Chapter 8: Great Power Ambitions and National Interest in Russia's Climate Change Policy

Alina Averchenkova

Abstract

This chapter explores whether Russia can be considered as a great power in international environmental politics, focusing on action to address climate change. It analyses the evolution in Russia's position and behaviour in the international climate change negotiations and its stance towards leadership in this area over time and discusses the factors that have contributed to these changes. It concludes with discussion of the role of great power framing in Russia's stance in the domestic and international debate on climate change. The chapter finds that, possessing key structural characteristics of positive and negative environmental power, Russia has actively drawn on great power framing in the formulation of its climate change strategy. While there is a clear ambition to act as a great power, overall Russia's efforts on climate change are not framed in the context of joint global action and common responsibility, but rather emphasize its national interests. Political perceptions of its own interests in turn have changed over time, influenced by a combination of a domestic economy highly dependent on fossil fuel extraction and export, prominence of climate sceptics and anti-climate economic lobbyists, as well as overall internal and international political dynamics.

Keywords

climate policy, great power, climate politics, environmental power, national interest, climate leadership, climate ambition, great climate power, G20, Russia

This chapter discusses to what extent Russia can be considered as a climate great power, particularly with regard to its sources of power and engagement in international climate change politics. In doing so, the chapter analyses the shifts in Russia's position and behaviour over time in this arena and discusses the factors that have contributed to these changes.

Following Buzan and Falkner (Chapter 2, this volume) I consider two dimensions of power in global environmental politics (GEP): Russia's potential for acting as a *negative* power, based on its control over environmental 'goods' and/or its ability to produce environmental 'bads' through degradation of internationally significant environmental resources (or by contributing to climate change), and as a *positive* power, based on its ability to engender positive change in international environmental politics. As Hochstetler (Chapter 6, this volume) observes, the exercise of negative power is best seen in domestic environmental outcomes, while positive power requires constructive participation in international relations. This chapter therefore considers both of these aspects in relation to Russia's climate change policy.

The English School's social framing suggests that great power status is not just assumed by the powers themselves but also requires recognition by others of their having certain rights and responsibilities for the international order (Buzan and Falkner, this volume;). In line with this consideration, I discuss to what extent the framing of responsibility and (international) leadership are part of Russia's stance on climate change, as well as the perceptions of Russia's role in the international climate negotiations by its key negotiating partners and broader climate change community.

The case of Russia is particularly interesting to consider. Despite its possessing structural characteristics of a great environmental power and its active reliance on great power framing in the domestic political debate, Russia has largely failed to obtain recognition of its claims of leadership and contribution to global climate change mitigation efforts from its main negotiating partners. The significant emission reductions in greenhouse gas (GHG) emissions after the breakup of the Soviet Union and subsequent economic restructuring did not result in corresponding international recognition. Furthermore, Russian expectations of receiving significant benefits from the flexibility mechanisms of the Kyoto Protocol came to nothing. Ever since these early setbacks, Russia has pursued mainly a passive strategy in the international climate negotiations.

Yet, although heavily dependent on income from oil and gas production and exports and being set to experience economic losses due to global decarbonization, Russia has not taken an obstructive route in the international negotiations and remained a party to the Paris Agreement (unlike the US under the Trump administration and Brazil). The international expert community criticized Russia's levels of effort under the Paris Agreement (and previous accords) as being too weak since they hardly require additional emission reductions below the current levels (e.g. Climate Action Tracker, 2020). At the same time, Russia voluntarily became a donor of climate finance, ratified the Paris Agreement in the fall of 2019, and confirmed its continued political commitment to its objectives.

This chapter explores whether Russia can be considered as a great power in international environmental politics, focusing specifically on action to address climate change. It examines the evolution of the Russia's position in the international climate change negotiations and its stance towards leadership in this area as well as its domestic policy and analyses factors that determine these positions. It concludes with a discussion of the role of great power framing in Russia's stance in the domestic and international debate on climate change.

Structural Conditions of Environmental Power: Resource Endowments and Dependencies

Understanding a country's ecological footprint is central for assessing its potential for acting as a negative power in GEP (see Buzan and Falkner, Chapter 2, this volume). As discussed earlier, control over a large share of world's environmental resources or 'goods' (such as forests, fresh water, or biodiversity stock), or over a large share of environmental 'bads' (such as pollution, forest degradation, or biodiversity loss) would give rise to *negative* power. This section assesses to what extent Russia possess structural characteristics of environmental power.

The Russian Federation is the largest country in the world. With an area of 17.1 million square kilometres, its territory is more than 60% larger than that of second-placed Canada (FAO, 2016). Russia's territory contains about 32% of the world's proven natural gas reserves, 10% of its explored coal reserves, and 12% of its oil reserves (Bradshaw and Connolly, 2016). The Russian economy is highly dependent on fossil fuels: in 2019 the country was the world's third largest oil producer (after the US and Saudi Arabia) and the second largest producer of natural gas (after the US) (EIA, 2019). Oil and natural gas revenues accounted for 43% of Russia's federal budget revenues as at February 2020 and varied between 34–54% over the past decade (Author's calculations based on data from the Ministry of Finance of the Russian Federation, 2020). The European market has been the most important consumer of Russia's energy exports; in 2016, more than 60% of crude oil exports and almost 75% natural gas exports from Russia went to Europe (EIA, 2019). Russia is also a major coal producer globally, containing the world's second largest reserves of recoverable coal (Martus, 2019) and being the world's third largest coal exporter after Australia and Indonesia (IEA, 2020).

Being the world's fourth largest emitter of GHGs, following China, the US, and India, Russia is responsible for about 5% of global emissions (IEA, 2020). In 2018, it emitted 2.2 billion tons of CO₂ equivalent, not taking into account sequestration by carbon sinks (30.3% below the level of 1990), with 78.8% emissions coming from the energy sector (Ministry of Natural Resources and Ecology of the Russian Federation, 2019; Center for Strategic Research, 2021). At the same time, Russia is also home to about 20% of the world's forest cover (FAO, 2012), which sequesters large amounts of carbon and is rich in biodiversity. Its territory stores about half of the northern hemisphere's terrestrial carbon, predominantly in the permafrost regions (Goodale et al., 2002). Deforestation and the melting of permafrost could have considerable implications for the success of the global efforts to mitigate climate change.

Despite some earlier claims to the contrary, the country is also vulnerable to the impacts of climate change. Warming over Russian territory is on average happening at significantly higher rates compared to the global averages. The average annual temperature increase from 1976 to 2018 in Russia was 0.47°C per decade, two and a half times higher than the global temperature increase in the same period (0.17–0.18°C). Particularly high warming rates of over 1.0°C per decade have been observed in the polar area over the past 30 years (Roshydromet, 2019). Impacts of climate change are already observable in Russia and are projected to increase in the future, including heatwaves, widespread forest fires, epidemics, drought, mass flooding, and food shortages (Ministry of Natural Resources and Ecology of the Russian Federation, 2017).

Being among the largest emitters of GHGs, and a country with large carbon sequestration and storage, Russia clearly possesses structural characteristics of both negative and positive environmental power, as its efforts on reducing GHG emissions, preserving and enhancing its carbon sinks, and stored carbon have significant influence on the effectiveness of global efforts to address climate change.

Contribution to International Cooperation on Climate Change and Domestic Implementation

Russia's domestic climate change policy developed slowly, mostly in response to the emerging international regime and economic developments. Since the end of the Soviet Union, Russia has moved from a centrally planned towards a more market-based economy. Economic reforms in the 1990s privatized most industries, bar the energy and defence-related sectors. Economic restructuring resulted in a fall of GDP and subsequently in GHG emissions. In 1998 the GDP was 44% below the level of 1989 (Grigoryev, Golyashev and Brilliantova, 2017). The economic dynamics were influenced by the development of market institutions and external factors, such as world crises, swings in economic activity by trade partners, and oil market shocks. Economic recovery started in 1997 but was interrupted by the oil price crash and financial crisis of 1998. Concurrently, GHG emissions in 1999 were 1,879 Mt of CO₂eq (not considering emissions and sinks through land use, land use change, and forestry—or LULUCF), which is about 40% below their levels in 1990 of 3,113 Mt of CO₂eq (see Figure

8.1). When accounting for LULUCF, emissions in 1999 were about 55% below the levels of 1990 (based on UNFCCC, 2020). Russia's emission trends in the 1990s are in stark contrast with the dynamics in global GHG emissions (see Figure 8.2). Global GHG emissions (including LULUCF) in 1999 were 8% higher than in 1990.



Figure 8.1: Greenhouse gas emissions in Russia, Mt CO₂ equivalent

Figure 8.2: Global greenhouse gas emissions, Mt CO₂ equivalent



Source: Our world in data and CAIT Climate Data Explorer

https://ourworldindata.org/grapher/total-ghg-emissions, Accessed 15 June 2020.

Source: UNFCCC, 2020.

The above economic and emission trends defined Russia's starting position in the emergent international climate change negotiations and its domestic climate change policy. Domestic climate change policy has lagged behind commitments taken by Russia in the international sphere. While Russia has engaged in the international climate change treaty negotiations and undertook commitments under the international accords since early 1990s, domestic climate change policy in its own right started to emerge over a decade later. Below, I outline several key policy periods (summarized in Table 8.1).

From Global Stewardship Aspirations to 'Leadership by Chance'

In the early 1990s Russia, as a newly formed actor at the international scene, was seeking to establish itself as a major cooperative global player, including through joining international environmental treaties. At the Rio Summit in 1992, Russia joined all three of the conventions adopted, including the United Nations Framework Convention on Climate Change (UNFCCC). It was included in the Annex I list alongside developed countries, but with a special status recognizing its ongoing process of transition to a market economy. Russia was among the first countries to ratify the Rio Conventions. However, in 1996, under the influence of domestic climate sceptics in the scientific community, Russia sided with OPEC countries in opposing quantitative limits on GHG emissions in the negotiations on the Kyoto Protocol (Moe and Tangen, 1999).

After several international studies demonstrated potential benefits for Russia from participation in the proposed emission trading mechanisms under the protocol (e.g. Averchenkova, Golub, and Strukova, 1997; Golub, Avertchenkov, Berdin, et al., 1999), Russia finally joined the Umbrella Group in supporting a protocol in 1997, subject to it containing flexibility mechanisms (emission trading and join implementation). Its emission target under the protocol was set as stabilization at the levels of 1990 (see Table 8.2), a target that gave ample room for the potential growth in emissions during economic recovery and promised significant potential income from emission trading.

Between 1997 and 2004 much of the domestic focus in the climate change debate was on the benefits and costs of ratification of the Kyoto Protocol. With the decision of the US to withdraw from the Kyoto Protocol, announced in 2001, Russia received a de facto veto power over entry into force of the protocol, as its ratification was necessary to meet the emission threshold. It suddenly found itself in the position of exercising leverage, while also occupying a stronger position in the international negotiations.

Period	International position	Domestic developments
Early	Global aspirations: Active	Development of basic environmental
1990s	engagement in international	institutions
	environmental cooperation	
1995–	Scepticism and obstruction:	Rise of climate scepticism; domestic
1996	Opposition to quantified emission	institutional competition for oversight
	targets; siding with OPEC at the	of climate change
	climate negotiations in Geneva	
1997–	Leadership by chance: Ratification	Little domestic implementation; focus
2004	of the Kyoto Protocol; focus on	on economic recovery and rapid growth
	national benefits through issue	in early 2000s; Growing criticism of the
	linkages to WTO entry and expected	Kyoto protocol; Formation of the
	economic benefits from Kyoto.	economic expert community around the
		president
2005-	Going with the flow: Passive stance	Little implementation and little attention
2008	in international negotiations	to climate agenda (Putin-2)
2008-	Modernization Thaw:	Push for the modernization agenda
2012	Synergy between domestic	domestically; slight acceleration in the
	modernization priorities and	implementation of climate policy with
	international image; decision to not	progress on energy efficiency policies.
	join Kyoto-2	
2012-	Minimal engagement and political	De facto undermining of energy
current	distancing Further political	efficiency and other climate-relevant
	distancing from the West; growing	policies largely due to public resources
	emphasis on national interest,	being shifted to the preparation of the
	sovereignty; explicit recognition of	Sochi Olympics;
	economic risks to Russia from	
	global decarbonization	
2019–	Focus on accelerating domestic	
current	decarbonization?	

 Table 8.1: Key periods in Russia's international and domestic climate change policy

Source: Author.

Russia was expected to benefit from participation in the Kyoto Protocol: its GHG emissions were unlikely to come anywhere close to the target level in the first commitment period between 2008 and 2012, while participation in the flexibility mechanisms through the sale of excess emission quotas or additional emission reductions could deliver significant new investment (according to some studies up to 4 to 35 billion USD, assuming US participation, e.g. Victor, Nakicenovic, and Victor, 2001). Yet a domestic campaign against the ratification was launched, led by the climate sceptics questioning climate science and some economic experts claiming that climate action and participation in the international agreements would be detrimental to Russia's economic development. One of the most vocal Kyoto critics was Andrei Illarionov, President Putin's chief economic advisor between 2000 and 2005, who argued ratification would harm Russia's economy. An investigation by international NGOs showed that Illarionov's think tank was supported financially by vested interests, namely by large multinational fossil fuel companies (e.g. Poberezhskaya, 2016; Corporate Europe Observatory, 2007). Having the ear of the President, Illarionov is believed to have influenced Putin's position and contributed to the delay of the decision on ratification for several years. Around the same time, a number of climate sceptics emerged in the scientific community, mostly in the geological circles, who questioned the scientific claims about human-caused climate change.

Table 8.2:

	Emission targets	Conditions
Paris	25-30% below 1990	Subject to the maximum accounting for
agreement	by 2030	LULUCF
Copenhagen	15–25% below 1990	Subject to the maximum accounting for
Accord	by 2020	Russia's LULUCF Commitments to
		action by all major emitters
Kyoto Protocol	Stabilization at the	Access to the flexibility mechanisms
1st	1990 levels in 20018-	(emission trading and joint
commitment	2012	implementation)
period		

Summary of climate change targets committed to internationally by Russia

Based on the corresponding UNFCCC decisions.

The decisive role of Russia in the entry into force of the Kyoto Protocol gave it significant political leverage internationally (Tynkkynen, 2010). While Russia had economic incentives for the ratification of the Kyoto Protocol, the primary factors in the ratification decision were rather international incentives in other policy areas and concerns over Russia's international image (Korppoo, Karas, and Micheal et al., 2006; Henry and McIntosh Sundstrom, 2007). The 2004 negotiations on Russia's entry into the World Trade Organization (WTO) provide a case in point. The EU promised to drop its objections to Russia's joining of the WTO if Russia ratified the Kyoto Protocol (Andronova, 2008). In a speech at the EU summit President Putin noted, 'the fact that the European Union has met us halfway at the negotiations on membership in the WTO cannot but influence Moscow's positive attitude towards ratification of the Kyoto Protocol. We will accelerate our movement towards ratifying this protocol' (Paton Walsh, 2004). Overall, in his announcement of the ratification President Putin asserted the status of Russia as a 'great power' while focusing on national interest as the primary driver for the decision, emphasizing the potential costs and the side payments that Russia deserves for participating in international climate change agreements.

Domestically in the early 2000s, the prevalent perception among Russian civil servants of President Putin's being against the Kyoto Protocol's ratification and climate policy in general created a major disincentive for starting any new policy initiatives related to climate change. Yet transnational projects and diffusion of expertise in this period contributed to strengthening the knowledge of the economic expert community on climate change in Russia and of their influence on policy. They helped strengthen the position of the Ministry of Economics and Trade as a major player in the debate and facilitated a shift of power to the ministry, which was supportive of participation in the Kyoto Protocol (Andronova, 2008).

However, ratification of the Kyoto Protocol in 2005 did not result in any major shift in domestic climate change policy. Lack of active engagement in the flexibility mechanisms in the early years of the first commitment period (2008–2012), despite the associated economic benefits, was reflective of the low priority of climate policy implementation in the domestic agenda in Russia. Overall inefficiency of the bureaucracy and administrative hurdles also played a role in the delay (Andonova and Alexieva, 2012). Delays with developing domestic infrastructure necessary to participate in the Kyoto Protocol's flexibility mechanisms, such as procedures for project approval, coupled with lower demand for Russian emission reduction due to the withdrawal of the US from the protocol, led to the expectations of new investments being largely unfulfilled. Furthermore, Russia's entry into the WTO, which was perceived as

the main political benefit from ratification of the protocol through issue linkage, happened only in 2011, seven years after the initial deal brokered with European leaders. This created a perception at the top levels of the government that the EU has not kept its end of the bargain.

Furthermore, the economic recovery that resumed in 1999–2000 was based on the rapid growth of oil and gas extraction supported by the growth of energy demand in Russia and internationally. By 2007 Russia's GDP had recovered to 1989 levels, and by the time of the world recession in 2008–2009, the average annual growth in Russia reached 7–8% (Grigoryev, Golyashev, and Brilliantova, 2017). By 2008 oil and gas exports constituted 68% of Russia's export revenues (Bergloef, Plekhanov, and Rousso, 2009). With such a focus on economic growth based on extractive industries, domestic climate change policy and decarbonization has received scant political attention.

Focus on Modernization: Alignment of Domestic and International Priorities

Between the adoption of the Kyoto Protocol in 1997 and the climate summit in Copenhagen in 2009, Russia was generally seen as disengaged from the international climate change negotiations (Henry and McIntosh Sundstrom, 2012). The spike in international attention to climate change around the Copenhagen summit coincided with a shift in domestic policy towards modernization initiatives under Medvedev's presidency (ibid.), much of which was rooted in the economy. From the second decade of 2000s, the growth in fossil fuel extraction in Russia slowed down due to the limited potential for increasing production from existing oil fields and lack of capital for developing new ones, exposing the limitations of the extensive growth model (Grigoryev, Golyashav, and Brilliantova, 2017)).

In 2008 an analysis by the World Bank and partners showed that Russia could potentially save about 45% of its annual primary energy demand, equivalent to the primary energy consumption of France at the time (World Bank and IFC, 2008). Utilizing this potential required addressing low efficiency of power stations, high losses of heat and electricity in the grid, and gas flaring, as well as energy efficiency improvements in industry and buildings, and increasing fuel efficiency of cars. While there was low concern over climate change itself, there was political and economic motivation to focus on modernization, which aligned with climate change objectives.

Between 2008 and 2012, President Medvedev's government introduced a number of policies aiming at improving energy efficiency as part of the modernization agenda. In June 2008 the president signed a decree declaring a goal of reducing energy intensity of GDP by

40% by 2020, followed by energy efficiency legislation in 2009. In December 2009, Russia adopted the Climate Change Doctrine by a presidential decree. Its strategic objective was 'to ensure [the] safe and sustainable development of Russia, including institutional, economic, ecological, social and demographic development aspects in the context of a changing climate and related threats' (Climate Doctrine of the Russian Federation, 2009). The doctrine clarified the government's position on climate change, recognizing it as one of the major international problems, accepting the contribution of human activity, and outlining mitigation, adaptation, and engagement with the international community among the key policy objectives.

Internationally, President Medvedev attempted to project himself as a modern liberal leader by shifting the understanding of the national interest towards the modernization agenda and linking it to the international concerns over climate change (Henry and McIntosh Sundstrom, 2012). At the Copenhagen summit President Medvedev characterized Russia as the world leader in emission reduction. Some domestic media outlets covering the summit noted that Russia's participation was key to confirming its status as a leading power. Yet the actual influence of Russia on the negotiations was minimal (Henry and McIntosh Sundstrom, 2012). Russia announced a commitment to reduce GHG emissions by 15–25% below 1990 by 2020, subject to the full accounting of its LULUCF potential. Effectively this target translates to a 30–35% emission increase from 2007 levels (Charap and Safonov, 2010), which has been subject to international critique. In 2011 Russia took the decision to oppose the second commitment period under the Kyoto Protocol, together with Japan and Canada. At the same time, it reaffirmed its commitment to cooperation under the new post-Kyoto framework that was being negotiated, emphasizing throughout the importance of action on climate change by all large emitters.

Minimal Engagement and Political Distancing

After his re-election in 2012, President Putin shifted away the from Medvedev's modernization narrative and international cooperation to focus on geopolitical objectives and sovereignty (Tynkkynen and Tynkkynen, 2018). Greater emphasis was placed on nationalism and

¹ Website of the President of Russia, 'Climate Doctrine of the Russian Federation', available at: http://kremlin.ru/events/president/news/6365, accessed 13 April 2020.

² 'Rossiya budet uchastvovat' v novom soglashenii po sokrashcheniyu emissii parnikovykh gazov', *Rossiiskaya Gazeta*, 18 December 2009; Speech of Prime-Minister Medvedev at the plenary of the UN Rio+20 Summit21, 2012

conservative values, while the process of distancing from the West in Russia's foreign policy accelerated. Some political observers argue that this was part of President Putin's strategy of political survival through to 2018 and a way to gain legitimacy and popularity through non-economic solutions amidst economic stagnation due to falling oil prices and structural issues (House of Lords, 2015). At the time of military intervention in Ukraine from 2014, domestic public approval of President Putin increased to one of its highest points (83–85%), which experts attributed mainly to Russia's foreign policy. The sanctions introduced in response to the Ukraine crisis led to the rouble sinking to a record 16-year low against the dollar, which further strengthened the ability of the government to foment further nationalist sentiment (ibid). Military intervention in Ukraine and the subsequent decline in the relationship with the West and with the international institutions (such as the World Bank, The European Bank for Reconstruction and Development, etc.) signalled an overall decline of Russia's engagement in global initiatives.

Conversely, Russia is also positioned as a 'great energy power' in this period, able to exert political influence through formulating dependencies via energy infrastructure and attractive trade terms relying on fossil fuels (Tynkkynen and Tynkkynen, 2018). This framing has made it more difficult to argue for an ambitious stance on climate change policy, as prosperity from hydrocarbon development was closely bound up with discourses of nation-building (Bouzarovski and Bassin, 2011). Ambitious climate policy was increasingly seen as at odds with national interests, particularly Russia's national gas programme, run by Gazprom (Tynkkynen, 2013). It also gave more prominence to the growing concerns over economic threats from global decarbonization to Russia's economy and its status as a major energy power, a concern still highlighted today (Mitrova et al., 2020). Domestic implementation of the energy efficiency measures adopted by President Medvedev were driven to the minimum as most of public resources and administrative muscle were channelled into the preparation of the Sochi Winter Olympics of 2014 (Anonymous. September 2020. Interviews with experts). Energy discussions in this period thus pivoted away from Medvedev's economic costeffectiveness rationale for efficiency improvements, towards placing priority on the geopolitical traction Russian fossil fuel energy could create.

Despite the above developments, Russia played a passive but constructive role during negotiations of the Paris Agreement. Russia joined the agreement with a target of 25–30% emission reduction below 1990 by 2030, which is a slight progression from its Copenhagen commitment but falls short of the levels compatible with the goal of keeping global warming

below 2°C (Climate Tracker, 2020). Yet the government was not in a hurry to ratify the agreement. In November 2016 a decree on 'Designing a package of measures to improve state regulation of greenhouse gases and preparing for approval of the Paris Agreement' (Government of the Russian Federation, 2016) was adopted. This outlined a number of steps, including mandating a socio-economic assessment of the consequences of ratification of the Paris Agreement with a recommendation to the president by early 2019. This signalled a three-year delay in ratification until at least 2019 and cast some doubt on whether Russia would go ahead with the ratification.

At the same time, the plan attached to the decree outlined several regulatory steps and timelines that guided subsequent regulatory developments on climate change. These steps included: preparation of the national adaptation strategy by July 2018; preparation of a draft law on regulation of GHG emissions by June 2019; a presidential decree on 2030 emission targets by December 2019 and of a plan for the necessary implementation measures by March 2020; and development of a low emission development strategy up to 2050 by December 2019. Importantly, all of these steps have been implemented, and close to the outlined schedule.

In a move long awaited by climate observers, in 2018 the government introduced draft legislation 'On state regulation of emissions and the absorption of greenhouse gases' that would require companies to report on emissions and introduce emission quotas and charges on large emitters with a cap-and-trade system by 2025 (Ministry of Economic Development, 2019). However, amidst strong lobbying from the Russian Union of Industrialists and Entrepreneurs, the legislation was weakened to merely introducing a reporting system for GHG emissions and five-year audits (Moscow Times, 2019).

In the same period the official narrative on climate change slightly shifted. Official statements highlighted both risks to the economy from climate change and from the global economic trends related to the implementation of the Paris Agreement (Kokorin and Korppoo, 2017). International climate action has been shown to present significant risks for Russia, mainly due a lower demand for fossil fuel energy and a shift of market power from the suppliers to the consumers of energy (Makarov, Chen, and Paltsev, 2018). Analysts forecast a reduction in Russia's GDP of 0.2–0.3% as a result of the global implementation of the Paris Agreement and the related changes in the global energy markets that would entail. They also point out greater risks of Russia not participating in the Paris Agreement, such as the introduction of trade barriers or export duties on exports by countries without low carbon policies and

technological inefficiencies. Addressing these risks requires changes in the economic model and diversification of economy (ibid.).

Russia ratified the Paris Agreement in October 2019 ahead of the UN Secretary-General's Summit on Climate Change. Partly due to the tensions outlined above, the decision on ratification did not include any change to the targets communicated in the nationally determined commitments (NDC) to the Paris Agreement in 2015, which effectively assume no change in the level of emissions by 2025 compared to 2017 levels (Porfiriev and Katsov, 2017).

Positive Contribution to Climate Change Action: Failed Attempt at Getting Recognition

One of the central pillars of Russia's engagement in the international climate change negotiations has been its claim for recognition of the country's significant contribution to the global efforts through emission reductions during the transition period. In the period 1990–2012, due to its economic transformation Russia achieved the largest absolute reduction in emissions in the world, about 1.8 gigatons (Gt) of CO₂eq (Makarov, Chen, and Paltsev, 2018). Russia has repeatedly argued that its contribution to global mitigation efforts is far greater compared to other emerging economies, which were exempt from emission limitation commitments, and that it is the only major emitter apart from the EU that maintained emissions below 1990 levels and had one of the lowest rates of emission increases after 1998 (compared to China and the US in particular) (Andonova and Alexieva, 2012).

The positive environmental image presented internationally contrasts the poor effectiveness of domestic climate change policymaking, which may explain the lukewarm reception of the leadership claims from the international community. Targeted domestic efforts to reduce GHG emissions were mainly related to improving energy efficiency and energy saving. This has led to some positive results. Energy intensity of industrial production in Russia between 2000 and 2015 fell by 38%, while the increase of GHG emissions was much slower than that of GDP (10.7% against 71.4% respectively) (Porfiriev and Katsov, 2017). However, total GHG emissions have grown by about 13% in the period from 2000 to 2017 (not considering carbon sinks through LULUCF) (based on Ministry of Natural Resources and Ecology of the Russian Federation, 2019). Total GHG emissions in 2017 were about 32%

³ As expressed mainly by the NGOs and international media. Negotiators are usually very careful about publicly criticizing emission targets and efforts to implement them by other countries.

below the level of 1990 when not including LULUCF, and about 49% below 1990 levels when LULUCF emissions and sinks are accounted for. Despite additional measures taken since 2012 the level of GHG emissions remains stable, suggesting radical transformation towards decarbonization is not yet occurring (Porfiriev and Katsov, 2017).

According to Climate Action Tracker (2020), Russia will achieve its Paris Agreement target, which does not require a decrease in GHG emissions from the current levels. Its current policies are projected to result in emissions of between 2,100 and 2,200 MtCO₂e in 2020 and in 2030 (excluding LULUCF), or 0–2% above 2017 emission levels. This is equivalent to emission reductions of 32–33% in 2020 and 31–33% in 2030 below 1990 levels, which are all well below the Russia's NDC targets, which allow emissions to grow 16–23% above 2017 levels by 2030 (ibid.). In the context where reaching the objectives of the Paris Agreement requires a stabilization of carbon dioxide in the atmosphere, Russia's efforts are labelled as 'critically insufficient' by the Climate Action Tracker (2020).

In international climate change negotiations Russian officials have consistently argued that the country is making a major contribution to the global mitigation efforts and acts as a leader in reducing emissions, given significant reductions in GHG emissions below 1990 levels. This is demonstrated, for example, in a speech by the head of the delegation at the Cancun climate change conference in 2010 (Bedritsky, 2010). Similarly, in its communications to the UNFCCC, the government highlights that Russia has significantly exceeded the levels of emission reductions that it committed to under the Kyoto Protocol (e.g. Ministry of Natural Resources and Ecology of the Russian Federation, 2019). Between 1990 and 2010 global emissions have increased by 43% and those by OECD members by 10%. Russian emissions in 2010 were 34.2% below 1990 levels (or 50.8% considering carbon sinks). However, if a more recent reference year would be chosen, Russia's track record would not look as favourable.

It is fair to say that the international community at large has not recognized this claim and Russia's performance, demanding more ambitious action, as evidenced by numerous statements by NGOs and international media. Much of this demand was due to strong opposition from many environmental NGOs during the negotiation and implementation of the first commitment period of the Kyoto Protocol in 2008–2012 to the idea of Russia being able to sell some of the accumulated emission reductions from the early 1990s through emission trading mechanisms. The term 'hot air' was coined and used in this context, accompanied with demands that any sales of emission quotas from Russia should be tied to investments in further

reductions of emissions, leading to the emergence of the proposal for the so-called Green Investment Schemes (e.g. Moe et al., 2003).

Much international critique of Russia's current policies and targets committed under the Paris Agreement rests on the fact that while its emission targets represent an absolute reduction below the levels of 1990 comparable with those of the EU and more ambitious than those of most developed countries, they allow for actual growth of emissions of between 16–27% compared to the levels of 2017 (Climate Action Tracker, 2020).

'Great Power' Narrative and Russia's Positioning in Climate Change Politics

Self-presentation of Russia as a great power guided its conduct internationally for centuries, which in the environmental domain is based on its natural resources and ecological potential (Tynkkynen, 2010). A public opinion survey on climate change in Russia in June 2013 showed that 54% of the respondents knew and 36% had heard about climate change. Over 70% thought climate change should be addressed at the international level and 45% considered that Russia should play a leadership role in this process, including unilateral commitments to reduce emissions, while 36.7% disagreed with such a course of action (President Administration, 2013). Another survey in 2018, focused specifically on perceptions of the population on Russia's role in global affairs, found that 75% of the surveyed population considered Russia to be a great power and 88% agreed that it should maintain great power status (Levada Center, 2019, reported by Korppoo, 2020).

Two prevalent paradigms have been identified in Russia since the start of the transition period in 1990s in terms of how the notion of great power is understood. Firstly, there is a new model for great power that is based, among other things, on environmental and nuclear security that emphasize the *notion of responsibility* and *engagement* in cooperation with international community. Secondly, there is a *national-patriotic* or *national interest* one that stressed national interests based on the unilateralist realist tradition (Tynkkynen, 2010, based on Crow 1992, and Sakwa 1996) and accepts engagement in international affairs solely from the point of view of national self-interest. This model effectively rejects the notion of responsibility for upholding the multilateral order.

Analysis of the coverage of climate change in the Russian media leading up to the ratification of the Kyoto Protocol from 2000 to 2004 by Tynkkynen (2010) shows that the notion of Russia as a great (ecological) power is central to the debate. The study acknowledges

that the views of climate change action either from the angle of great power responsibility (or duty) or 'national interest' were among the dominant political frames in the Russian media (ibid.). While arguing for different policy outcomes vis-à-vis a decision on ratification of the Kyoto Protocol, all dominant framings pursued in the climate change debate in Russia are of a 'positive' rather than 'negative' environmental power as defined by Buzan and Falkner (Chapter 2, this volume) and discussed above. Russian scholars and politicians stressed Russia's ecological potential as a source for environmental solutions (e.g. the role of its boreal forests in carbon sequestration) rather than its contribution to the causes of environmental problems (e.g. Mokrousov and Kudeyarov, 1997); Oldfield, Kouzmina, and Dennis, 2003). Part of this narrative was Russia's positioning as 'an environmental donor'. Some scientists explicitly argued that Russia should be recognized as a 'great ecological power' (Klyuev, 2002) and should be compensated for the ecological services it provides to the world in addressing climate change (Kondratiev, 2003).

The great power narrative based on great environmental power *responsibility* emerged in Russia in the late 1980s and early 1990s. It builds on the liberal democratic ideas dominant in that period (Tynkkynen, 2010). It emphasizes climate change as a global challenge that requires Russia to exercise its moral duty and join the rest of the world, acting responsibly by cooperating with others. While economic benefits are not central to the responsibility frame, often the benefits of modernization, improved energy efficiency, and qualitative growth are highlighted by its proponents. Some of the promoters of this frame included, among others, Viktor Danilov-Danilyan, former Minister of Environment, Alexander Bedritskyi, the head of the Federal Service for Hydrometeorology (RosHydromet) and chief climate change negotiator for Russia, and Mikhail Gorbachev (ibid.).

The *national interest* frame, on the other hand, implies that Russia should only join global climate change policy if it meets its national interests and carries significant political and economic benefits. Interestingly, the frame has led to different policy recommendations on Russia's engagement in international climate change policy, depending on the proponent's interpretation of what is in Russia's national interest in relation to climate change action. The analysis of the media debate on ratification of the Kyoto Protocol showed that some proponents recognize political benefits from Russia positioning itself as a great climate power internationally (Tynkkynen, 2010). In discussing arguments for ratifying the Kyoto Protocol, media articles that fall under this framing appeal to the need for Russia to act as an environmental leader, while some also draw on the concept of ecological donor (ibid.).

However, the national interest frame was also pursued by the opponents of the ratification, who appeal to the lack of scientific consensus (e.g. the director of the Global Climate and Ecology Institute at the Russian Academy of Sciences, Yury Izrael), positive impacts from climate change, and negative impacts of the Kyoto Protocol on the national economy (e.g. the president's economic advisor, Andrei Illarionov) (Tynkkynen, 2010).

During the presidencies of Putin, the national-patriotic ideology of self-interested great power status has strengthened (Anikin, 2002; Tynkkynen, 2010). Further emphasis on the nationalist narrative in foreign policy since the re-election of President Putin in 2012 also impacted Russia's self-positioning as a great power in global climate politics, focusing primarily on national economic and security interests. The 2016 foreign policy concept of the Russian Federation outlined consolidation of Russia's position as a centre of influence in the world as its key strategic priority (Korppoo, 2020). A study by Korppoo (2020) on cultural drivers of Russia's position in international climate diplomacy, based on over 100 interviews with non-climate professionals, finds that Russian participation in the international climate change negotiations, as perceived by domestic experts, is largely influenced by concerns unrelated to environment, such as foreign policy interests and benefit-seeking.

Not surprisingly the influence of normative framings of 'common responsibility' and 'international cooperation' become increasingly less significant in Russia's international statements on climate change compared to the earlier periods. When announcing its decision to ratify the Paris Agreement in September 2019, Russia emphasized that the agreement and its instruments should not be used to create barriers for countries' sustainable socio-economic development.

A focus on sovereignty and the national interest framing is also reflected in the latest submission to the UNFCCC in the fourth biennial report on progress with implementation of the key international agreements on climate change. In this report, while taking account of its actions on climate change, Russia emphasizes its own will in undertaking initiatives on a voluntary basis (Ministry of Natural Resources and Ecology of the Russian Federation, 2019). It further stated that, while it recognizes that developed countries should provide financial resources to help developing countries in addressing climate change, Russia is not obliged to provide such resources not formally being a donor or so-called Annex II Party to the UNFCCC. Interestingly, later in the same report Russia recognizes its responsibility for preserving climate and ensuring sustainable development, and reports on its active role in implementing the

UNFCCC objectives, including through providing financial assistance as a voluntary donor (ibid.).

Recent initiatives by Russia to support developing countries in addressing climate change include debt write-offs for the least developed countries in Africa and participation in the 'debt for development' initiative; R & D cooperation related to climate change; and disaster relief. Since 2017 Russia has operated a trust fund, the Russian Federation Programme for Sustainable Development, under the UN Development Programme, which has a dedicated climate window that supports mitigation and adaptation projects in developing countries. In 2018 Russia voluntarily contributed towards funding of the Intergovernmental Panel on Climate Change and Green Climate Fund.

While emphasizing self-interest in determining its international engagement on climate change, continued engagement in international climate treaties and voluntary initiatives on finance would suggest that Russian leadership sees some political and economic benefits from international engagement on climate change. These could include advancing political and economic influence with developing countries and overall strengthening of Russia's image as a great power. It could also be that Russia realizes the costs of disengagement in international climate change cooperation are potentially high (e.g. threat of trade barriers to countries without climate change policies, the need to be at the table when decisions are being taken that impact global energy markets to which Russia is sensitive, and the risk of deteriorating relationships with other countries, in particular developing nations). There is a risk, however, that, being driven mainly by concerns other than climate change, Russia's climate diplomacy could become increasingly less ambitious in the future. The overall shift from interpretation of great power as responsibility towards a more nationalist framing implies rejection of the notion of international responsibilities and a shift towards a more voluntarist approach. This is similar to the dynamics at the federal level in the US under the Trump administration and in a few other countries. The proponents of strong climate action in Russia and international negotiating partners should therefore articulate how ambitious climate action would help Russia pursue its national self-interest.

Conclusions

Possessing key structural characteristics of positive and negative environmental power, Russia has actively drawn on great power framing in formulation of its climate change strategy. However, political perceptions of its own interest in relation to climate change policy have

changed over time, influenced by a combination of a domestic economy highly dependent on fossil fuel extraction and export, prominence of climate sceptics and anti-climate economic lobbyists, and overall internal and international political dynamics.

Positive use of the global environmental power frame has declined in Russia over time. Driven by the overall desire to join the international community and to establish itself as a global leader, including in the environmental domain, in the early 1990s Russia joined the key global environmental agreements and domestically started to implement environmental reforms. Recognition of international norms and cooperation, with allusions to great power responsibility, were more evident in the early 1990s. However, over time the domestic political economy, coupled with the changing international profile of the country and tensions with the EU and US, has resulted in Russia taking a less active role in international climate change politics.

A shift towards resource distribution, extraction, and management in Russia's overall approach to environmental policy led to the strengthening of the national self-interest narrative, while the great ecological and energy power stance becomes less attractive. Issue linkages in the international and domestic policy around the ratification of the Kyoto Protocol resulted in a period of perceived alignment between domestic interests and international leadership. While the earlier periods of climate change policy were in line with Russia's strategy of enhancing its aspirations as a great power, a large-scale global transformation to a low carbon society threatens Russia's status as a great energy power, which to an extent explains the current strategy of minimal participation in climate change agreements with conservative targets.

Overall, Russia's efforts on climate change are not framed in the context of joint global action and common responsibility, but rather emphasize the country's own will, national interests, and voluntary or unilateral decisions. There is a clear ambition to act as a great power, but it is driven by Russia's own domestic interests rather than by global values and explicit aspiration to environmental leadership. This suggests there are competing visions of what great power responsibility means, and raises questions as to what extent its meaning is shared internationally or defined unilaterally by individual powers.

While being criticized for its minimal progress in reducing emissions since the early 2000s, Russia's GHG emission reductions achieved in the 1990s far exceed emission reductions achieved by other industrialized countries—a card that the Russian government has been playing in the international climate change negotiations to claim leadership, yet with little success. Given its 'accumulated achievement' in terms of emission reductions in the 1990s,

Russia's domestic policy, while sluggish, could hardly be considered as a conscious exercise of negative environmental power.

The lack of international recognition of Russia's contribution to the reduction of GHG emissions in the 1990s as an achievement and demonstration of leadership is a testament to that. An interesting emergent question for future analysis is to what extent this lack of recognition from the key negotiating partners and the international community at large (and hence zero political benefit received) may have contributed to Russia's relatively passive position in the international climate change negotiations.

One of the factors contributing to the confused status of Russia as a potential great power in international climate change politics is its dual personality, which was used through the 1990s and 2000s. On the one hand, there was a claim for leadership and great power ambitions; on the other, there were requests for special treatment under the UNFCCC as an economy in transition. Another interesting question arises: is the current non-ambitious stance of Russia in relation to climate change policy due to its lack of interest in taking greater responsibility or is it also, as least partially, reflective of its current capabilities to deliver deeper and more rapid decarbonization, in particularly given the strong dependency of its economy on fossil fuels?

It is unlikely that Russia will radically change its international position in relation to climate change in the absence of significant incentives. Such incentives could be presented by technological cooperation, however the current economic sanctions from and challenging political relations with the EU and US limit the scope for this. Overall, the political situation and economic sanctions limit economic incentives for Russia's active participation in the international climate change cooperation. Hence, the recent position of passive participation with conservative targets is likely to continue.

References

- Andronova, L.B. (2008). 'The climate regime and domestic politics: the case of Russia'. *Cambridge Review of International Affairs* 21(4): 483–504.
- Andonova, L.B., and Alexieva, A. (2012). 'Continuity and change in Russia's climate negotiations position and strategy'. *Climate Policy* 12(5): 614–629.
- Anikin, B.A. (2002). 'Predislovie'. In B.A. Anikin (ed.) Natsionalnaya ideya rossii, Moscow:
 Dashkov i K, 4–7. https://unfccc.int/sites/default/files/resource/10469275_Russian%20Federation-BR4-14BR RUS.pdf, accessed on 13 April 2020.

- Averchenkova, A., Golub, A., and Strukova, E. (1997). *Russian Strategy relating to carbon trading* [in Russian]. Russia: Higher School of Economics.
- Bedritsky, Alexander. (2010). Statement at the Cancun Climate Change Conference. https://unfccc.int/files/meetings/cop_16/statements/application/pdf/101209_cop16_hls_ru ssia.pdf, accessed 13 April 2020.
- Bergloef, E., Plekhanov, A., and Rousso, A. (2009). 'A Tale of Two Crises'. Finance and Development. European Bank for Reconstruction and Development.
- Bouzarovski, S., and Bassin, M. (2011). 'Energy and Identity: Imagining Russia as a Hydrocarbon Superpower'. *Annals of the Association of American Geographers* 101(4): 783–794.
- Bradshaw, M., and Connolly, R. (2016). 'Barrels and bullets: The geostrategic significance of Russia's oil and gas exports'. *Bulletin of the Atomic Scientists* 72(3): 156–164.
- Center for Strategic Research. (2021). 'Russia's climate change agenda: Responding to the international challenges'. [Климатическая повестка России: реагируя на международные вызовы. Центр стратегических разработок совместно с Аналитическим центром ТЭК РЭА Минэнерго России и Ситуационным центром (ГК Селдон).] January 2021. https://www.csr.ru/upload/iblock/8f3/8f34a0e7c6cc6b8af39986ae8e71f3ad.pdf (Accessed

on 26 July 2021).

- Charap, S., and Safonov, G.V. (2010). "Climate change and role of energy efficiency". In A.
 Åslund, S. Guriev, and A. Kuchins (eds) *Russia after the Global Economic Crisis*,
 Washington, DC: Peterson Institute for International Economics/Center for Strategic and
 International Studies, and Moscow: New Economic School, 132–150
- Climate Action Tracker. (2020). 'Russian Federation Country Summary'. https://climateactiontracker.org/countries/russian-federation/, accessed 13 April 2020.
- Climate Doctrine of the Russian Federation. (2009). Website of the President of Russia. http://kremlin.ru/events/president/news/6365, accessed 13 April 2020.
- Corporate Europe Observatory. (2007). 'Awarding deception: Rewarded for anti-Kyoto lobbying?'. http://archive.corporateeurope.org/awardingdeception.html, accessed 10 August 2020.
- EIA. (2019). 'The U.S. leads global petroleum and natural gas production with record growthin2018'.USEnergyInformationAdministration.https://www.eia.gov/todayinenergy/detail.php?id=40973, accessed 13 April 2020.

- FAO. (2016). AQUASTAT Country Profile Russian Federation. Rome: Food and Agriculture Organization of the United Nations (FAO).
- FAO. (2012). The Russian Federation Forest Sector: Outlook Study to 2030. Rome: Food and Agriculture Organization of the United Nations (FAO).
- Golub, A., Avertchenkov, A., Berdin, V., Kokorin, A., Martunova, M., and Strukova, E. (1999). *Study on Russian National Strategy of GHG Emission Reduction*. Moscow: The World Bank, BEA, State Committee of Russian Federation on Environmental Protection.
- Goodale C., Apps, M., Birdsey, R., Field, C., Heath, L., Houghton, R., Jenkins, J., Kohlmaier, G., Kurz, W., Liu, S., Nabuurs, G.J., Nilsson, S., and Shvidenko, A. (2002). 'Forest carbon sinks in the Northern Hemispere'. *Ecological Applications* 12(3): 891–899.
- Government of the Russian Federation. (2016). Order of the Russian Government No. 2344. О плане реализации комплекса мер по совершенствованию государственного регулирования выбросов парниковых газов и подготовки к ратификации Парижского соглашения, принятого 12 декабря 2015 г. 21-й сессией Конференции Сторон Рамочной конвенции ООН об изменении климата. 3 November 2016. https://www.garant.ru/products/ipo/prime/doc/71432434/, accessed 13 April 2020.
- Grigoryev, L.M., Golyashev, A.V., and Brilliantova, V.V. (2017). 'Характер экономического роста и региональные аспекты развития России'. In: С.Н. Бобылева, Л.М. Григорьева (eds) Доклад о человеческом развитии в Российской Федерации за 2017: Экологические приоритеты для России.
- Henry, L.A., and McIntosh Sundstrom, L. (2007). 'Russia and the Kyoto protocol: Seeking an alignment of interests and image'. *Global Environmental Politics* 7(4): 47–69.
- Henry, L.A., and McIntosh Sundstrom, L. (2012). 'Russia's Climate Policy: International Bargaining and Domestic Modernisation'. *Europe-Asia Studies* 64(7): 1297–1322.
- European Union Committee. (2015). *The EU and Russia: before and beyond the crisis in Ukraine* (HL 2014–15 115). https://publications.parliament.uk/pa/ld201415/ldselect/ldeucom/115/115.pdf
- IEA. (2020). *IEA Energy Atlas*. http://energyatlas.iea.org/#!/profile/WORLD/RUS, accessed 12 April 2020.
- Klyuev, N.N. (2002). 'Rossiya na Ekologicheskoi Karte Mira'. *Izvestiya Akademii Nauk, Seriya Geograficheskaya* 6: 5–16.
- Kokorin, A., and Korppoo, A. (2017). 'Russia's Ostrich Approach to Climate Change and the Paris Agreement'. CEPS Policy Insight 2017-40. http://aei.pitt.edu/92744/1/PI_2017-40_Russian_Climate_Policy_Kokorin_Korppoo_0.pdf.

- Kondratiev, K. (2003). 'Tsena Ekologicheskih Uslug Rossii'. Vestnik Rossiiskoi Adademii Nauk 2003(1): 3–11.
- Korppoo, A. (2020). 'Domestic frames on Russia's role in international climate diplomacy'. *Climate Policy* 20(1): 109–123.
- Korppoo, A., Karas, J., and Michael, K. (2006). *Russia and the Kyoto protocol: Opportunities and challenges*. London: Chatham House.
- Makarov, I.A., Chen, H., and Paltsev, S.V. (2018). 'Impacts of Paris Agreement on Russian economy'. *Voprosy Ekonomiki* 2018(4): pp. 76–94.
- Martus, E. (2019). 'Russian industry responses to climate change: the case of the metals and mining sector'. *Climate Policy* 19(1): 17–29.
- Ministry of Economic Development. (2019). 'Federal draft law "On state regulation of greenhouse gas emissions and on amendments to certain legislative acts of the Russian Federation" [Проект Федерального закона "О государственном регулировании выбросов парниковых газов и о внесении изменений в отд. http://base.garant.ru/56777252/#friends, accessed on 13 April 2020.
- Ministry of Finance of the Russian Federation. (2020). Federal budget of the Russian Federation. https://www.minfin.ru/en/statistics/fedbud/, accessed on 6 April 2020.
- Ministry of Natural Resources and Ecology of the Russian Federation. (2017). STATE
 REPORT On the status and protection Environment Russian Federation in 2017.
 Moscow: Ministry of Natural Resources and Ecology of the Russian Federation.
- Ministry of Natural Resources and Ecology of the Russian Federation. (2019). *Fourth Biennial Report submitted by the Russian Federation to the UNFCCC*. Moscow: Ministry of Natural Resources and Ecology of the Russian Federation.
- Mitrova, T., Khokhlov, A., Melnikov, Y., and Perderau, A. (2020). Global Climatic Threat and Russian Economy: Searching for the way. Moscow: Skolkovo Energy Centre, Skolkovo School of Management. Available at <u>https://energy.skolkovo.ru/downloads/documents/SEneC/Research/SKOLKOVO_EneC_</u> <u>Climate Primer EN.pdf</u>, Accessed on 26 July 2021.
- Moe, A., and Tangen, K. (1999). 'The Kyoto Mechanisms and Russian Gas: A Powerful combination?'. FNI report FNI-R-18/1999, Fridtjof Nansens Inst., Lysaker.
- Moe, A., Tangen, K., Berdin, V., and Pluzhnikov, O. (2003). 'Emissions Trading and Green Investments in Russia'. *Energy & Environment* 14(6): 841–858.

- Mokrousov, A.T., and Kudeyarov, V.N. (1997). Stok i Emissiya Uglekislogo Gaza na Territorii Rossii. Globalnoe Izmenenie Prirodnoj Sredy i Klimat. Izbrannye Nauchnye Trudy Veduschyh Uchenyh Rossii, Moscow: RAN.
- Moscow Times. (2019). 'Russia Rejects Climate Change Plan After Business Uproar'. Moscow Times, October 17. https://www.themoscowtimes.com/2019/10/17/russia-rejectsclimate-change-plan-after-business-uproar-a67780, accessed 13 April 2020.
- Oldfield, J.D., Kouzmina, A., and Denis, J.B.S. (2003). 'Russia's involvement in the international environmental process: A research report'. *Eurasian Geography and Economics* 44(2): 157–168.
- Paton Walsh, Nick. (2004). 'Putin throws lifeline to Kyoto as EU backs Russia joining WTO'.TheGuardian,Life22May.https://www.theguardian.com/world/2004/may/22/environment.russia.
- Poberezhskaya, M. (2016). Communicating Climate Change in Russia. London: Routledge.
- Porfiriev, B.N., and Katsov, V.M. (2017). 'Изменения климата и их последствия для населения и экономики России: императивы и приоритет стратегии адаптации'. in С.Н. Бобылева, Л.М. Григорьева (eds), Доклад о человеческом развитии в Российской Федерации за 2017; Экологические приоритеты для России, Analytical Centre by the Government of Russia, pp 126-147.
- President Administration. (2013). Результаты социологического опроса населения Российской Федерации по проблемам изменения климата. http://kremlin.ru/events/administration/19203, accessed on 13 April 2020.
- Roshydromet [Russian Federal Service for Hydrometeorology and Environmental Monitoring]. (2019). A Report on Climate Features on the Territory of the Russian Federation in 2018. Moscow: Ministry of Natural Resources and Ecology of the Russian Federation.
- Speech of Prime Minister Medvedev at the plenary of the UN Rio+20 Summit. (2012). 21 June. http://archive.government.ru/docs/19427/, accessed 13 April 2020.
- Tynkkynen, N. (2010). 'A great ecological power in global climate policy? Framing climate change as a policy problem in Russian public discussion'. *Environmental Politics* 19(2): 179–195.
- Tynkkynen, N. (2013), The Challenge of Environmental Governance In The Network Society: The Case of The Baltic Sea. Env. Pol. Gov., 23: 395-406. <u>https://doi.org/10.1002/eet.1621</u>

- Tynkkynen, V., and Tynkkynen, N. (2018). 'Climate Denial Revisited: (Re)contextualising Russian Public Discourse on Climate Change during Putin 2.0' *Europe-Asia Studies*, 70(7): 1103–1120.
- UNFCCC. (2020). UNFCCC Data Interface. https://di.unfccc.int/detailed_data_by_party, accessed on 13 April 2020.
- Victor D., Nakicenovic, N., and Victor, N. (2001). 'The Kyoto Protocol Emission Allocations: Windfall Surpluses for Russia and Ukraine'. *Climatic Change* 49(3): 263– 277.
- Paton Walsh, Nick. (2004). 'Putin throws lifeline to Kyoto as EU backs Russia joining WTO'.TheGuardian,Life Subscription22May.May.https://www.theguardian.com/world/2004/may/22/environment.russia.
- World Bank & IFC (in cooperation with CEEF). (2008). Энергоэффективность в России: скрытый резерв. http://www.cenef.ru/file/FINAL_EE_report_rus.pdf, accessed on 13 April 2020.