

Climate Obstruction in Russia

Surviving a Resource-Dependent Economy, an Authoritarian Regime, and a Disappearing Civil Society

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INTRODUCTION: THE FOUNDATIONS OF CLIMATE OBSTRUCTION IN RUSSIA

Russia is one of the world's largest producers and exporters of fossil fuels, including coal, oil, and gas, and the fourth-largest global emitter of greenhouse gases (GHGs).¹ Russia is also a recognized laggard in global climate politics. In 1990, the country emitted 3,170 million metric tonnes of carbon dioxide equivalents (MMT CO₂e) (Figure 9.1). However, due to the subsequent major economic and social crises following the fall of the Soviet Union, by 1992, emissions had involuntarily dropped to 2,530 MMT CO₂e. In 1998, they reached their lowest level yet, at 1,870 MMT CO₂e. Hence, to comply with its international commitments under the Kyoto Protocol not to exceed 1990 emissions levels, Russia did not need to do anything, yet could still access potential climate-related investments.² Later, as part of its nationally determined contributions (NDC) under the Paris Agreement, Russia committed to a 70% reduction in GHG emissions by 2030, again relative to 1990 levels, and has also proposed a target of net zero emissions by 2060. However, the NDC commitment has been rated 'critically

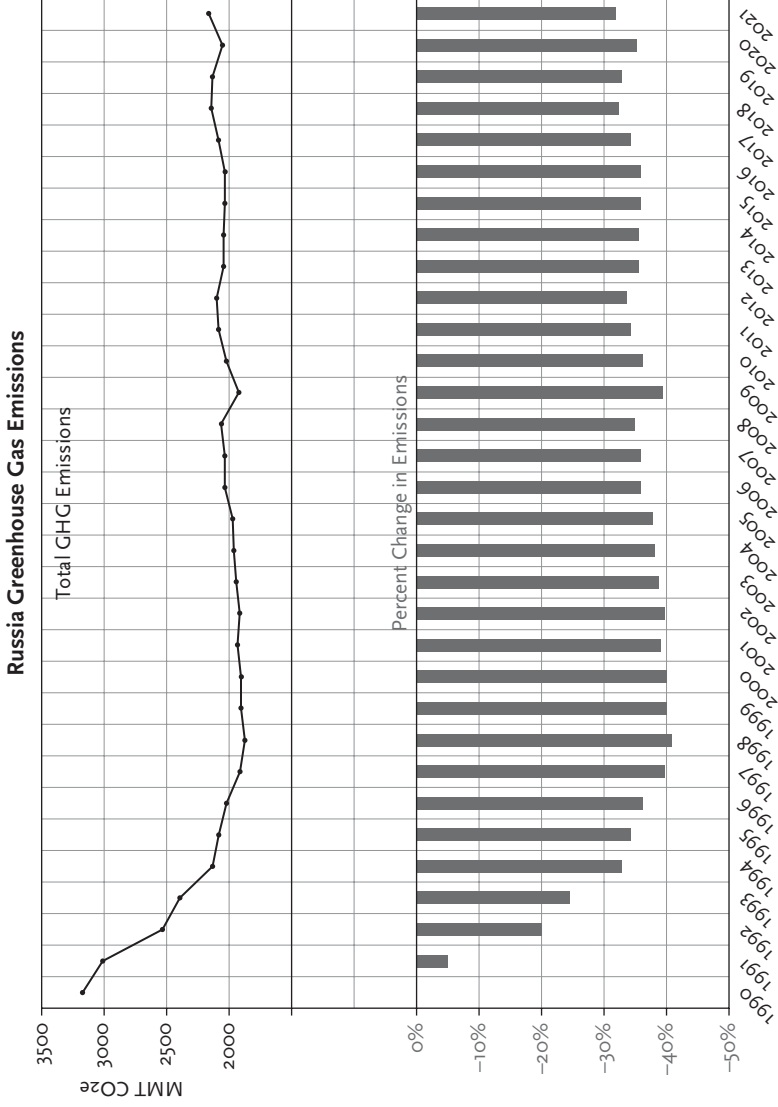


Figure 9.1 Total greenhouse gas (GHG) emissions (in MMT CO₂e) and percentage change in emissions in Russia between 1990 and 2021, inclusive.

Source: Total GHG emissions based on data provided by Gütschow and Pflüger (2023) for Kyoto Six Greenhouse Gas Totals.

insufficient' by the Climate Action Tracker because it requires little effort to achieve³ and still leaves Russia one of the major global emitters.

Russia's domestic policy commitments also fall short.⁴ It has produced several policy documents addressing climate, from the 2009 Climate Doctrine, which first introduced the need to address the issue, to a range of emissions reductions laws and decrees. However, as Korppoo and Alisson note, domestic policy measures 'tend to be vague and "ghosted" after adoption, remaining unimplemented without further development or measures'.⁵ Further, despite a long tradition of climate research dating back to the Soviet era,⁶ policy action has faced strong opposition in Russia from a range of actors who have sought to obstruct or delay climate action. The current political and economic isolation of Russia since its invasion of Ukraine in 2022 could worsen the situation as the country finds itself excluded from global climate policy negotiations, under serious economic pressure from sanctions, and in search of new markets for its fossil fuels.

Compared with other major polluters and fossil fuel exporters, Russia is critically understudied in the literature on climate politics and in many ways represents a stark contrast to the other countries explored in this volume. While private actors certainly play a role in opposing climate action, climate obstruction is built into the nation's authoritarian political system. Fossil fuels are central to the Russian economy, and the distribution of profits from among political and economic elites is central to the regime's stability.⁷ The boundaries between the state and the economy are therefore blurred, with heavy state intervention in the economy and powerful state-owned oil and gas majors, in a system that has been described as authoritarian capitalism.⁸ This mutually dependent relationship between the state and the fossil fuel industry is so close that scholars disagree over who is capturing whom: some describe the state takeover of the energy sector as part of the reconsolidation of the state following privatization in the 1990s,⁹ while others speak of business capture of the state and the takeover of state property by private interests.¹⁰ In Russia, therefore, we see strong resistance to action on climate change because it represents a direct challenge to the sources of regime stability and to the wealth of political and economic elites.

HISTORICAL EXAMPLES OF CLIMATE OBSTRUCTION

In 1997, the Kyoto Protocol, which set binding emission reduction targets for thirty-seven industrialized countries and economies in

transition as well as the European Union, was announced at COP 3. Its conditions required ratification by countries that were collectively responsible for at least 55% of global GHG emissions. In 2001, the United States withdrew from the treaty, leading the international community to turn to Russia as one of the world's highest-emitting countries.¹¹ Russia ratified Kyoto in 2004, after years of deliberations and open climate obstruction at the national level.¹² Indeed, there were vocal opponents of Russia's involvement despite the Kyoto Protocol's very favourable conditions, stipulating that Russia needed to keep its emissions below the levels of the 1990 baseline year, a goal that, as noted earlier, it had already achieved.

Among the opponents of the Kyoto Protocol, two stood out: Yuri Izrael, a world-leading physicist who made a substantial impact in global climate science, and the economist Andrei Illarionov, a presidential economic adviser between 2000 and 2005. Izrael insisted that the Kyoto Protocol lacked 'a scientific base', and was just a 'political step'¹³ which could undermine Russia's economic development. Illarionov doubted the anthropogenic nature of climate change and, on various occasions, called the Protocol 'an assault on economic growth, the environment, public safety, science, and human civilization'¹⁴, an 'undeclared war against Russia',¹⁵ and 'an international Auschwitz'.¹⁶ According to him, Russia would exceed its GHG emissions quota and, therefore, would be forced to slow down or compensate for the overshoot.¹⁷ It is believed that Illarionov played a key role in delaying the Protocol ratification by two years.¹⁸

Anti-Kyoto sentiment was also shared by some of the largest companies, including mining giant Norilsk Nickel, oil and gas major Yukos, and a few important governmental institutions including the Ministry of Energy (which became the Ministry of Industry and Energy in 2004), though other key bodies such as the Ministry of Natural Resources and to some extent the Ministry of Economic Development and Trade were more hesitant in their position.¹⁹ Notably, after the Protocol's ratification, the opposing voices at the national level dissipated.

The convoluted Kyoto negotiations corresponded with an overall trend in Russia's environmental policies of the late 1990s–early 2000s, when the environment was 'frequently sacrificed to . . . resource exploitation, the chance to earn foreign revenue, and demand for cheap energy . . . [which was] further exacerbated by financial shortages, administrative inefficiencies, and public indifference'.²⁰ As discussed later, in the twenty years that followed, the situation has barely changed.

THE ROLE OF THE MAJOR ACTORS AND INSTITUTIONS INVOLVED IN CLIMATE OBSTRUCTION

We now turn to the four major actors and institutions involved in climate obstruction in Russia, examining the role of science, the media, government, and industry.

Science obstruction

The majority of the Russian scientific community has been clear in their support for the theory of anthropogenic climate change (ACC)²¹ and actively contributed to the Intergovernmental Panel on Climate Change (IPCC) reports, while the sceptical voices that do exist remain a minority. However, we argue that these minor sceptical views among scientists have been disproportionately used by other interested actors, including industry and the government, as a tool of obstruction.

As noted, both Soviet and Russian climatologists have made a substantial impact in advancing climate science.²² Against this backdrop, climate scepticism²³ within the scientific community presents an interesting case. For example, atmospheric physicist Kirill Kondratyev questioned the methodological value of climate modelling, which then allowed him to challenge ACC.²⁴ Prominent astrophysicist Khabibullo Abdusamatov insisted that the planet was not warming but would soon enter another ice age.²⁵ And, as mentioned, even one of the most established, world-famous Soviet and then Russian climatologists, Yuri Izrael, while not denying climate change per se, doubted how much humans had to do with it.²⁶

The more recent appearance of climate denialism in the public sphere comes from the so-called science popularizers.²⁷ For example, Aleksandr Gorodnitskiy, a world-renowned geologist/oceanographer with a limited background in climatology, called ACC a ‘myth’ started by Al Gore, arguing that both Kyoto and the Paris Agreement are merely political manipulations.²⁸ As Wilson Rowe highlights, scepticism among Russian scientists was noticeable during the Kyoto deliberations²⁹ but became less vocal during Dmitry Medvedev’s presidential term (2008–2012). During this period there was political acceptance of ACC, as demonstrated by, for example, the publication of the Climate Doctrine. While not holding the legal power of a law or presidential decree, this was an important step in setting guidance for future climate policy. During this time, we also saw the emergence of an economy-oriented narrative of climate mitigation policy co-benefits.

The Soviet climatologist Mikhail Budyko was one of the first scientists who, while making an undeniable contribution to the understanding of ACC, also ‘determined that if science suggested ice removal was feasible, having limited consequences for broader natural systems, then potential socio-economic benefits were in the offing’.³⁰ The alleged benefits that climate change could bring Russia include the expansion of arable land in the North (as a warmer climate would make larger territories suitable for agriculture and prolong the harvesting season) and a shortening of the heating season, thus cutting energy expenses.³¹

One of the most powerful arguments in Russia was that ACC would provide easier access to natural resources in the north and the development of the Northern Sea Route (NSR). The point has ‘travelled’ to official political discourse, presenting climate change effects in the Arctic as an economic opportunity rather than a threat.³² For example, at an international forum in 2017, President Vladimir Putin commented on Arctic warming, stating that ‘climate change provides more favourable conditions for economic activity in this region’ and cited the anticipated growth of shipping along the NSR from 1.4 million tonnes of goods in 2017 to 30 million tonnes by 2035.³³ It is also embedded within policy, with the ‘Energy Strategy to 2035’, for example, noting the significant potential benefits of the development of the NSR for the oil and gas sectors, giving year-round access to growing markets in the Asia Pacific.³⁴

In addition to Yuri Izrael, other scientists also highlighted the potentially damaging nature of the Kyoto Protocol for the Russian economy, its supposed meaninglessness after the United States’ withdrawal, and its ‘unfairness’ in calculating Russia’s contribution to global emissions (e.g. disregarding its forests’ carbon-absorbing capacity).³⁵ Within this approach of undermining the policy rather than ACC,³⁶ we also see the reappearance of the climate geoengineering debate. It initially entered scientific discourse in the early 1960s, while in the 2000s, the proponents of geoengineering restarted the discussion, exploring the benefits of spreading sulphate aerosol in the lower stratosphere.³⁷ This, according to Izrael, would create ‘a kind of umbrella from the sun’ dealing with climate change regardless of its origins and would be ‘safe for health and many times cheaper than “Kyoto developments”’.³⁸

The existence of scepticism and denialism among scientists and their contribution to climate obstruction can be explained by several factors, starting with the practical limitations of Soviet climatology, which was affected by ‘the relative backwardness of Soviet computing technology’³⁹ and different approaches to environmental science⁴⁰ as well as the negative impacts of ideologies. Historically, in the Soviet Union ‘climatology

was largely shaped by Cold War conditions and Soviet science policy, which prioritized military research and neglected many other fields, including climatology'.⁴¹ In turn, the fall of the Soviet Union resulted in an economic and political collapse provoking a 'brain drain' as well as the slowdown or cancellation of various research projects due to financial limitations. This said, on average and similar to global trends,⁴² Russian scientists promoting sceptical or denialist narratives belong to older generations (those who were not able to switch to newer methods in climate research) and/or have a different disciplinary background, with limited climate-related experience.⁴³

While some of these problems slowly became less relevant (e.g. there is a new generation of highly skilled Russian climatologists), others are re-emerging. For example, a new wave of 'brain drain' was triggered by the Russian invasion of Ukraine.⁴⁴ At the same time, researchers who have remained in Russia find themselves cut off from the international scientific community, external funding, and access to the most advanced equipment.⁴⁵ This situation will once again make climate scientific discourse more vulnerable to scepticism and denialism and/or desynchronization with global progress in climate knowledge.

Media obstruction

As Russia's political regime has become progressively more authoritarian over the past two decades, national media have been undergoing a corresponding process of showing less diversity, slowly becoming more in sync with the state agenda.⁴⁶ The country has several laws restricting the media industry, including Federal Law N-31, 'the fake news law'; Federal Law N-139, 'the internet blacklist law'; and Federal Law N-121, 'the foreign agent law'. The tightening of control has intensified since February 2022, forcing remaining independent media and individual journalists to flee the country or face a series of fines and restrictions, while Russia's regulatory bodies cut off access to major international media websites (including all Meta social media platforms).⁴⁷

In Russia, there is no national media outlet with a clear sceptic position or consistent involvement in climate obstruction. However, the nature of Russia's political regime means that climate coverage is highly susceptible to variations in the state's attitude toward the problem. A study of climate coverage by the national newspaper *Izvestiya* from 1992 to 2012, for example, showed that, in the 1990s, there were very few mentions of climate change, but what did get published confirmed its anthropogenic

nature and the problem's urgency. But between 2009 and 2012, 30% of all publications questioned ACC.⁴⁸

Furthermore, Russia's media system represents an interesting case whereby the government-owned gas giant Gazprom controls a substantial number of media outlets, including forty-one TV channels, nine radio stations, six digital platforms, and eight print and online media outlets.⁴⁹ This portfolio included (until March 2022) one of the most independent radio stations, *Ekho Moskvyy* (Echo of Moscow), which, despite being an example of high-quality liberal journalism, also transmitted climate denialism popularized by Yulia Latynina, a prominent journalist with a strong anti-regime stance and famous for her climate denialism.⁵⁰

The sceptical narratives in both new and traditional Russian media go hand in hand with the conspiratorial thinking and/or antagonistic narrative of Cold War sentiment.⁵¹ As demonstrated in the Kyoto example, this narrative has always been present in Russian public discourse but became more noticeable in the 2010s. For example, a major heat wave in central Russia in 2010 was explained as being a result of a 'climate weapon' deployed by the West, while international appeals to move away from fossil fuel dependency have been met with the argument that ACC is a myth created by profit-driven Western businesses (e.g. renewable energy companies).

A paucity of climate-related publications is another persistent trend in the Russian media. As Boussalis et al. illustrated in their 2016 study,⁵² between 2000 and 2014, *The New York Times* alone published more articles on climate change than twenty-three major Russian national newspapers combined. Such modest media attention can also be seen as climate obstruction. With climate change consistently de-emphasized, the climate sceptic lobby has no need to be proactive to influence media coverage⁵³; instead, it can simply continue to reenforce a 'climate "spiral of silence" that leads people who do not hear about the topic in daily life to avoid discussing it themselves'.⁵⁴

Among other factors affecting climate coverage in Russia are the country's geographical characteristics (a diverse range of climatic zones from east to west and north to south), regional politics, and sociodemographic variations throughout the country⁵⁵ whereby climate change discourse can be affected by people's economic instability, the presence and position of the local climatologic community, and interference from federal and international stakeholders.

Like that of other authoritarian states,⁵⁶ Russian media climate discourse is substantially affected by the main 'newsmaker' in the country; hence, when President Putin casts doubts over ACC, the media reproduce this message without challenge. For example, in 2019, during the end of

the year press conference, Putin, while highlighting Russia's commitments to GHG emissions reduction, stated that 'no one knows the reasons behind global warming', after which he alluded to natural processes that could be responsible.⁵⁷ Conversely, when Putin confirms ACC and claims 'we need to do everything we can to minimise our input', the media do not mention Russia's lukewarm climate policy but instead repeat the president's message that, in the past three decades, due 'to a radical restructuring of industry and energy, it was possible to reduce greenhouse gas emissions more than in other countries'.⁵⁸

The sentiment fits into the narrative of Russia being 'a great ecological power',⁵⁹ which peaked during 2020–2021, when climate change for the first time became prominent on the state's agenda. As Head of the State Duma Committee on Ecology and Environmental Protection Vladimir Burmatov stated, 'Today the Russian Federation is one of the leaders on the climate agenda and it has something to show the world'.⁶⁰ Indeed, from 2020 until the invasion in February 2022, official rhetoric became much more in sync with a stronger climate policy, with Putin consistently reconfirming Russia's intentions to reach carbon neutrality by 2060.⁶¹

However, as a 2016 longitudinal study of the news media found,⁶² challenging economic conditions have negatively affected climate coverage in Russia, with journalists either paying even less attention to the topic than usual or covering it only within the context of the international negotiations. In 2022, Russia managed to avoid the worst-case economic scenario despite the imposition of sanctions and the demands of the military campaign, yet the economic decline has been felt throughout the country, with the situation expected to deteriorate further.⁶³ For this and other reasons, the state public relations establishment has been focussed on justifying the invasion, monopolizing the media agenda, with climate coverage marginalized once again.⁶⁴

Government obstruction

Tynkkynen and Tynkkynen, in their 2018 study of climate denial under Putin, highlight 'the specific interests of the energy sector in maintaining the status quo in domestic energy policy and in the general interests of Putin's regime in reducing the likelihood of criticism by the Russian people toward the hydrocarbon-based political and economic system'.⁶⁵ Indeed, as noted, the state depends on the fossil fuel industry for regime stability, and climate obstruction is therefore woven into the activities of government elites. We see this manifest in three core ways: through the position

and public statements of Putin; via the restrictions imposed on nongovernmental organizations (NGOs), which limit meaningful participation of civil society in policy debates; and in the role of the powerful Ministry of Energy (MinEnergo).

The authoritarian nature of the political system means that Putin plays a leading role in setting broad strategic goals and framing the policy agenda. As noted, the president has made controversial statements in the past that have demonstrably slowed the development of Russia's climate policy. His remark, for example, that 'we shall save on fur coats and other warm things' sent mixed signals during an international climate change conference in Moscow in 2003, given that his overall message was about Russia's commitment to 'addressing climate change'.⁶⁶ Tynkkynen and Tynkkynen⁶⁷ argue that, around the start of Putin's third presidential term, we see a re-emergence of climate denialism at the highest level, with climate policies regarded as another potential threat to regime stability. As noted, Putin's discourse has also emphasized Russia's role as an 'ecological donor' or 'great ecological power' due to its existing contributions to global efforts to address climate change. This discourse has become part of the country's climate obstruction efforts because it is used to justify Russia's limited climate policy commitments and express doubts about international policy responses.

NGOs are generally regarded as playing a minimal role in shaping Russian climate politics.⁶⁸ However, prominent groups such as World Wildlife Fund (WWF) Russia, Greenpeace Russia, and Ecodefence have maintained climate programmes aimed at providing information to the public (e.g. Greenpeace's Green Deal of Russia, a proposed emissions reductions programme), participated in drafting policy (e.g. WWF was involved in the National Climate Adaptation Plan, aimed at mitigating the impact of climate change for Russia), and in some cases, held protests against coal mining (e.g. Ecodefence picketed in Novokuznetsk⁶⁹ and Germany to protest the importing of Russian coal⁷⁰). Ecodefence is also among the plaintiffs in Russia's first climate lawsuit, which demands Russia reduce its GHG emissions.⁷¹

Thus, in recent decades, NGOs have increasingly been viewed as a threat to the regime, and efforts to restrict their operation have become a key element in the government's climate obstruction enterprise. This has manifested in a series of repressive laws, increased state scrutiny of civil society activities, and heavy administrative burdens for groups.⁷² In 2012, the 'foreign agent law' was introduced, targeting groups receiving international funding and engaged in 'political activities' broadly defined; it carries the negative connotation that such people are spies or traitors.

New laws since 2012 have tightened the space for NGO activity even further.

While not specifically focused on the issue of climate change, but rather targeting the NGO community more broadly, these changes have ensnared individuals and groups campaigning on climate action. For example, Ecodefence was listed as a foreign agent in 2014, with individual members forced to leave the country.⁷³ Similarly, the Indigenous Peoples' Centre was put on the register of foreign agents in 2015 for 'organising discussions on climate change, its impact on indigenous peoples',⁷⁴ and prominent youth climate activist Arshak Makichyan was stripped of his Russian citizenship.⁷⁵ Finally, WWF Russia, one of the most prominent NGOs, was listed as a foreign agent in March 2023,⁷⁶ and in June its parent organization, WWF, was declared an 'undesirable organisation'. That designation meant it could no longer operate in Russia, forcing WWF Russia to disassociate itself from the global network.⁷⁷ This trend can be considered as part of climate obstruction in Russia because it limits civil society participation in public life and the ability of NGOs to provide input into policy decisions, including those individuals and groups actively campaigning for Russia to adopt a more ambitious climate agenda. This challenge is exacerbated by the framing used by Putin and others, who describe the IPCC and international climate cooperation as a form of 'Western dominance': something foreign and hostile to Russia's interests.

MinEnergo, the key bureaucratic stakeholder, is responsible for high-level energy strategy as well as policy development and implementation for specific power sectors including coal, electricity, oil, gas, renewables, and nuclear. This mandate has brought the ministry into conflict with the climate policy ambitions of other agencies within the government, including the Ministry of Economic Development (MED), which has been a central actor in driving domestic climate policy and shaping Russia's participation in the international climate discussions. However, MinEnergo has tempered some of the more ambitious forecasts and production plans put forward by the coal sector, for example.⁷⁸

In terms of shaping policy debates, MinEnergo largely acts as an advocate for sectoral interests, particularly those of the fossil fuel industry. This is apparent from the key energy strategies and policy documents the ministry has produced, which emphasize the need to support Russia's fossil fuel industries and discuss climate change primarily as a national economic threat. As Romanova⁷⁹ notes, both the 'Energy Strategy' and the 'Energy Security Doctrine' (ESD) signal a recognition of the need to diversify export markets toward Asia to limit the impact of the European Union's 'political motivations' in shifting away from Russian oil and gas exports,

while the ‘2019 ESD and most officials treat renewables and clean energy as (unfair) competition and, in some cases, as external political challenges’.⁸⁰ Previous documents such as the ‘Economic Security Strategy to 2030’ also recognize the economic threat of green technology and energy efficiency⁸¹ but without calling for corresponding policy development around cutting Russia’s own emissions.

MinEnergO has also successfully limited the climate policy ambitions of other ministries within government. In one prominent example, a draft law aimed at limiting GHG emissions from industry, developed by the MED, was met with strong opposition from industry, led by the Russian Union of Industrialists and Entrepreneurs (RUIE), a powerful industry association discussed later in this chapter. MinEnergO sided with these actors and was able to limit the obligations proposed in early drafts of the law, which included emissions quotas for industry, penalties for exceeding them, and the introduction of a market for trading carbon.⁸² After sustained lobbying from MinEnergO and the RUIE, all these elements were removed from the final bill. In 2021, the Law on GHG Emissions was passed by the State Duma, the lower chamber of the Russian parliament, including only the mandatory disclosure of emissions by the largest companies and making all targets voluntary, without penalties for exceeding them.⁸³ In short, the combination of bureaucratic and elite-driven obstruction in Russia limits the space available for other actors to promote a pro-climate policy agenda. The situation is made even more challenging by the mutually dependent relationship between the state and the fossil fuel industry, discussed next.

Industry obstruction

Some of the strongest opposition to action on climate change comes from Russia’s powerful industry actors, including private and state-owned companies and business associations. Russia is one of the world’s largest oil- and gas-producing and export countries, with the oil and gas sectors dominated by large companies, including state-owned gas giant Gazprom and oil company Rosneft, as well as privately owned oil company Lukoil and gas producer Novatek. In addition to the government’s involvement in state-owned energy companies, there are close connections between Putin’s inner circle and independent (on paper) gas producers such as Novatek.⁸⁴

Russia is also the world’s largest exporter of coal, although, unlike the oil and gas sectors, the industry is mostly privately owned.⁸⁵ It is concentrated in a number of major coal-mining regions, including Kemerovo Oblast (Siberia), where it is an important source of employment and electricity.

While coal-fired power stations supply approximately 15% of Russia's domestic electricity overall,⁸⁶ in the major coal regions the percentage of coal in the electricity balance increases dramatically. For example, in 2021, in the city of Kemerovo, coal supplied 80% of the region's electricity.⁸⁷ The significant contribution to GHG emissions from burning coal means that the coal industry is seriously threatened by climate action, even in comparison with oil and gas, and has thus actively lobbied the government and sought to frame coal as essential for the Russian and global energy future.⁸⁸ Similar practices are found in other major coal-producing countries, which have been among the slowest to implement comprehensive climate policies.⁸⁹ Strategies and tactics adopted by industry take two primary forms: lobbying and other forms of interference in the policy process, and the use of discursive framings.

Lobbying

As we might expect, there is strong resistance from the fossil fuel sector to any suggestion of strengthening the climate policy agenda. Their resistance has been largely effective, as demonstrated in the example of the Law on GHG Emissions. These actors are motivated by a desire to promote the interests of their industry, including its expansion; to acquire increased government financial support; and to resist any form of regulation they perceive as burdensome. These priorities mean fossil fuel companies often come into conflict with government attempts to introduce stronger climate policies, such as curbing industry emissions.⁹⁰ Lobbying also extends beyond domestic politics, with Russia sending the second-largest number of 'fossil-fuel linked delegates' to COP 27.⁹¹

Another notable example of industry's climate obstruction concerns the RUIE, a powerful business association representing some of Russia's largest companies and regarded as the designated intermediary between business and government in Russia.⁹² While it represents a range of companies,⁹³ many are connected to fossil fuels, and, as a result, it has been an active defender of fuel and energy interests. The RUIE has not always held a united or consistent position on climate change⁹⁴; however, its executive has generally been sceptical of proposed government measures that might create additional regulations for business. Furthermore, the RUIE has direct access to policymakers, with representation on, for example, the high-level Interdepartmental Working Group on Climate Change.⁹⁵ This group was established in 2012 to coordinate policy implementation and provides a formal channel for industry to voice concerns over the direction of climate

policy. The group had previously lobbied against Russia's participation in the Paris Agreement, though dropped its opposition when it became clear that Russia's commitments would be very limited and the economic consequences of failing to ratify Paris would be more severe.⁹⁶

Importantly, industry lobbying aimed at climate obstruction involves not only attempts to curb the obligations imposed on industry through climate policy per se but also to increase government support in the form of subsidies, financial support, and access to preferable transport options. When it comes to coal, for example, serious rail bottlenecks create problems for exports,⁹⁷ and the industry has sought government help to find a solution. Companies have also lobbied for the expansion of coal production forecasts in policy documents, such as the 'Strategy for the Development of the Coal Industry (2020)'. Finally, in addition to its involvement in policymaking, the fossil fuel industry has successfully resisted the implementation of laws on several occasions. Work by Korppoo⁹⁸ on gas flaring, for example, points to a case whereby policy was undermined by oil company noncompliance with associated petroleum gas regulations and weak oversight by government bodies. Furthermore, in the months after the invasion of Ukraine began, companies have lobbied to have climate regulations, including the new Law on GHG Emissions and other environmental laws and forms of reporting, delayed or reduced in hopes of limiting the effects of international sanctions.⁹⁹

Discursive framings

Beyond lobbying, industry actors engage in other forms of climate obstruction through their use of discursive framing strategies. The most prominent example comes from the coal industry, which has questioned the economic rationality of climate policy and emphasizes the importance of coal as a source of employment and heating in major coal mining and export regions of the country.¹⁰⁰ This narrative is part of the broader discursive framing of climate as a 'second-order' problem, discussed further on.

Communication with the public and shareholders through their on-line presence and corporate reporting is illustrative of this approach. As Martus and Fortescue¹⁰¹ discuss, they make no blanket denial of climate change but rather attempt to shift the narrative around coal and its future in the context of climate change, with an emphasis on the social and economic importance of coal at a regional level. As with the creation of astroturf organizations in other contexts,¹⁰² in the past, Russian companies have provided financial support to 'grassroots' groups whose campaigns

advocated the continued operation of the coal industry, such as the ‘Right 4 Coal’ campaign run by the Siberian Generating Company (a coal-fired power generating company).¹⁰³ In the context of war, we would expect these narratives around employment and energy security of the regions to intensify. As we discuss later, we are also seeing a new emphasis on anti-Western rhetoric, including by key fossil fuel actors cheering the end of the Western-led ‘green agenda’.

OVERARCHING DISCURSIVE FRAMINGS EMPOWERING CLIMATE OBSTRUCTION

As demonstrated earlier, while tools and approaches might differ depending on the stakeholder, their contribution to climate obstruction in Russia is underpinned by four overarching narratives: (1) Russia as ‘a great ecological power’, (2) ‘climate policy as a Western tool of dominance’, (3) ‘climate change as an opportunity’, and (4) ‘climate change as a second-order problem’. The way each of the actors contributes to these discourses is summarized in Table 9.1 and explored in more detail further on.

Russia as a great ecological power

The narrative of Russia as a ‘great ecological power’ first became evident during the Kyoto negotiations, where Russia’s key role in bringing the agreement into force was framed as saving global climate governance.¹⁰⁴ The country’s unintentional GHG emissions drop in the early 1990s provided a foundation for state leaders for the next three decades to continue referring to Russia as an environmental leader or donor.¹⁰⁵ Another issue driving this narrative is Russia’s vast boreal forests, with stakeholders presenting the country as a giant carbon sink that has already done enough for the world. This narrative has fuelled debates within the scientific community over the method for calculating forests’ GHG absorption. While significant uncertainty remains over the accuracy of the data,¹⁰⁶ the scientific debate has been leveraged politically using the most ambitious estimates.¹⁰⁷ Both the Paris Agreement NDC and updated targets within the ‘Strategy for the Socio-Economic Development of Russia with a Low Level of Greenhouse Gases to 2050’ link emissions reductions to the ‘maximum possible absorption capacity of forests and other ecosystems’.¹⁰⁸

The narrative of Russia being an ‘ecological donor’ is used by the government and industry actors as an excuse not to act and has become an

Table 9.1 EXAMPLES OF HOW VARIOUS ACTORS CONTRIBUTE TO THE IDENTIFIED DISCURSIVE FRAMINGS

	Actor			
	Science	Media	Government	Industry
Discursive framing	Russia as a great ecological power	Offering different ways to calculate forest reserves	Following the lead of the ‘main newsmaker’; not questioning state decisions/policies	Highlighting 1990s’ emissions drop; highlighting absorptive capacity of Russia’s forests
	Climate policy as a Western tool of dominance	Appealing to the lack of a scientific basis for the international agreements	Spreading climate-related conspiracies (e.g. climate weapon; climate change as a myth)	Labelling civil- society groups with foreign links as traitors; doubting anthropogenic climate change; characterizing international policies as ‘Western led’
	Climate change as an opportunity	Highlighting potential benefits from climate change for Russia (agriculture, energy expenses, Arctic access)	Not questioning state and scientist commentary on potential benefits	Highlighting potential investments; overplaying energy efficiency policy; downplaying negative consequences
	Climate change as a ‘second-order’ problem	Offering alternative ways to manage without economic sacrifice (e.g. geoengineering)	Limiting coverage of climate change	Promoting the Northern Sea Route (NSR) as an opportunity for greater economic benefits
			Monopolizing public agenda—highlighting the importance of economic development/state security	Branding climate policies as ‘uneconomic’ or damaging to social stability; portraying fossil fuels as essential to country’s survival

integral part of Russian policy documents, strategies, and corporate statements on climate. For example, the founder of the major coal company SUEK, Andrey Melnichenko, stated: 'We are an environmental donor to the planet, including because of the large number of forests rather than a source of emissions. . . . I think we will not need to make global efforts in this direction'.¹⁰⁹ As Nina Tynkkynen¹¹⁰ observed, the 'Great Ecological Power' approach serves to mask the weaknesses of Russia's climate policy and deflect attention from the country's overdependence on the fossil fuel sector. We see no signs of this changing anytime soon.

Climate policy as a Western tool of dominance

The narrative of climate being a 'Western tool of dominance' feeds off the conspiratorial thinking discussed earlier, as well as the re-emergence of Cold War rhetoric, introducing an antagonistic approach of 'us versus them' to climate politics. During Kyoto deliberations, its antagonist Illarionov stated that climate governance is 'a war, war against the whole world but in this case the first one who got in the way, is our country. . . . It is a total war against our country'.¹¹¹ The narrative has remained persistent throughout the past two decades, though has been amplified since Russia's invasion of Ukraine. For example, the pro-government state news agency RIA Novosti published an article in March 2023 on the 'climate weapon': 'This is how the United States wants to fight "Russia's emerging dominance in agriculture"'.¹¹² This narrative, once again, advances the false assumption that climate change is beneficial for Russia and suggests that it is the United States that has been pushing geoengineering all along (ignoring the early Soviet/Russian role in the field, as discussed earlier).

Within this discursive framework, 'international climate policy is increasingly seen as a Western-led hegemonic project aiming to bypass or overrule the sovereignty of Russia',¹¹³ while Russia's resistance to global climate governance is presented as a sensible and even essential way to defend itself against the West. After February 2022, this theme became even more prominent, with the public agenda monopolized by the 'special military operation's' concerns. Unsurprisingly, after a brief splash of climate-related interest in 2020–2021, the problem has almost disappeared from national discourse. As Doose and Vorbrugg¹¹⁴ have stated, 'it is undeniable that the economic crisis, sanctions and strengthened anti-Western rhetoric brought on by the war have made it more difficult to pursue decarbonisation plans' as actors that were already trying to obstruct national climate commitments now receive more opportunities to be heard.

For example, the head of the 'Just Russia' party, Sergey Mironov, claimed that 'Russia after Western sanctions must leave the Paris Agreement'.¹¹⁵ Simultaneously, Igor Sechin, the chair of oil giant Rosneft, claimed that sanctions have ended the green transition as countries try to find alternative sources of hydrocarbons to replace Russian ones, with Europe committing 'energy suicide' in doing so.¹¹⁶ Ironically, Oreskes and Conway, in their provocative book *Merchants of Doubt* (2011),¹¹⁷ explain how, in the United States, obstruction narratives tried to frame climate change as something invented by socialists/communists and that, therefore, threatens the prosperity of the capitalist world.

Climate change as an opportunity

Since Medvedev's move during his presidency to give more political prominence to the climate change agenda, he and various other government and business actors have highlighted the potential economic benefits for Russia that are said to emanate from both a changing climate and climate-related policy. For example, the 'National Climate Adaptation Plan to 2022' (signed December 2019) lists the potential negative consequences (for public health, industry, etc.) but also the anticipated positive effects of climate change, including a reduction of energy consumption in winter, greater access for shipping in the Arctic, an expansion of arable land, and the increased productivity of boreal forests.¹¹⁸

At the same time, it has been emphasized that Russia meets GHG emission reduction targets without any effort. Indeed, even after the economic recovery from the 2000s onward, and despite the country's remaining one of the most carbon-intensive economies in the world, Russia's emissions did not exceed 2,160 MMT CO₂e—this highest level yet was reached in 2021—and are therefore still well below 1990 levels. However, Russia could still benefit from energy-efficiency plans (to save more fossil fuel for export and reduce national energy expenses). Furthermore, recent documents such as the 'Strategy for the Socio-Economic Development of Russia with a Low Level of Greenhouse Gases to 2050' have placed a stronger emphasis on the opportunities for Russia. These opportunities include the expansion of Russia's nuclear export programme as a core element of its climate agenda, with Russia already being the world's largest exporter of nuclear reactors. Other perceived emerging prospects around hydrogen and renewables have also been emphasized, at least prior to February 2022.

The discourse of 'opportunity' is a complicated one. It can be argued that this 'win-win approach' is a way to overcome climate obstruction because

it allows climate advocates to attract the attention of key stakeholders without antagonizing them, something especially valuable in an authoritarian society. At the same time, this positive narrative prevents policymakers from seeing climate change as an environmental problem or threat to the country's wellbeing, thus slowing or limiting the scope of climate policymaking and implementation. Kokorin and Korppoo argue that Russia's leaders follow the 'ostrich approach', persistently delaying climate-related policies. For example, by 2017, despite renewables becoming economically viable in some parts of Russia, Deputy Prime Minister Arkady Dvorkovich suggested waiting until they 'become cost-effective in Russia as a whole'.¹¹⁹ Furthermore, if climate change is not seen as an existential threat, then it naturally fits into the next narrative of climate as a 'second-order problem': a problem that can be postponed (indefinitely).

Climate change as a 'second-order' problem

The marginalization of the climate change problem in favour of addressing other, seemingly more important difficulties is not unique to Russia, but in fact one of the persistent features of developing societies.¹²⁰ As Inglehart argued in his 1995 study,¹²¹ a higher concern for environmental issues is normally accompanied by a 'postmaterialist shift' that goes hand in hand with economic prosperity. While there is evidence suggesting applicability of this argument to Russia,¹²² there are also other explanations for the low level of public and state attention to the problem. As discussed earlier, the media overall do not 'see environmental concerns as important compared to political concerns',¹²³ often resulting in an avoidance of climate change as a topic.

Due to Russia's economic dependency on extractive industries, those with a vested interest (e.g. industry groups, government elites) are more likely to focus on strategies that are not public-facing and seek to influence policy- and decision-makers directly, hence minimizing the public discussion of climate change. Interestingly, in Western countries, especially the United States, a range of stakeholders have contributed to the powerful countermovement that challenged 'the environmental community's definition of global warming as a social problem and blocked the passage of any significant climate policy'.¹²⁴ However, Ashe and Poberezhskaya suggest that, in Russia, the need for a countermovement has been negligible because a fully fledged environmental movement never had a chance to flourish due to increased state repression of NGOs. Hence, as we discussed in the media section, there is no need to deny or censor climate-related

discussions. Instead, it is much easier to relegate climate to a ‘second-order’ problem. Because the latest migration wave has forced several top climate correspondents and activists to leave the country, the situation is likely to worsen.¹²⁵

Interested parties also tend to highlight more ‘acute’ economic and social issues that may affect either a specific region or the country overall. For example, coal companies have been active in leveraging this tactic in corporate communications, arguing that a shift away from coal would have significant implications for employment, energy security, and social stability in major coal regions such as the Kuzbass.¹²⁶ The strategy of regarding climate change as something that can be postponed or dealt with superficially became even more fruitful after February 2022. This narrative may be one of the most difficult to overcome in an authoritarian political regime that dominates the public agenda.

CONCLUSION

In their observations on climate obstruction in the Global South, Milani et al.¹²⁷ suggested paying greater attention to whether different economies produce ‘different types of climate obstruction strategies, discourses, and organizational structures’. We echo these sentiments but add that we also need to understand whether different political systems create different forms of obstruction. The evidence presented in this chapter suggests that climate obstruction in Russia, an authoritarian state dependent on fossil fuels, differs in many ways when compared with other Western countries. For example, according to Brulle,¹²⁸ in the United States, ‘key opponents to climate action are motivated by private interest in the continuation of the fossil fuel-based economy’. In Russia, there is a less clear-cut distinction between the state and the private sector, which means that some of the more well-known tools and agents of climate obstruction, such as conservative think tanks, do not exist.

Climate is seen as a risk by the Russian state due to its perceived link with foreign influence and, presumably, the challenge that civil society represents to the political system, itself grounded in the fossil fuel economy. Plantan¹²⁹ argues that authoritarian governments divide civil society into ‘wanted and unwanted elements’ to maximize the benefits and minimize risks posed to the regime. For example, Russia’s use of labels such as ‘foreign agent’ and ‘undesirable organization’ shapes public perception of NGOs and media, thus delegitimizing their work.¹³⁰ Indeed, studies have shown limited public demand for climate policy action in Russia.¹³¹ Interestingly, the existing

work on climate obstruction beyond Russia emphasizes public opinion as a key focus for actors engaged in climate obstruction, yet in Russia it is irrelevant. Moreover, we argue that public climate disinterest turns into a 'passive' form of climate obstruction, whereas the 'active forms' take place among networks of influential industry groups and state elites.

Regarding possible solutions for these trends, prior research on Russia's climate policy has suggested that support be given to the small but important coalition of national climate change experts and advocates (who have been slowly but surely shaping the country's climate-related agenda).¹³² More recent studies have pointed to the potential emergence of influential policy actors within specific areas of the renewable energy industry, including solar photovoltaic manufacturing.¹³³ Prior to February 2022, it had also been suggested that external actors (including, for example, the European Union, one of Russia's major trading partners) could play an important role in stimulating the development of climate initiatives and projects, leveraging Russia's desire to increase trade and be better integrated within the global community.¹³⁴

Under the ongoing regime of sanctions and Russia's economic, political, and cultural isolation, these strategies have become obsolete, at least for the time being. Since the start of the invasion of Ukraine, the already challenging environment for proactive climate policy has taken another turn for the worse: climate sceptic messages have resurfaced in the major media outlets,¹³⁵ business and political actors are capitalizing on hostile relations with the West, and the importance of Russia's international image and engagement in global dialogue has become irrelevant. Hence, national and international stakeholders and researchers need to find new ways to overcome climate obstruction in Russia.

Potential solutions might include a certain degree of depoliticization of climate change by international actors to limit Russia's anti-Western motivated withdrawal from international dialogues and to elevate scientific engagement on climate-related policies. Yet continuing international scientific dialogue with Russia-based climatologists remains a highly controversial topic.¹³⁶ Within Russia, climate obstruction could be addressed if there were greater realization among political elites and policymakers that climate-related risks and losses at the national level would surpass any perceived benefits and that assistance for mitigation and adaptation will most likely come only from within Russia itself.

Ultimately, though, given that Russian relations with former Western partners are at their lowest point since the end of the Cold War, a more realistic solution might be to encourage other, non-European/American international partners (e.g. BRICS countries) to take the lead in engaging

with Russia on climate for the foreseeable future to ensure it remains on the country's agenda. As we have sought to highlight, climate obstruction is not homogenous globally. We believe there is considerable value in exploring frequently overlooked cases such as Russia to understand how climate obstruction can be overcome in the most difficult political, economic, and social contexts.

NOTES

1. Igor Makarov (2022), 'Does Resource Abundance Require Special Approaches to Climate Policies? The Case of Russia', *Climatic Change*, 170, 3, <https://doi.org/10.1007/s10584-021-03280-0>.
2. Jonathan Oldfield (2005), *Russian Nature. Exploring the Environmental Consequences of Societal Change*. Hants, UK: Ashgate.
3. Climate Action Tracker (2022, 9 November) 'Russian Federation', <https://climateactiontracker.org/countries/russian-federation/>.
4. Anna Korppoo (2020), 'Domestic Frames on Russia's Role in International Climate Diplomacy', *Climate Policy* 20, 1: 109–123, doi:10.1080/14693062.2019.1693333.
5. Anna Korppoo and Alex Alisson (2023), 'Russian Climate Strategy: Imitating Leadership', Climate Strategies Report, p. 6, <https://climatestrategies.org/publication/russian-climate-strategy-imitating-leadership/>.
6. Andy Bruno (2018, July), 'Climate History of Russia and the Soviet Union', *WIREs Climate Change*, <https://doi.org/10.1002/wcc.534>.
7. David White (2018, January), 'State Capacity and Regime Resilience in Putin's Russia', *International Political Science Review*, 39, 1: 130–143, doi:10.1177/0192512117694481.
8. Dorottya Sallai and Gerhard Schnyder (2021), 'What Is "Authoritarian" about Authoritarian Capitalism? The Dual Erosion of the Private–Public Divide in State-Dominated Business Systems', *Business & Society*, 60, 6: 1312–1348.
9. Thane Gustafson (2012), *Wheel of Fortune*. Cambridge, MA: Harvard University Press.
10. Margarita Balmaceda (2013), *The Politics of Energy Dependency: Ukraine, Belarus, and Lithuania between Domestic Oligarchs and Russian Pressure*. Toronto: University of Toronto Press; Margarita Balmaceda and Andreas Heinrich (2018), 'The Energy Politics of Russia and Eurasia'. In: Kathleen Hancock and Juliann Allison (eds.), *The Oxford Handbook of Energy Politics*, pp. 465–506. New York: Oxford University Press.
11. Marianna Poberezhskaya (2016), *Communicating Climate Change in Russia: State and Propaganda*. Abingdon, UK: Routledge.
12. Barbara Buchner and Silvia Dall'Olio (2005), 'Russia and the Kyoto Protocol: The Long Road to Ratification', *Transition Studies Review*, 12: 349–382.
13. *RIA Novosti* (2003, 7 May) 'Izrael: Kiotskomu Protokolu ne Khvataet Ekonomicheskikh Obosnovaniy', <https://ria.ru/20030507/376649.html>.
14. Alvin Powell (2004, 2 December), 'Debate over Kyoto Climate Treaty Heats Up at KSG', *The Harvard Gazette*, <https://news.harvard.edu/gazette/story/2004/>

- 12/debate-over-kyoto-climate-treaty-heats-up-at-ksg/#:~:text=Illarionov%20went%20on%20to%20say,is%20responsible%20for%20global%20warming.
15. Martin Enserink (2004, 13 July), 'Hot Controversy Over Climate Meeting', *Science*, <https://www.science.org/content/article/hot-controversy-over-climate-meeting>.
 16. *The Irish Times* (2004, 15 April), 'Putin Adviser Likens Kyoto Pact to Auschwitz', <https://www.irishtimes.com/news/putin-adviser-likens-kyoto-pact-to-auschwitz-1.1308171>.
 17. Buchner and Dall'Olio, 'Russia and the Kyoto Protocol'.
 18. Jessica Tipton (2008), 'Why Did Russia Ratify the Kyoto Protocol? Why the Wait? An Analysis of the Environmental, Economic, and Political Debates', *Slovo*, 20, 67–96.
 19. Laura Henry and Lisa Sundstrom (2007), 'Russia and the Kyoto Protocol: Seeking an Alignment of Interests and Image', *Global Environmental Politics* 7, 4: 47–69.
 20. Jonathan Oldfield, Anna Kouzmina, and Denis Shaw (2003), 'Russia's Involvement in the International Environmental Process: A Research Report', *Eurasian Geography and Economics*, 44, 2: 166.
 21. For example, see Rosgiromet (2021), 'Doklad ob Osobennostyakh Klimata na Territorii Rossiyskoy Federatsii za 2020 god', https://www.meteorf.gov.ru/upload/pdf_download/doklad_klimat2020.pdf.
 22. The development of climate research in the Soviet Union was state-sponsored (like any other research), hence, it presents an interesting comparative case to the private companies-led research and obstruction in the West. The impact of the state over scientific research in the post-Soviet era is a more complex case. As discussed in this chapter, Russian state and industry are closely interconnected, making it extremely complicated to understand whether it is an impact of private or state interests. For more on the Soviet contribution to climate science, see Jonathan Oldfield (2018), 'Imagining Climates Past, Present and Future: Soviet Contributions to the Science of Anthropogenic Climate Change, 1953–1991', *Journal of Historical Geography*, 60: 41–51.
 23. There is an ongoing debate on the terminology around climate denialism/scepticism; here we agree with van Rensburg's typology which 'implies that sceptics are disagreeing with parts (rarely all) of the mainstream climate thesis' and more likely to engage in a mainstream discussion on ACC whilst denialists suggest a complete rejection of ACC existence without any engagement with climate science. See Willem Van Rensburg (2015), 'Climate Change Scepticism: A Conceptual Re-Evaluation', *SAGE Open*, 5, 2: 9.
 24. A. Gerasimov (2002, 19 July), 'Global'noe Poteplenie Klimata – Eto Mif', *Nauka i Zhizn*, 25, 58: 1.
 25. Khabibullo Abdusamatov (2009), 'Solntse Opredelyaet Klimat', *Nauka i Zhizn*, 1: 34–42.
 26. Quirin Schiermeier and Bryon MacWilliams (2004, September), 'Crunch Time for Kyoto', *Nature*, 431: 12–13.
 27. Dmitry Yagodin (2021), 'Policy Implications of Climate Change Denial: Content Analysis of Russian National and Regional News Media', *International Political Science Review*, 42, 1: 65.
 28. Aleksandr Gorodnitskiy (2020, 13 January), 'Devochka i Mif', *Ogonek*, <https://www.kommersant.ru/doc/4205270>.

29. Elana Wilson Rowe (2012), 'International Science, Domestic Politics: Russian Reception of International Climate Change Assessments', *Environment and Planning D: Society and Space* 30: 711–726.
30. Oldfield, 'Imagining Climates', p. 45.
31. Tamara Kazarina (2015), 'Klimaticheskii Khaos', *TASS spetsial'nyi proekt*, <https://tass.ru/spec/climate>.
32. Olga Khrushcheva and Marianna Poberezhskaya (2016), 'The Arctic in the Political Discourse of Russian Leaders: the National Pride and Economic Ambitions', *East European Politics*, 32, 4: 547–566, doi:10.1080/21599165.2016.1231669.
33. President of Russia (2017, 30 March), 'The Arctic: Territory of Dialogue International Forum', <http://en.kremlin.ru/events/president/news/54149>.
34. Pravitel'stvo Rossii (2020), *Energeticheskaya Strategiya Rossiiskoi Federatsii na period do 2035 goda*, Approved by Government Order 9 June 2020, No 1523-r.
35. Anna Korppoo, Nina Tynkkynen, and Geir Hønneland (2015), *Russia and the Politics of International Environmental Regimes: Environmental Encounters or Foreign Policy?* Cheltenham, UK: Edward Elgar.
36. Van Rensburg categorises this approach as a 'response criticism' which doubts various parts of climate governance and does not necessarily deny ACC (Van Rensburg, *Climate Change Scepticism*).
37. Jonathan Oldfield and Marianna Poberezhskaya (2023), 'Soviet and Russian Perspectives on Geoengineering and Climate Management', *WIREs Climate Change*, e829, <https://doi.org/10.1002/wcc.829>.
38. Yurii Medvedev (2010, 13 May), 'Yuriy Izrael: Sushchestvuet desyatok stsenariiev izmeneniya klimata na Zemle', *Rossiyskaya Gazeta*, <https://rg.ru/2010/05/14/izrael-nauka.html>.
39. Oldfield, 'Imagining Climates', p. 43.
40. Nikolai Dronin and Alina Bychkova A. (2018), 'Perceptions of American and Russian Environmental Scientists of Today's Key Environmental Issues: A Comparative Analysis', *Environment, Development, and Sustainability*, 20: 2095–2105.
41. Katja Doose (2022), 'Modelling the Future: Climate Change Research in Russia during the late Cold War and Beyond, 1970s–2000', *Climatic Change*, 171, 6: 15.
42. Laura Young and Erin B. Fitz (2021), 'Who Are the 3 Per Cent? The Connections Among Climate Change Contrarians', *British Journal of Political Science*, December 1–20, <https://doi.org/10.1017/S0007123421000442>.
43. For example, B. Porfir'ev, V. Kattsov, and S. Roginko (2011), *Climate change and International Security*. Moscow: Russian Academy of Science, <https://cc.voeikovmgo.ru/images/dokumenty/2016/izmKlim.pdf>.
44. Vera Kuzmina (2022, 16 August), 'How Has Russia's Climate Policy Changed Since the Beginning of the War against Ukraine?', *UWEC*, <https://uwecworkgroup.info/how-has-russias-climate-policy-changed-since-the-beginning-of-the-war-against-ukraine/>.
45. Katja Doose and Alexander Vorbrugg (2022, 23 May), 'Other Casualties of Putin's War in Ukraine: Russia's Climate Goals and Science', *The Conversation*, <https://theconversation.com/other-casualties-of-putins-war-in-ukraine-russias-climate-goals-and-science-182995>.
46. Rolf Fredheim (2017), 'The Loyal Editor Effect: Russian Online Journalism after Independence', *Post-Soviet Affairs*, 33, 1: 34–48.

47. Anton Troianovski and Valeriya Safronova (2022, 4 March), 'Russia Takes Censorship to New Extremes, Stifling War Coverage', *The New York Times*, <https://www.nytimes.com/2022/03/04/world/europe/russia-censorship-media-crackdown.html>.
48. Marianna Poberezhskaya (2018), 'Traditional Media and Climate Change in Russia: A Case Study of Izvestiia'. In: Marianna Poberezhskaya and Teresa Ashe (eds.), *Climate Change Discourse in Russia: Past and Present*, pp. 64–79. Abingdon: Routledge.
49. Gazprom Media (2023), <https://www.gazprom-media.com/ru>.
50. Yagodin, 'Policy Implications'.
51. Marianna Poberezhskaya (2018), 'Blogging about Climate Change in Russia: Activism, Scepticism and Conspiracies', *Environmental Communication*, 12, 7, doi:10.1080/17524032.2017.1308406.
52. Constantine Boussalis, Travis G. Coan, and Marianna Poberezhskaya (2016), 'Measuring and Modeling Russian Newspaper Coverage of Climate Change', *Global Environmental Change*, 41: 99–110.
53. Teresa Ashe and Marianna Poberezhskaya (2022), 'Russian Climate Scepticism: An Understudied Case', *Climatic Change*, 172, 41, <https://doi.org/10.1007/s10584-022-03390-3>.
54. Liz Koslov (2019), 'Avoiding Climate Change: 'Agnostic Adaptation' and the Politics of Public Silence', *Annals of the American Association of Geographers*, 109, 2, :570, doi:10.1080/24694452.2018.1549472. Please also see a discussion on the lack of climate knowledge in Kari Marie Norgaard, *Living in Denial: Climate Change, Emotions, and Everyday Life* (Cambridge: The MIT Press, 2011).
55. Benjamin Beuerle (2018), 'Climate Change in Russia's Far East'. In: Marianna Poberezhskaya and Teresa Ashe (eds.), *Climate Change Discourse in Russia*, pp. 80–96. Abingdon: Routledge Focus.
56. For example, Marianna Poberezhskaya and Nataliya Danilova (2022), 'Reconciling Climate Change Leadership with Resource Nationalism and Regional Vulnerabilities: A Case-Study of Kazakhstan', *Environmental Politics* 31, 3: 429–452, doi:10.1080/09644016.2021.1920768.
57. Piter.tv (2019, 19 December), 'Putin: 'Nikto ne znaet prichin global "nogo izmeneniya klimata"', https://piter.tv/event/Parizhskie_soglasheniya_Putin/.
58. Nataliya Demchenko (2021, 30 June), 'Putin ob'yasnil pochemu priroda soshla s uma', *RBK*, <https://www.rbc.ru/politics/30/06/2021/60dc5f4d9a7947e9e3860da4>.
59. Nina Tynkkynen (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.
60. Ekaterina Postnikova (2021, 22 April), 'Klimaticheski sami: Putin predlozhl chetyre shaga dlya bor'by s potepeniem', *Izvestiya*, <https://iz.ru/1155511/ekaterina-postnikova/klimaticheski-sami-putin-predlozhl-chetyre-shaga-dlia-borby-s-potepeniem>.
61. For example, Angelina Milchenko (2021, 31 October), 'Osobenno nas bespokoit tayanie vechnoy merzloty', *Gazeta.ru*, <https://www.gazeta.ru/social/2021/10/31/14154643.shtml>.
62. Boussalis et al., 'Measuring and Modeling'.
63. Agathe Demarais (2023, 13 March), 'Don't Trust Russia's Numbers', *Foreign Policy*, <https://foreignpolicy.com/2023/03/13/russia-economy-sanctions-gdp-war-ukraine-disinformation-statistics/>.

64. Environmental activist, personal communication, March 2023.
65. Tynkkynen and Tynkkynen, 'Climate Denial Revisited', p. 1116.
66. Steven Lee Myers and Andrew Revkin (2003, 3 December), 'Putin to Reject the Pact on Climate, Putin Aide Says', *The New York Times*, <https://www.nytimes.com/2003/12/03/world/russia-to-reject-pact-on-climate-putin-aide-says.html>.
67. Tynkkynen and Tynkkynen, 'Climate Denial Revisited'.
68. Liliana Andonova (2008), 'The Climate Regime and Domestic Politics: The Case of Russia', *Cambridge Review of International Affairs*, 21, 4: 483–504; Asya Cooley (2023), 'The Role of the Nonprofit Sector within the Climate Change Discourse: The View Through Russian News Media', *Nonprofit Policy Forum*, 14, 1: 1–23, <https://doi.org/10.1515/npf-2022-0002>.
69. See Ecodefence (2020, 13 March), 'Pikety protiv dobychi uglya v Kuzbasse', <https://ecodefense.ru/2020/03/13/stock-against-coal/>.
70. See Ecodefence (2020, 3 February), 'Ugol' – uzhas! Spasem Kuzbass!', <https://ecodefense.ru/2020/02/03/ecodefense-kuzbass-statement/>; Stephen Fortescue and Ellie Martus (2020), 'Black Jack: Russia's Coal Industry in the Age of Climate Change', *Osteuropa*, 70, 7–9: 103–130, doi:10.35998/oe-2020-0050.
71. Filipp Lebedev (2022, 14 September), 'Russia's First Climate Lawsuit Filed over Greenhouse Emissions', *Reuters*, <https://www.reuters.com/article/climate-change-russia-idAFKBN2QE1TO>.
72. Jo Crotty, Sarah Marie Hall, and Sergej Ljubownikow (2014), 'Post-Soviet Civil Society Development in the Russian Federation: The Impact of the NGO Law', *Europe-Asia Studies*, 66, 8: 1253–1269.
73. Anna Kireeva and Charles Digges (2019, 25 June), 'Activist from Ecodefence, under Pressure from Russia's 'Foreign Agent' Law, Flees to Germany', *Bellona*, <https://bellona.org/news/russian-human-rights-issues/2019-06-activist-from-ecodefence-under-pressure-from-russias-foreign-agent-law-flees-to-germany>.
74. Case of Ecodefence and others v. Russia (2022) European Court of Human Rights, [https://hudoc.echr.coe.int/fre#{%22itemid%22:\[%22001-217751%22\]}](https://hudoc.echr.coe.int/fre#{%22itemid%22:[%22001-217751%22]}).
75. Moscow Times (2022, 1 November), 'Climate Activist Arshak Makichyan Stripped of Russian Citizenship', <https://www.themoscowtimes.com/2022/10/31/climate-activist-arshak-makichyan-stripped-of-russian-citizenship-a79246>.
76. AP (2023, 11 March), 'Russia Lists World Wildlife Fund, Others as Foreign Agents', <https://apnews.com/article/russia-world-wildlife-fund-foreign-agents-86b8c97fd44f992264b34de3f7de949e>.
77. Reuters (2023, 22 June), 'WWF Russia Cuts Ties with Global Environment Group, Now Labelled 'Undesirable' by Moscow', <https://www.reuters.com/world/wwf-russia-cuts-ties-with-global-wildlife-fund-now-labelled-undesirable-by-2023-06-22/>.
78. See Ellie Martus and Stephen Fortescue (2022), 'Russian Coal in a Changing Climate: Risks and Opportunities for Industry and Government', *Climatic Change*, 173, 3: 1–21.
79. Tatiana Romanova (2021), 'Russia's Political Discourse on the EU's Energy Transition (2014–2019) and Its Effect on EU-Russia Energy Relations', *Energy Policy*, 154: 112309, <https://doi.org/10.1016/j.enpol.2021.112309>.
80. Tatiana Romanova (2021), 'The 2019 Energy Security Doctrine and Debates around It in Russia'. In: Elizabeth Buchanan (ed.), *Russian Energy Strategy in the Asia-Pacific: Implications for Australia*, pp. 201–217. Canberra: ANU Press.
81. Alexey Kokorin and Anna Korppoo (2017), 'Russia's Ostrich Approach to Climate Change and the Paris Agreement', *CEPS Policy Insights*, 40.

82. Dmitrii Butrin and Aleksei Shapovalov (2019, 17 October), 'Uglerodnye nalogi poshly na vybros', *Kommersant*, <https://www.kommersant.ru/doc/4127113>.
83. Angelina Davydova (2 June 2021), 'Vybrosoy vyzvali voprosy', *Kommersant*, <https://www.kommersant.ru/doc/4838307>.
84. Balmaceda and Heinrich, 'The Energy Politics of Russia and Eurasia'.
85. Martus and Fortescue, 'Russian Coal in a Changing Climate'.
86. Sergei Tikhonov (2020, 4 September), 'Aleksandr Novak: Dolia VIE v energobalanse Rossii dostignet 4–5%', *Rg.ru*, <https://www.Rg.ru/2020/09/04/alksandr-novak-dolia-vie-v-energobalanse-rossii-dostignet-4-5.html>.
87. Administratsiya Goroda Kemerovo, Postanovlenie ot 06.06.2022 No 1538, 'ob utverzhdenii toplivo-energeticheskogo balansa goroda Kemerovo na 2021 god i prognoz na 2022–2025 gody', <https://kemerovo.ru/sfery-deyatelnosti/gorods-koe-zhkhk/toplivno-energeticheskij-balans-goroda-kemerovo/>.
88. Ellie Martus (2019), 'Russian Industry Responses to Climate Change: The Case of the Metals and Mining Sector', *Climate Policy*, 19, 1: 17–29; Martus and Fortescue, 'Russian Coal in a Changing Climate'.
89. Mathieu Blondeel and Thijs Van de Graaf (2018), 'Toward a Global Coal Mining Moratorium? A Comparative Analysis of Coal Mining Policies in the USA, China, India and Australia', *Climatic Change*, 150: 89–101; Thomas Spencer et al. (2018), 'The 1.5°C Target and Coal Sector Transition: At the Limits of Societal Feasibility', *Climate Policy* 18, 3: 335–351.
90. See Davydova, 'Vybrosoy vyzvaki voprosy'.
91. Phoebe Cooke, Rich Collett-White, and Michaela Herrmann (2022, 12 November), 'Sanctioned Coal Barons Among Russia's COP27 Delegates', *DeSmog*, <https://www.desmog.com/2022/11/12/sanctioned-coal-barons-among-russias-cop27-delegates/>.
92. Stanislav Klimovich, Sabine Kropp, and Ulla Pape (2023), 'Defending Business Interests in Russia: Collective Action and Social Investments as Bargaining Chips', *Post-Communist Economies* 35, 1: 1–24.
93. See Russian Union of Industrialists and Entrepreneurs, <https://rspp.ru/about/inform/>.
94. Liliana Andonova and Assia Alexieva (2012), 'Continuity and Change in Russia's Climate Negotiations Position and Strategy', *Climate Policy* 12, 5: 614–629; Martus, 'Russian Industry Responses'.
95. See President of Russia, <http://www.kremlin.ru/structure/administration/groups#institution-1003>.
96. Angelina Davydova (2019, 25 January), 'Parizhskomu soglasheniyu RSPP ne meshaet', *Kommersant*, <https://www.kommersant.ru/doc/3862151>.
97. Stephen Fortescue (2021), 'Future of Russian Coal Exports in the Asia-Pacific'. In: Elizabeth Buchanan (ed.), *Russian Energy Strategy in the Asia-Pacific. Implications for Australia*, pp. 155–180. Canberra: ANU Press.
98. Anna Korppoo (2018), 'Russian Associated Petroleum Gas Flaring Limits: Interplay of Formal and Informal Institutions', *Energy Policy*, 116: 232–241.
99. Valerii Voronov (2022, 27 April), 'Terpyat otlagatel'stv: v Rossii khotyat otsrochit' sokrashchenie parnikovykh vybrosov', *Izvestiya*, <https://iz.ru/1326653/valerii-voronov/terpiat-otlagatelstv-v-rossii-khotiat-otsrochit-sokrashchenie-parnikovykh-vybrossov>.
100. Martus, 'Russian Industry Responses'.
101. Martus and Fortescue, 'Russian Coal in a Changing Climate'.

102. For example, Kristoffer Ekberg, Bernhard Forchtner, Martin Hultman, and Kirsti Jylhä (2023), *Climate Obstruction: How Denial, Delay, and Inaction Are Heating the Planet*. London: Routledge, p. 54.
103. Martus, 'Russian Industry Responses'.
104. Tipton, 'Why Did Russia Ratify'.
105. Poberezhskaya, *Communicating Climate Change*.
106. Alexey Kokorin and Darya Lugovaya (2018), 'Pogloshchenie CO2 lesami Rossii v kontekste Parizhskogo soglasheniya', *Ustoichivoe Lesopol'zovanie* 2, 54: 13–18.
107. For example, Felix Light (2021, 7 September), 'Russia Says Its Forests Neutralize Billions of Tons of Greenhouse Gases. Scientists Have Their Doubts', *The Moscow Times*, <https://www.themoscowtimes.com/2021/07/05/russia-says-its-forests-neutralize-billions-of-tons-of-greenhouse-gases-scientists-have-their-doubts-a74428>.
108. Pravitel'stvo Rossii (2021), 'Rasporyazhenie ot 29 Oktyabr 2021 No3052-r', <http://static.government.ru/media/files/ADKkCzp3fWO32e2yA0BhtIpyzWfHa iUa.pdf>. Accessed 24 March 2023.
109. RIA Novosti (2017, 2 June), 'Andrei Mel'nichenko: Rossiya odin iz liderov po sokrashcheniyu parnikovyykh gazov', *RIA Novosti*, <https://ria.ru/20170602/1495700837.html>.
110. Tynkkynen, 'A Great Ecological Power'.
111. Vladimir Baburin (2004, 9 July), 'V blizhayshee vremya Rossiya ne ratifitsiruet Kiotskiy Protokol', *Radio Svobody*, <https://www.svoboda.org/a/24190936.html>.
112. RIA Novosti (2023, 12 March), 'Posledniy argument. Amerika gotovitsya primenit' klimaticheskoe oruzhie', *RIA Novosti*, <https://ria.ru/20230312/klimat-1856861090.html>.
113. Tynkkynen and Tynkkynen 'Climate Denial Revisited', p. 1115.
114. Doose and Vorbrugg, 'Other Casualties of Putin's War'.
115. Spravedlivo (2022, 20 April), 'Sergey Mironov: Rossiya posle sanktsiy Zapada dolzhna vyiti iz Parizhskogo soglasheniya po klimatu', <https://spravedlivo.ru/12016310>.
116. Quoted in Matvei Katkov (2022, 18 June), 'Igor Sechin rasskazal o pokhoronakh 'zelenoi' povestki . . .', *Vedomosti*, <https://www.vedomosti.ru/business/articles/2022/06/18/927288-sechin-rasskazal-pokhoronah-zelenoi-povestki>.
117. Naomi Oreskes and Eric Conway (2011), *Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming*. New York: Bloomsbury Press.
118. Natsional'nyi Plan Meropriyatii pervogo etapa adaptatsii k izmeneniyam klimata na period do 2022 goda (Natsional'nyi Plan), 3183-r, approved 25 December 2019.
119. Kokorin and Korppoo, 'Russia's Ostrich Approach to Climate Change', p. 9.
120. For example, Ralf Barkemeyer, Frank Figge, and Diane Holt (2013), 'Sustainability-Related Media Coverage and Socioeconomic Development: A Regional and North–South perspective', *Environment and Planning C: Politics and Space*, 31, 4: 716–740.
121. Ronald Inglehart (1995), 'Public support for environmental protection: Objective problems and subjective values', *PS: Political Science & Politics*, 28, 1: 57–72.
122. Poberezhskaya, *Communicating Climate Change*.
123. Cooley, 'The Role of the Nonprofit Sector', p. 16.
124. Aaron McCright and Riley Dunlap (2003), 'Defeating Kyoto: The Conservative Movement's Impact on U.S. Climate Change Policy', *Social Problems*, 50, 3: 348;

- see also Aaron McCright and Riley Dunlap (2000), 'Challenging Global Warming as a Social Problem: An Analysis of the Conservative Movement's Counter-Claims', *Social Problems*, 47, 4: 499–522.
125. Environmental correspondent, personal communication, March 2023.
 126. Martus, 'Russian Industry Responses'; Fortescue and Martus, 'Black Jack'; Martus and Fortescue, 'Russian Coal in a Changing Climate'.
 127. Carlos Milani, et al. (2021), 'Is Climate Obstruction Different in the Global South? Observations and a Preliminary Research Agenda', CSSN Position Paper no. 4, https://cssn.org/wp-content/uploads/2021/10/CSSN-position-paper-4_-Global-South.pdf.
 128. Robert Brulle (2021), 'The Structure of Obstruction: Understanding Opposition to Climate Change Action in the United States', CSSN Briefing, https://cssn.org/wp-content/uploads/2021/04/CSSN-Briefing_-Obstruction-2.pdf.
 129. Elizabeth Plantan (2022), 'Not All NGOs Are Treated Equally: Selectivity in Civil Society Management in China and Russia', *Comparative Politics*, 54, 3: 501–524.
 130. Maria Tysiachniouk, Svetlana Tulaeva, and Laura Henry (2018), 'Civil Society under the Law 'On Foreign Agents': NGO Strategies and Network Transformation', *Europe-Asia Studies*, 70, 4: 615–637.
 131. For example, Oleg Anisimov and Robert Orttung (2019), 'Climate Change in Northern Russia through the Prism of Public Perception', *Ambio*, 48: 661–671, <https://doi.org/10.1007/s13280-018-1096-x>
 132. For instance, Aleksey Kokorin and Anna Korppoo listed NGOs (WWF, the Social & Ecological Union, Greenpeace-Russia), environmental committees' members from major business associations, certain civil servants from the presidential administration, the MED, and prominent academics who, one way or another, contributed to the adoption of the Climate Doctrine and its implementation plan, raised climate awareness, supported Russia at UNFCCC events, encouraged transition to the low carbon economy, and so on. (Aleksey Kokorin and Anna Korppoo (2013, May), 'Russia's Post-Kyoto Climate Policy: Real Action or Merely Window-Dressing?' *FNI Climate Policy Perspectives*, 10: 1–8).
 133. Anatole Boute and Alexey Zhikharev (2019), 'Vested Interests as Driver of the Clean Energy Transition: Evidence from Russia's Solar Energy Policy', *Energy Policy*, 133: 110910.
 134. For example, Igor Makarov, 'Does Resource Abundance Require Special Approaches?'
 135. For example, Anna Urmantsev (2023, 16 January), "CO2 tut ni pri chem". Inoy vzglyad na global'noe poteplenie', *Gazeta.ru*, <https://www.gazeta.ru/science/2023/01/16/16088101.shtml?updated>.
 136. Eric Piaget, Luk Van Langenhove, and Luc Soete (2022, 31 May), 'Science Diplomacy in Times of War: To What Extent Should Western Countries Distance Themselves from Russian Science?', *Impact of Social Science blog*, <https://blogs.lse.ac.uk/impactofsocialsciences/2022/05/31/science-diplomacy-in-times-of-war-to-what-extent-should-western-countries-distance-themselves-from-russian-science/>.