approved by Maritime Board at the Government of the Russian Federation Moscow. Available at https://oaarchive.arctic-council.org/bitstream/handle/11374/1029/ACSAO-DK03_7_1a_SAP_Arctic.pdf?sequence=1&isAllowed=y (last accessed 2 July 2019).
- Strategy of the Arctic Zone. 2013. Strategy for the Development of the Arctic Zone of the Russian Federation and National Security for the Period up to 2020 [Strategiya razvitiya Arkticheskoy zony Rossiyskoy Federatsii i obespecheniya natsional'noy bezopasnosti na period do 2020 goda]. Available at <http://www.consultant.ru/cons/cgi/online.cgi?req=doc&base=LAW&n=142561&fld=134&dst=1000000001,0&rnd=0.997247410296283#0> (last accessed July 2019).
- Thérien, Jean-Philippe and Vincent Pouliot. 2006. "The Global Compact: Shifting the Politics of International Development?" *Global Governance* 12(1), 55–75.
- Tladi, Dire. 2007. *Sustainable Development in International Law: An Analysis of Key Enviro-Economic Instruments*. Pretoria: Pretoria University Law Press.
- Tynkkynen, Nina. 2014. "Prospects for Ecological Modernization in Russia: Analysis of the Policy Environment." *Demokratizatsiya* 22(4), 575–603.
- Udachin, Valery, Ben J. Williamson, Ole William Purvis, Baruch Spiro, William Dubbin, Stephen J. Brooks, B. Coste, R. J. Herrington and Irina Mikhailova. 2003. "Assessment of Environmental Impacts of Active Smelter Operations and Abandoned Mines in Karabash, Ural Mountains of Russia." *Sustainable Development* 11(3), 133–142.
- United Nations Global Compact. 2017. Available at <https://www.unglobalcompact.org/> (last accessed 25 September 2019).
- United Nations Resolution 70/1. 2015. *Transforming our World: The 2030 Agenda for Sustainable Development*. Available at https://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E (last accessed 25 September 2019).
- Verbitskaya, Ludmila A., Natalia B. Nosova and Ludmila L. Rodina. 2002. "Sustainable Development in Higher Education in Russia: The Case of St. Petersburg State University." *Higher Education Policy* 15(2), 177–185.
- Verheye, Willy H. 2009. "Land Use, Land Cover and Soil Sciences." In W. H. Verheye (ed.). *Volume IV: Land Use Management and Case Studies*. Oxford, U.K: EOLSS Publications, 337–353.
- Vernadsky, Vladimir. 1998. *The Biosphere*. New York: Nevaumont Publishing Company.

Water Code of the Russian Federation. 2006. [Vodnyy kodeks Rossiyskoy Federatsii] 3 June 2006 No 74-FZ. Collection of acts of the Russian Federation 23, 2381.

Williams, Oliver. 2004. "The UN Global Compact: The Challenge and the Promise." *Business Ethics Quarterly* 14(4), 755–774.

© 2019. This work is published under <http://creativecommons.org/licenses/by-nc-nd/4.0> (the “License”). Notwithstanding the ProQuest Terms and Conditions, you may use this content in accordance with the terms of the License.