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From continuity to change: Soviet and Russian government attitudes on climate change (1989–2009)

Benjamin Beuerle[1,2]

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Abstract
This article studies successive Soviet and Russian government positions on climate change between the late 1980s and the Putin era. It thereby bridges a gap between expanding research on both the role of the Soviet Union in climate change science and diplomacy and on Russian climate change policy after the turn of the millennium. While far-reaching late Soviet plans for decisive participation in the groundbreaking Rio Earth Summit contrasted with the lack of priority accorded to it by Russia during a period of political and economic turmoil, this article argues that there was, before and after 1991, a remarkable continuity of real concern in government about anthropogenic climate change and its negative consequences, not least for the Soviet Union and Russia. This continuity of concern took form in 1989 and lasted for a decade. In contrast to the misleading picture presented to outside observers, notably by the highly visible Yuri Izrael' and some of the Russian delegations at international climate conferences in the 1990s, a neglect of anthropogenic climate change and its dangers for Russia took hold in the Russian government only after Vladimir Putin came to power. A renewed official recognition of the dangers of anthropogenic climate change materialized only with the 2009 Climate Doctrine. However, until recently this recognition remained half-hearted in comparison with the clear government positions of the late 1980s and the 1990s.

Keywords Soviet Union · Russia · Climate change · Climate policy · Climate scepticism

1 Introduction

This article aims to study successive Soviet and Russian government positions on climate change from the late 1980s to the Putin era. In recent years, literature on both Soviet climate science and post-Soviet Russian climate policy and science has developed considerably. We have gained significant insights with regard to the late Soviet period, notably into the important role Soviet scientists have played in raising awareness about the phenomenon of global warming and its anthropogenic origins (Oldfield 2018, 2016); into the at times constructive, at times strained interplay of Soviet climatologists and their Western

✉ Benjamin Beuerle
benjamin.beuerle@cmb.hu-berlin.de

[1] Centre Marc Bloch, Berlin, Germany

[2] Max Weber Foundation, Bonn, Germany

colleagues in various fora (Doose 2021, 2022; Rindzevičiūtė 2016); and into the way climate change was reported on in Soviet media (Mazanik 2018). Meanwhile, with regard to the Putin era, our knowledge has expanded greatly on a large array of topics including climate change policies (Korppoo and Kokorin 2015; Kokorin and Korppoo 2013; Henry and Sundstrom 2012; Andonova 2008), Russia´s positions in international climate negotiations (Andonova and Alexieva 2012), the interplay of science and politics (Wilson Rowe 2013, 2009), climate change in the media (Poberezhskaya 2016), discursive framings of climate change (Tynkkynen 2010), climate scepticism (Tynkkynen and Tynkkynen 2018; Ashe and Poberezhsakya 2022; Dronin and Bychkova 2018), and positions on climate change in Russian industry (Martus 2019; Martus and Fortescue 2022).

Largely missing so far are links between our knowledge of the late Soviet and Putin eras. This research gap between two epistemic communities which still operate mostly separately — historians and historical geographers focused on the late Soviet period, political scientists on the Putin era — concerns not least the development of positions on climate change prevalent in the late Soviet and post-Soviet ministerial governments until the end of the 1990s and beyond. While we know that longtime president Putin, though very pragmatic and flexible in his positions on the topic, has upheld climate-sceptic attitudes, doubting the anthropogenic nature of climate change (attribution scepticism) as well as, at times, its detrimental effects on Russia (impact scepticism) (Wilson Rowe 2018; Poberezhskaya 2016; Tynkkynen and Tynkkynen 2018; President of Russia 2017), we have so far ignored the extent to which this has corresponded to a tradition of Soviet and Russian government scepticism.[1] How much continuity was there in government attitudes on climate change between the late 1980s and Putin´s (and Medvedev's) presidencies and at which moment(s) did changes occur? This article sets out to bridge this gap.

The first part of the article is dedicated to the late Soviet period. This section is based on sources comprised of archival documents from Goskompriroda, the Soviet State Committee for Nature Protection (primarily responsible for any environmental issues within the ministerial bureaucracy since 1988), mainly from communication with the Soviet Council of Ministers and the Supreme Soviet regarding new environmental legislation and initiatives, and complemented by files from Goskomgidromet, the State Hydrometeorological Committee which was responsible for climate research. Beginning in 1989, these documents show a marked apprehensiveness about anthropogenic climate change (ACC) and a willingness shared by representatives of various ministries to deal decisively with this issue both nationally, through legislation stipulating a reduction of greenhouse gases (GHG), and internationally, through binding accords to be negotiated and signed at the pending Earth Summit. The article then proceeds to investigate how government attitudes towards climate change developed in Russia from the breakdown of the USSR until the adoption of the Russian Climate Doctrine in 2009, with some outlook on further developments. This second part is based mostly on a keyword search for "climate change" and "global warming" on the Russian government website (government.ru) which took into consideration decrees, ordinances and orders (*postanovleniia*, *rasporiazheniia* and *ukazy*, respectively) of the government and president, as well as federal laws. This has been complemented by corresponding research into debates of the Russian State Duma available on the Duma website.

[1] In the growing body of literature on the multi-faceted phenomenon of climate change "scepticism", response scepticism and epistemic scepticism have been differentiated, with the latter further separated into trend, attribution and impact scepticism (casting doubt on the existence of climate change, its anthropogenic origins or its harmful consequences) (Ashe and Poberezhskaya 2022).

Based on the late Soviet archival documents and on earlier literature about post-Soviet Russia and climate change that notably depicted sceptical positions of Russian delegations at the Rio summit and at early Conferences of the Parties (COP) (Moe and Tangen 2000; Andonova 2008), the initial hypothesis during work on this article was that a sharp break occurred between the successive Soviet and Russian governments, with pro-climate action attitudes in the late Soviet period and a subsequent neglect and scepticism of the topic beginning in the early 1990s, for which explanations should be found. However, the research conducted for this article proved this assumption to be incorrect. Throughout the 1990s, a number of Russian government documents clearly confirmed the anthropogenic nature of climate change; consequences that were expected to be overwhelmingly negative, notably for Russia; and a resulting imperative to align Russia with international efforts to mitigate climate change. This continuity between government attitudes in late Soviet and post-Soviet years ceased only beginning in 2000, when Putin came to power. To some extent, the 2009 Climate Doctrine corresponds with the prevailing attitudes before Putin. However, even this doctrine was considerably less unequivocal than the documents of the late 1980s and the 1990s as far as the anthropogenic nature of climate change and its negative consequences for Russia were concerned.

2 The Soviet Union and climate policy

2.1 Preface: the Soviet Union in nascent climate diplomacy

When, in the 1970s and 1980s, anthropogenic climate change became an increasingly important topic in various international fora and conferences, the USSR played an important role, in keeping with its position as both one of the two global superpowers and as a leading science nation (Schmid 2014; Sher 2019). This was true for the first World Climate Conference, held February 1979 in Geneva, where two dozen Soviet participants signed the "Appeal to Nations" for intense global cooperation in further research and mitigation of climate change (World Meteorological Organization [WMO] 1979). It was true as well for various bilateral efforts to research climate change and develop initiatives on the topic, for which the US-Soviet working group on climate was one of the most prominent and arguably most important examples (Doose 2021).[2] Soviet scientists were also prominently involved in the work of the International Institute for Applied System Analysis near Vienna, founded in 1972, where they discussed topics such as global climate change and its possible/probable anthropogenic origins with their counterparts from the USA, Japan, West Germany and several other Western (and Eastern) countries (Rindzevičiūtė 2016).

From the start of perestroika in particular, the USSR took the initiative in various respects. In 1986, it hosted two international events at which climate change and its causes and consequences where discussed: the 7th session of the Brundtland commission on sustainable development and a five-day WMO-UNEP symposium on "Climate and Human Health". Referring to the former, the Soviet climatologist K.Y. Kondratiev, while more cautious than chairperson Brundtland on the probability of anthropogenic factors being the main causes of climate change, underlined the primordial importance of getting to the bottom of this possible causal link and proposed a global monitoring system to research

[2] RGAĖ (Rossiĭskiĭ Gosudarstvennyĭ Arkhiv Ėkonomiki), F. 8061, op. 11, d. 3520, ll. 66–71.

this question cooperatively (on the Brundtland commission, Borowy 2014).[3] Beginning in 1988, the USSR's important role and engagement in international efforts on climate change was also underlined by the fact that one of the three Intergovernmental Panel on Climate Change (IPCC) working groups (Working Group II, which dealt with the socio-economic impacts of climate change) was chaired by geophysicist and head of Goskomgidromet Yuri Izrael' (Oldfield 2018; qualifying Doose 2022).

2.2 Climate change in the Soviet government

It was after the foundation of the IPCC that climate change began to be discussed at the Soviet government level. From 1989 on, government bureaucrats and politicians identified climate change as an important topic that had to be dealt with both internationally and nationally. The recognized importance of this topic is testified to by a number of internal documents drafted mostly by the Goskompriroda, which was founded in 1988 and headed first by the agronomist and functionary Fedor Morgun, who was succeeded in 1989 by the biologist and former academic Nikolai N. Vorontsov (Josephson et al. 2013; Aksenova et al. 2006). This should be viewed in a context of overall heightened attention to environmental topics during the Gorbachev years. Climate change was far from the only environmental topic that the government paid attention to during this period (Josephson et al. 2013). However, it stood out as one of the global problems that could only be solved transnationally and thus lent itself to close international cooperation across ideological divides.

In autumn 1989, under Vorontsov's leadership, Goskompriroda elaborated a document called "Basic principles of a conception of ecological security [and] main theses and directions of a global and European strategy for nature protection and use of natural resources", which outlined a system of close inter- and transnational cooperation "for avoiding an ecological catastrophe".[4] In the first paragraph, the document deplored the "undeniable fact that the state of the environment continues to deteriorate as a result of economic and other forms of human activity […]. They lead to climate change and change[s] of the state of the world's ocean[s], and to the destruction of Earth's ozone layer […]".[5] While the authors thereby acknowledged ACC as a fact from the start, a later section entitled "Possible climate changes" also called for the development of a global "action plan" that was to mainly include further joint observations of and research into ongoing climate change, its mechanisms and consequences, but also "the reduction of the quantity of gases that provoke harmful consequences, the maximal reduction of damage and the adoption of due measures in relation to climate change, as well as the rise of sea levels".[6] This Soviet ministerial document from September 1989 thus called for the global community to combine its efforts not only for research on climate change, but also for mitigation and adaptation measures. This was in line with another passage in the document's first paragraph that declared nature protection "a global all-human problem that can only be solved on the basis of all-sided international cooperation […]". It further stated that the economic activity of each state should not harm the environment either within that state or elsewhere and that each state should be obliged to thoroughly assess the ecological consequences of economic activity

[3] RGAĖ, F. 9480, op. 13, d. 2516, ll. 146–159.
[4] RGAĖ, F. 709, op. 1, d. 158, ll. 44–64.
[5] Ibid., l. 48.
[6] Ibid., l. 56.

on its territory and provide the resulting information to other interested states and international organizations. It also postulated a principle that declared "inadmissible all kinds of economic and other activity whose ecological consequences are unpredictable".[7] Given the remaining scientific uncertainties concerning ACC at that time, this postulated principle appears particularly meaningful for the mitigation and adaptation measures called for later on in the section on climate change. This whole passage also makes clear the spirit of close international cooperation and *glasnost'* that would be a marker of Soviet positions on environmental issues in the very last years of the Red Empire.

In line with the aforementioned "Conception" and "Theses" as far as climate change was concerned were two other (draft) documents elaborated around the same time by the Soviet ministerial bureaucracy: a "Long-term state programme for environmental protection and rational use of natural resources of the USSR […] in an outlook until 2005" and a Soviet environmental protection law. The former was drafted in spring 1989 by the Goskompriroda together with the State Planning Agency, the State Committee for Science and Technology, the Soviet Academy of Sciences and the Goskomgidromet. In its first part, which listed numerous grave ecological problems that had amassed in the USSR, the document stated: "There are clear signs of a negative influence of environmental pollution through harmful emissions from thermal power stations, industrial enterprises and transport on the stability of climatic conditions in our country and beyond its borders as well". Among other measures, the programme thus stipulated the "elaborate[ion] between 1991 and 2000 [of] a system of observations on global changes of the state of the natural environment, of the climate and of factors influencing the climate [*klimatoobrazuiushchikh faktorov*]", an increase in the share of natural gas in industry, the building of new power stations which include techniques for reducing emissions and raising the share of "non-traditional energy sources" to 5% of the overall Soviet power production by 2005.[8] "Non-traditional" energy sources in Soviet terminology were equivalent to renewables (excluding large hydropower). During its final decade, the USSR ran a substantial programme for the development and introduction of renewables into the economy that involved around 200 organizations.[9] At first glance, the 5% aim by 2005 might not seem very ambitious. However, a brief comparison with developments in post-Soviet Russia is apt to correct this impression. In 2009 under Medvedev — when the real share was only 0.5% — the target was set to reach 4.5% by 2020. However, in 2015, this aim had to be pushed to 2024, and it still appeared out of reach by 2020, when just 1% had been achieved (Korppoo and Kokorin 2015; Tynkkynen 2020; Lanshina 2021; Pravitel'stvo Rossiĭskoĭ Federatsii 2009). Thus, the late Soviet 5% by 2005 aim was much more ambitious than anything that has been accomplished — or aimed for — in terms of renewable energies in post-Soviet Russia thus far.

This course towards an enhanced role of renewable energies in the Soviet energy system was confirmed by the decree of the Supreme Soviet from November 27, 1989, "On Immediate Measures of Environmental Improvement", which stipulated that "a new variant of the State energy program" be elaborated in 1990, "taking into consideration the use of non-traditional, ecologically secure sources of energy".[10] In line with this, an inter-ministerial draft for a Soviet law on nature protection which, according to the November 27 decree, was to be submitted for the consideration of the Supreme Soviet by mid-1990 and

[7] Ibid., ll. 50–51.

[8] RGAĖ, F. 709, op. 1, d. 170, ll. 5v, 20, 34.

[9] This programme is currently researched by the author of this paper.

[10] RGAĖ, F. 709, op. 1, d. 363, l. 6.

circulated as early as autumn 1989, contained a passage stating: "Ministries and agencies, enterprises, institutions, [and] organizations are obliged to develop the exploitation and widespread use of non-traditional, ecologically clean and secure forms of energy (solar, wind, sea tides, bio-energy etc.)".[11] This draft law which had, in late November 1989, the explicit approval of representatives of numerous Soviet ministries and agencies (including the Interior Ministry, the Ministry of Foreign Affairs and the Ministry of Justice) as well as the councils of ministers of the Ukrainian, Belarusian and other Soviet republics and entities, also contained an article "On the protection of the climate and of the ozonosphere of the Earth". This article stipulated:

> The protection of the natural environment from ecologically dangerous changes in the climate and ozonosphere of the Earth are secured by:
> The organization of a unit of a global network of observations, calculation and monitoring of changes of the state of the climate and the ozonosphere influenced by economic activity and other processes;
> The elaboration of and compliance with norms of maximally admissible emissions of harmful substances that influence the state of the climate and Earth's ozonosphere; […]
> The elaboration of long-term, ecologically founded energy development programmes, providing for a reduction of CO_2 emissions and other radiationally active gases. […]

As can be seen here and in other documents, protection of the world´s climate and the ozone layer were often dealt with as interconnected challenges. Indeed, as had been proven at the time, ozone-depleting substances are also highly effective GHG (Doolittle 1989). At the same time, the explicit mentioning of CO_2 reductions — without relevance to the ozone layer — indicates that the authors of this legislative draft understood these problems were related without being identical. The authors made very clear they did not intend the climate policy norms to be of a merely declarative character. In the same article on climate protection, they put the Goskomgidromet in charge of monitoring compliance with the aforementioned norms and further stated that failure to observe the norms or to reduce means "harmfully influencing the state of the climate and Earth's ozonosphere […] entails the suspension or the full stop of the corresponding activity of businesses, institutions, organizations or of particular facilities, units, technological processes, equipment" upon the decision of the Goskompriroda following the notification of the Goskomgidromet.[12] Insofar as it stipulated explicit climate change mitigation measures and concrete sanctions against corporations not observing these measures, this climate policy article was arguably more far-reaching than most of what has been discussed — let alone passed — at the government level in post-Soviet Russia so far.

To be sure, in its very concrete form — entailing explicit CO_2 reductions and sanctions against businesses that did not comply — the article did not survive the further interministerial deliberations on the draft law that took more than half a year. The third version of the draft, circulated in June 1990, was reduced to just 42 articles — down from 99 articles in the first version. It is all the more remarkable that it still contained the article on "Protection of the climate and Earth's ozonosphere", though instead of explicitly mentioning CO_2 reductions, it stipulated more cautiously the "elaboration and observation of

[11] RGAĖ, F. 709, op. 1, d. 165, l. 128.
[12] Ibid. ll. 136–137.

norms of maximum admissible emissions of harmful substances that influence the state of the climate and Earth's ozonosphere". And instead of the closing down of facilities or activities contradicting the norms, it stipulated more vaguely the "adoption of measures of responsibility for the violation of the mentioned demands".[13] However, even in this slightly reduced form, the article was a clear sign that ACC was being taken seriously by the ministries involved and that it was not disputed as such within the ministerial bureaucracy. After all, the draft law had, in the previous months, been reworked by representatives of various Soviet ministries and agencies.[14]

2.3 Rio Conference expected to be a key moment for concrete decisions

An important point of reference in many of these late Soviet documents was the pending 1992 Rio Earth Summit. The abovementioned draft for "a global and European strategy for nature protection" underlined the necessity of convening this type of global UN conference on the environment and development "no later than in 1992".[15] The decree from November 1989 "On Immediate Measures of Environmental Improvement" stipulated, among others, that the Goskompriroda, together with representatives of (other) interested ministries and the councils of ministers of the Soviet republics, should establish a committee in 1990 to prepare for the 1992 Earth Summit in order to secure the USSR's effective participation in it.[16] In late August 1989, the Central Committee of the Soviet Communist Party had already ordered the Goskompriroda to prepare a plan for Soviet participation in the 1992 conference.[17] The obvious importance accorded to this event by Soviet party and government protagonists was confirmed in mid-September 1989, when UNEP executive director Mostafa Tolba was visiting Moscow. His main interlocutor on the Soviet side, Lev A. Voronin, first deputy head of the Soviet Council of Ministers, agreed explicitly with Tolba that it was important the USSR and the US be represented at the 1992 conference by high-ranking delegations and that this conference should result in concrete decisions and obligations by the participating states for solving the most important global environmental problems. Voronin referred thereby to similar declarations on the part of foreign minister Eduard Shevardnadze.[18] In line with this, as late as April 1991, the Soviet committee for the preparation of the Earth Summit stipulated that the USSR should take part in the Summit with a high-ranking delegation headed by the Soviet president and comprising no less than 190 delegates — *plus* 30 representatives from Soviet "non-governmental organizations" and 40 representatives from the Soviet (environmental) technology field.[19]

Earlier still, climate change had already been singled out by various Soviet protagonists as an important environmental topic that lent itself to international cooperation. Thus, when in November 1987 Jutta Ditfurth — at that time the co-head of the fledgling West German Green Party — visited the USSR, the head of Goskomgidromet, Yuri Izrael', underlined the "importance of international cooperation" in a conversation with Ditfurth and singled

[13] RGAĖ, F. 709, op. 1, d. 360, l. 110.
[14] Ibid., ll. 93–94.
[15] RGAĖ, F. 709, op. 1, d. 158, l. 53.
[16] RGAĖ, F. 709, op. 1, d. 363, l. 16.
[17] RGAĖ, F. 709, op. 1, d. 158, l. 27.
[18] RGAĖ, F. 709, op. 1, d. 162, ll. 17–21.
[19] RGAĖ, F. 709, op. 1, d. 556, ll. 54–55.

out various environmental problems, naming "the possible climate change" first.[20] And after the already well-known US senator Al Gore visited Moscow in late August 1990 and had talks in the Goskompriroda, chairman Nikolai Vorontsov wrote of Gore's visit in a letter to presidential council Alexander N. Yakovlev: "In relation with the problems [sic] of global warming, Gore raised [our] attention to the extraordinary scientific value of data on the thickness of the arctic ice that is received by American and Soviet submarines. He proposed that this data be declassified by the American and by the Soviet side". Vorontsov explicitly stressed the ecological interest of Gore's proposition, which promised data about the dynamics of ice thickness in the Artic over a period of 20 years.[21]

All this is not to say that the USSR's relationship with the nascent international climate regime was untroubled. Archival documents from the early Gorbachev period bespeak a growing uneasiness on the part of Soviet politicians and scientists, first with the work of the WMO becoming increasingly dominated by the climate change topic — which was seen at times as being part of a "Western" agenda — and then with the topic being usurped more and more by the IPCC (co-founded in 1988 by the WMO and UNEP) at the expense of the WMO. This was again perceived as being part of a Western agenda and a push for domination, the important role of Soviet actors, including in the IPCC, notwithstanding (Beuerle 2020).[22] This uneasiness was also related to language and methodological issues — with English as a working language and modelling as a tool for researching climate change both clearly favouring (and related to) the predominance of Western actors in the field (Gordin 2015; Oldfield 2018; Dronin and Bychkova 2018; Doose 2022). Finally, internal documents also testify to growing Soviet difficulties in mustering the funds necessary for sending participants to international meetings and making monetary contributions to the international organizations involved.[23]

2.4 Interim conclusion

It must be noted that none of the draft documents discussed above were ultimately realized in terms of actual legislation. All were initiated in the course of 1989, which did not leave enough time for inner-governmental deliberations to be completed before the USSR entered its final, tumultuous months in 1990–1991. These months were defined by an accelerating dramatic economic crisis, strong centrifugal tendencies and acute political crisis, resulting in a de-facto paralysis of ordinary legislation (Hildermeier 1998; Plokhy 2014; Kotkin 2001).

Up to this point, however, the late Gorbachev years were marked by a high significance accorded to the problem of anthropogenic climate change by protagonists within the Soviet government; by a recognition that ACC lent itself to intense international cooperation and thus constituted not only a problem, but an opportunity as well; by a will, indeed, to tackle this problem — like other global environmental problems — through vastly enhanced international cooperation and concrete obligations of the states, the two superpowers above all, to be determined by high-ranking delegations, particularly during the Rio Earth summit. These years were marked by a willingness to inscribe binding reductions of GHG

[20] RGAĖ, F. 8061, op. 11, d. 3290, l. 36.
[21] RGAĖ, F. 709, op. 1, d. 367, l. 72.
[22] RGAĖ, F. 8061, op. 11, d. 3520, ll. 90–93; F. 8061, op. 11, d. 3764, ll. 12, 18–19.
[23] RGAĖ, F. 709, op. 1, d. 556, ll. 45–50; F. 8061, op. 11, d. 3011, l. 40.

directly into Soviet legislation in order to contribute to the mitigation of climate change and by concrete plans to introduce — with the aim of emission reductions — renewable energies into the national economy and raise their share of energy production substantially within the two subsequent decades, combined with a "gazification" of the economy and other emission reduction measures.

Several indicators bespeak the persistence of this agenda on the part of the Soviet government: the decree "On Immediate Measures of Environmental Improvement" from 27 November 1989 — a piece of binding Soviet legislation — explicitly stipulated the preparation of a law on nature protection, thorough Soviet preparation for the Rio Conference in order to secure effective participation in it, and concrete measures for substantially enhancing the share of renewable energies in the Soviet energy system.[24] As mentioned above, as late as April 1991, the Soviet government committee in charge of preparing for the Rio Conference called for a large, high-ranking Soviet delegation to take part, thereby underlining the importance of the topics that were to be discussed and a willingness to participate effectively and arrive at binding international commitments. In addition, the article on climate change within the draft law for environmental protection survived an intense deliberation process in which practically all Soviet ministries and agencies as well as the councils of ministers of various Soviet republics participated. It was thus still included in the last, substantially shortened version of this draft law, and it still stipulated the elaboration of norms of maximally admissible GHG and sanctions in the event of infractions. Only once the USSR entered the state of acute political crisis that resulted in its implosion in 1991 did the government climate policy agenda lose momentum and eventually become derailed.

The late Soviet interest and engagement in the topic of anthropogenic climate change and the important role the Soviet government intended to play during the Rio Earth Summit was in line with the USSR's superpower status and its role as one of the biggest GHG emitters worldwide.

3 The Russian government and climate change (from 1992 on)

With the turn of the year 1991–1992, the situation changed dramatically. The USSR was no more. The (smaller) Russian Federation found itself in a deep socio-economic crisis, notably due to the painful transition from a planned to a free market economy (Kotkin 2001; Aslund 2007; Klein 2007). Together with the peaceful breakdown of the Warsaw Pact (Matěka 1997), this contributed to a substantial lessening in the weight and importance of Russia on the international scene. This was true to a considerable extent for emerging international climate policy, which was, at this precise moment, about to develop key features that would be of importance for decades to come.

It was at the United Nations Conference on Environment and Development, held in June 1992 in Rio de Janeiro — subsequently known as the Rio Earth Summit — that the UN Framework Convention on Climate Change (UNFCCC) was concluded and signed, thereby creating an international climate regime with different categories of countries and responsibilities (developed countries, developed countries with special responsibilities and developing countries) that led to the subsequent COPs. These eventually resulted in the Kyoto Protocol and, later, the Paris Agreement (Hampton 2004; Bassewitz 2013; United Nations

[24] RGAĖ, F. 709, op. 1, d. 363, ll. 6, 16.

1992). Here, finally, was the big international conference late Soviet government protagonists had prepared for and had stipulated to include large, high-ranking delegations, notably from the USA and the USSR, in order to arrive at far-reaching, universally binding decisions. It is all the more striking that the new post-Soviet Russia — the USSR's successor state in most cases of international law, not least as one of the five permanent UN Security Council members — was hardly present at all. No less than 103 heads of state, including George Bush, Helmut Kohl, François Mitterrand and John Major, were present and gave speeches. Boris Yeltsin did not attend. Vice-President Rutskoy gave a speech on Russia's behalf, but was strikingly absent at the final meeting of the conference. Whereas the US delegation numbered 200, Rutskoy had just 10 official Russian delegates with him — a delegation too small to contribute substantially to this big and multi-faceted event (Josephson et al. 2013; United Nations 1993; Freestone 1994).

Was this more than a lack of priority at a moment of political turmoil and economic crisis, just half a year after the new Russian Federation came into being? Was there a sharp break between the importance accorded to the problem of ACC in the late Soviet government and attitudes to it in the new Russian one?

At first glance, it seems so. From all we know, during the Rio Conference the minuscule Russian delegation was noticed for its climate-sceptic positions, both concerning the anthropogenic origins of climate change and its negative effects on Russia (Andonova 2008). During the first two COP under the new UNFCCC framework, held 1995 in Bonn and 1996 in Geneva, the Russian delegations were acting either in a "defensive and almost unnoticed" way or aligning themselves with the OPEC countries, casting doubt (again) upon ACC and thus refusing to undertake steps to significantly reduce GHG (Moe and Tangen 2000). However, and this is one of the important insights of this article, a study of Russian government documents from the 1990s testifies clearly that the attitude towards climate change shown by these Russian COP delegations did not correspond to that of the Russian government.

3.1 Government documents on climate change in the first half of the 1990s

To be sure, what we can see from the Rio Conference, the first COP, and also from the "State Strategy of the Russian Federation on protection of the environment and on securing of a sustainable development" that was signed by President Yeltsin in February 1994, is indeed a lessening of priority accorded to the topic of climate change in comparison with the prevailing attitudes within the late Soviet government. Thus, in this four-page State Strategy, climate change was mentioned explicitly only once, in the fourth and last part on participation in the solution of global ecological problems: "In the aims to develop international cooperation for the preservation, protection and restoration of Earth's ecosystems, the following directions of activity are foreseen: […] the prevention of anthropogenic climate change; […]". That said, the topic was embedded between a number of obviously related issues like "the preservation of biodiversity", "the protection of the ozonosphere" and "the protection of forests and reforestation" (President of Russia 1994).

The passage, though very short, was in line with late Soviet government concerns about ACC and the willingness to enhance international cooperation against this danger. Consequently, in 1992, Russia had been among the first countries to sign the UNFCCC framework that had been concluded at the Rio Conference (Poberezhskaya 2016). Most importantly, what we can read here is a clear acknowledgement that climate change was anthropogenic and that it was expected to have overwhelmingly negative consequences,

including for Russia. This clear recognition was consistent with other Russian government documents in the 1990s that referred to climate change. Thus, in January 1994, a government decree (*postanovlenie*) signed by prime minister Chernomyrdin on the formation of an inter-ministerial commission of the Russian Federation on climate change issues explained its aim from the start as "the lessening of the negative influence of economic activity on the climate and the prevention of negative consequences of climate change on the economy and the natural environment […]" (Pravitel'stvo Rossiĭskoĭ Federatsii 1994a). A further decree from April 1994 repeated the same formula and charged the commission with the elaboration of propositions and recommendations for "businesses, institutions and organizations for the reduction of greenhouse gases on the basis of the use of ecologically clean technologies as well as for an enhanced absorption of these gases through the realization of […] the enlargement of the forest surface" (Pravitel'stvo Rossiĭskoĭ Federatsii 1994b).

3.2 The UNFCCC ratification debate

On 14 October 1994, after some debate, the Russian State Duma voted to ratify the UNFCCC with an overwhelming majority of 318 deputies to two, after the head of Rosgidromet Aleksandr Bedritsky and representatives of the Communist Party, the (rightist-populist) Liberal Democrats and (liberal) Yabloko all clearly argued for ratifying the Convention. Bedritsky warned of the dramatic negative consequences of unhindered climate change — notably for Russia — and was supported explicitly in this position by the Communist Shevelukha and the Yabloko representative Glubokovskiĭ. Shevelukha criticized only that Bedritsky had not mentioned all the negative consequences of climate change for Russia, concerning agriculture in particular — in reaction to which Bedritsky readily explained that, indeed, unmitigated climate change could lead to a dramatic 30% reduction of Russian agrarian production. Bedritsky had also argued that it was in Russia's economic interest to modernize its industry and thereby reduce GHG anyway and that the CO_2 reduction which had occurred since 1990 meant that, in the short term, Russia could easily fulfil its UNFCCC obligations without additional efforts. The latter point was stressed by the Liberal Democrat Lemeshev as well (Gosudarstvennaia Duma 1994; Russian Federation 1994).

This exchange underlines the importance of 1990 as the year of reference for emission reduction aims that had been established in the UNFCCC and signed during the Rio Earth summit, a legacy that was later consistently upheld by the Kyoto Protocol and further climate agreements (United Nations 1992; Bassewitz 2013). Against the background of Russia's deep economic crisis and the crumbling of considerable parts of its heavily-polluting industry beginning at the start of the 1990s, this base year allowed Russia to fulfil its obligations under the UNFCCC (and, later, in the Kyoto Protocol) without having to undertake far-reaching mitigation measures. While it facilitated the ratification of the UNFCCC in the Duma, the reference year of 1990 thus had the effect of a sustained anti-incentive on Russian decision-makers regarding ambitious climate mitigation action.

Apart from this, the Liberal Democrat Lemeshev adopted an impact-sceptical position, doubting notably that a warming of a couple of degrees Celsius could lead to the melting of permafrost. But he argued nevertheless that it was in Russia's interest to ratify the convention, given that this would put pressure on the USA to agree to emission cuts that would create difficulties for America's coal-driven industry. However, Lemeshev's impact

scepticism was the exception within the debate, which was dominated by warnings of the grave dangers of ACC for Russia (Gosudarstvennaia Duma 1994).

3.3 The 1996 government programme on climate change

One might be tempted to think that the government's attitude — one which clearly recognized ACC and its negative consequences for Russia – and the corresponding will to reduce GHG in Russia was subject to change, given that at the second COP in July 1996 in Geneva, the Russian delegation under Yuri Izrael' aligned itself with the OPEC countries casting doubt upon the anthropogenic origins of climate change, and refused to commit to reducing GHG (Moe and Tangen 2000). However, this again did *not* correspond to the Russian government position. In October 1996, just a couple of months after the COP-2, the Russian government under Chernomyrdin adopted a federal programme "Prevention of dangerous climate changes and their negative consequences". At its very beginning, it stated.

> Climate change as a result of anthropogenic greenhouse gases leads to huge negative consequences in practically all areas of human activity. The most significant warming concerns the higher latitudes of the Earth, in which a significant part of the territory of the Russian Federation is situated.
> In the Russian Federation, agriculture, water and forest economies are highly vulnerable to changes of the climate. […] As a result of thawing related to the warming of the climate, the economic infrastructure will be destroyed in the area of permafrost, which occupies around 10 mio. km^2 (58% of the territory of our country), due to, in first place, the vulnerability of the mining industry, energy and transport systems and the communal economy.

The document further listed, among others, the flooding and destruction of coastal cities and territories due to a rise in sea level and various negative consequences for the health of people in the southern regions of the country. Accordingly, the programme then stipulated both mitigation and adaptation measures (Pravitel'stvo Rossiĭskoĭ Federatsii 1996).

To be sure, as has been noticed by other researchers, the programme was rather lacking in concreteness as far as the mitigation measures were concerned (Moe and Tangen 2000). Though it stipulated "the elaboration of a complex system of techno-economical and organizational matters for the reduction of greenhouse gases in all spheres of economic activity" in addition to "normative-juridical" measures with the same aim, it bet above all on the enhancement of energy efficiency throughout the Russian economy and of the absorption capacities of Russian forests. In contrast to the late Soviet documents analysed in the first part of this article, no explicit mention of sanctions against infracting entities nor of renewable energies could be found in the programme, to say nothing of concrete aims for reducing the share of fossil fuels. When searching for explanations for this apparent lack of ambition despite the clear recognition of the need to act against ACC, it should be considered that, in the context of the deep economic crisis of the 1990s, Russia's economy grew even more dependent on hydrocarbons — notably gas — than the late Soviet economy had been (Gustafson 2020). Countries like Norway and Canada were similarly limiting their domestic climate action in the 1990s largely to energy efficiency measures, refraining from actions that could restrain their important fossil fuel industries — though their governments plainly recognized the need to mitigate ACC (Hermansen and Kasa 2014; Hermansen and Kasa 2014). If one adds to this the signal emanating from the 1990 reference year that Russia had already overfulfilled its international emission reduction obligations, one

could hardly expect Russia's government to embark on a more ambitious course than that of the aforementioned countries, which were economically much better off.

Nonetheless, the cited passages from the October 1996 government programme show that the Russian government at that time not only took the problem of climate change seriously, but also did not leave the slightest doubt about its anthropogenic origins or about the disastrous consequences that were to be expected, notably for Russia itself, which resulted in an acknowledgement of the need to act for mitigation and adaptation. With this position, the 1996 government programme was in line with a variety of other Russian government documents from the 1990s. This was still the case in May 1999, when a government decree concerning Rosgidromet mentioned among its tasks "the coordination of the activity of federal organs of the executive branch for the reduction of the negative influence of economic activity on climate and the prevention of negative consequences of climate change on the economy and the environment […]" (Pravitel'stvo Rossiĭskoĭ Federatsii 1999).

3.4 Government documents in Putin's first two terms: climate change negligence

A few months later, Putin became first Prime Minister, then President (Shevtsova 2005). In stark contrast to the Russian governments of the 1990s, not a single ministerial government document confirming the anthropogenic nature of climate change and its negative consequences for Russia was issued during the first two terms of Putin's presidency (2000–2008).[25] This included documents related to Russia's eventual ratification of the Kyoto Protocol in 2004. The long ratification debate in Russia, with the opponents (among them Yuri Izrael', by then a presidential adviser) challenging the Protocol's scientific basis and warning of negative economic consequences for Russia, and the proponents stressing, among others, the economic opportunities from the Joint Implementation mechanisms and political benefits for Russia's international standing, has been dealt with by other researchers (Mandrillon 2005; Buchner and Dall'Olio 2005; Korppoo et al. 2006; Tynkkynen 2010). In light of this debate, it comes as no surprise that the Russian ratification law signed by Putin on 4 November 2004 contained not a single word on ACC nor its possible negative consequences for Russia. Rather, it stressed economic and political implications and considerations that had nothing to do with climate change:

> The Russian Federation acts on the assumption that the obligations imposed by the [Kyoto] Protocol on the Russian Federation will have serious consequences for its economic and social development. In relation with this, the decision on the ratification was adopted after careful analysis of all factors, including […] taking into consideration that the Protocol will come into force only on the condition of the participation of the Russian Federation in it. (Russian Federation 2004)

3.5 The Russian Climate Doctrine (2009) in comparison with the 1996 programme

It would take 5 more years, a new president, and the Copenhagen climate conference before the Russian government again made a case for the existence and dangers of ACC. In late April 2009, to the general surprise of outside observers, the Russian government

[25] Rosgidromet — a federal agency — did point to negative effects of climate change on Russia, alongside with positive ones, in its 2005 report (Federal'naia sluzhba 2005; Wilson Rowe 2013).

adopted a new attitude by pointing to the need to act against ACC (Schiermeier 2009). On 17 December 2009, President Dmitry Medvedev — in office since May 2008 — signed the corresponding "Climate Doctrine of the Russian Federation", which is officially still valid today (Kokorin and Korppoo 2013; Poberezhskaya 2016). The doctrine underlined the importance of the international problem of climate change and was relatively outspoken about climate change's anthropogenic nature, though it left some room for doubt: "Modern science provides more and more solid arguments in support of the fact that human economic activity, related, first of all, to greenhouse gas emissions as a result of fossil fuel combustion has a considerable impact on the climate", and "[t]he scientific justification of this Doctrine includes the recognition of the fact that the anthropogenous factor may have an effect on the climate system triggering an important reaction which is adverse and dangerous, first of all, for human beings and environment" (President of Russia 2009). Notwithstanding the apparent clarity of attribution and the fact that the doctrine was unequivocal in stipulating GHG reductions in Russia through various means, a comparison with the Russian climate change programme from October 1996 shows that the latter was much clearer in stating that climate change *was* in fact caused by anthropogenic GHG. The difference was even more pronounced regarding the consequences of climate change for Russia. The October 1996 programme mentioned only once and very briefly the "possible positive consequences of climate change" that should be taken into account. The remainder of the programme, as seen above, stressed from the start that Russia was *especially* vulnerable to climate change for several reasons and should expect a considerable number of highly negative consequences as a result. This was in line with government and deputies' assessments during the cited Duma debate on 14 October 1994. By contrast, the 2009 Climate Doctrine underlined that climate change was expected to have both negative and positive consequences for Russia and dedicated an entire paragraph to the latter. Among other aspects, it mentioned reduced energy consumption during the heating period and improved navigability of the Northern Sea Route and an enlargement of the arable land surface before stressing that, overall, Russia had the advantage of "better adaptive potential [to climate change] in comparison with many other countries and regions of the world".

A third remarkable difference between the 2009 Climate Doctrine and climate change government documents in both the 1990s and late 1980s was that the 2009 doctrine repeatedly stressed a "priority of national interests in the development and implementation of climate policy". This was in line with statements already made by Putin in 2003, when he stressed during a climate change conference in Moscow that the decision on whether to ratify the Kyoto Protocol would "of course" be decided "according to the national interests of the Russian Federation" (Vsemirnaia konferentsiia po izmeneniiu klimata 2004). This principle of prioritizing national interests in the elaboration of environmental and climate policies might not seem extraordinary. It was, however, a marked contrast with the cited government documents from the 1990s, where such a principle was not listed, and even more so with the documents from the late Soviet period, with their internationalist orientation. Thus, the September 1989 Soviet draft of a "conception of ecological security and its basic principles" defined ecological security at the very beginning as "a state of international relations, in which the protection, rational use, reproduction and enhancement of the quality of the environment are secured in the interests of a sustainable and safe development of all states and the build-up of favourable conditions for the life of every human being".[26] The difference between

[26] RGAĖ, F. 709, op. 1, d. 158, l. 47.

an internationalist approach to climate change and other global environmental topics on behalf of mankind, in the late Soviet case, and a nationalist one on behalf of Russia, in Putin's Russia, is obvious.

After the adoption of Russia's Climate Doctrine in 2009 under Medvedev, insofar as there was a debate about climate policy, it remained largely focused on the economic benefits for Russia in modernizing its economy and enhancing its energy efficiency as well as, to a lesser extent, international image and leverage concerns (Henry and Sundstrom 2012). As spelled out in the Climate Doctrine, the assumption that Russia was in a better position than other countries to address climate change for geographical reasons was certainly important for this focus of the debate. It would take another decade and the effects of climate change being increasingly felt, not least in the northern and eastern regions of Russia, before the contrasting notion of Russia's particular vulnerability to climate change — an idea already common in Russian government documents of the 1990s — would finally make its way into president Putin's discourse in 2019 (President of Russia 2019a; President of Russia 2019b). Until very recently, the anthropogenic nature of climate change was put into doubt by Putin on various occasions (President of Russia 2019b).

4 Conclusion

This article contributes to closing a gap between the expanding research on climate science and policies in the Soviet Union on the one hand and Putin's Russia on the other. The focus of this article has been on positions of successive Soviet and Russian ministerial governments, based on archival documents for the late Soviet period and on material available for the post-Soviet era on government websites, complemented notably by the UNFCCC ratification debate in the State Duma. This allows us to attain a considerably clearer understanding of how positions of the successive governments in Moscow on the topic of climate change have evolved in the decade-long transition phase between the late perestroika period and the Putin era and to what extent there has been continuity or change between both.

In 1989 and 1990, the newly formed Soviet State Committee for Nature Protection gathered substantial inner-governmental support for an ambitious environmental policy that would include explicit climate policy measures nationally and that bet on far-reaching cooperation internationally. While all versions of the long-discussed inter-ministerial draft for a law on nature protection included a climate change article stipulating binding GHG reduction measures, the subsequent Rio Conference was seen as the key event where concrete and far-reaching obligations should be determined by high-ranking government delegations. In the end, however, the accelerating economic, social and political crisis stalled government climate initiatives, and the new post-Soviet Russia was hardly present at the important 1992 Rio Conference. However, as this article has shown, the Russian governments of the 1990s were in concurrence with their late Soviet predecessor in holding that climate change was real, anthropogenic and highly dangerous for Russia and that mitigation and adaptation were thus imperative. These were the main arguments put forward when Russia ratified the UNFCCC in 1994 with a huge inter-fractional majority in the Duma and when the Russian government launched its 1996 programme for preventing (further) "dangerous climate changes". This continuity ceased only once Putin came to power. From then on, no Russian ministerial government document confirming ACC or its dangers was issued throughout an entire decade. The 2004 Kyoto Protocol ratification law

was based explicitly on economic and political considerations that had nothing to do with climate change. The Russian Climate Doctrine signed into being by Medvedev in December 2009 ended this decade-long negligence of climate change in Russian politics. However, the doctrine was less unequivocal about the anthropogenic nature of climate change than the government documents of the 1990s. And there was an even greater difference with regard to the question of whether Russia was especially vulnerable to climate change or, on the contrary, in a better position than other countries to adapt to climate change. It would take another decade before president Putin himself finally adopted the first position.

Open questions remain. The most important one concerns the obvious discrepancy between successive governments clearly recognizing the need to act against dangerous anthropogenic climate change and the markedly different attitudes showcased by the USSR's and Russia's main negotiators on the international scene, both in the first phase of the IPCC and at the first two COPs. Pending further research, it can be assumed that longtime chief negotiator Yuri Izrael' was an important factor in this dissonance.[27] By contrast, the article shows that in a country faced with political transition, economic difficulties and a considerable dependence on fossil fuels, an understanding of the grave problem of global warming and the need to mitigate it can indeed gain the upper hand in government if competent government actors — like the Goskompriroda — adopt this agenda and have some room for manoeuvre.

At the same time, it is clearly discernible from this article that, in terms of an unequivocal recognition of the dangers of anthropogenic climate change — not least for Russia itself — and of the need to act decisively in this respect, the rise to power of Putin, who would link himself to Russia's fossil fuel industry like no Russian ruler before, inaugurated more than a lost decade.

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Declarations

Conflict of interest The author declares no competing interests.

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[27] Izrael's own position was far from clear-cut and subject to change. While he at times upheld sceptical positions concerning trend, attribution and impact, he had written about ACC in the 1980s and, in the 2000s, admitted on various occasions that it might become a problem — also for Russia. Meanwhile, he advocated for geo-engineering solutions rather than binding GHG reductions (Oldfield 2018; Doose 2022; Mandrillon 2005; Medvedev 2010).

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