UNDERSTANDING CLIMATE CHANGE NARRATIVES IN CENTRAL ASIA: THE POWER DYNAMICS IN VULNERABLE STATES

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Thesis submitted in fulfilment of the requirements for the degree of Doctor of Philosophy

September 2023

ABSTRACT

This thesis examines the social construction of climate change in the three Central Asian countries, Kazakhstan, Uzbekistan and Kyrgyzstan. It enquires how the topic is discussed, how and why, and who constructs the knowledge about climate change in each of the case studies. This is achieved by applying Foucault's (1975) argument about the interconnectedness of power and knowledge in the meaning making processes. The study analyses various narratives constitutive of national ideas about climate change via Carvalho's (2008) iteration of Critical Discourse Analysis with its focus on the actors involved in the knowledge production and social processes 'outside' the topic.

Through the analysis of legislations, media articles and expert interviews, this study has found that climate change narratives are shaped less by the genuine concern about the issue and more by the interests of political elites in these three authoritarian states. Political elites are dominant actors in making sense of the climate crisis, therefore, interestingly, this environmental problem is presented through economic interests, aspirations at the geopolitical level and attempts to facilitate domestic political regimes. Furthermore, the study finds that the Soviet legacies are still salient in today's rhetoric being reflected in the attitude to nature and concerns over weakened national identity over the years of SU rule. Indeed, the complex politico-economic situation in the post-Soviet years is an important factor shaping climate change discourses in the successor states. Nonetheless, in the past years, the predominance of political interests in climate discourses has been having positive effects resulting in the three states being increasingly involved in global climate action. Yet, as the narratives are mediated by those in power, the next political change may result in the topic being taken off the agenda. Hence, the increased climate awareness and an inclusion of the non-state actors in setting the agenda are essential requirements for the countries to address the looming impacts of climate change.

ACKNOWLEDGEMENTS

In the first place, words cannot express my gratitude to Mr John Hague whose exceptional generosity made it possible for me to embark on this academic journey. It means the world to me, thank you.

I am deeply grateful to my supervisor, Dr Marianna Poberezhskaya, whose insightful guidance, constant support and high expectations helped me to accomplish this thesis. My second supervisor, Dr Imad El-Anis, gave important comments on several chapters and I especially appreciate his contribution to the quality of my writing. Dr Jonathan Gorry, my third supervisor, provided invaluable guidance in developing the theoretical framework; more importantly, his kindness is remarkable.

Dr Nicolai Dronin (Moscow State University) has a very special place in my heart. His insightful guidance and belief in me as a researcher have encouraged me to embark on this academic journey. Also, I would like to acknowledge Dr Natalia Akinshina (National University of Uzbekistan) and Dr Kanat Baigarin (Nazarbayev University) whose openness and empathy made my fieldwork in Central Asia genuinely fruitful and memorable.

I would like to thank the School of Social Sciences and the Doctoral School, especially Dr Lucy Betts for coordinating the financial support for the fieldwork and the conference travel, and Catriona Bradbury for taking me through technical and administrative matters. Mumtaz Haque and the teachers from Hot Yoga Nottingham for being my safe space, and a source of joy and strength during my down moments and homesickness.

Finally, I am deeply grateful to my family. To my husband, Tomás Ferreira, for his love and kindness and for being an example through and through. To my parents, Tatiana and Alexey, and sister Olga whose support and sense of humour took me through the years of working on the project. Finally, to my grandfather, Leonid Kharitonov, PhD in geography, who sparked my curiosity and taught me to question things. I dedicate this thesis to my grandfather.

LIST OF ABBREVIATIONS

100 Steps - Plan of the Nation - 100 Concrete Steps

Adaptation Strategy - Priority Directions for Adaptation to Climate Change in the Kyrgyz Republic till 2017

ADB – Asian Development Bank

AT - The Astana Times

CA – Central Asia

CABAR.asia – the Central Asian Bureau for Analytical Reporting (CABAR.asia)

CAREC – Central Asia Regional Economic Cooperation Program

CDA – critical discourse analysis

CIA – Central Intelligence Agency

CIVICUS – a global alliance of civil society organisations and activists

Concept to ID - Concept of Innovative Development of the RK until 2020

COP – the Conference of the Parties

COVID-19 – coronavirus disease of 2019

DA – discourse analysis

EBRD – European Bank for Reconstruction and Development

EBRD – European Bank for Reconstruction and Development

EM-DAT – the International Disaster Database of the International Monetary Fund

ENGO – environmental non-governmental organization

Environmental Code - The new Environmental Code of the Republic of Kazakhstan No 400-VI ЗРК

Environmental Program - Program of actions for environmental protection of the Republic of Uzbekistan for 2013-2017

Environmental Protection Concept - Concept of environmental protection of the Republic of Uzbekistan until 2030

ETS – Emission Trading Scheme

EU – European Union

EXPO 2017 – the International Specialized Exhibition: Future Energy (Astana, November, 2017)

FAO – Food and Agriculture Organization

Gazeta - Gazeta.uz

GCF – Green Climate Fund

GHG – greenhouse gas

GIZ – Deutsche Gesellschaft für Internationale Zusammenarbeit [German Society for International Cooperation]

Green Economy Concept - Concept for Transition of the Republic of Kazakhstan to a Green Economy

Green Economy Program 2019 - Program for the Development of a Green Economy in the Kyrgyz Republic for 2019-2023

Green Economy Strategy - Strategy for the transition of the Republic of Uzbekistan to “green” economy for 2019-2030

IBRD – International Bank for Reconstruction and Development

IEA – International Energy Agency

IFAS – The International Fund for saving Aral Sea

IICAS – The International Innovation Centre for the Aral Sea

INGO – an international non-governmental organisation

IPCC – Intergovernmental Panel on Climate Change

IRENA – International Renewable Energy Agency

Kazhydromet – National Hydrometeorological Service of Kazakhstan

KP - Kazakhstanskaya Pravda

Kyrgyzhydromet – National Hydrometeorological Service of the Kyrgyz Republic

MJDC – the Centre for the Development of Modern Journalism for the Republic of Uzbekistan

NAP – National Adaptation Plan

NDC – Nationally Determined Contribution

NDC Kyrgyzstan - Updated Nationally Determined Contribution of the Kyrgyz Republic

NDC Uzbekistan - Updated national contribution of Uzbekistan to global GHG emissions reduction

NGO – a non-governmental organisation

NS - Narodnoe Slovo

NVIVO – a qualitative data analysis software

Program to SD - Program and strategy of the Kyrgyz Republic on Transition to Sustainable Development for 2013-2017

RES – renewable energy sources

RK – the Republic of Kazakhstan

RSF – Reporters Sans Frontieres [Reporters Without Borders]

SC – social constructionism

SK - Slovo Kyrgyzstana

Strategy 2040 – National Development Strategy of the Kyrgyz Republic for 2018-2040

Strategy 2050 - Strategy Kazakhstan 2050: A New Political Course of the Established State

SU – Soviet Union

TCA - The Times of Central Asia

TT - The Tashkent Times

UN – United Nations

UNDP – United Nations Development Program

UNECE – United Nations Economic Commission for Europe

UNESCAP – United Nations Economic and Social Commission for Asia and the Pacific

UNFCCC - United Nations Framework Convention on Climate Change

USAID – United States Agency for International Development

Uzhydromet – Hydrometeorological Center Services of the Republic of Uzbekistan

VB - Vecherniy Bishkek

Vlast - Vlast.kz

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Introduction

As Rutherford (2007:304) noticed, 'the saving of nature is a profoundly political project'. Departing from this premise, this study is a contribution to the body of academic knowledge about the climate change discourses. While the issue is undeniably objective, with its effects being prominent across the world, it is also important to consider subjective interpretations of climate change as they condition the associated responses. Indeed, there is a 'dialectical relationship between particular discursive practices and the specific fields of action […] in which they are embedded' (Wodak 2001a:66). There is no lack of scientific research on the causes and effects of climate change, and the Intergovernmental Panel on Climate Change summarizes relevant knowledge and communicates it to the policymakers across the world (for the latest report, see IPCC 2022). Yet, the ways the issue is approached by global players differ.

It is argued that the ideological aspect, i.e., the interests, values, and beliefs of those in power, is important to consider making sense of what impacts the interpretations of climate change. Since 90s, the climate change topic has been increasingly vocal in the global political arena as the political leaders have witnessed concerning scientific prognoses and been increasingly active in addressing the climate crisis (Weingart et al 2000). At the domestic level, climate action may clash with the one's vision of economic development. Understanding the ideological factors behind the interpretations of climate change is important as this knowledge can be used to direct the perceptions, and action, towards more effective ones. Indeed, this knowledge is particularly beneficial in the global climate politics creating common grounds among its actors, as well as it can be used productively for directing the national responses to the climate crisis. Similarly to other scholars (e.g., Carvalho 2005, Rutherford 2007), this study looks at the climate narratives through the lens of Foucauldian thought, which highlights the presence of the ideological forces in the production of knowledge and vice versa. In doing so, it attempts to make sense of how power dynamics shape the production of national climate change discourses in Central Asia (CA).

This research study looks at the climate change narratives in three CA countries, Kazakhstan, Uzbekistan and Kyrgyzstan. The authoritarian political regimes paired with the predominantly fossil fuel-based developing economies are the common characteristics of these countries that form complicated politico-economic settings for green action. Meanwhile, the

region is exceptionally vulnerable to climate change and the annual temperatures in CA are rising faster than the global average (IPCC 2022). Given the national economies' reliance on natural resources, climate change effects jeopardise the prospects for development across the region. Furthermore, CA is a landlocked region[1] where freshwater resources are limited. Climate change has been posing and additional pressure on the freshwater availability with the consequent effects on public health and national security as well as regional relations (Chikalova 2016). It is worth comparing the narratives in the three given countries as, besides these commonalities, they have distinct geographical, economic and political characteristics that mediate their approaches to climate change. Kazakhstan and Uzbekistan are downstream countries possessing some considerable hydrocarbon resources, which power the development of national economies. Meanwhile, Kyrgyzstan is an upstream country and is the least economically developed of the three. While domestic energy needs are covered by coal, the country does not possess hydrocarbons valuable for export, and economically relies on agriculture, however, a major part of CA water resources originate here. Hence, climate change can mean different things across these settings. In mountainous Kyrgyzstan (where a majority of households rely on land production) droughts, floods and extreme weather events pose a particular risk, while for the fossil fuel export-reliant economies of Uzbekistan and Kazakhstan the global decarbonisation perspective comes as a threat to development (Sabyrbekov et al 2023).

As to the political context, all the three states are considered authoritarian (Freedom House n.d.). It is argued that the authoritarian governance creates a disadvantageous ground for addressing a climate crisis as the dominant ideology mediates the meanings across all social spheres (McCarthy 2019). This translates into limited alternative discussions, and the interests of those in power, rather than decisions grounded in just debates, and informed climate policies. This is the case of Central Asia, where media censorship, suppressed political activism and limited public participation in decision making are characteristics shared by all countries of the region (Freedom House n.d.). In Uzbekistan, the change over the President's chair in 2016 has marked an ideological shift towards democratisation which was reflected in the growing importance of climate policy. In Kazakhstan, the President's concerns over economic wealth and international image are found in national responses to the issue. In Kyrgyzstan, which

[1] Although some of the CA countries (e.g., Kazakhstan) have access to an inland sea such as the Caspian, they are still considered landlocked (Shisabaki et al. 2021).

features the highest level of political freedom across CA (Freedom House n.d.), the alternative discussion and public activism on climate change are the most pronounced, while complicated socio-economic circumstances explain the close ties with international donors. Arguably, the shared Soviet past with the associated approaches to nature also shapes national climate responses across the region (Poberezhskaya and Bychkova 2022, Dubuisson 2022).

In the past years, the three states have been increasingly active in climate policies and demonstrate a growing concern about both global and local effects of the climate crisis (Buranelli 2023). The countries are subjects to the Paris Agreement and have been regularly increasing their commitments to the global climate action. At the national level, all three governments have passed several legislations aimed to advance domestic responses to climate change. Yet, despite the growing concern and ambitious aims, the feasibility of national climate goals is questionable as the countries 'continue to rely heavily on fossil fuels and outdated, crumbling energy infrastructure' (Sabyrbekov et al 2023:2). Indeed, the usage of hydrocarbons for the region's energy needs has been growing over the past decade (Vakulchuk et al. 2022b). The energy losses in the electricity sector across CA reach up to 20%, while wind and solar energy output contributes only 6% of the region's energy mix (ADB 2023). As Buranelli (2023) argues, lacking achievements in national climate actions are the result of economic and political interests outweighing climate concern itself (see also Koch and Tynkkynen 2021, Poberezhskaya and Danilova 2022). Yet, it is argued here that there are reasons beyond the global politics and economic concerns that mediate the climate narratives in CA.

The present research study looks at the dominant climate change narratives in the three countries, which, due to authoritarian political regimes, represent the voices of the governments. In doing so, the study furthers knowledge about ideological standpoints, interests and beliefs of the political elites, which shape climate change discourses in the studied CA states. It argues that, despite the aggravating effects of climate change in the region, relevant discussions are less about an actual concern about the climate crisis. Rather, the discourse is instrumentalized to satisfy the governments' ambitions at national, regional and global levels. Furthermore, the countries' historical past as Soviet republics resonates in the current rhetoric, as climate discourses are shaped by concerns about national identity, government legitimacy, global political image, economic aspirations, and fears. Understanding ideological underpinnings and mechanisms of discourse production provides an opportunity to reframe dominant narratives and, ultimately, to advance national climate policies and public agency. In

doing so, the study contributes to the democratization of the states by spotlighting the downsides of authoritarian approaches to climate action. Furthermore, the findings contribute to the understanding of CA rhetoric at the global political level, which will benefit both international and regional climate action (Buranelli 2020). Last, by looking beyond the Western geographies, the study contributes to theorizing of the relationship between power, knowledge and the environment (Leipold et al 2019).

Climate change discourses in Central Asia : an understudied matter.

To date, the political responses to climate change in CA have not received enough scholarly attention albeit its geopolitical position and an important role in the global energy market (Vakulchuk et al 2022a). A lack of attention to the region can be explained by its relatively low greenhouse gas emissions (GHG), and within CA, a limited scholarly attention to the matter is associated with a general neglect of the topic due to economic and political challenges the countries have faced during the early years of independency (ibid.). Furthermore, the restricted political regimes contribute to a limited discussion on the climate change governance (ibid, see also Mirzabayev 2023).

The limited outlook of the region is evident beyond the climate change topic, indeed, Heathershaw and Megoran (2011:590) pointed out that in the political scholarship, Central Asia is positioned as 'obscure, oriental and fractious'. In the western scholarship, CA is commonly known as a 'locus of danger', i.e., a place of highly pronounced insecurity, where 'violent political conflict is ever ready to erupt' (ibid:589). Consequently, the studies mostly reflect on the global security concerns associated with CA while overlooking the issues of security and vulnerability experienced inside the region. Indeed, the only environmental matter, which has been prominent on the social scholarship is freshwater crisis given the global security risks triggered by the issue (Vakulchuk et al 2022a). Another narrative associated with the region is its Soviet past, and the scholars have been reflecting on it through the discussions on informal politics, national identity and coloniality (Isaacs and Marat 2021). These topics remain relevant today, indeed, as this study will show, the concepts of coloniality, identity and security are sound when making sense of climate change. However, viewing the region primarily from the geopolitical and postcolonial perspectives leads to overlooking the domestic and interregional processes, in particular, taking away attention from the authoritarian governance and allocating responsibility for the present agenda to the external forces and the Soviet past (Kassymbekova and Chokobaeva 2021, Dzhuraev 2022). More recently, the studies

have been attentive to the agency of CA states themselves in the international relations (e.g., Dzhuraev 2021) as well as to the aspects of national governance outside the colonial perspective discussing the matters of democratisation, legitimacy and sustenance of the authoritarian regimes (e.g., Gallo 2021, Schiek 2018, 2022).

As to the environmental politics, the attention to the topic has been growing in the past years, and the studies have looked at the government's climate change narratives in the foreign political arena (Poberezhskaya and Bychkova 2022) and geopolitics of green energy development (Koch and Tynkkynen 2021) spotlighting the economic and geopolitical interests reflected in the environmental discourse. Several studies also looked at the matters of environmental resistance across the region discussing how the political concern is represented in the narratives of green activists in Kazakhstan (Knox and Yessimova 2015, Dubuisson 2022), Kyrgyzstan (Wooden 2013) and Uzbekistan (Kim 2020). Last, a number of studies discussed the climate change media reporting in Kazakhstan (e.g., Zhurtbay 2018) and Kyrgyzstan (e.g., Toralieva 2011, Sultanalieva and Freedman 2015). However, the ideological aspect of climate media coverage, while being extremely relevant to the authoritarian contexts where media is commonly controlled by the state remain overlooked with an exception of a single study examining the ideological underpinnings of climate coverage in Kazakhstan (Poberezhskaya and Danilova 2022). Furthermore, existing knowledge on CA climate change politics focuses on international politics and green energy development, which means that the discussion is limited to the aspects of climate change mitigation. Recognising the exceptional proneness of CA livelihoods to climate change effects, Bossuyt (2023) highlights the need to advance social resilience. Public knowledge about the issue is a crucial factor forming capacity to address climate change, therefore, it is important to look critically at how and why climate change is portrayed in a given society.

Overall, it becomes apparent that studies looking at the political aspects of the environmental discourses in CA remain fractured. By looking at the climate change discourses in the three countries of the region, the research study broadens the geography of existing scholarship being the first project that examines climate change narratives in Uzbekistan. It also addresses Leipold's et al (2019) call for more comparative research projects in the critical discourse scholarship. Understanding climate narratives across the region is essential not only for advancing national policies but also the regional response to the issue. Despite the focus of CA scholarship on the matters of international security and the tendency of climate change to

exaggerate regional conflicts (Chikalova 2016), CA scholarship overlooks the issue as a matter of the interregional security concerns while focusing mostly on water availability (e.g., Menga 2017). Understanding the regional power dynamics and ideological interests within CA climate discourses will help to find common grounds for the countries to successfully address the climate crisis (Sabyrbekov et al. 2023). This is especially relevant considering that the intentions for regional cooperation on climate change has been solidifying (Buranelli 2023).

The present study looks at the climate change rhetoric in the authoritarian states, where the political elites mediate national discourse. Inquiring the ideological interests, which shape climate change meaning-making in CA, the project broadens the geography of the studies on climate change narratives in the authoritarian states, which has so far focused on the major global players such as China and Russia (Schreus 2011, Kopra 2018, Korppoo 2020). Meanwhile, the awareness about how hierarchical governance limits the national capacity to address and adapt to climate change is important to make a meaningful shift in climate political strategies of the developing states that are highly vulnerable to the issue. To date, the studies on climate politics in the Western democracies have been dominating the critical discourse studies, given the Western origin of the discipline (Wodak and Meyer 2016). Similarly, the prevalence of English language in the global social scholarship often results in English narratives and case studies being favoured over those outside of the Western sphere (Leipold et al. 2019). Notwithstanding, there is a considerable number of the studies on green discourses across various geographical settings (ibid.). Yet, more is needed to advance global climate responses and to further theorising the relationship between environment, power, governance and knowledge (Rutherford 2007). In particular, understanding climate change discourses in CA is important to advance global climate responses as this knowledge will help other international actors to make sense of how to cooperate with the region's governments in resolving the climate crisis.

The study is an attempt to broaden the understanding of the academic concepts commonly associated with the region. It addresses the call for a better understanding of how the nationalist appeal is used to advance the governments' control over the society (Isaacs and Frigerio 2019:5). More specifically, it looks at the representations of nationalist rhetoric in the national climate change discourses and how those are used to sustain and further the political regime. Furthermore, the study explores coloniality within national discourses discussing whether and how SU heritage is reflected in the current takes on climate change. In doing so,

it broadens the existing body of the literature on the SU environmental discourses (e.g., Oldfield et al. 2015, Doose and Oldfield 2018) offering, in particular, an initial look at the primary actor of the climate change knowledge production, science. Linking CA scientific narratives to the dominant ideologies and SU past, the present project reemphasises the impact of the ideological forces on the objective knowledge.

In all, the global scholarship argues that climate change is a politically charged issue with its meanings varying across geographical localities, socio-economic and political environments (Rutherford 2017). Looking at the specifics of the climate narratives in CA, besides the aforementioned practical use of the knowledge, is thought as a potential contribution to the global political studies given a limited scholarly understanding of the socio-political specifics of the region. Indeed, as Isaacs and Frigeiro (2019) argued:

> Meaning of objects, ideas and concepts are not the same at all places and at all times, thus the Central Asian experience can reveal something which on the one hand will be context specific in terms of abstract understandings of power, the state and ideology, but on the other hand, allow for a deepening and expansion of how we can understand such concepts and practices in the general broader sense. (p.6)

That is, examining climate change knowledge production in the new settings holds a potential to identify the mechanisms and meanings that have not been discussed yet relevant to global political scholarship. The rest of the thesis is an attempt to do so.

Theoretical framework and research design

As indicated earlier, the research project looks at climate change narratives in the three authoritarian countries highly vulnerable to the issue. It argues that the multitude of social factors 'outside' the physical issue mediate the interpretations of and approaches to climate change. In particular, it enquires the role of ideological factors in the production of meanings. Attempting to make sense of the processes of knowledge creation across the distinct socio-political settings, the project is grounded into a social constructionist tradition (Berger and Luckmann 1991), i.e., viewing climate change as both an objective matter and the topic (re-)created within public discourse. More specifically, it stands on Foucault's (1975) idea about the interconnection of power and knowledge in discourse. The concept draws attention to the ability of knowledge to reinforce ideology, as such, the processes of meaning-making

are seen as exercises of power that aid the ideological interests of the authorities and further control over the society. However, knowledge may also influence power balances shifting the public perceptions about the powerful actors and informing the ideas and actions of the elites themselves (Foucault 2019:100). Following Foucault, discourses here are viewed as 'certain ways of speaking', the predominantly linguistic practice of meaning-making as mediated by ideological factors (see also Fairclough and Wodak 1997). As such, written and oral texts are sites of observing enactments of power.

In this perspective, environmental issues are seen as ideologically contested, that is, the meanings are mediated by the ideological beliefs and used by those who possesses control over meaning-making (Lindseth 2006). As such, one should take the knowledge about physical issues critically, and inquiring who constructs meanings, and how this is done, is helpful to both derive our understanding of the environment from the power projects and better understand the features of the dominant ideology through its representations in the 'green' discourse.

This study uses Critical Discourse Analysis (CDA), an approach informed by Foucauldian thought focusing on the representations of ideology in texts (Wodak and Meyer 2016). More specifically, the study follows Carvalho's (2008) iteration of CDA with its focus on the actors involved in knowledge production and social processes 'outside' the topic. In particular, it looks at the structural organisation of the text and its linguistic features, the objects and actors of the discussion, the ideological interests and the strategies of how those are facilitated through text, and, last, it considers situatedness of the narrative in the multitude of social contexts, e.g., political, economic and cultural historical ones. The method and the data analysis process are discussed in detail later in the thesis (see chapters 2 and 3).

The analysis is guided by the following research questions:

- How knowledge about climate change is constructed in Kazakhstan, Uzbekistan and Kyrgyzstan?
- Who are the actors and what are their roles in discourse production?
- What ideological interests are advanced through climate change discourses?
- What are the other factors impacting interpretations of climate change?

As to the empirical data, inquiring about dominant climate change discourses in the three countries, the study analyses official documents, media articles, and expert interviews across the case studies. In existing authoritarian settings media possess limited freedoms, as such, the analysis reflects on the ideas and images the state prefers to be seen by civil society. As to the interviewees, besides policymakers, the study grasped on the narratives of climatologists, media workers, activists, and other relevant experts, who are non-state actors. This has allowed for a more comprehensive critical account on the ideological premises of the dominant climate change narratives. Overall, the findings are informed by the analysis of 14 official documents, 226 media articles selected from a total of 9 newspapers, and 43 expert interviews. For the detailed information on the data, see chapter 3.

Structure of the thesis

Addressing the posed questions, the thesis unfolds as following. Chapter 1 highlights the main approaches to climate change as a social construct and the scholarly debates on the matter. It unfolds by introducing the reader to the main actors of climate change knowledge production, i.e., science, politics, media, and civil society. It reviews the scholarly findings on how and why particular meanings are created within the discursive fields, and also discusses the power dynamics across these fields inquiring who gets to decide on the dominant meanings of climate change. In so doing, the chapter serves as an introductory point to the theoretical considerations and establishes the ground for analysing climate change narratives across the case studies.

Chapter 2 discusses the theoretical and methodological groundings of the study. It places climate change in a socio-constructionist perspective navigating the reader through the scholarly perspectives on the subjective and objective aspects of the environmental issues faced today. It then turns to Foucauldian views on power, knowledge and discourse, the key concepts that inform this study, and demonstrates how these were applied to explore the ideological site of climate change narratives. Finally, the chapter presents the analytical framework, which underpins the study. Chapter 3, in turn, discusses the specifics of the empirical part of the study: data selection, collection and analysis.

Chapters 4, 5 and 6 represent the empirical studies. All three case studies show that ideology matters in how climate change is approached at the different levels. The political elites are the main actors of discourse production, and climate change comes as an instrument to advance a range of ideological interests, including those of economic aspirations and

political aims at the domestic, regional and global levels rather than a matter of concern itself. While the key themes and ideological interests are something the countries have in common, multiple specific features, including the ways the ideological standings are advanced through the narratives, differ.

Chapter 4 discusses the case of Kazakhstan, the region's wealthiest country, where climate change is seen as an opportunity for economic development. Furthermore, given the importance of image for the government/image politics, climate action comes as means to advance the state's power both internationally and domestically. Chapter 5 argues that in Uzbekistan, climate change is embraced as an opportunity to improve the state's global connections and legitimise the current political leadership domestically after the years of repressing authoritarian regime under Karimov's governance. As such, climate action is reasoned by concerns about the citizens' wellbeing and embodies the values typical for democracies. Chapter 6 discusses the narratives in Kyrgyzstan, the most vulnerable country of the three. While the risks posed by the issue are of a concern, national vulnerability is instrumentalised to benefit from the foreign funding, and, domestically, the calls for climate action, aid the government's nation-building project.

Chapter 7 brings together the theoretical underpinnings of the study and the empirical findings. It argues that in CA, climate change is seen less than the environmental concern and more as means to advance the interests of the political elites at the national, regional and global levels. The chapter places the findings with the academic body of knowledge, in particular, in the political scholarship and CA area studies, and discusses the applicability of Carvalho's (2008) analytical framework to the studied cases. It concludes with the discussion on how the knowledge about the mechanisms of discourse production can be used to advance national climate change responses.

Last, the concluding chapter summarizes findings and highlights the contributions of the present research project to the scholarship as well as offers the perspectives for future research.

Chapter 1. Climate change discourses and the role of power regimes

The past few decades reflect high scholarly interest in climate change in the socio-political context. The scholars have enquired the ways the physical matter is reconstructed in society, in particular, climate change narratives have attracted the interest of critical scholarship, which emphasised the importance of the ideological context in how the issue is articulated (Pettenger 2016, Leipold et al. 2019). This chapter assesses what is known about the discursive construction of climate change – the actors involved in the process, the interests articulated, and other factors shaping the narratives. Recognising the particular relevance of the power/knowledge dynamics in the authoritarian context (McCarthy 2019), the chapter focuses on the role of powerful actors in discourse production, looking at the links between dominant political discourses and meanings given to this environmental problem. It commences by placing climate change within the socio-constructionist framework, which sees it as a contested idea (Feindt and Oels 2005) and maps out the actors involved in the process of meaning making: scientists, policymakers, media and public activists. This is followed by examining the roles of each of these actors in defining climate change and the ways ideologies intervene with the discourses. Through these discussions, the chapter also looks into the factors outside of the ideological context, i.e., economic considerations and cultural aspects that may shape the discourse in socio-political settings similar to CA. The chapter concludes by synthetising what is known about the role of actors and ideology in climate change discourse production and identifying knowledge gaps in CA scholarship.

Climate change as a product of discourse

The environmental processes are complex and multidimensional (Dryzek 2013). They are not self-evident and often being built up over the long-time intervals and across large geographical areas (Feindt and Oels 2005). Despite their objective nature, these matters receive various, contested meanings being dictated by cultural, historical, economic and political settings (ibid.). Indeed, Macnaughten and Urry (1998:97) argue that the 'expressions of environmental concern and sentiment are not self-contained but are bounded within wider social, cultural and political contexts'. Multiple meanings are particularly often given to the matters, which dynamics, causes and effects are not easily observable, for instance, climate change or radiation. While being subjective, the meanings allocated to the physical matters are important as they define actions, i.e., mediate public approaches to the environment (Hajer 1995). Indeed, as Dryzek noticed (2013:11), 'language matters […] the way we construct, interpret, discuss, and analyze environmental problems has all kinds of consequences'. While science and technologies are fundamental in addressing the problem, accounting for the social dimension

of the natural objects is beneficial to understand, reframe and advance public responses to the environmental challenges (ibid.).

There are multiple ways to conceptualise environmental discourses. The scholars have been interested in 'rhetoric', looking at the elements of the discourse and the techniques employed to deliver the desired message (e.g., Bennett and Chalpoupka 1993, Myerson and Rydin 2014). Brulle (1998) identifies 'discursive frames', i.e., several categories uniting environmental narratives with the common characteristics. Hannigan (2006:38) places discourses in historical perspective identifying Arcadian, ecosystem, and environmental justice narratives. The Arcadian discourse emphasised an intrinsic value of nature and proposed people treating it as a non-resource, which was then replaced by the ecosystem discourse with its knowledge-based outlook on the environment informed by scientific evidence. In the 80s, the environmental justice took over the global agenda arguing for harmonious development of both people and nature. In turn, Dryzek (2013) looks at the relationship between people and nature distinguishing between the discourses of environmental problem solving, limits and survival, sustainability, and green radicalism. Emerging in the 70s, the former proposes moderate adjustments to public action in order to solve environmental problems yet to retain a political status-quo, while the limits and survival narrative criticizes human-centred development models and calls, instead, for radical changes in the political approaches. The green radicalism is, essentially, a protest against industrialisation leaning towards ecocentrism[2] in its interpretations of human-nature relationship, while the sustainability narrative is an attempt to solve the conflict between environmental protection and economic development in a positive way. The latter narrative is often confounded with the ecomodernisation discourse (Leipold et al 2019). Ecological modernisation's key point is that environmental protection is not a burden for development, indeed, it can accelerate economic growth (Hajer 1995:3). Sustainable development discourse, in turn, highlights the equal importance of various spheres of being, i.e., social inequality issues should be given the same attention as the environmental issues (Malnes 1990:3).

The meanings are important as they determine how the environmental issues are approached and dealt with. For instance, many agree that the ecological modernisation perspective – the idea of tackling environmental crisis via economic development and innovation, prominent since the 80s (Mol and Sonnenfeld 2000) – is an ineffective approach

[2] Ecocentrism

as it does not challenge the capitalist views and reinforces the dominance of men over nature (Freudenburg 2000). Today, while the latter ideas remain relevant in most of developing economies (Sonnenfeld and Rock 2020), the developed countries lean towards the sustainable development paradigm with its emphasis on strengthening social equality via the environmental action - something called 'environmental justice' (Schlosberg and Collins 2014). The environmental discourse might also influence action at the public level, for instance, a 'green radicalism' discourse has helped some people to distance from a capitalist system and create self-sufficient communities, while 'sustainability' discourse has facilitated practices like vegetarianism and conscious consumption (Dryzek 2013:21). However, the negative effects on public agency are not less common, for example, media portrayals of climate change largely as a matter of the political negotiations weakens public agency (Carvalho et al. 2017). That is, as the responsibility of solving the climate crisis is allocated to the major political actors and stakeholders, while the importance of an individual action is taken off the agenda. The effects of climate change scepticism, i.e., doubting the anthropogenic nature of the matter or the very fact of climatic changes, go further: lowering public trust in science and setting the ground for the criticism of the green action at the political level (Lorenzoni et al. 2007). Hence, in terms of acting on the issue, the meaning given to an environmental problem matters as much as its 'real' physical characteristics.

Discourse production: the actors

As the climate change concern has been growing over the past decades globally, the matter has attracted noticeable attention beyond scientific community. As Hulme (2009:322) notices, 'the idea of climate change is now to be found active across the full parade of human endeavours, institutions, practices and stories'. Hajer's (1995) work puts an emphasis on the diversity of actors involved in acting on the environmental issues, which are complex and intersect with various aspects of social life. The scholar conceptualizes 'story lines' – common discursive grounds or a negotiated meaning, which brings actors with different interests together. The idea of climate change is then the result of continuous 'struggle for discursive hegemony', a debate between discursive coalitions united by shared interests (ibid:63, see also MacNaughten and Ury 1998:97). There is a substantial political scholarship concerned with the roles and motives of the different actors involved in climate discourse (e.g., Weingart et al. 2000, Backstrand 2004, Doulton and Brown 2009, Hovden and Lindseth 2004). The scientific authority is seen as an essential actor of discursive production, as it communicates knowledge to the public or validates the claims which first appeared in the public sphere (Hannigan 2006). The dominant

political actors, i.e., the government, legitimizes scientific claims on the national agenda by passing relevant strategies to act on the matter in question (Hajer 1995). The media, in turn, deliver the message to the public (Doulton and Brown 2009), while civil society has an important role informing the state on the environmental challenges and enable relevant actions (Hovden and Lindseth 2004, Stevenson and Dryzek 2014).

However, the allocation of roles in making sense of climate change might differ across the political regimes – in particular, the research on authoritarian states has demonstrated the dominant role of powerful elites in discourse production (e.g., Poberezhskaya 2016, Tynkkynen 2018, Bocher 2019). Furthermore, critical discourse scholarship argues that the ideology is the main force of discourse production – with the difference that in some regimes it is more apparent than in the others, and the power holder does not have to be the government (e.g., Oels 2005, Carvalho 2007). The rest of the chapter will look at the key actors of climate discourse production seeking to understand the role of the ideology in the whole process. The discussion commences with the role of science in social construction of climate change, followed by the role of political actors, media and a civil sector in this process. Notably, the whole discussion focuses on the scholarship relevant to CA – climate discourses in authoritarian, developing, postcolonial/post-soviet and resource-rich states.

The role of science in shaping climate change discourse

As Beck (1992) noticed, viewing climate science as an 'ivory tower', the entity outside of the public arena, is ultimately wrong. Social constructionist studies highlight that climate change has become problematised on the public arena after the scientists have drawn attention to the negative effects of the environmental process (e.g., Backstrand 2004, Hannigan 2006). In particular, Weingart et al (2000) describe how climate change has become a political concern in Germany after alarming statements of the climatologists. Also, a number of studies link the appearance of the global warming concern at the international political arena to the development of computer modelling within climate change research. The technology enabled the scientists to produce the first prognoses of the future climate trends, which, in turn, turned attention to the correlation of the drastic temperature rise with industrialisation processes (Meadows et al 1972, Demeritt 2001, Wholforth 2004). It is this knowledge that has given a direction to the modern climate politics at the cornerstone of which is minimisation of the environmental impact of the human activity, in particular, GHG emissions reduction.

However, the critical scholarship argues that, although scientific community is a primary source of knowledge, it is the powerful ones, the government or the business actors, who got to define the climate narrative. Lyotard (1984:46) acknowledges the superiority of the private interest over knowledge arguing that climate research comes as an instrument for advancing ideological interests: 'scientists, technicians, and instruments are purchased not to find truth, but to augment power'. Instead of directing action plans, science is instrumentalized in the hands of policymakers being used to legitimize a certain strategy: 'politicians do not want science; they want a justification for pre-existing political programs' (Haas 2004:571, see also Carvalho 2007). For example, in the UK, the officials used the argument of scientific uncertainty to justify inaction towards environmental pollution caused abroad (Hajer 1995). Meanwhile, several studies have observed how in Russia, scientific knowledge about climate change was appropriated by the political elites to create different narratives for the domestic and global agendas (Wilson Rowe 2013, Korppoo 2020). Dunlap and McCright (2010) draw attention to the role of private actors observing how the corporations employed the experts to facilitate doubt about the scientific consensus and therefore protect ecologically demanding industries. Hence, climate science appears 'a discursive resource which is used by social and political actors in very different ways to legitimate given courses of action in relation to climate change' (Carvalho 2005:3). In this sense, scientific research papers and policy proposals come as a useful material for a critical analyst to observe power at work (Berkes et al 2000).

Criticizing the modern Western climate policy, Luke (2011) claims that viewing climate change primarily in terms of GHG emission calculations is not a purely scientific idea but an exercise of power, a facet of global climate governance led by the interests of the Western elites. In this light, the function of the Intergovernmental Panel on Climate Change (IPCC) is to legitimise global climate politics. In a similar fashion, Lovell and Mackenzie (2011) argue that environmental impact assessment and GHG emission accountancy, key tools of scientific expertise used in the policymaking, feed into the current hegemonic narrative of techno-economic progress. Besides the external influences, Demeritt (2001) points to the discursive struggles inside the scientific community viewing the computer modelling of climate change and the GHG emissions reduction-focused approach to climate action as both the product of global climate politics and the result of discursive hegemony of the Western climate science. In this light, some argue that the international climate science, in particular, the IPCC, is dominated by the Western scholars, and call for a better representation of scientific knowledge from across the world (Backstrand 2004, Beck et al 2014). Some notice, however, that this

tendency is not the IPCC's shortcoming but rather the result of underdeveloped climate change research either unwillingness of certain countries themselves to participate in the global discussions; in particular, this is argued to be the case of CA (Vakulchuk et al 2022, Mirzabayev 2023).

Notably, the aforementioned claims about the discursive hegemony in climate science were popular in SU climate science which has lost its global influence with development of computer modelling (Doose and Oldfield 2018). In SU, climate science was developing under the 'transformation of nature' slogan with a human-centred approach (Oldfield et al.2015:115). Climate change was seen as any other issue that can be fixed by a human, which was logical 'within the context of a regime that had for decades promoted social progress with dominance over nature' (Doose and Oldfield 2018:28). Acting on climate change was thought not to solve the environment but to benefit people, and climatic changes were seen as a positive thing if they boost economic development (Oldfield 2016). Having its rise during the Cold War, climate science in SU was thought to strengthen national security - the purpose of the research was to find the ways to weaponize climate (Doose 2022:15). The Soviet climate research has become recognised globally, in particular, it had an important place in the first IPCC report (Oldfiled et al 2015). However, SU expertise was marginalised with the development of technology and globalisation of the climate concern. SU climatologists were reluctant to computer modelling in the Western climate science doubting the validity of the predictions of the future and criticizing an overt focus on GHG regulation (Doose and Oldfield 2018:25). Instead, they stood for purely empirical observations of climatic processes and favoured instrumental paleoclimatic approach, i.e., predicting future through the analysis of the past (ibid:17). Also, the global concern about the climate crisis resulted in the discourse being predominantly in English language, and it is the language barrier that further limited the knowledge exchange with the foreign scholars (Oldfield 2018). Furthermore, the limitations posed by the government to the Soviet scientists' engagement with the outer world contributed to marginalisation of SU climate research (Oldfield et al 2015).

The impacts of marginalisation still influence the modern research agenda as the post-Soviet scholars tend to distant themselves from the global research cooperation and some even express scepticism towards the scientific consensus considering the IPCC reports to be 'written by hand-picked, politically committed experts' (Dronin and Bychkova 2018: 2102). Indeed, Ashe and Poberezhskaya (2022:6) acknowledge that climate sceptics tend to belong to the older

generation of climatologist whose expertise originates from SU. There is an evidence of climate scepticism among the Russian scientists (Wilson Rowe 2013, Korppoo 2020, Doose 2022, Ashe and Poberezhskaya 2022), as well as in the countries of the Eastern Block, e.g., in Czech Republic where the experts reinforced sceptical claims of the political elites (Kolářová 2020). Yet, there is no relevant research on scientific discourses in Central Asia.

As of today, climatology as a discipline is underdeveloped across all CA countries, and this is majorly attributed to the effects of SU dissolution (Vakulchuk et al 2022a, Mirzabayev 2023). The new status of independency obtained by CA states in 1991 has come along with the major decline in economic development, political instability and global security concerns. Furthermore, the SU collapse has marked the end of the centralised organisation of research – that is, numerous national scientific units, which previously were part of the complex Soviet research body, have become independent entities yet lacking resources (ibid.). Scientific units that used to execute their specific tasks, for instance, glacier monitoring, have faced the need to work as a self-sufficient research body with little capacity to do so. The low priority and financial support given to climate science in the newly independent states has not only disabled research development but caused further loss of knowledge as the experts have moved to work abroad, mostly to Russia (Vakulchuk et al 2022a), the country considered a centre of SU governance (Heathershaw 2010). As a result, the ex-SU centre has inherited the research potential while CA countries had to rebuild their climate science. Consequently, there was no climate research published across the region during the first five years of independence (Vakulchuk et al 2022a:4, see also Mirzabayev 2023). In some cases, development of climate science was further complicated by the authoritarian leaderships, which restricted national scholars from enhancing their capacity via international knowledge exchange and collaborations (Markowitz 2016). Over the past decade, climate research in CA has been developing with a slow but relatively steady increase of research projects (Vakulchuk et al 2022a). This is attributed to the national and global political contexts, as such, economic development and more stable political situations across CA countries have translated into increased availability of national research funding, whilst a growing interest to CA within the IPCC attracts the financial support from the foreign donors (ibid:7).

In sum, while climate scientists are the ones to produce primary knowledge on the matter, power elites have a central role in shaping climate change narratives. This might be done intentionally – dictated by the particular interests or be an effect of the political regime, like in

the case of the Soviet science. Either way, the national circumstances affect the ability to produce knowledge. While the ideological influences on environmental ideas evident in different political settings, they are especially prominent in authoritarian regimes (McCarthy 2019). Recognising the relevance of the latter for CA context, the following section looks at the role of political actors in climate change discourse production focusing on the processes in the authoritarian contexts where the officials have more power than other actors.

The role of the government in shaping climate change discourse

Emphasising the role of language in forming the ideas about and actions on climate change, Wilson Rowe (2013:459) argues that 'selecting one policy framing above another is an important act of power'. In this regard, Rutherford (2007) points at how the defined scope of problems correlates with the power regime – not only reflecting the dominant ideological views but also being filtered in terms of what the government is able to manage. The array of studies identified the factors, which shape political discourses on climate change across the world. In particular, Hornsey et al (2016) highlight that the role of political ideology is a stronger determinant of environmental views even stronger than climate change knowledge. Besides those, cultural-historical settings, economic interests, security concerns and many more non-physical matters influence the ideas about climate change (Oels 2005, Carvalho 2007). Yet, little is known about the factors shaping the discussion in CA political contexts. Arguing that climate change is an ideologically charged matter, this section demonstrates how the approaches to the issue vary across different political settings. It proceeds by offering a closer look at the political features that should be considered making sense of climate narratives in CA.

Political scholarship demonstrates that ideological influences are inherent to climate narratives across the whole political spectrum. Hajer (1995) observes how neoliberal ethics influenced the idea of the environment and relevant actions in Western societies. With the rise of 'free market' ideology, the discussion shifted from the terms of environmental crisis to the terms of costs and benefits viewing climate action as an opportunity for economic development. Reflecting the global shift, climate change started to be considered the issue to be managed through collective efforts (Backstrand and Lovbrand 2006). Dryzek (2013) argues that the move from top-down approaches to softer modes of governance were reflected in the political take to climate change with a preventive approach, i.e., prognosing and mitigating the future climate crisis, rather than a problem-solving approach, i.e., focusing on solving already existing issues. In turn, Oels (2013) observes how the global growth of attention to the security

matters has shifted the perceptions of climate risks from the concerns about the warming per se to the associated dangers of transboundary conflicts, migration and energy crises. Consequently, the policies have been refocusing from climate change mitigation to prevention of the resource scarcity and global conflicts (ibid:25). That is, in the liberal paradigm, being masked under the concern about the public wellbeing, it is still ideology that determines an approach to solving climate crisis both at the national and individual levels.

As to the authoritarian ideology, a number of studies link it to a lower environmental concern (Schultz and Stone 1994). Indeed, Stanley's and Wilson's (2019) meta-analysis has shown that the preference for social hierarchy and inequality as well as the preference to submit to authority and traditionalism are the predictors of sceptical attitude towards anthropogenic climate change. Devine-Wright et al. (2015) argue that in the authoritarian states, the idea of 'national' impacts the attitude: while those leaning towards global and democratic values argue for a collective climate action, in nationalist and authoritarian settings, the discourse neglects national responsibility for the global future. McCarthy (2019) also notices authoritarianist tendency to view natural resources as an instrument for national development. In this sense, the powerful ones see environmental exploitation as means to strengthen the social hierarchy via the struggle over resources (Milfont and Sibley 2014). However, it is argued that there is a multitude of factors beyond the ideological settings, which should be considered to make sense of an attitude to climate change. In particular, the political regime does not explain the fact that authoritarian states, just like the Western ones, care about the sustainable future (McCarthy 2019). Regarding the individual level, Reese (2012) points out that certain authoritarian values, e.g., submission to the authority, may relate to proenvironmental attitudes. Besides looking at the authoritarian perspective, it is worth to consider the discursive features common for the resource rich states, developing economies and post-Soviet countries when making sense of climate narratives across CA.

An instrumental approach to nature is argued to be common for the countries where economic development depends on availability of natural resources (Tietenberg and Lewis 2018). In some cases, hydrocarbon resources become not only the means for economic development but a key element of the governance and the idea of the nation, something called 'resource' or 'green' nationalism (Conversi 2020). In resource nationalist rhetoric, the government's attitude to nature is justified by the importance of social welfare, that is, security provided by fossil fuels is prioritized over climate action (Sidortsov 2019). Notably, climate

scepticism reinforced by the state is a popular view among the population of these countries (Fritz and Koch 2019, Korppoo 2020). Resource nationalism with associated low environmental concern is documented across the fossil fuel economies on the post-Soviet space, e.g., in Russia (Poberezhskaya 2016), Estonia (Fritz and Koch 2019), Georgia (Swann-Quinn 2019) and CA (Domjan and Stone 2010, Sanghera and Satybaldieva 2021). The possible explanations go beyond the acknowledged impact of authoritarian attitudes as well as economic structures of these countries where the extractive industries account not only for financial growth but sustain social security, i.e. provide a major share of employment (Fritz and Koch 2019:10). Resource nationalism can be also attributed to the impact of the Soviet ideology with its emphasis on human supremacy over nature and centrality of the idea of progress (Oldfield et al. 2015). Indeed, several studies observe the relatively low salience of climate change on the political arena in the former Communist countries of Eastern Europe, especially since SU dissolution (Lorenzoni and Pidgeon 2006, Schreurs et al. 2009). Interestingly, sometimes the blame attributed to the Soviet past coexists with resource legacy maintained in a country. Dubuisson (2022:413) observes this tendency in CA conceptualizing it as a discursive 'responsibility paradox. The resource extraction industries continue to grow, and the Soviet norms of natural resource management are still in use, but SU does not exist anymore, therefore, cannot be held accountable for the ongoing environmental changes (see also Poberezhskaya and Bychkova 2022). Allocation of responsibility for climate change, however, is a characteristic of developing states overall as more successful economies are seen as the main contributors to the environmental crisis, therefore, it is them who have to adjust the attitude (Rajao and Duarte 2018).

Given its geopolitical relevance to CA and economic ties with the region (Laruelle 2021), an example of Russia's climate change political approaches is useful for understanding the region's peculiarities. Tynkkynen (2018:6) conceptualizes Russia's fossil fuel-sustained statehood as a 'hydrocarbon culture' or 'gazifikatsiia governmentality', the ideology under which hydrocarbons are seen as a guarantee of social welfare. National climate rhetoric also helps to build the image at the global arena emphasising 'Russia's Great Power status, identifying its sovereignty and fossil energy as the basis of this status' (Tynkkynen and Tynkkynen 2018:1103). The discussions of the negative effects of the fossil fuel economy are tabooed in the official discourse (ibid.:1117), therefore, national climate action, including public (Tynkkynen 2018:60) and industry (Martus 2018:109) sectors, is weakened by a lack of information and motivation for reducing the environmental impact. Notably, the state's rhetoric

is flexible when it comes to national interests as Wilson Rowe (2013) and Tynkkynen (2018) observe Russia's discursive alignment with the Western rhetoric during the key climate change negotiations. There are further ways in which climate concern can be used instrumentally in the resource-rich countries. China, another neighbouring superpower with detectable influences on CA climate policies (Obydenkova et al 2022), has undergone the process of positioning itself as a 'developing state with no climate responsibilities' to featuring global climate concern and impressive low-carbon development, which Kopra (2018) sees as means to advance the country's great power status. Nationally, the concern about the government's legitimacy, i.e., public recognition and support of those in power, is the main driver of the 'ecological civilisation' political discourse with its emphasis on public and environmental welfare being the main premise of national environmental action. Meanwhile, the 'low-carbon life' rhetoric is thought to advance the country's image in the geopolitical arena as the state is portrayed as the global leader of green development. Yet, the country maintains the status of world's leading coal producer (Engels 2018:5).

In all, the ideology matters in the interpretations of climate change, in particular, the meanings vary across the political regimes as democratic and authoritarian governments tend to offer different understandings of and approaches to solving the climate crisis. However, as the above discussion has shown, there are many more factors beyond the mode of power per se, which mediate the discourse, e.g., economic structure and geopolitical factors of a particular state. Furthermore, those possessing the dominant power demonstrate the ability to make use of the other actors involved in discourse. Indeed, the media, an essential site of public – government engagement, comes handy to set the national agenda. However, the journalists also hold power to shape the public perceptions about national policies. The role of the media, the key actor of climate discourse construction is discussed below.

The role of media in shaping climate change discourse.

As Fairclough (2013b:4) argued, the strength of ideology becomes proportional to its communication. Recognizing the role of language in shaping perceptions and actions, social scholars have given a great deal of attention to how the media engages with policy and science in defining climate change (e.g., Carvalho 2005, Boykoff 2011, Poberezhskaya 2015). The media has a central role in discourse production serving as a site for debates between the involved actors and playing 'a central cultural role in modernity through the selective provision of social knowledge […] through continual redefinitions of reality' (Carvalho and Burgess 2005: 1458). Besides defining the issue for the public agenda, media navigates how certain

social actors will be perceived by public. Therefore, it is 'instructive to account for how mass media have influenced who has a say, when and how in the public arena' (Goodman et al 2023:255). Furthermore, Wilson (1995) argued that media is essential for regulating policymaking given its ability to influence the political decisions through the articulations of public opinion serving as a gatekeeper for policy responses. As Carvalho (2005:1) noticed, 'the media, the main stage of the contemporary public sphere, is instrumental for a range of social actors to advance or justify specific options in relation to climate change'. Reflecting the premise of this study, the section aims to highlight the multitude of influences between those actors and media while paying a particular attention to these processes in CA and the states with similar ideological and economic environments.

Media play a key role in delivering scientific knowledge to people. Gamson (1999:24) points at the media's ability to institutionalise scientific knowledge in the public sphere by reporting it to the audience, and, when there are conflicting narratives, it is media coverage that influences what will be considered truth among its readers. Hence, media does not only communicate but shapes scientific messages prioritising one idea over the other and adding its own interpretations of the narrative. The reasons vary, would that be simplification of the message due to a lack of understanding of the issue (Weingart et al 2000), the influence of state elites (Carvalho 2007, Wilson Rowe 2013) or the influence of the corporate actors pushing their own agenda (Boykoff 2013). Furthermore, journalists can shape the message for their own interests. Some drew attention to the journalistic norm of balance[3] that used to construct a heated scientific debate (Boykoff and Boykoff 2004, Antilla 2005), climate change alarmism with its exaggerated messages of risk (Antilla 2005) and the apocalyptic reporting claiming the non-negotiable catastrophe (Faust and O'Shannon 2009) to maximise the public interest in the topic. However, these types of coverage have been decreasing, thanks to the environmental watchdogs being more effective in the traditional media spaces (Dinan et al. 2022). 'Balanced' reporting has significantly lost in its prominence (Bruggemann and Engesser 2017), and, while catastrophic reporting and alarmism are still prominent their presence has been proven to decline (Pan et al 2019).

[3] The norm of balanced reporting is a journalistic practice of giving opposing ideas equal attention to ensure validity of the coverage. However, balanced reporting also results in the false claims being considered valid by the audience. An example of this is a spread of climate scepticism in the public sphere (Boykoff and Boykoff 2004).

There is a long-established scholarship, which highlights the influences of political actors on the media representations. Back in the 1970s, the influential study of Hall et al (1978) argued that the official actors, act as 'primary definers' of the media agenda, and the journalists, in turn, reproduce the elites' narratives. This hierarchy is thought to be the outcome of a fast-paced nature of the news production, the need to comply with journalistic norms as well as shared news values (ibid:58). That is, the officials serve as a source to provide the credibility of a certain message and also political news attract the maximum of public attention (see also Carvalho and Burgess 2005). In regard to climate change, Pan et al (2019) in their analysis of COP21 coverage demonstrated how the media reflected the national agendas in both authoritarian and democratic settings (see also Olausson 2009).

Even in democracies, climate coverage is dictated by the political orientation of the outlet, for instance, in the UK (Carvalho 2007, Doulton and Brown 2009), in Austria (Forchtner, 2019), and in Finland (Hatakka and Välimäki 2019). In the authoritarian states, however, the ideological influence is even more ubiquitous as the top-down governance exercised by the state elites applies to the media. In CA, it is argued that 'the majority of Central Asian media are, above all, geared toward reinforcing the authoritarian status quo' (Rollberg and Laruelle 2015:227). Schatz (2009:210) notices that the media in the post-Soviet CA, rooted in the propaganda-operated SU, remain an essential tool for public control promoting the ideas of national identity and statehood instead of the communist ideology. However, in Kazakhstan, propaganda under Nazarbayev's presidency has become more plausible, with occasional appearances of state-criticism, hence, featuring more sophisticated techniques to sustain legitimacy (ibid:211, see also Wilson 2005). Indeed, the journalists are aware that the censorship has not faded away, and the self-censorship is a common journalistic practice in Kazakhstan, Uzbekistan and Kyrgyzstan (Freedman 2014, Schatz 2006). Interestingly, in Kyrgyzstan, softening the media control along with an image of the liberal and tolerant new state promoted by the ex-President, has encouraged real criticism of the government in the media, which, in turn, has led to the public upheavals and, ultimately, to the governmental change (Schatz 2006:216). That is, media are still able to influence the political outcomes even within the authoritarian settings.

As to the climate change topic, research on CA media representations of the issue is limited. While the number of studies has been growing over the past decade, the research has been focusing on the quality of journalism and the barriers for its development (Freedman

2011, 2014, Toralieva 2011) and its synergies with the civic sector (Sultanalieva and Freedman 2015, Zhurtbay 2018) rather than on climate discourses. Kazakhstan is the only country where discourses of climate change and related matters of low carbon development were examined considering the influence of the powerful actors. Poberezhskaya and Danilova (2022) re-emphasise the ideological ties demonstrating how the media portrayed national climate policy as the President's achievement (see also Kudaibergenova 2019) and detached the negative climate effects from the governmental responsibility. Indeed, Koch and Tynkkynen (2021) conclude that the green energy transition in Kazakhstan is narrated in geopolitical terms, that is, working towards the national aspirations at the global arena and legitimising the national fossil-fuel legacy. Considering a scarcity of CA scholarship on climate narratives, it is useful to look at the climate change reporting in countries, which share common characteristics in terms of political regime and economic structure, i.e., authoritarian political regimes and fossil-fuel based economies, with an example of those being Vietnam, China and Russia.

Several studies identify ideological bias behind media representations of the issue in Russia as climate coverage is shaped by national economic and political circumstances. The studies observed the absence of demands to the government in terms of responsibility for the climate effects (Poberezhskaya 2015) and the growth of climate scepticism in the media underpinned by strengthened authoritarian regime (Tynkkynen and Tynkkynen 2018). Notably, Wilson Rowe (2013) and Tynkkynen (2018) observe an instrumentalization of scientific knowledge in the pro-state Russian media outlets, where scientific opinion was used to reinforce doubt regarding anthropogenic climate change, while during the international negotiations the expert discourse was used to align with the global agenda. These patterns might be reflected in CA considering the influence Russian broadcast industry has in the region, in particular, in Kazakhstan and Kyrgyzstan (Toralieva 2011, Rollberg and Laruelle 2015). Furthermore, Kurambayev and Freedman (2020) observe the journalism ethic crises including a lack of balance and impartiality. Considering cultural embeddedness of the falsehood in the post-Soviet CA (Roudakova 2017) and disregard of the media function as a watchdog by journalists themselves (Kurambayev et al 2019), the probability of climate scepticism being present in CA coverage is high.

Another useful insight comes from Vietnam, the country featuring authoritarian political regime and developing economy. As Gverdtsiteli (2023) observes, national climate coverage is used by the state as means for achieving legitimacy nationally and globally as well as to fulfil

economic interests towards the foreign donors. The dominant narratives, which are the appeals to risk, economic benefits from climate action and willingness for global cooperation, justify the state's action including the top-down practices as well as provide a common ground with the globally accepted discourse. Given the authoritarian leadership and developing character of the regional economics, it is likely that the narratives observed in Vietnam might be found in CA. Indeed, Kazakhstan's traditional media features a similar notion of risk and attitudes towards the international community (Poberezhskaya and Danilova 2022). Last, there are several positive effects of the state-media ties, too. As in China, an increased attention to the issue at the political level was reflected in media reporting, and the environmental journalists have been having more power to influence policymaking (Burgh & Zeng, 2012). Observing these positive developments in the authoritarian political regime, it could be suggested that the similar changes will happen in CA states given the influence of China in the region.

As to the state of development of the climate reporting in the region, several studies highlighted major issues and barriers as well as successes. Freedman (2011:128-130) observes a scarce of environmental coverage in Kazakhstan and Kyrgyzstan and argues that the main reasons for that are a general lack of knowledge on the topic among the journalists and the state censorship. An absence of related education for the journalists along with the limited access to the scientific data, financial resources and a limited freedom of expression results in the environmental problems being covered in the media only when those are extremely prominent either are highly discussed on the political agenda. Notably, the reporters with high expertise on the issue do exist in the region, however, being driven away by the barriers posed by the state, they prefer to write for the foreign media (ibid.). Besides the aforementioned self-censorship, Freedman (2014:50-54) highlighted the avoidance of cross-regional controversies in the environmental coverage given that the topic has a high geo-political relevance in CA. Meanwhile, there are signs of the growing interest in the topic in Kyrgyzstan (Sultanalieva and Freedman 2015:145) and Kazakhstan (Poberezhskaya and Danilova 2022:435), which is suggested to be the reflection of the increased political interest. Indeed, Karimova et al. (2018) draw on the advancement of the regional environmental journalism being aided by the help of the international non-state organisations. The issue is mostly discussed in political terms focusing on the international climate policy and the green development via new technology (ibid.). The downside of these narratives is a weakened public agency as responsibility is allocated to policymakers and techno-science sector (Carvalho et al 2017).

In all, the discussion has shown that while the media possess the power to mediate the public understanding of a given matter, in the authoritarian settings, the political elites remain the ones leading meaning making processes. That is, the media serve not as a platform for the government-society dialog but rather the source appropriated by those in power to channel the ideas that fit their interests. The scholarship concerning media coverage of the environmental problems in CA has been growing, however, the studies have mostly focused on the quality of reporting while little attention has been given to the ideological aspect mediating media narratives of climate change. Yet, the latter is important considering the power dynamics discussed through the chapter. The following section concludes the overview of the actors involved in climate change meaning making by looking at the role of NGOs and civil society representatives in setting the climate change agenda.

The role of civil society in shaping climate change discourse

It is argued that inclusion of civil society is important in addressing climate change as people are important agents of action and are able to navigate national policies advising about existing vulnerabilities and place-specific circumstances (Stevenson and Dryzek 2014). NGOs with their ability to mobilize public action and communicate public concerns to the government have been 'a distinct feature of global climate governance during the past three decades' (Backstrand et al. 2017:574). A number of studies acknowledge the contributions of NGOs in the international climate change negotiations (Hadden and Jasny 2019) and national policies (Hovden and Lindseth 2004) as well as their key role in communicating scientific agenda to the state and the public sector (Doyle 2009). Some argue that liberal democracies are more capable to address the issue due to the open dialogue and greater freedoms allocated to civil society (Stevenson and Dryzek 2014, Pickering et al 2020).

In the authoritarian states, however, NGOs are treated differently, and their role is often instrumental providing legitimacy to the government. As Heiss (2019:560) noticed, non-state organizations 'have become yet another democratic-appearing institution that authoritarians can use to enhance regime stability'. Public loyalty is achieved through creating the image of a diverse political environment (ibid.). Furthermore, a vision of the popular consent is manufactured via state-backed NGOs, which purpose is to proclaim the government's agenda (Gandhi and Przeworski 2007). In some cases, however, non-state actors are allowed to voice criticism to the extent carefully measured by the powerful ones (Schatz 2008). Furthermore, the actions of the non-state sector may strengthen the government's legitimacy in crisis times, for instance, when NGOs help governments to address the effects of extreme weather events

on civil society (Ahmed and Potter 2006). Ultimately, the state-NGO engagement in authoritarian settings represent Foucauldian 'productive power' (Foucault 1991b) and may deepen the regime if navigated skilfully; government becomes able to dissolve within civic society controlling the narratives and distorting any unfavourable horizontal links created at these levels (Heiss 2019:559).

Civil agency in Central Asia is clearly weak due to the governmental pressures (Matveeva 2009). Schatz (2008) argues that in Kazakhstan, the increase of the public sector and appearance of state-criticism during Nazarbayev's term can be viewed as an exercise of power to legitimise elites and create the vision of democratic society both for people and the foreign observers (Schatz 2008). Still, the country suffers from a lack of legal support to the civic sector, absence of regulations on NGOs' inclusion in decision-making, and a restricted public access to environmental data (Kuratov and Omarbekova 2017:19). Furthermore, Knox and Yessimova (2015) acknowledge how the state's negative attitude towards the non-state sector distort public perceptions about activism. Coupled with the fossil-fuel legacy established in the public field, it leads to environmental activists not getting required social support and their claims are seen as 'manifestations of environmental extremism or ecological utopianism' (Kuzembayeva et al 2019:98). Overall, the real impact of NGOs on the state sector proves minimal, and this is mostly because the access to decision-making is reserved for the actors tied with the officials closely (ibid).

Besides ensuring legitimacy of the domestic regime, NGOs also serve as means to improve the international image of the autocracies (Kendall-Taylor and Frantz 2014; Gandhi and Przeworski 2007). In attempts to achieve the latter, many authoritarian states, especially developing ones, allow the international organisations operate on their territories and even to advice national policymaking. Discussing the reasons for that, the number of scholars point to the financial interests and image ambitions in the global political context (Heiss 2019). For instance, Greenpeace, known for its radical views, has been advising on China's environmental policy since 1990s, yet the organisation's interaction with the national civil sector is limited by the state (Wheeler 2013). Overall, this paradox is prominent in authoritarian regimes, where relationship between national and foreign NGOs are limited by the state, yet foreign actors are given space at the higher political levels (Heiss 2019). Notably, the presence of the international players can at times only deepen the hierarchical structure rather than enhance democratisation. This was the case of the post-soviet Russia where the incoming donors,

instead of strengthening civil sector, reinforced their own agenda and have created a 'patron-client' relationship with local NGOs, hence, extending vertical relationship beyond the state and public interaction (Henderson 2003).

As to the reasons above, the international non-state bodies have been welcomed in CA to advice on national development and contribute to the latter financially (Schatz 2006, Weinthal and Watters 2010). While the role of INGOs was significant in Kazakhstan and Kyrgyzstan since SU collapse, in Uzbekistan, the international organisations have been welcomed only since 2016, i.e., Mirziyoyev's presidency and his allures to democratisation (Emazarov 2020, Kim 2020). Schatz (2006) notices that in Kazakhstan, this has positively impacted the political regime as the presence of the international actors welcomed to support the country over its post-independency period were acting as watchdogs of the regime, hence, contributing to democratization. Similarly, Obydenkova et al (2022) point at how the international organisation EBRD was able to influence climate policies in the region through the need of CA countries to borrow, and how the region has championed the development among the rest of the sponsored countries. The positive evaluations from the international actors are important as they correlate with the value of foreign direct investment, therefore, the developing states are particularly interested in matching the global human rights values (Dietrich and Murdie 2017). Notably, the foreign rhetoric is also used instrumentally by the non-state actor. Weinthal (2003) highlights 'dependent activism' in the region, pointing to the critical role the Western NGOs played in helping the region's activist groups financially. As such, Freedman (2015:159) noticed how a number of Kyrgyzstan's NGOs have changed their focus from the environmental to social issues in order to qualify for a grant. Dubuisson (2022) in her analysis of discourse of environmental protestors in Kazakhstan, points to how the appeals to international environmental values coincide with nationalist narrative emphasising the ideas of cultural heritage and sovereignty. Hence, this discourse allows the activists to operate via the claim already established in the global discursive field and legitimised by the state (ibid:418, see also Wu 2021), while the appeal to national identity aligns with eco-nationalist discursive patterns permeating the civic and state sectors (see also Graybill 2019). In Uzbekistan's context, Erdem (2007) in her analysis of the Uzbek ENGOs in the Aral Sea transboundary conflict notices that besides the restrictive context of the authoritarian governance, the activists focused on promoting Western values rather than on the real needs of those involved in the conflicts. That is, the pattern of regional NGOs to follow the international agenda compromises the effectiveness of their actions.

Regarding the media, it has an important role for the non-state sector as it communicates NGOs' claims to the state and public and provides a ground for attracting new members, organizing collective action and building shared identity (Cox and Schwarse 2022). However, there are multiple issues in this cooperation, in particular, driven by the journalistic norms and ideological orientation (ibid.). Indeed, the scholars observe how the media omit the narratives of the environmental activists (Ihlen and Nitz 2008), challenge them (Carvalho et al 2017), reframe the messages towards the ones that suit the interest groups (Doyle 2011) or misinterpret the message to maximise public attention (Hansen 2010, Allan and Hadden 2017). Consequently, NGOs may align their discourses to the journalistic norms, which affects the quality of the message as the public messages tailored top evoke a sense of fear and other intense emotions (Cox and Schwarse 2022:241). Notably, CA non-state organisations are lacking an understanding of the potential of the media use. Freedman (2011) notices that in Kyrgyzstan, activists hesitate to engage with the media despite the journalists being open to communication (see also Sultanalieva and Freedman 2015). The reasons are the concerns about the state censorship, a lack of professional members, limited financing and the leaders being 'unfamiliar or uncomfortable with public relations' (Freedman 2011:130). This hesitance to communicate also translates into a limited cooperation between like-minded NGOs at the national level, which, consequently, reduces the prominence of the organisations and their messages at the public and political levels (ibid:131). Last, the studies acknowledge the role of new media in mobilizing climate action. With its absence of gatekeeping function and decreased need to fit into news values and affordability, social media have come as a game-changing opportunity for environmental activists to promote their agenda, communicate to public and unite with like-minded actors (Comfort and Hester 2019). As to the disadvantages, the absence of checks and balances can discourage activists - for instance, the online global mobilisation campaign around COP21, while able to increase public action, triggered significant number of sceptical narratives which could have discouraged some from the green action (ibid:281, see also Khoo and Ryan 2020). New communication channels are considered to be important in advancing youth activism in Kazakhstan, which was almost absent until the past decade (e.g., Azizi 2022).

Overall, the political agenda in the studied CA countries with their emphasis on green development is promising in terms of achieving more sustainable future. In particular, a number of studies acknowledge the growing prominence of environmental NGOs in Kazakhstan (Knox and Yessimova 2015), Kyrgyzstan (Wooden 2013) and Uzbekistan (Kim 2020). Indeed,

Dubuisson (2022) points to the recent successes of Kazakh environmental activists, which have led to some significant adjustments made by the government. In Uzbekistan, given the importance of cultural norms and customs, mahallas, institutionalised local public representatives have become important actors of environmental protection and public-state conversation on the matter (Tookey 2004). However, the state actors seem to pursue with top-down techniques in their relationship with NGOs overlooking the sector's potential to become an important agent of change (Wooden 2013, Dubuisson 2022). This feature diminishes public agency, for instance, in Kyrgyzstan, where the environmental concern is among key factors of public activism, many still find the state being responsible for and capable of meaningful action (Wooden 2013:332). Dubuisson (2022:418) points at the interests in the green future and economic development shared by the state actors and activists, which should be used as a ground for a dialogue.

Conclusion

The chapter grasped on a multitude of meaning allocated to climate change various social realms, in particular, addressing the role of political ideology in discourse production. Climate change is a complex issue affecting the essential spheres of human life, from ecosystems and public health to geopolitical security and economic prospects of a given society. Consequently, understanding and approaching the issue effectively requires involvement of the actors from the various discursive spheres, reviewed in the present chapter. Furthermore, the review of the studies has drawn attention to multiple factors, in particular, the interests of the political elites, which mediate climate change narratives in a given society (e.g., Stern 2016). While a remarkable attention has been drawn to the climate change governmentalities in the Western contexts, significantly fewer studies looked at the power/knowledge dynamics in the authoritarian settings (Mittiga 2022). Meanwhile, understanding and disrupting these mechanisms may open the more effective ways to improve political approaches to climate change (Oels 2005).

The present study intends to contribute to the substantial gap in climate policy-oriented research concerning CA (Vakulchuk et al 2022a). While there is a growing body of research on media discourses and public activism on climate change, a few studies have looked at how the issue is reproduced in political and scientific circles. Ultimately, little is known about who shapes the narratives, and how; and what reasons, outside of the environmental concerns, dictate approaches to the issue. The scholarship has almost exclusively focused on Kazakhstan (Vakulchuk et al 2022a), while the knowledge about climate change discourses in the rest of

CA remain very limited. Addressing the calls for further political research on the region (ibid, Sabyrbekov et al 2023, Mirzabayev 2023) the present study looks at the climate change narratives in the three CA countries and identify the mechanisms of and the reasons behind meaning-making processes. The following chapter discusses the theoretical and methodological considerations, which guide the project.

Chapter 2. Theoretical and methodological framework

The chapter outlines the theoretical framework , which underpins the present research project. The study attempts to explain the narratives of climate change in three distinct socio-political settings, therefore, it stands within the social constructionist perspective viewing the physical matter as a social construct. Enquiring how the knowledge about climate change is constructed in the authoritarian states, i.e. appreciating the role of political ideologies in the action of knowledge creation, Foucault's (1975) infamous argument on the interconnectivity of power and knowledge comes as a key foundation used to understand why, how and by whom certain meanings of climate change are constructed. As such, a discourse comes as a central object of the research, i.e., those verbal expressions of the natural objects, in which power and knowledge come together. The chapter commences with establishing the ground for understanding climate change as a matter of social interpretation reflecting on the ideas of discourse and the role of actors involved in its creation. It then moves to key ideas about power, knowledge and discourse offered by Foucault, which provide the foundation for the present attempts to make sense of climate change narratives. Finally, the chapter moves to the methodological aspect discussing specifics of critical discourse analysis and presenting the main analytical framework, which underpins the present study.

Social constructionist perspective

Exploring the narratives of climate change, this study lies in the perspective of social constructionism (SC). SC problematizes the idea of objective reality and insists to look critically at knowledge claims about the world. At the core of SC is the idea that 'our ways of understanding the world do not come from objective reality but from other people, both past and present' (Burr 2015:10). Social constructionists highlight that knowledge claims are

socially produced rather than a direct reflection of an objective reality, therefore, meanings assigned to an object differ across various social settings (Berger and Luckmann 1991). As such, one should be 'ever suspicious of our assumptions about how the world appears to be' (Burr 2015:3). Seeking to understand how meanings and beliefs about an objective world are created, social constructionists examine complex social settings knowledge emerges from (Young and Collin 2004).

SC emerged in early 1980s from attempts to question the nature of reality and cannot be traced back to a single direction of thought. As to Burr (2015:12), postmodernism, a philosophical direction of thought, which views the world as an artifact of ideological meaning-making is a 'cultural and intellectual backcloth' of SC. SC underpins multiple scholarly perspectives such as symbolic interactionism, phenomenology, postmodernism studies and ethnomethodology (ibid.). In sociology, SC has departed from poststructuralism, which rejects possibility to explain the world purely through objective means, this was attempted by Marx who explained a social phenomenon by economic dynamics, and psychologists Freud and Piaget who emphasized the role of psychic structures in perceptions of the world (ibid:13). Instead, poststructuralism recognizes multiple ways of apprehending the world and argue that reality is not sustained by a single knowledge system or belief. The development of science and technology offers countless perspectives for understanding reality and many systems of knowledge; that is, there are multiple lenses the world can be seen through. As such, SC challenges the idea of objective knowledge highlighting plurality of meanings and the role of social context in defining the ideas about the world.

Within scholarly debates, the matter of objectivity is among the central points. While majority of social constructionists differentiate between an objective reality and socially produce knowledge about it, there are adepts of relativist approach with its rejection of an objective reality. Relativism presents itself as a rather extreme position arguing that 'nothing can ever be known for definite' (Andrews 2012:42), therefore, the world cannot be objectively explained. In this perspective, climate change is discursively produced notwithstanding its evident effects on nature and society. This position has received 'fierce criticism' from the environmental scholars (Freudenburg 2000:103). The critics focus on the approach's inability to recognize nature as an independent entity, therefore, seeing climate change as an issue not requiring solution (Burningham 1998). Indeed, in relativist perspective, to avoid the climate crisis, it is enough to alter one's way of thinking, i.e., to let go of the concerning climate change prognoses

and alarmism (ibid., see also Brulle 1998). Furthermore, relativists hold a human-centered approach, which overlooks the intrinsic value of the non-human beings, that is, has a potential to deepen the environmental crisis (Benton 1993). Hence, relativism is problematic 'both logically, insofar as it fails to deconstruct the notion of culture, and ethically, insofar as it categorically privileges human activities and traits' (Peterson 1999:399). Social environmental scholars, therefore, should be cautious about relativist approach with its outright rejection of reality, as it may deepen public vulnerability, turning attention away from the need to address the climate crisis (Young and Collin 2004).

Meanwhile, most of the contemporary critical social studies recognize the objectivity of the outer world, while highlighting complex social contexts, which shape public perceptions of reality (Berger and Luckmann 1991). Among others, Hulme (2009:201) brought attention to the influence of changing cultural contexts on the interpretations of climate change viewing the physical process as 'a subject to multiple expressions of instability' in the social world. Indeed, 'green' critical discourse scholarship aims to contribute to solving environmental problems by bringing attention to power dynamics, which shape the meanings assigned to nature (Leipold et al. 2019). These studies stand within Foucauldian perspective emphasizing instrumentality and power effects of common knowledge about nature: 'environmental discourse has material and power effects as well as being the effect of material practices and power relations' (Feindt and Oels 2005:161, see also Carvalho 2007). As such, most of social constructionist studies, in particular, critical discourse scholarship, do not question an objective reality but problematize the influence of social context on how the issue is approached. The present research project is set to further the critical discussion in this direction.

Ideology as a mediator of meanings: Foucauldian idea of power/knowledge

The aforementioned emphasis on the role of power among other social factors has turned scholarly attention to the argument about the relationship between power and knowledge offered by Michael Foucault in *The history of sexuality. Volume 1: the will to knowledge* (2019). Drawing on the practice of confessions in the twentieth century, the French philosopher emphasised the interconnectedness of the ideological forces and knowledges: 'all power relations are based on a field of knowledge that sustains them and vice versa' (ibid:100). Confessions are viewed as power mechanisms used to gather and employ information to control all aspects of public life, including its non-political sites like the matters of body and sex (ibid: 103). This information comes as a source for producing knowledge about the matters, which

essentially represent the ideas of truth, norm, good and bad. By establishing morality through knowledge, the government is exercised at the level of self, where an individual regulates its ways of acting, informed by the webs of knowledge regimes. These regimes are not stable but vary between time and place, thus, the beliefs may vary across the societies. Dissemination of knowledge, institutionalised in education, is key in making subjects governable. Education ensures that subjects are given the information that is carefully selected and accepted by the dominant discourses.

The approach to enacting power through establishing meanings was coined by Foucault (ibid.) as biopower and the mode of governance sustained by power/knowledge as governmentality. As such, public knowledge represents an exercise of power, as it is through creating a set of ideas in individuals' minds that that power is enacted. Therefore, the government is rather a practice than a group of political actors, that is, 'to govern, in this sense, is to structure the possible field of action of others' (Foucault 2002a:341). Biopower operates at the microlevels, a set of strategies with numerous tactics, which penetrate all the social levels and exists not just in terms of law and rules, but in the definitions of morality, in common sense, language and culture. Indeed, government, as Foucault adds later, is 'the way in which the conduct of individuals or of groups might be directed—the government of children, of souls, of communities, of families, of the sick' (ibid.). Governmentality is focused on the production of not the rules that an individual must follow but of a will that enables one to behave in the way that sustain the power regime. As a result, an individual becomes their own overseer.

Foucault (ibid:352) compares biopower with a pastoral power, the metaphor that originated in Egyptian, Assyrian, Mesopotamian and Hebrew cultures and is used to describe the way a shepherd controls his flock. It refers to the idea that there are shepherds who guide those they are responsible for ensuring that the guided will reach a certain point established by the leaders. In doing so they are not oppressive, but manipulative, as they control the way the guided persons act through reaching and shaping their individual beliefs. Thus, the pastor manages community through the mechanisms of knowledge on both individual and collective levels, which is the mechanism like the one of modern government. 'In a way, we can see the state as a modern matrix of individualization, or a new form of pastoral power' (ibid: 354). Biopower appeared in the end of the eighteenth century as an alternative to sovereign power, a traditional approach to governance exercised through the negative means of coercion, which

Foucault (2019:136) defined as the 'right to take life or let live'. The scholar refers to the public execution as an ultimate example of this power regime, i.e., using the objectivity of human body and brutality of punishment as means to control actions of the rest of the society. In *Discipline and Punish: the birth of a prison* (Foucault 1991a), the philosopher also discusses a disciplinary type of power as an intermediate step between sovereign and biopower - the regime in which an individual is aware of being governed by the dominant actors, but the power is exercised via continuous control via observation of the body, instead of by violent means. That is, an individual perceives the continuous control, and this awareness is what makes one self-regulate – the technique as the philosopher argued, developed in prisons and later implemented across various social institutions. In comparison, biopower techniques aim to eradicate public awareness about the sources and representations of power and to stimulate willing participation of the citizens in the regime.

Biopower does not belong to a certain actor or institution, but is inherent in political, economic and sexual relations. It is 'a whole series of particular mechanisms, definable and defined, that seem capable of inducing behaviours or discourses' (Foucault 1996:394). Being embodied in discursive flows, the power strategies can emerge as an outcome of the series of unintentional acts of the random actors involved in discourse (Foucault 2002a). The philosopher also adds that the government probably is no more than a 'mythicized abstraction, whose importance is a lot more limited than many of us think' (Foucault 1991b:103). Notwithstanding, Foucault recognised that in majority of political regimes, biopower coexists with the elements of sovereign power as the idea of authority remains an important component of the government being represented in norms, rules decision making processes and so forth (Foucault 2002a:345). To sum up, Dean's (2009) definition of Foucauldian idea of governmentality emphasises all the key points:

> Government is any more or less calculated and rational activity, undertaken by a multiplicity of authorities and agencies, employing a variety of techniques and forms of knowledge, that seeks to shape conduct by working through the desires, aspirations, interests and beliefs of various actors, for definite but shifting ends and with a diverse set of relatively unpredictable consequences, effects and outcomes. (p.18)

In the governmentality project, scientific knowledge is positioned as superior to all other knowledges existing in a society. In particular, information obtained through confessions before being used in governance, was filtered and rendered knowledge by a scientific community (Foucault 1991a). As such, scientists are vital actors of governmentality project, whose functions are appropriated to exert power. In this light, Foucault viewed ideological settings as 'regimes of truth' (ibid:23), i.e. power is enacted by mediating what knowledges about the world would be seen as relevant. Science is presented as a single source of rational thought, a measure of truth, and knowledge to become valid should seek to become scientific, or to fit the framework of scientific discourse institutionalised by the interests of the empowered. Foucault's emphasis on ideological nature of knowledge has grown into a new scholarly area, sociology of scientific knowledge, the discipline that problematises science as a product of human subjectivities rather than an objective source of information about the world. In particular, its proponents argued that culture-historical and power settings are dominant forces that shape scientific knowledge (Bloor 1976). The idea has given rise to discourse analysis of science: attempts to make sense of how factors and actors shape something previously considered objective facts (Mulkay and Gilbert 1984). Berger and Luckmann (1991) made some important contribution to the discipline arguing that development of science and economics have brought not only multiple knowledges, but also have given rise to expert knowledge. Created by an intent of powerful actors, e.g., political elites or industries, biased scientific expertise comes as a tool to legitimise particular claims. A good example is debates around climate change – in response to the warnings about the climate crisis posed by international climate research, the industries' owners created dedicated research groups to institutionalise knowledge that fits their economic interests (Dunlap and McCright 2010). Hence, scientific knowledge is a cognitive attempt to understand objective reality yet is shaped by the influence of power and instrumentalised to advance dominant ideology.

Last, Foucault (2019:94-5) recognised the forces of resistance in the governmentality project, i.e. the active role of the society, arguing that as the governed are actors, they can think and act in the ways opposite to that what are imposed. On the contrary, the exercise of power requires a certain degree of freedom, or the ability of one to make a choice and reject social demands posed by government (ibid, see also Foucault 2002a). This resistance, just like in traditional political theory, constitutes power, although for Foucault, this act does not have to

be successful to do this function (Oels 2005:187). Thus, power is not opposite to but sustained by freedom.

Power, knowledge, and the environment

From the 1990s onwards, environmental issues have been increasingly seen as subjected to the discursive perspective (Leipold et al 2019). Viewing nature as knowable and governable has commenced within sociology of knowledge scholarship and has been increasingly prominent as a reflection of the growing environmental concern at the political level. The early environmental movements have brought attention to the policymaking on the issues of acid rain and nuclear pollution arguing that interpretations of these issues were politically charged (Hajer 1995:164). Similarly, SC perspective, while viewing the environment as an objective matter, shares the idea that what we know about the environment, i.e., its meanings, are discursively co-produced. The environmental issues are complex and the ways to respond to them are contested, therefore, their interpretations become sites of expression of knowledges, ideological and economic interests (Dryzek 2013:3). Indeed, the concept of climate change, albeit the global nature of the issue, 'means different things to different people in different contexts, places and networks' (Hulme 2009:325). That is, discursive practices are the first to be considered to navigate through and to advance human-nature relationship (Dryzek 2013:10).

Reflecting the embeddedness of 'green' agenda in political discussions, the scholarship has been particularly concerned with the effects of power and knowledge within interpretations of the environment. As such, environmental problems are 'not taken as objectively 'given' but their representation is recognized as an effect of linguistic regularities, which implies that their constitution reflects strategies of power and knowledge' (Feindt and Oels 2005:168). Discursive studies enquire why certain understandings of the environment become dominant and others are neglected. Indeed, Hajer (1995:50) points out that the environment comes as a site of discursive struggles, in which power dynamics prescribe how the issue will be viewed and addressed. Hence, environmental concern is a part of a wider ideological project, in which those in power define the problems to deal with in a way that match their interests.

Appreciating the role of power and knowledge in this debates, political scholars view the environment as a representation of Foucauldian governmentality. Oels (2005:200) suggests that both governmentality and modern environmental discourses are concerned with similar issues like state and safety, forms of knowledge, and techniques of control. Furthermore, Feindt

and Oels (2005:169) highlighted how a green concern becomes an element of governmentality project, i.e., 'environmental discourse constitutes identities, expectations and responsibilities that play their part in disciplining individuals and society at large'. That is, the environment becomes one of the tools to govern a given society (see also Carvalho 2005). Indeed, as Bäckstrand (2004) notices,

> Environmental problems similar to 'madness', 'sexuality' and 'criminality' are not 'out there' in a pure and unmediated form, but various techniques, procedures and practices construct and produce these fields in such a way that they become both objects for knowledge and targets for regulation. (p.703)

Consequently, political scholarship has been looking at how the political ideology impacts the way people understand and act on the environmental matters, from global climate change negotiations (Bäckstrand and Lövbrand 2006) to individual habits of recycling (Darier 1999). It has become a useful concept to help think through the ways that the environment is not only a biophysical reality, but also a site of power. Rutherford (2007) suggested a framework to think about the environment through the idea of power/knowledge. As such, production of rationalities of rule (Foucault 1991a) equals production of knowledge about the environment, that is, scientific community creates not an independent knowledge but discourse to legitimise political claims. Thus, science is seen as an authorised epistemic community and as a 'green laundering' of the state, which justifies a scope of actions suggested by the government (Carvalho 2005:17). Indeed, Luke (1995) argued that the World Watch Institute, an environmental NGO, was the main actor of environmental discourse production on the rise of the green concern. Furthermore, the green discourse generates self-governing subjects, i.e. produces knowledges and practices, which the individuals follow without realising they are being governed. Rutherford (2017:3) notices 'a green citizen', the self-identity with a set of relevant knowledges and behaviours imposed to the people in Western societies through the biopower mechanisms. Indeed, Luke (2011:97) claimed climate change discourse to be the Foucauldian project of biopower expressed in 'the continuous 24×7 management of Nature and Society through combating greenhouse gas emissions'.

The scholars also discussed the global environmentality perspective emphasising the links between the environmental crisis and the concepts of sovereignty, geopolitics and

identity. Darier (1999) argued that the environmental decay triggers the global competition over natural resources, and the right to govern the responses to the green challenges, i.e., to lead global environmental politics, comes as a way to control the availability and allocation of the natural resources. Indeed, Luke (2011) viewed environmental problems as transnational security threats, which require political and military solutions. Hence, it is not only national environmental situation that matters, rather, the green rhetoric become a tool to exert power at the global level. Indeed, Luke (ibid:104) argued that the Western approach to climate change, which narrows climate action to GHG reduction and taxation mechanisms is a thought through tactic of the dominant actors to regulate global economies.

Last, the studies highlighted how the shift of dominant narratives, i.e., turn of the ideological concerns from governance itself to economic concerns, shaped global environmental discourse. From being instrumentalised as a tool to guide public minds and deeds, environmental narratives have turned to the terms of costs and benefits (Luke 2011:98). This shift has resulted in a technology-based and global approach to climate action (ibid.). As such, scientific knowledge, from being utilised to shape the individual consciousness, has become a resource for 'solving' the environmental problems while providing economic profits. The representation of this is a focus of climate policies on techno innovation, e.g., investment in green energy research as a way to address the climate crisis. Furthermore, modern environmental rhetoric embraces the idea of globalisation and promotes a collaborative work between the institutions of science, politics and economics at the international level. Unlike green governmentality with its ideas of frontiers and nations, 'green globalism' presumes that states and societies should be managed collectively through the terms of economic benefits (ibid:99). As to the individual level, the technology and profit-based outlook to the environment governs social practices through the new principles of efficiency, procedural integration, and coordinated management (Hajer 1995). Over the past decades, reflecting the aggravating climate crisis and increased importance of democratic values in the global political discourse, the climate narrative, too, has embodied the ideas of public agency and participation in climate politics (e.g., Mert 2009) as well as the values of social equality and human rights (e.g., Espinosa 2014). That is, meanings allocated to the environmental issues reiterate the ideas dominant at the political level.

Discourse and approaches to its analysis

Discourse becomes a central object of the study as 'social realities are produced and made real through discourses, and that social interactions cannot be fully understood without reference to the discourses that give them meaning' (Phillips and Hardy 2002:2). The notion of discourse refers to the wide range of disciplines like linguistics, anthropology, and sociology, and can be studied for different reasons, therefore, the definitions of discourse vary within social scholarship. The present study adopts the understanding of the concept established in SC studies, that is, viewing a discourse as a site of enacting power. In a very broad sense, 'a discourse is a shared way of apprehending the world' (Dryzek 2013:9). Hajer (1995:44) provides more specific definition arguing that a discourse is '…a specific ensemble of ideas, concepts, and categorizations that is produced, reproduced, and transformed in a particular set of practices and through which meaning is given to physical and social realities'. The notion of discourse is among central concept of Foucauldian thought, and there are several characteristics of Foucauldian understanding of discourse worthy of consideration.

As Foucault (2019:100) argued, knowledge and power are constitutive of discourse: 'it is in discourse that power and knowledge are joined together'. Ideologies are sustained by discursive practices, specific sets of rules that mediate different forms of knowledge (Foucault 2002a:341). Discourses condition the perceptions of those who are subject to them in the way that certain interests and ideas dominate over another. Discourse constitutes society and culture, does ideological work, and mediates the links between knowledge production and society. Therefore, discourses become the exercises of power and the first major form of power (ibid.). Discourses are 'productive' as they reproduce, legitimise or challenge power and dominance relations in society at macro- and micro-levels (van Djik 2001:352). Fairclough (2013b:94) emphasises ideational and interpersonal functions of discourse. Ideational function is an ability of discourse to produce systems of knowledge that constitute representations of reality, while interpersonal function operates by power and constitutes subjects, their social relations and identities. As such, a discourse 'constructs meanings and relationships, helping define common sense and legitimate knowledge' (Dryzek 2013:9).

Foucault mentioned twofold relations between power and discourse, which he conceptualised as power of and over discourse (Jäger and Maier 2016:119). The idea of power over discourse emphasises how discursive flows act as channels to transmit dominant

ideologies. Hence, it is through discourse the powerful ones form public consciousness determining the ways people think and behave. Thus, by constructing subjectivities, exercises of power embodied in discourses define a social reality. Furthermore, certain actors of a given discourse have more power than others, hence, are in control of the dominant ideas about an objective matter. However, Foucault (2019) also noticed the opposite effect of discourse on ideology, i.e., the narrative is not only influenced by but is also capable to expose, question and weaken the dominant power. recognised the contrary effect of discourse on ideology. As an example of this, Stevenson and Dryzek (2014) observed how public discourses are capable of influencing the government's climate change politics.

Foucault's notion of the active role of all actors involved in discourse was overlooked by many scholars given the number of contradicting statements made by the philosopher, e.g., his idea of 'the death of subject' (Foucault 2002b), which considers all discursive actors being submissive to the wider ideological framework. As such, the followers of Foucauldian thought faced criticism for neglecting the speaker (Burr 2015:28). Indeed, Dryzek (2013:23) argues that 'a discourse is not like a tribe', giving the actors an active role in discourse. An active role of actor is one of the key points of Hajer's (1995) idea of discourse, which otherwise mostly follows Foucauldian thought. As such, Hajer leaves a room for individual's agency arguing that discourses are 'communicative miracles' (ibid:44), sites of debates among the actors from different fields involved in discussion. How the certain elements of discourse are combined in coherent stories reflect the power dynamics and common interests between the actors. The debates produce 'story lines' (ibid:63), i.e. the stories co-produced by the actors involved based on those interests and understandings they have in common. Mapping out those commonalities brings actors into 'discursive coalitions' (ibid.), as a result, an end meaning is co-produced by the unity of the most powerful actors of discourse ends up defining the narrative. This is a useful perspective to understand, for example, why the severe effects of climate change may exist but are not being recognised as problematic and contrariwise certain issues may be highly problematized without objective reasons for doing so (Burningham 1998, see also Dryzek 2013).

In *Archaelogy of knowledge* (2013), Foucault emphasized the active nature of discourses seeing them as linguistic (more speaking and writing rather than thinking) practices 'that systematically form the objects of which they speak' (ibid:49). As such, language becomes a machine that produces and constitutes the social world (Jørgensen and Phillips 2002) and a site

of observing biopower at work (van Dijk 1993:259). The individual perceptions of the 'objective' reality are mediated by discourse and continuously (re-)constructed (Berger and Luckmann 1991). Discourses are constituted in language although not limited to it, e.g., Link (1983 in Jäger and Maier 2016:111) noticed that a non-linguistic acting also may reproduce the dominant ideas. Discursive approaches see language as a social practice, which represents the process of creating meanings. Fairclough (2013b:59) argued that 'language is the material form of ideology'. The ideas are sustained and developed within language, hence, discourse is a 'a pre-condition for thought' (Burr 2015:10), which constructs world perceptions among its speakers. That is why oral and written texts are central objects of scholarly analysis.

Foucault (2013) noticed that critical engagement with historical context is essential to understand a certain interpretation of reality as an object changes its meanings according to ideological, cultural, historical settings. As such, it is necessary to trace the narrative back, i.e. carry out 'archaeology' or 'genealogy' of knowledge (ibid.). Foucault emphasises that genealogical perspective is an essential tool for analysing those aspects of life that are often seen as without history; the examples are sexuality, health and other common routinised elements knowledge, which are commonly not thought about as the elements of a governance project (ibid:139). Hence, this perspective uncovers historically rooted relationship between society, power and knowledge allowing to understand how the meanings have become what they are today.

Following the discursive perspective, environmental problems are not objective facts but rather subjects of discursive struggles with active debates around their reasons and meanings (Lindseth 2006:25). Indeed, Carvalho (2005:2) argues that discursive processes are 'key in the constitution and evolution of environmental matters as scientific, social, and political causes'. As such, the approaches to the environment differ being dictated by the ideas about nature accepted in a given society as truth. Indeed, human-nature interactions do not always reflect the real state of the environment, for example, the climate change topic might be less of a concern in the places where its effects have been increasingly prominent, and be high on the public agenda in the localities with these effects are not that obvious (Lee et al. 2015). Hajer (1995:2) argues that the analysis of the environmental discourses is helpful to explain and manage the social response to the challenges posed by nature. The discursive perspective allows one to trace the collective production of the ideas about the environment, making sense of who and how contribute to knowledge (Feindt and Oels 2005:163), and identify power

dynamics, which shape environmental discourses and being reproduced through them (ibid:169).

Aiming to understand how and why the narratives of climate change are constructed, the study in its methodology draws on discourse analysis (DA). Situated under the umbrella of social constructionism, discursive approaches are concerned with how the reality is reconstructed in social world (Burr 2015). Appreciating contextual nature of discourse, i.e., political, cultural, historical settings the discourse is placed in, the scholars have argued for the interdisciplinary approach to discourse analysis and flexibility of the analytical procedure (van Dijk 1993, Meyer 2001). As to Meyer (ibid:15), DA 'is open to the broadest range of factors that exert an influence on texts', paying attention to the social matters outside the text as well as to the intertextual level, i.e., the influence of other texts on the narrative. Discursive approaches do not follow a specific set of rules and, opposingly to theories and models, are quite flexible and interpretative in their nature (Wodak 2001b). Hence, DA offers a perspective of observation, a framework, which is ultimately concerned with unravelling external influences on how a particular matter is referred to (ibid.).

In all diversity of discursive approaches there are two main directions of discourse analysis, 'linguistic' and 'Foucauldian', or 'micro' and 'macro' approaches, which address the relevant strands of SC discussed earlier in the chapter (Burr 2015). While the proponents of the 'micro' approach assume discourse is being created within the acts of speech, 'macro' analysts are concerned about the reflections of wider ideological settings in language. These two groups are commonly referred as constructionist and critical discourse analyses (Phillips and Hardy 2002), and also known as non-Foucauldian and Foucauldian (Feindt and Oels 2005). The theoretical considerations of the 'linguistic' or 'micro' approach embody the traditions of symbolic interactionism, linguistic and cultural studies with discursive psychology and conversation analysis being prominent representatives of the analytical strand (Burr 2015:181). From the 'micro' perspective, language is seen as an instrument of the pragmatic production of meanings. For instance, discursive psychologists argue that meaning is created within an interaction itself, therefore, the text is an only thing to focus on to analyse meaning. The approach has been criticised for limiting its analysis to text alone as the outside factors that may influence language remain overlooked (e.g., Jäger 2001). The 'macro' perspective, in turn, focuses on the context arguing that it is power dynamics in a given society that determine meanings the matters are assigned in text.

Critical Discourse Analysis

Attempting to make sense of the reasons behind the climate change discourses in the three CA countries, the present study follows the 'macro' perspective, which is at the core of Critical Discourse Analysis (CDA). Considering the authoritarian political settings in the studied localities, the methodological framework focused on the impact of power dynamics on discourse production is seen as particularly beneficial for the research project. Indeed, several studies have argued that ideological concerns and private interests of the political elites are the key mediators of the environmental discourses in the authoritarian states (e.g., Poberezhskaya 2016, Schreus 2018), in particular, in Kazakhstan (Koch and Tynkkynen 2021, Poberezhskaya and Bychkova 2022).

In relation to discourse, the term 'critical', albeit a common misunderstanding (Chilton et al 2010), does not signify criticism per se or negativity but rather encourages more profound understanding of society (Wodak and Meyer 2016:6). CDA looks at the contradictions in and between discourses, at the limits that establish what can be said (and when) and why particular statements become relevant and others are discredited (ibid.). Critical discourse approaches encourage researchers to look at the world's matters recognising their social embeddedness, i.e., subjectivity, and to see the meanings given to the objects as ideologically charged (ibid.). CDA emerged in 1991 as an outcome of a symposium in Amsterdam (Wodak and Meyer 2016:4). Norman Fairclough, Ruth Wodak, Teun van Dijk, Gunther Kress and Theo van Leeuwen came together willing to aid liberation from the forms of domination by producing knowledge about how the exercises of power are embedded in everyday social occurrences (ibid:7). In other words, 'critical research is oriented towards the reduction of illusion in society itself' (Sayer 2009:769).

As it is becoming evident from the above, Foucault's concern with the matters of power and knowledge is a foundation for the critical discursive studies. Ultimately, critical scholars inquire whether and how ideology impacts the meaning, and the ways linguistic expressions are used as tools to exert ideology. In other words, CDA looks at 'the function of discourses in the bourgeois-capitalist modern industrial society as techniques to legitimize and ensure government' (Jäger 2001:34). Being influenced by the Frankfurt School and Western Marxism, CDA is a mixture of epistemological stances of critical social theory and critical linguistics (Wodak 2001b:3). In particular, it has been informed by discourse analysis of Jurgen Link with

his attention to the function of language in the governance project (Jäger 2001). In this perspective, discourse is 'an institutionally consolidated concept of speech in as much as it determines and consolidates action and thus already exercises power' (ibid:60). The authority and control are reproduced through language, in this way, critical discourse analysts 'take explicit position, and thus want to understand, expose, and ultimately resist, social inequality' (van Djik 2001:352). Following Foucault, CDA seeks to explain how the micro levels of discourse - language, text, and speech acts – are influenced by the macro level of power and dominant ideologies. CDA expresses political commitment as highlighting the ways 'social power abuse, dominance and inequality are enacted, reproduce and resisted by text and talk in the social and political context' (ibid.).

In critical discourse studies, discourse is commonly understood as a form of 'social practice', or language expressed in speech and writing (Fairclough and Wodak 1997:258). That is, in line with Foucauldian thought, language is seen as a key tool to produce (ideological) knowledge (Jäger and Maier 2016:113). However, there are debates on what expressions should be considered discourses. Commonly, a text is considered a materialisation of discourse and becomes a central object of discourse analysis, indeed, some scholars see a text and speech as ultimate representations of discourse, a view typical in a discourse-historical approach (e.g., Reisigl 2017). Others, however, expand the definition to the whole spectrum of social, i.e., non-verbal, representations such as acts, images and objects (e.g., Jäger and Maier 2016). Another important dimension of discourse is intertextuality, or awareness about the processes of production and consumption of the texts. Indeed, van Dijk (2001:358) defined discourse as a 'text situated in context'. Fairclough (2013b) suggests that CDA should ask how the construction or understanding of the text is influenced by the experiences that people get from reading other texts. For instance, while analysing the media text, a scholar should be aware of the influences of the primary sources used for the publication, and how the issue was reported in other media outlets. Fairclough (ibid:94) proposed an idea of three-dimensional discourse analysis where discourse is seen simultaneously as 1) a language text, spoken or written, 2) discourse practice, 3) sociocultural practice. The text is the core element of the model, and it is placed in a context of discursive practices such as text production and consumption. A text and connected practices are situated in sociocultural context, that is, all aspects of texts, i.e., grammar, vocabulary, structural organisation, writing style and genre come as sites of observing the influence of the social. Furthermore, any discourse method should pay attention

to both micro-events and macro-structures: 'micro' interactions cannot be analysed just as local discourses because they contribute to and shape bigger contexts and vice versa (Fairclough 2013). In particular, scholars bring attention to historical factors, given that discourses constantly change over time (Wodak 2001a, Jäger and Maier 2016). Last, van Dijk (2001:354), add that to understand how the text is formed, attention should be given to the relation between the text and the author's position in a wider social context, i.e., considering those private interests and ideological standpoints held by the actor.

Wodak and Meyer (2016:17) in their overview of critical discourse scholarship emphasise the diversity of approaches and research enquiries possessed by the scholars ranging from those based on linguistics (e.g., discourse-historical approach, social actors approach) to rather generic theories like post-structuralism and cognitive psychology (e.g., sociocognitive approach). Wodak and Meyer (ibid.) point up that just like all DA approaches, CDA does not follow a rigid methodological framework, rather, the researchers are invited to combine several analytical methods tailoring them to a particular object of studies. In their systematic overview of critical discourse scholarship, Wodak and Meyer (ibid.) part with the notion of CDA offering the term Critical Discourse Studies (CDS). Indeed, van Dijk (2013 in Wodak and Meyer 2016:6) insists to 'do critical analysis by formulating critical goals, and then explain by what specific explicit methods you want to realise it'. Thus, the choice of the perspective depends on the research questions that are raised and on the methodological tools that are on hand.

Wodak and Meyer (2016:17-20) outline the methodological points the proponents of different critical approaches agree about. They share the interest in how power and ideologies are constructed, how politics and hierarchy are built and maintained. Following critical theory, CDA explores social inequalities and the mechanisms of control looking at the linguistic means. Critical analysts work eclectically as they adopt and mix theories of various spheres and ranges. They work interdisciplinarily aiming to explain complex social phenomena. The connection between theory and discourse in CDA can be described as circular model, where the theory, methods and analysis are closely interconnected and affect each other. As such, not only does theory define the research questions and data analysis, but it should stand on the prior interpretations of data. As to the data, although the methods of data collection vary, commonly researchers work with already existing materials (written texts, recorded speeches). However, ethnography and fieldwork are becoming more common as researchers point at the limitations of using only existing textual data.

Jäger and Maier (2016) see the flexible character of CDA as an advantage and argue that researchers should 'develop a thorough theoretical understanding that underlies their methodology and – on this basis – to innovate, adapt, mix and match the methods as it fits their research purpose' (ibid:134). Although a wide scope of options may be confusing for the researcher, Phillips and Hardy (2002:74) emphasize that the strong point of CDA is that it gives space for the researcher to create a unique method which best addresses the research question. Notably, Hovden and Lindseth (2004:78) notice that CDA toolkit is particularly advantageous in making sense of climate change discourses.

Criticism of CDA

A word should be said regarding criticism faced by critical discourse approaches. As such, some argue that CDA is too linguistic or not linguistic enough, others accuse the approach of being too interdisciplinary (Wodak and Meyer 2016). Also, Schlegoff (1998) questioned the ability of CDA to provide detailed and systematic analysis of texts. Furthermore, it is claimed that critical analysts do not consider the role of the reader in the consumption and interpretation of text (van Noppen 2004).

However, the biggest criticism addresses the validity of CDA since the discipline emphasises subjectivity of knowledge and meanings viewing them as produced and filtered through power relations. Also, Abrams and Hogg (1990) questioned the assumption that CDA scholars are especially well qualified to identify and help marginalised groups. For example, if there is no objective truth and all discourses are equally valid, how one can justify that some people are oppressed and that a certain group has a privilege over others. Addressing this, Jäger and Maier (2016) emphasise that critical discourse studies do not claim to produce objective knowledge as the scholars themselves are impacted by power dynamics. Rather, critical discourse scholarship sets to challenge existing ideological settings and perceptions of the matters commonly accepted as truth. As such, being critical means to

> expose the evaluations that are inherent in a discourse, to reveal the contradictions within and between discourses, the limits of what can be said, done and shown, and the means by which a discourse makes particular statements, actions and things seem rational and beyond all doubt, even though they are only valid at a certain time and place. (p. 122)

It is this process of creating and sharing knowledge that contributes to tackling social inequalities and oppression (Wodak 2001b). In this light, to increase validity of critical discourse scholarship means an openness to different takes on a subject produced within various discursive settings. As such the scholars should adopt 'a democratic attitude, meaning that researchers, audiences, and other actors […] try to understand each other and are open to modifying their position' (Jäger and Maier 2016:126). As to validity of an individual study, a researcher needs to make sure that it is comprehensive and transparent by keeping apart description, interpretation and explanation stages of analysis to enable transparency of the work (Wodak and Meyer 2016).

Last, critical analysts have been accused in spreading doubt regarding realness of the environmental issues and objectivity of scientific knowledge. Considering the environment a product of discourse and viewing all its interpretations as equally valid, CDA scholars sometimes happen to raise uncertainty about a given matter without having any actual evidence at hand (Jäger and Mayer 2016:14). This contributes to suspicion about scientific research (Donnelly 2008:488) and initiates counterproductive debates, in particular, on climate change (Boykoff 2008:89).

Developing the methodological framework

The critical discourse approach adopted for this study is informed by the two scholarly works, the ones of Carvalho (2008) and Jäger and Maier (2016), which are both drawing on Foucauldian concept of power/knowledge in making sense of climate change discourse. These perspectives complement each other as the scholars generally agree about the idea and mechanisms of discourse but bring attention to its different aspects. As such, the present analytical framework takes an advantage from Jäger and Maier's (2016) guidance on the data selection and sampling, while employs the toolkit for a textual analysis suggested by Carvalho (2008). The key ideas of the scholars used in the present project are outlined below.

CDA framework introduced by Jäger and Maier (2016) is arguably the closest interpretation of Foucault's power/knowledge concept (Wodak and Meyer 2016). It is also particularly appealing to the present study on climate change discourses given its focus on knowledges, in particular, scientific ones. The scholars seek 'to identify the knowledges contained in discourses and dispositives, and how these knowledges are connected to power relations in power/knowledge complexes' (Jäger and Maier 2016:123). Knowledge is seen as

constitutive of and constituted by discourse. It is also conditional as it derived by actors from discourse. As such, the notion of 'truth' varies depending on circumstances of place, time, class, cultural heritage etc.

The scholars bring an idea of 'dispositive analysis', where dispositives are the structures of knowledge that constitute reality. They include both linguistic and non-linguistic practices in their analysis following the idea expressed by Foucault (2013:54) in the Archaeology of knowledge that discourses form the objects of which they speak, and non-linguistic practices and materialisations offer the objects which discourses can speak of. The scholars differentiate between explicit knowledge, which can be verbalised and analysed via CDA, and tacit knowledge, that cannot be expressed in language being constituted in practices and materialisations. In the present study, explicit knowledge reflects the analysed texts, while tacit knowledge, i.e., non-verbal materialisations of discourse, is considered an element of a social context (Carvalho 2008), which was observed during the fieldwork in the region.

Furthermore, the scholars offered some extremely useful guidance on data selection, in particular, how to create sample data from different discourse planes, i.e., 'social locations from which speaking takes place' (Jäger and Maier 2016:128). They also pointed to the benefits of comparing various planes, e.g., those of science, politics and media, to make sense of how and why a certain matter is assigned a certain meaning (ibid.). As to the program of the analysis of text itself, it is not explicitly detailed. The scholars suggest that the analysis should cover the following aspects: 1) context; surface of the text (structure); 2) rhetorical means, content and ideological statements; 3) discourse position and overall message of the article; 4) other important peculiarities (ibid:130).

In turn, Carvalho's framework is beneficial for the present study in several ways being explicitly analytical, i.e., consisting of a set of categories, following which the scholar can offer a logical, structured description of a given matter. It also highlights the ideological aspect of how the meaning is created, and, last, it is suitable for analysing larger samples of texts, which is a crucial for this study considering its ambition to make sense of various types of textual data in the three countries. Carvalho (2008) offers an approach to textual analysis informed by the aforementioned main points of CDA (Wodak and Meyer 2016), yet points to the number of matters overlooked by the critical scholars. Those are discursive strategies, effects of discourse inside and outside the text, and a time plane. Discursive strategies are techniques used to make

a certain understanding of a matter dominant in a given society, i.e., *how* the meaning is created (Carvalho 2008:164). Then, discourse can have effects on a discussion around a given matter and also has an impact at the institutional levels and mediate actions (ibid:165). Last, a time plane is a temporal context of a given discourse, which helps to make sense of how and why the topic has evolved into what it is now (ibid:163).

Carvalho (ibid:164) also highlighted the role of actors in the production of discourse. Just like Fairclough (2013b), she pointed to the role of the author in the creation of meanings, and the fact that their position is prone to be influenced by more powerful actors. As such, it is important to look for the representations of hierarchies in-text. However, she noticed that the discursive strategies employed by those actors, i.e., how the issue is narrated to be given a certain meaning, has been overlooked by the scholars. Discursive strategies reflect ideological standpoints, i.e., interests of the powerful ones, hence, it is important 'to study the ways they [powerful actors] and their standings are represented' (Carvalho 2008:165). Indeed, Jäger and Maier (2016:130) only mentioned discursive positions of the actors, i.e., acknowledged hierarchies and influences of the private interests on discourse, however, they did not discuss how those are to be uncovered.

Both scholarly works draw attention to the contexts of discourse, present and historical. While the multitude of the current opposing discourses challenge each other mediating the dominant understanding of a given matter, the historical context is key in shaping the standings existing today. Indeed, 'each topic has a genesis, a historical a priori' (Jäger and Maier 2016:126), and the researcher should consider the time plane of discourse and perform both synchronic and diachronic analyses of texts. As such, 'the 'biographical' study of social and political matters can therefore help make sense of the arrangements that govern us' (Carvalho 2008:163). However, the limitations of the present study do not allow longitudinal examinations due to a number of considered discourse planes. Indeed, Jäger and Maier (2016:133) notice that 'an analysis of the history, present and future of overall societal or even global discourse is an enormous endeavour and can only be tackled in the form of many single projects'. The synchronic perspective, i.e., comparison of the current narratives, is fully considered in this study. However, the limitations of the study do not allow to grasp the full historical account of the climate narratives in CA, i.e., to perform thorough historical discourse analysis. The matter is addressed, however, by including the contextual dimension in the

methodological framework. The historical context derived from the relevant literature and expert interviews is an important factor informing the present analytical procedure.

Last, Carvalho (2008:165) calls for more attention to the discursive effects, the processes happening outside but explicitly linked to discourse. While an intertextual approach (e.g., Fairclough 2013b) considers the effects of ideologies on texts, it overlooks the social effects produced by discourses. In turn, texts themselves have a potential to influence the narrative established in society, and the discourse analyst should look for these correlations. The scholar notices, however, that such effects are occasional, produced over time and not by one single text (ibid:166). While the present study is aware of the matter, it is not among the key objectives to capture these effects.

The analytical framework for the present study, therefore, consists of the preparatory steps for critical discourse analysis (steps 1-4) offered by Jäger and Maier (2016:133), and the framework for a textual analysis (step 5) offered by Carvalho (2008:167). Notably, there are a few minor adjustments, which stem from the specifics of data; those are discussed in chapter 3. The steps followed through the analytical process are outlined below.

1. Choosing a subject matter
2. Choosing and describing a discourse plane and sector
3. Assessing the materials
4. Sampling a data
5. Textual analysis
   - Structural organization of the text
   - Objects
   - Actors
   - Language, grammar and rhetoric
   - Discursive strategies
   - Ideological standpoints
   - Context

Some words on the analytical process.

First, a subject matter should be clarified. The subject matter is a phenomenon that a researcher finds interesting and a departing point of the study that directs the choice of methods and data.

Following suggestion of Carvalho (2008), research questions are not defined at this point to do a first 'open' read of texts without the prejudices and to be able to grasp the striking aspects of the discourse.

The next step is choosing discourse planes and sectors and characterising them. Discourse planes are the social locations from where speaking takes place, e.g., science, media, politics, everyday life (Jäger and Maier 2016:128). Sectors are the elements of discourse plane, for example, press is a sector of a mass media discourse plane. At this stage, the analyst narrows down the data deciding on discourse sectors, geographical locations, and time plane of the analysis. To describe a discourse plane means to provide its general characteristics like political orientation of the data source, its audience, and circulation. The scholars (ibid.) advice to choose several sources in each discourse sector from one or several countries covering an extended period.

The next step is a rough structural analysis of all texts from the chosen discursive sector (ibid). Carvalho (2008), however, moves this process to the later stage of analysis and brings some add-ins, i.e., proposes to look at the structural organisation of texts after sampling data. As to Carvalho, primary analysis should be attempted as an open-ended reading of some texts from the chosen fairly long period of time (ibid:167). The open reading should be done before defining any research questions and hypotheses, as it allows us to identify striking issues/omissions in texts. The rest of the texts are scanned across headlines and first paragraphs to capture the main message of the text. As an open-ended reading has a potential to uncover authentic or unexpected characteristics of the discourse under analysis, the study follows the suggestion of Carvalho (ibid.).

Next texts are selected for a fine analysis. Those may be texts, or parts of texts, that deal precisely with a topic of an interest (Jäger and Mayer 2016:126). CDA is applied to a relatively small amount of data (Wodak and Meyer 2016), and the only rule is that a final sample should include as many texts that is enough to cover the typical characteristics. As to Jäger and Maier (2016:134) for a fine analysis, a researcher should select the texts that are most typical for a source. Selection can be done departing from the most common argumentation, headlines, illustrations etc. Instead, Carvalho (2008) suggests limiting a dataset by doing an analysis around 'critical discourse moments'. They are 'periods that involve specific happenings, which may challenge the 'established' discursive positions' (ibid:166). They appear on the discourse

planes intensively for prolonged period of time and may cause changes in discourse. These periods mark key topics and actors and determine the development of a discourse. After some time, the amount of novelty decreases, and it does make sense to jump from one critical discourse moment to another when doing CDA. As environmental discourses are very much depending on such moments (e.g., Carvalho and Burgess 2005, Boussalis et al. 2016), this approach to data selection is adopted in this study.

When texts are selected, they are analysed in detail. Layout and structural organisation of the text play 'a key role in the definition of what is at stake, as well as in the overall interpretation of an issue' (Carvalho 2008:167). As mentioned earlier, in this study it is not possible to assess the layout fully given the specifics of the media data (i.e., online versions of the media articles do not reflect on the position of the text in the print version of a newspaper). However, some 'surface' elements of a media text are still examined, e.g., headlines, the section of an online version of an outlet an article is placed into and, where available, images. Next, language, grammar and rhetoric are important tools in the construction of meanings. A particular vocabulary, metaphors, writing style, word order, direct and indirect speech help an author to communicate a certain idea about a given matter (Carvalho 2008:168). These linguistic features were closely looked at through the analysis of all data collected for this study.

Then, it is time to identify the objects, i.e., the topics central for a given discourse. In doing so, the researcher should be aware that a single topic interpreted differently may be a part of several discourses, or the topics from the different spheres of life may be parts of one narrative, i.e., 'discursive knots' mentioned by Jäger and Maier (2016:123). Paying attention to the links between the objects from different fields, or 'storylines' of Hajer (1995), is helpful to uncover the political standings of the author or of the source where the text is published.

Next, Carvalho (2008:170) brings an attention to the discourse positions, or ideological standpoints, arguing that they are 'possibly the most fundamental shaping influence of a text'. The scholar advises to do a fine analysis of texts constantly asking questions of how the ideological component affect rhetoric, and arguments, vocabulary of an article, and the roles of actors quoted in text (ibid:168). The role of actors is important as their presence in text shapes overall meaning of the text and influence a perception of it. At the same time, a text constructs the image of the actors and defines their identities in the eyes of a reader (Fairclough

2013a). Actors are both subjects and objects of discourse as they 'do things' and at the same time they are 'talked about'. Also, discursive strategies of the actors deserve a closer look. Discursive strategies are 'forms of discursive manipulation of reality by social actors, including journalists, in order to achieve a certain effect or goal' (Carvalho 2008:169). Through such strategies, social actors frame a topic, or to shape it in the way that is in their own interest. As discursive strategies are capable to shape reality, investigation of them becomes an important task of discourse analysis. It is especially appropriate to the analysis of media where the strategies of external actors filtered through the ideological standpoints of a media outlet. Discourse analyst thus should explore how the strategies of the actors are reproduced, shaped or excluded.

The last stage of analysis is a final assessment of a discourse position of a source and of its influence (Jäger and Maier 2016:137). Also, at this stage, an analyst seeks to find out how texts impact the whole discursive field and how they may shape connected fields of action. Carvalho (2008:165) calls such impacts extra- and supra-textual effects of discourse – 'inside' effects on discourse development and 'outside' effects on the actions, respectively. There is a further advice on the procedure of critical discourse analysis. The analyst should be aware about 'discursive limits' of the text, i.e., about sayable and unsayable elements of a narrative (Jäger and Maier 2016:125). Indeed, Carvalho (2008:170) notices that a 'silence can be as performative as discourse'. Also, Jäger and Maier (2016:126) mention that a single text can constitute multiple discourses, or multiple meanings can be referred to a single object forming 'discursive knots'. These can be quite challenging for an analyst to disentangle and, indeed, to offer clear analytical description of the body of texts linking the meanings to the objects.

As acknowledged earlier in the chapter, critical discourse scholars are themselves subjects of discourse, i.e., their personal viewpoints shape interpretations of findings. In this light, it is worth acknowledging the perspectives on climate change, authoritarianism and democracy, which underpin this study. Global climate change is seen here as a process driven by human activity, yet, negatively affecting the environment, social security, global economic development and so forth. These effects are particularly evident in CA, a region highly vulnerable to climate change. While being a physical issue, understanding the meaning assigned to it within particular social settings is important as the ideas dictate actions taken to address the matter. Indeed, authoritarian political regimes in the studied countries limit the effectiveness of national responses to the issue as the hierarchical nature of decision-making

with limited inclusion of non-state actors result in the narrative about a physical issue reflect the viewpoints of the political elites (see Poberezhskaya and Bychkova 2022). Considering the resource-based developing character of the national economies, the dominant narratives may lead to deepening environmental crisis (Sabyrbekov et al. 2023). It worth mentioning, however, that despite the dominance of the government's rhetoric in the three CA states, the present project considers the narratives of non-state actors. This is done not only to deepen understanding of the dominant actors' ideological standings, but also to vocalize marginalized voices promoting democratization and public agency in the region (see Pickering et al. 2020).

Conclusion

The present study is placed in the theoretical perspective of social constructionism with its emphasis on the social processes, which shape the meanings assigned to objective reality. Informed by the idea of ideological nature of discourse and knowledge (Foucault 2019), the project looks at the textual representations of power dynamics, which mediate notions of 'truth' and the perceptions of reality. Discourses are conceptualised as societal flows that materialise in language and, shaping and being shaped by the social, constitute knowledge and sustain power. The methodological approach is Critical Discourse Analysis. Following the idea that discourses are the 'language in use', the study analyses written and spoken texts. Indeed, Fairclough (2013a) points out that since power is embedded in discourse, all language interactions and actions are potentially ideological. Recognising this, the analytical strategy adopted from the ones of Carvalho (2008) and Jäger and Maier (2016) seeks to uncover the ideologies behind the construction of discourse. Foucauldian discursive framework may be especially useful in the environmental perspective as it allows us to identify knowledges contained in discourse and how those are connected to the dominant power. It reveals the techniques through which the dominant interests are released and allows to critique power/knowledge formations behind the interpretations of the environment (ibid:14). Feindt and Oels (2005) add that criticality towards the idea of the objective truth and the interest in democratisation of science production and policymaking possessed by critical analysts are the characteristics of CDA, which make the approach particularly useful in making sense of the environmental knowledge production. Also, an awareness about the diachronic perspective of discourse (Carvalho 2008) is important when inquiring climate change, the topic reflective on the changes in science, politics and economics. Critical discourse framework therefore benefits the understanding of environmental discourses and uncovers how the discourses mediate social

norms and the ways of acting. Ultimately, it asks whether environmental policies are focused on the protection of nature or 'rather about a redistribution and reconfiguration of power in the name of the 'environment' (Feindt and Oels 2005:163). The next chapter discusses empirical application of these ideas.

Chapter 3. The data: selection, collection and analysis

This chapter addresses the empirical part of the research. It describes the empirical data used in the study and specifics of applying the critical discourse analytical approach in making sense of climate change narratives in the three CA countries. As explained earlier (see chapter 2), the analytical framework grounded in Foucauldian (2019) argument about the role of power in discourse production is an advantageous tool to examine the processes of meaning-making around climate change (Carvalho 2005). Looking at the textual representation of climate change in various discursive fields, i.e., those of politics, science, media and NGOs, the project analyses official documents, media articles, and expert interviews across the three countries.

It should be noted that interviews are viewed here as texts, consequently, all the data was treated using a single methodological framework As Fairclough (2013a:12) argued, in CDA texts are 'to be understood in an inclusive sense: they are not only written texts but also conversations and interviews, as well as the 'multi-modal' texts […] of television and the internet'. Notably, examining different types of textual data is thought to enhance the depth and accountability of CDA studies (Wodak and Krzyzanowski 2008). The rest of the chapter discusses the processes of data selection, collection, and the specifics of analysis across the aforementioned discursive fields. It also discusses limitations, ethical aspects and the matters of validity and reliability for the present project.

The case studies

Attempting to grasp on the diverse climate change narratives in CA, the three region's countries were selected for the present research: Kazakhstan, Uzbekistan and Kyrgyzstan. While commonalities in vulnerabilities to climate change and politico-economic environments

provide a ground for comparison, there are sizeable variations in economic and political structures, which shape national climate discourses *(see Table 1)*.

While the three countries contribute relatively little to climate change (less than 1% of global GHG, IPCC 2022), the region features one of the world's highest levels of vulnerability to the issue. The pace of global warming is higher than the global average with temperatures across the region increasing by 1.5 C since the 1990s (ibid.). The countries' arid continental climate and landlocked position exacerbate freshwater availability challenges and extreme weather events such as heatwaves and floodings, which impact socio-economic development and intensify regional security issues (Chikalova 2016). The three case studies are developing economies with several common challenges dictated by the resource composition and a shared historical past. The collapse of the Soviet Union disrupted established supply chains and markets and left the countries reliant on a limited economic source (Heathershaw 2010). A pressure to address economic challenges and shift from centralised to capitalist market-based type of economy led to expansion of the resource based industries with limited attempts to diversify revenues. Given the economies being reliant on agriculture and resource extraction, climate change effects jeopardise the prospects for development across the region. The region's past have had an array of implications beyond an economic aspect, which are pronounced in the present approaches to governance. The global and regional security challenges along with weakened domestic political stability resulted in all CA states adopted authoritarian approaches to governance (Matveeva 2010). While the three states have been incorporating liberal rhetoric of the West, 'continuity of strong rule, avtoritet [authority] and stabilnost [stability]', the central values of the Soviet political regime continue to constitute approaches to governance (Buranelli 2020:1010). While the countries have been increasingly vocal in global climate politics, environmental approaches of the former SU still characterise national climate action (Sabyrbekov et al 2023, see also Farmer and Farmer 2001).

There are significant differences across the aforementioned aspects, however. Kazakhstan features the region's most developed economy powered by crude oil exports (IEA 2022a, see also Vinokurov et al. 2022). Furthermore, the country possesses significant revenues of natural gas, uranium and other hydrocarbons/minerals, and is the region's largest grain exporter (ITA 2022). Kazakhstan's downstream position, however, make the country prone to heatwaves and droughts, which have been seriously affecting agriculture production and social security (ibid.). Uzbekistan is one of the world's largest natural gas producers with gold and cotton being key

export commodities (Vinokurov et al. 2022). Due to its geographical position, the country is particularly prone to water shortages, which along with increased periods of heat poses challenges to economic development and social stability (Yuldashevich 2020). Furthermore, the implications of the Aral Sea crisis are intensified by climate change affecting health of local population (22% of total CIA 2020). Kyrgyzstan is the poorest economy of the three, however, its upstream geographical position and mountainous nature make the country (along with Tajikistan) one of the region's key water suppliers and allow significant hydropower generation (IEA 2022b, see also Sabyrbekov et al 2023). Yet, these physical characteristics make Kyrgyzstan particularly hazard-prone with extreme weather events and altered river flows exaggerating social and economic security (World Bank Group and ADB 2021:5). As to the political regimes, all of the three states are considered authoritarian, however, the levels of freedom vary (Freedom House n.d., see also Lewis 2021). Kyrgyzstan possesses the region's highest, yet limited, levels of freedom of expression and political pluralism (Schmitz 2021), while liberal appeals in Kazakhstan and Uzbekistan remained essentially performative attempts to legitimise the political elites at national and global levels (Gallo 2021). Kazakhstan, however, has gone further in its neoliberal transition, with Uzbekistan being the most authoritarian state of the three (Freedom House n.d., see also Lewis 2021).

Table 1. The case studies: a comparative framework[4].

Characteristic/country	**Kazakhstan**	**Uzbekistan**	**Kyrgyzstan**	**Commonalities**
Economic structure (World Bank n.d.; Vinokurov et al. 2022)	GDP per capita: USD 29,328 Major industries: crude oil; natural gas; gold; uranium GDP composition by sector: Agriculture: 4.5%, Industry: 32.2%, Services: 63.3%	GDP per capita: USD 6,037 Major industries: natural gas; gold; cotton GDP composition by sector: Agriculture: 26.1%, Industry: 33.8%, Services: 40.1%	GDP per capita: USD 4,690 Major industries: hydropower; minerals; gold GDP composition by sector: Agriculture: 16.8%, Industry: 27.3%, Services: 55.9%	Developing economies sustained by natural resources
Energy sector (IEA 2021)	Coal (48.8%), oil (24.9%) natural gas (24.7%) hydro (1.2%)	Natural gas (85.9%), coal (5.3%), oil (7.9%) hydro (0.9%)	Coal (26.8%), oil (36.9%) hydro (28%) natural gas (8.4%)	Reliance on natural resources; SU infrastructures

[4] The data represents the 2021 agenda, i.e., the year when the data collection for the project was commenced.

Political regime - level of freedom (Freedom House 2021)	23/100 (not free)	11/100 (not free)	28/100 (not free)	Authoritarian governance
Vulnerability to climate change (IPCC 2022)	Intensified heatwaves and droughts; Economic risks due to global decarbonisation	Acute freshwater deficit - impact on the agricultural sector; public health risks	Extreme weather events - impact on the energy sector, infrastructures and social security	Landlocked position; arid continental climate

Official documents

The political discourse consists of two types of data: official documents and expert interviews with policymakers. This section discusses the analysis of policy texts, while the whole body of expert interviews are discussed later in this chapter. Policy texts play an essential role in governing climate change responses, indeed, Foucault (1980:72) viewed official documents as the channels of 'the governmental apparatus'. These documents represent the dominant views on what climate change is, define the matters associated with the issue worth of attention and dictate the 'right' ways of acting. Arguably, policy texts impact the reality more than other sites of discourse production given their authority and ability to guide the action of other actors (ibid.).

The selected official documents are mid- or long-term national development strategies serving as a foundation for the national climate policies. CDA requires an in-depth interpretation of texts and is not designed for an analysis of large data samples (Talja 1999:460). Hence, rather than being an exhaustive account of all relevant texts, the appropriate number of texts is the one that allows to us to comprehensively address the research questions of the study, i.e. why climate change is assigned certain meanings and what are the mechanisms of knowledge formation.

The data set covers national policy discourses from 2012 onwards, which is reflective of the rise of climate change concern in three countries (Vakulchuk et al 2022a). Upon a comprehensive search of all relevant documentation across the three countries the total of 14 documents were selected for detailed analysis (see *Table 2*). These documents contain the governments' vision of climate change and strategies aimed to address the issue. Not all of the

selected documents directly address climate change, for example, the key national legislations are rather the comprehensive national development strategies and only mention the climate matter (e.g., National Development Strategy of the Kyrgyz Republic for 2018-2040, Strategy Kazakhstan 2050: A New Political Course of the Established State). These are important to consider given that all national policies, including the climate ones, ought to correlate with the main vision of the national development (State climate policy expert, Zoom interview, 26 February 2021).

In Kazakhstan, the data selection was informed by the seventh national communication of the Republic of Kazakhstan (RK) to the UNFCCC (Ministry of Energy of the RK, 2017: 75-77), which outlines the key national legislations on climate change. Kazakhstan's new Environmental Code, which entered into force in July 2021 and presents the most up-to-date information on the state's approach to climate change, was also included in the analysis. As to Kyrgyzstan, the data set consists of the five documents and was informed by the third national communication of the Kyrgyz Republic under the UNFCCC (Government of the Kyrgyz Republic, 2016: 196-197). The Updated Nationally Determined Contribution of the Kyrgyz Republic passed in September 2021 was added to the data set as it outlines the most recent vision of the national climate action (climate policy expert, online interview, 16 June 2022). Last, four legislations represent Uzbekistan's approach to climate policy. The selection was informed by the first biennial update report of the Republic of Uzbekistan (Uzhydromet 2021:60-64). For further description of the documents, see chapters 4, 5 and 6.

Table 2. Analysed official documents

Country	**Year**	**Policy**
Kazakhstan	2012	Strategy Kazakhstan 2050: A New Political Course of the Established State
	2013	Concept of Transition towards Green Economy until 2050
	2013	Concept of Innovative Development of the RK until 2020
	2015	Plan of the Nation - 100 Concrete Steps

	2021	The new Environmental Code of the Republic of Kazakhstan (No 400-VI ЗРК)
Uzbekistan	2013	Program of actions for environmental protection of the Republic of Uzbekistan for 2013-2017
	2019	Concept of environmental protection of the Republic of Uzbekistan until 2030
	2019	Strategy for the transition of the republic of Uzbekistan to a "green" economy for the period 2019-2030
	2021	Updated national contribution of Uzbekistan to global GHG emissions reduction
Kyrgyzstan	2013	Program and strategy of the Kyrgyz Republic on Transition to Sustainable Development for 2013-2017
	2015/updated 2020	Priority Directions for Adaptation to Climate Change in the Kyrgyz Republic till 2017
	2018	National Development Strategy of the Kyrgyz Republic for 2018-2040
	2019	Program for the Development of a Green Economy in the Kyrgyz Republic for 2019-2023
	2021	Updated Nationally Determined Contribution of the Kyrgyz Republic 2021

The analysis was performed in several steps. As suggested by Carvalho (2008), it commenced with the open reading to get familiar with the text and obtain a general idea about the meanings constructed in the texts. It is also a necessary step to confirm the data selections, i.e. whether the text corresponds to the study's objectives (Jäger and Maier 2016). The second step is coding, which was initially performed via NVIVO-12[5]. However, it is then has become clear that the software does not capture all of the discursive features and, overall, allows less in-depth analysis of texts than it was desired. Indeed, the political scholars have argued that computer-based analysis is prone to limit interpretations of discourse (e.g., Charmaz

[5] NVIVO – a software package for qualitative data analysis.

2000:520). As such, additional coding and the following detailed analysis were performed manually and organised in Excel spreadsheets. The detailed analysis of each of the selected documents, as per the analytical framework based on Carvalho's (2008) interpretation of Foucauldian idea of discourse (see chapter 2), has focused on the following components. First, it is not only the topics mentioned in-text but also absences, i.e., what hasn't been said, that matter. Indeed, as to Foucault (2013), a discourse is not about objects and terms used in speech per se, rather, the limited viewpoints, which guide a selection of one meaning over another are the reflections of a discourse. Second, the actors mentioned in the text and their positions towards each other are reflective of the power dynamics in discourse. Third, the ideological standpoint of the speaker helps to identify the reasons the issue is spoken of in a certain way. Fourth, to answer how those aims were achieved I looked for discursive strategies, i.e., linguistic patterns used to build the argument. I also considered how linguistic and structural features of the text aid to construct a desired meaning. Regarding the historical element of the context, I identified discursive features, which I suggested to be linked to the countries' past. I then read to the relevant literature and raised these matters in the expert interviews. Overall, the analysis included both deductive reasoning, i.e., findings pre-informed by the theoretical and the scholarly field-specific literature, and inductive, i.e., the findings informed purely by texts. As a result, I identified the main narratives corresponding to climate change in the three countries, as well as explained the reasons behind a certain meaning was attributed to the issue, the mechanisms of meaning-making, and the key actors who lead the process/whose opinion became dominant. A similar process was followed in the analysis of the media texts and the interviews.

Media texts

Similarly to the political discourse, the data set for media narratives consists of written texts, i.e. newspaper articles, and expert interviews with media workers. The present section discusses the former. The objective underlying the selection of the articles was to capture the prominent meanings produced about climate change via the media sources. Given the present study is concerned with the ideological factors at play in the knowledge production, the data set encompasses the media sources with different political orientation and ownership, and captured the time periods when climate change discussions were the most intense, i.e. 'critical discourse moments' (Carvalho 2008:166).

The analysed media sources are the newspapers accredited by the respective governments and published online or in print. For each case study, three outlets were selected. The aim was to grasp the variety of climate change narratives; for this reason, for each of the given countries the selected media feature different types of ownership, i.e., owned by the government, national private and foreign private actors. The outlets also represent different political views ranging from pro-state to independent and critical coverage. Also, the data set captures internationally-oriented discourses aimed at the foreign actors. It should be noted that it was not always possible to clearly define the latter for each outlet as some of them have somewhat complex ownership. For example, the Astana Times was first established by the Ministry of Foreign Affairs of the Republic of Kazakhstan (Nussipov 2019), while nowadays being published by the NGO Guild of Independent Journalists, which exists under the Ministry of Communications and Information's mentorship. As to the media circulation, while the media with the highest circulation was considered, not all of the selected newspapers top the popularity rankings in the relevant countries. While the size of the audience is an important factor when considering the influence of media agenda on the formation of popular discourses, the objective of the present study is not to evaluate the citizens' beliefs but to understand whether (and how) the prominent narratives are linked to the ideological factors. Nonetheless, while the political attribution of the source is considered a priority criterium, the media data set for each country includes the most popular newspapers in each category of ideological standing, and one of those is the country's most read outlet. The total number of the analysed outlets is 9 (*see Table 3*).

Table 3. Analysed media sources

Country	**Newspaper**	**Description**
Kazakhstan	Kazakhstanskaya Pravda (KP)	broadsheet newspaper; the highest circulation in Kazakhstan; state-owned; in Russian
	The Astana Times (AT)	International-oriented; business; state-owned; in English
	Vlast.kz (Vlast)	critical coverage; privately-owned; in Russian
Uzbekistan	Narodnoe Slovo (NS)	State-owned daily with the highest circulation in Uzbekistan; in Russian

	The Tashkent Times (TT)	is a partially state-owned online media; in English
	Gazeta.uz (Gazeta)	privately-owned online independent; in Russian
Kyrgyzstan	Vecherny Bishkek (VB)	Privately-owned broadsheet newspaper; the highest circulation in Kyrgyzstan; in Russian
	The Times of Central Asia (TCA)	International-oriented; business; state-owned; in English
	Slovo Kyrgyzstana (SK)	State-owned and represents the government's views; in Russian

A word should be said about the relationship between the media and the state in the studied countries. Overall, the media industries are largely controlled by the government - in the global ranking of the press freedom, the three countries find themselves at the bottom of the list (RSF 2023a). Democratisation processes observed in CA over the past years were followed by an increase in media freedom (see chapter 1), however, this trend is rather erratic. In all three countries, the state control over media sources has deepened in 2022 (RSF 2023b). The independent outlets are a very limited occurrence across the three states with the exception of Kyrgyzstan, which has the most plural media landscape in the region (Konurbayeva et al 2022). Furthermore, in all three countries, political elites have power to control the coverage of the privately-owned outlets in direct and indirect ways. The detainment and violence towards journalists, while still happening, are of a rare occurrence (ibid.). However, there are multiple ways to influence the coverage by suppressing the independents financially (Nussipov 2019), questioning the validity of information or obliging the outlets to register within/under the state's institutions (CABAR 2022). That is, in the studied countries, media spaces are particularly prone to ideological influences despite the intentions to liberalisation expressed by the political leaders (Konurbayeva et al 2022). Hence, the analysed media discourses, with the exception of the ones found in the independent sources, reflect the government's narratives.

As Carvalho (2008) argued, critical discourse moments capture the most significant topics and actors occurring in discourse. Concerned with the readers' attention, media tend to cover the

events of a high public interest and those on the political agenda rather than purely scientific topics (Carvalho 2007). Hence, the peak moments of discussion represent the interplay between ideology and knowledge production highlighting those aspects of a social context, which have made the otherwise unpopular topic salient. To identify critical discourse moments for CDA, a preliminary content analysis of the media article available online was performed first. It was based on the searches 'climate change' and 'global warming' in the period between October 2015 and July 2021. The start date is informed by the data availability as some outlets, e.g., the Tashkent Times, were established in Uzbekistan in the late 2015. The end of the time period is a cut-off date for the project, July 2021, which reflects the time when the first study, the case of Kazakhstan, was conducted.

The primary search identified 1271 articles where climate change was the main topic of discussion. Overall, the media attention to the climate topic has been growing across the studied countries, which is explained here by the increased attention to the climate matter at the political level (Carvalho and Burgess 2005). Indeed, just like around the world (Schmidt et al. 2013), the political events, in particular, COPs, have attracted the highest attention across the analysed outlets. The attention growth, however, is non-linear with the attention spikes marking the events considered significant, which is also no different from the global tendencies of climate change reporting (ibid.). Media in Kazakhstan demonstrated the highest attention to the topic (564 articles in total, *see Figure 1*) followed closely by Kyrgyzstan (490 articles, *see Figure 3*). In Uzbekistan, despite the most stable growth of attention to the topic, the number of articles over the studied period is considerably lower than in the other two countries (217 articles, *see Figure 2*). This is associated with the country's political context as the climate topic has appeared at the government's agenda following the 2016 Presidents' change and it is this recency of the narrative that explains why fewer media publications exist on the topic. As to the newspaper's ownership and political stance, in all studied cases, the independent outlets critical towards the government's agenda tend to be more concerned with the climate change issue and keep the attention levels relatively stable, which is also a common pattern around the world (see Carvalho and Burgess 2005, Stecula and Merkley 2019).

The next step was rough reading of all selected articles to identify the periods during which climate change has received the most media attention. The articles where climate change was a central topic were selected from the periods featuring the highest coverage of climate change, i.e., discursive events (Carvalho 2008). The timeframe for analysis of each event was two

months, which reflects a short-termed character of the media attention to a given topic (Boussails et al. 2016) yet allows to accumulate the body of data sufficient for CDA (Wodak and Meyer 2016). The number of articles identified for the first case study, Kazakhstan, was an indication for the other two studies, and while the intensity of climate reporting in Kyrgyzstan was similar to Uzbekistan, the five events had to be covered to reach the desirable size of a sample (*see Table 4*). The total number of the articles selected for the detailed analysis (CDA) is 226**.** The time periods associated with the highest coverage predominantly reflect the high-level global climate politics events, in particular, national participation in the UN Climate Change Conference (COP21) in Paris attracted media attention in all three case studies. Besides the political discussions, in Uzbekistan, the 2019 and 2021 heatwaves received a relatively high level of attention. Notably, the selected discursive events do not necessarily reflect the intensity of reporting in the given year overall as the spikes of media attention are driven a particular event. Further specification of the discursive events and associated numbers of articles can be found in the respective chapters (see chapters 4, 5, 6).

Figure 1. Media articles mentioning 'climate change' or 'global warming – Kazakhstan

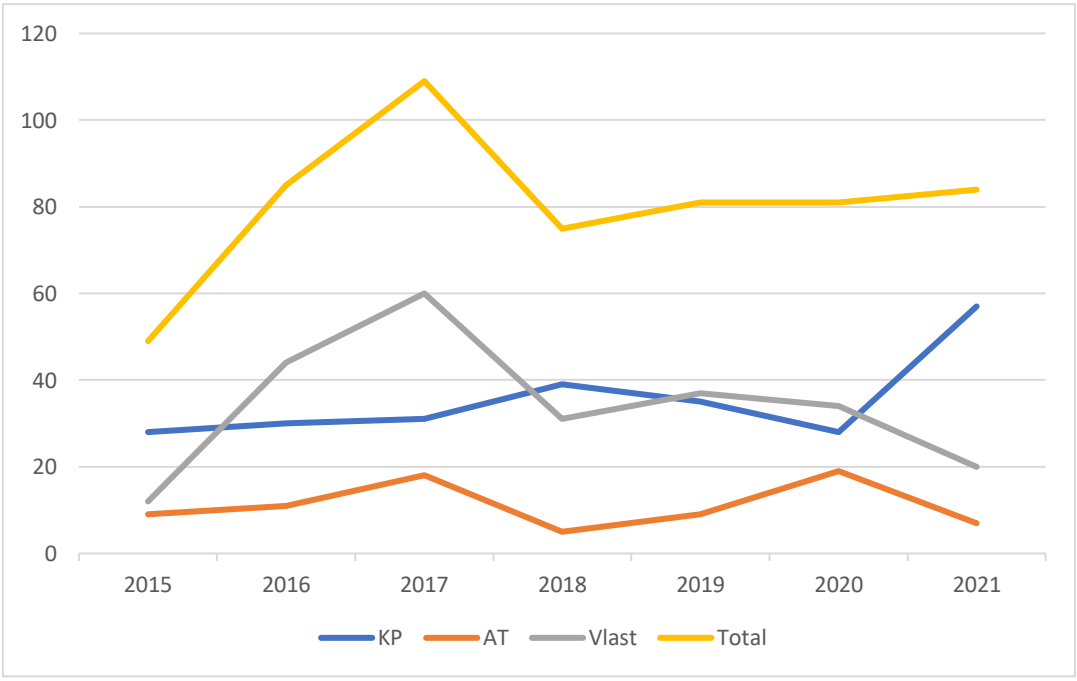

Figure 2. Media articles mentioning 'climate change' or 'global warming - Uzbekistan

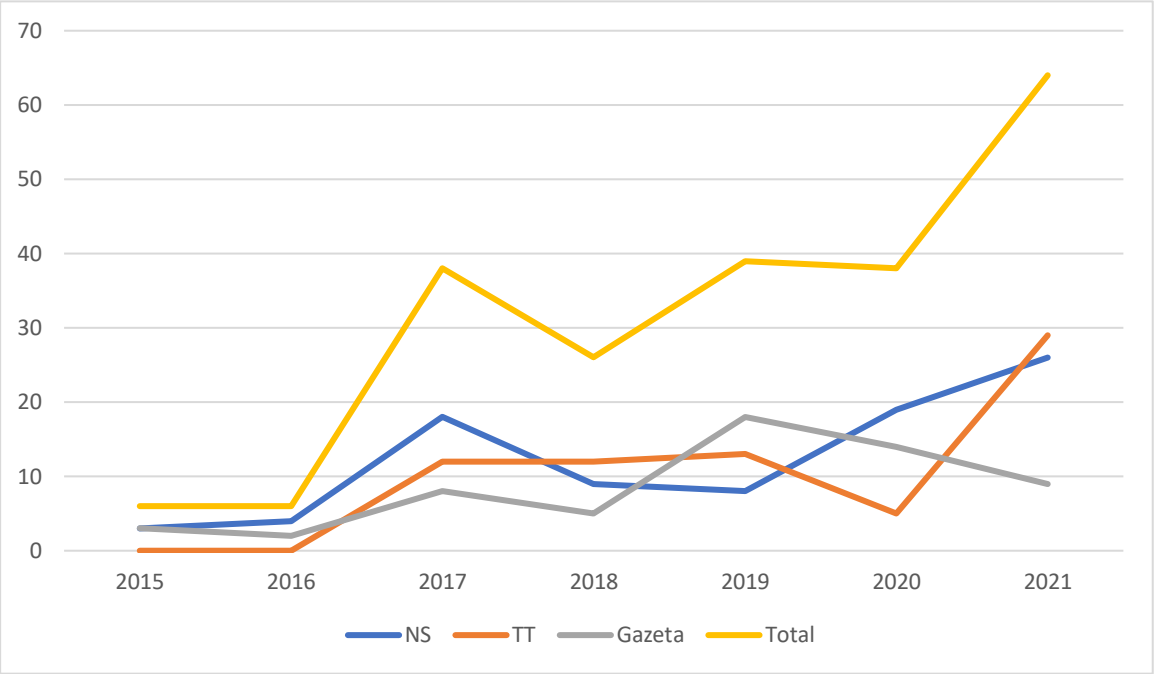

Figure 3. Media articles mentioning 'climate change' or 'global warming – Kyrgyzstan

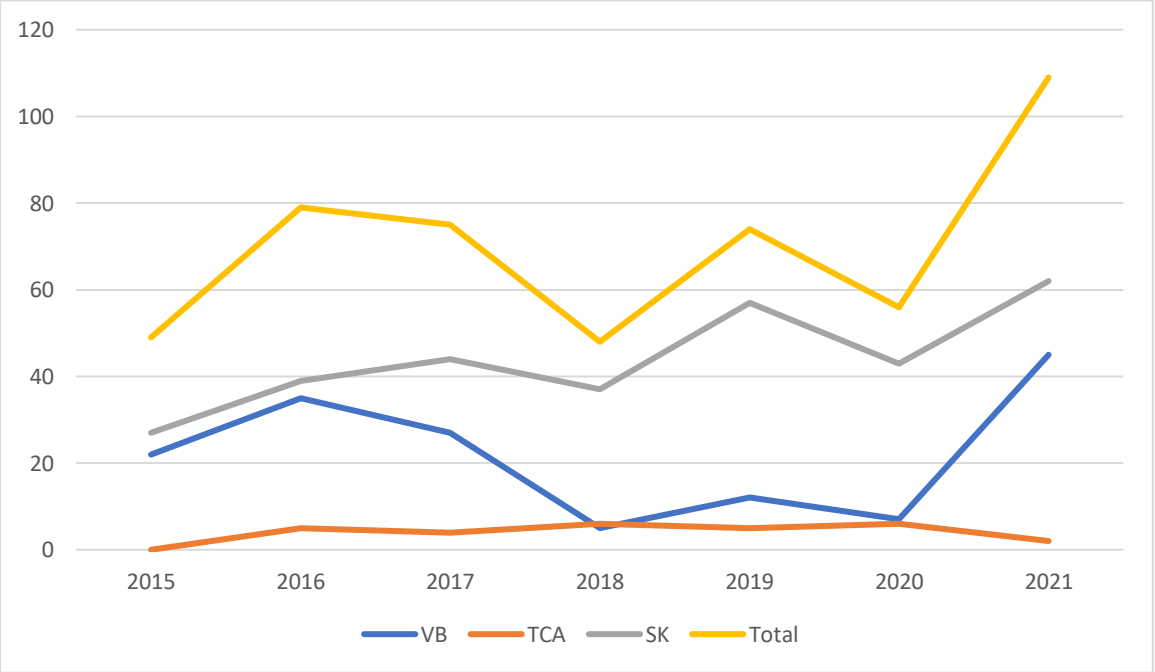

Table 4. Discursive events in media

Time period/country	**Kazakhstan**	**Uzbekistan**	**Kyrgyzstan**
	Climate Ambition Summit, 2020 Astana EXPO: Future Energy, 2017 The 21st Conference of the Parties, 2015	Paris Agreement signed, 2017 Paris Agreement ratification, 2018 The 2019 heatwave The 75th UN Assembly, 2020 The 2021 heatwave	Paris Agreement signed, 2016 Paris Agreement ratification, 2019 The 26th Conference of the Parties, pre-discussions, 2021
Total articles:	76	76	74

Expert interviews

The semi-structured expert interviews with the representatives of politics, science, media and NGOs were the invaluable source of data for the present study. As Frohmann (1994:120) noticed, CDA grounded in Foucauldian thought should look at the institutionalised acts of speech, i.e. at the expressions of those possessing or representing the dominant ideology. The present study follows Talja's (1999:460) argument that analysing the speeches of actors from the different groups regardless their institutional rankings is important as it allows to grasp the variety of interpretations of a studied object. The project looks at the national narratives, hence, it is important to involve the actors across the different sites of discourse production. Also, the inclusion of the non-state actors allows one to capture power dynamics between the actors, i.e., whether there are alternative discourses that have become dominant, and how the elites' agenda is received across other social groups (van Audenhove and Donders 2019).

In the DA methodological approach, a semi-structured interview with its open-ended questions and an absence of a rigid question guide is preferrable as it allows for the generation of new knowledge on the topic (Taylor 2013:62). When it comes to the complex matter requiring specific knowledge, e.g., climate change, expert knowledge is a preferable information source. As to Meuser and Nagel (2009:17-8), an expert is considered not only the one with a specific knowledge on the topic, e.g., climatologist, but also those involved in the

topic formation, either have power in decision making processes. As such, various actors involved in climate change discourse, i.e., scientists, policymakers, journalists and activists are viewed here as experts. Notably, in the social and political sciences, there is no fundamental difference between expert and elite interviews, rather, the concepts often overlap (Littig 2009). Since the present study aims to apprehend the interpretations of climate change rather than interested in scientific knowledge per se, the elites, i.e., policymakers are seen as the experts as well (ibid:99).

It should be noted that due to rather limited presence of the climate change topic at the national agendas (Mirzabayev 2023) the choice of relevant experts in each country was somewhat limited. For this reason, the number of the interviewees slightly differ across the three countries, and the actors with extensive expertise on the topic yet not fitting in the aforementioned discursive fields, e.g., the experts working for the international organisations' national branches were included in the analysis. Furthermore, many of the interviewees could not be allocated to a single area of the expertise, e.g., in Kyrgyzstan, environmental NGOs are heavily represented by climate scientists, and most of the media experts are climate activists (see chapter 7). Overall, the study draws on 43 interviews with 17 participants in Kazakhstan, 14 in Uzbekistan and 12 in Kyrgyzstan (*see List of interviews*). The obtained data is considered sufficient given the in-depth nature of DA (Taylor 2013:63), comparative nature of the present study, the project's timeframe, a limited presence of the experts in CA, and the use of the written texts alongside the interviews. The interview data collection was carried out between January 2021 and December 2022. The interviews in Kazakhstan and Uzbekistan were obtained in two steps, prior and during the fieldwork due to the restrictions associated with the COVID-19 pandemic. The fieldwork was held in June-July 2022 in Uzbekistan and Kyrgyzstan followed by the trip to Kazakhstan in December 2022, during which an additional data was collected.

In regard to data collection processes, the potential interviewees were recruited via email, which contained a brief description of the study and my own professional details, which allowed the experts to position themselves towards the topic and the actor (i.e. myself). Then, in case of interest, they were sent and informed consent form and a sample question list [see attached]. The core questions of the study were the same for the experts within each of the four groups, but were adjusted accordingly depending on the expert's specific knowledge (Littig 2009). The interviews were held both online and offline, with the former being the predominant

method of data collection. This is reasoned by the impacts of COVID-19 pandemic as well as by the geography of the interviewees, hence, the one-to-one video calls held via Teams and Zoom were chosen for practical reasons. Also, four interviewees have chosen to share their opinions in writing.

The interviews lasted for approximately one hour, with the minimum length of 40 minutes to the maximum of 1 hour 10 minutes. After being transcribed, the interview data was treated similarly to the written texts. The transcripts were coded manually and examined with a focus on the discursive objects, actors' positions, and interests served by the discourse, i.e., what actions are justified and what are disabled through defining the issue in a certain way (Carvalho 2008). Notably, Talja (1999:469) noticed the advantage of the interviews to reflect on absences, as for the analyst, it is easier to notice the informant's attempts to avoid a topic compared to when it is not mentioned in a written text (ibid.). This, however, does not apply to absences, which are the points-of-view a speaker is simply unaware of. Last, as mentioned earlier, the interviews hold an opportunity to generate more knowledge about the current and historical contexts outside the discourse (ibid.), that is, in the present study, it is through the interviews that Carvalho's (2008) call for more attention to synchronic and diachronic angles of meaning are addressed.

Reliability, validity and ethical considerations of the study

As mentioned earlier (see chapter 3) for a critical analyst it is crucial to recognise their own position within the processes of discourse production, i.e., that their findings are a subjective interpretation of a given matter (Wodak and Meyer 2016). While the project deals with the complex climate change topic, it places itself within political rather than physical academic disciplines. As such, the analysis does not attempt to make claims about climate change per se, rather, through the analysis of linguistic interpretations of the physical process, it aims to shed light on the ideological aspects of meaning-making.

This involves considering the multitude of opinions on the matter as equally valid and see those as linguistic expressions rather than objective facts. Indeed, 'all forms of talk and texts represent situated speech that provides evidence of the various ways in which a particular phenomenon can be approached' (Talja 1999:472). As such, the reliability in CDA does not come from the empirical side of the research but is rather concerned with whether the interpretations of the data are verifiable. To address that, the analysis encompasses diverse

discursive planes in each of the case studies (Wodak and Krzyzanowski 2008), and description, interpretation and explanation stages of data analysis were documented separately to enable transparency of the work (Wodak and Meyer 2016). Furthermore, the interviewed experts were sent the interview transcripts before its analysis to minimize any inaccuracies in the initial data set. As to the validity criteria, i.e., proving that the chosen research instrument is suitable for the study's inquiry, Wodak and Meyer (2016) suggest the analyst to perform triangulation procedures. This means verifying the findings across the multiple contexts those exist in, e.g., intertextual relationship across the variety of the analysed discourses as well as wider social and historical contexts. Also, the present study possesses theoretical validity as Foucault's concept of power and knowledge is widely used in the studies, which attempt to make sense of discursive dynamics around a certain meaning (ibid.). Also, the analysis of data included comparison with the literature within the scholarly field, and the experts were selectively asked about their own interpretations of the statements from media and legislations' texts as a part of the interviews.

Approaching the interview as a method of CDA, the researcher should be aware about their own impact on the narrative (Abell and Myers 2008). The interviewee's interpretation of climate change is not a pure knowledge but a meaning mediated by societal dynamics, including the expert's attitude towards the interviewee. Bogner and Menz (2009:68) advise a researcher to establish their own role in the interview and reflect on it during the interviewing process and data analysis. In the present project, the researcher's position outside of climate science, i.e., understanding of the matter's key processes, causes and effects yet limited knowledge about its specifics, in CA in particular, was communicated to the interviewees. This position allowed to lead the conversation with a minimal risk of the interviewee withholding the information anticipating that their ideas may be debated. Notably, there was a risk that the experts could see the interviewer as a possible critic (ibid.) given that the project is placed within political science. This could impact the experts' willingness to reflect on certain aspects of the topic, especially the political angle of climate change. To minimize this effect, the statements were kept neutral while some knowledge on the topic was still demonstrated to avoid the expert questioning the expertise of the interviewer (ibid). Furthermore, the presentation of the study during the recruitment process conditions the participant's attitude during the interview (Taylor 2013). The description of the project sent to the experts was as neutral as possible while not masking an ideological angle of the inquiry.

As to the ethical aspect, the conditions of anonymity and the aforementioned right of the expert to approve the transcript were essential to maximise the depth of the obtained data (Hammersley 2014). The interviewees were given an opportunity to choose whether they want to disclose their personal details or have them anonymized and were explained how the personal details are protected. Another important aspect is the rights of the participants during and after the interview, as such, the experts were explained the conditions of withdrawal from the study and the right to opt out from being recorded or stop the audio recording at any point of the interview. All participants have opted for anonymity, as such, in the following chapters, the general professional occupation, the country and the interview date are used to link a statement with a source of knowledge. Any mentions of individuals, organisations and other details, which could lead to disclosure of an expert's personality were omitted in this research study.

Limitations of the study

The timeframe is considered the main limitation of the project. Given that CDA requires an in-depth analysis of the data, the number of texts a single analyst is able to work through is rather limited (Jäger and Maier 2016). As such, not all of the relevant written texts were included in a data set and not all relevant experts were interviewed. This, however, is not seen as problematic in terms of the quality of the obtained results, indeed, several CDA scholars accentuate that the size of the data set does not need to be large but rather, it should be representative of the discursive fields and changes of the narrative through time (ibid; see also Wodak and Meyer 2016).

Furthermore, a limited timeframe as well as the impacts of COVID-19 resulted in less time allocated for the fieldwork in the region as desired. Due to the travel restrictions imposed by the pandemic, the fieldwork had to be rescheduled and the data for the studies of Kazakhstan and Uzbekistan was partially collected online. Notwithstanding, the data and further understanding of the discursive contexts gained during the fieldwork added a significant depth to the studies. It was possible, however, to collect most of the interview data offline for the study of Kyrgyzstan. Comparing it with the two prior case studies, I argue that in the given case, the online data collection has not impacted the quality of the data significantly, which is likely because video calls have become a part of the professional routine in the past few years. Nonetheless, the offline interviews had at least three advantages. First, interaction with the experts in person created more opportunities for snowballing the experts, i.e., all the

interviewed high grade political actors were approached as a result of the face-to-face interviews. Second, the in-person meetings guaranteed there are no distractions on either of the sides, which the interviewee may not be aware of. Furthermore, face-to-face interviews allowed for more sensitive information to be disclosed, though, a fair amount of that was kept off the record as requested by experts.

The fact that each of the analysed countries has its own national language limits the researcher's ability to comprehend the whole spectrum of meanings given to climate change. However, Russian language is still widely used in three post-Soviet countries. Albeit the considerable decline in its use given the nation building processes in the successor states, Russian remains a second language in the official communication, media reporting and public communication, and no less than a half of the population in each of the studied countries understand Russian, or are native speakers (Bekmurzaev 2019). Indeed, all inquired official documents and media sources have the versions in Russian, and analysing Russian-language texts across the three case studies has given comparability to the data and added coherency to the final data set. The only exceptions are the global community-oriented The Astana Times, The Tashkent Times and the Times of Central Asia issued solely in English. As noted earlier, the present research project did not intend to capture all climate change narratives existing in the three states, rather, it looked at the dominant discourses, which have most significant impact on national approaches to the issue. In this perspective, Russian language is also considered here as a characteristic of the dominant rhetoric, therefore being not only a limitation but a helpful criteria in selecting the dominant discursive data for analysis (see Talja 1999). However, the future inquiries should go further and explore narratives in native languages, in particular, lived experiences of people in the remote areas of CA. This is essential to enhance climate resilience in the region as well as to contribute to its democratization and decolonization. More on this along with other suggestions for the future research are discussed in the concluding chapter. Last, the interpretations of the findings are likely to be affected by the fact that the academic literature concerning the discursive perspectives on climate change is dominated by the Western research studies (Hulme 2015). This poses significant limitations in terms of applicability of relevant scholarship to CA contexts. To address that, the utmost attention was paid to include the relevant English-language studies published by the researchers from the analysed countries in English language.

The chapter has described the empirical data used in the project – its types, sources, the processes of selection and collection as well as specifics of applying CDA to the different types of data. Albeit all the empirical materials are social texts, there are important differences between oral and written texts, policy and media narratives. The discussed points guided all of the three case studies, the results of which are presented in the following three chapters.

Chapter 4. Kazakhstan: climate change narratives at the end of hydrocarbon era

This chapter explores how knowledge about climate change is constructed in Kazakhstan, the region's wealthiest country, where economic growth and social security are at risk in the face of the climate crisis. In particular, it looks at the ideological aspect of climate change knowledge construction, i.e., who influences the meanings, and how. Overall, the study has found that under the current authoritarian political regime, the government comes as a mediator of national climate change discussions, consequently, it is the interests of the political elites that are advanced through discourse. While there is an awareness about the accelerating negative effects climate change has on the country, yet it is economic and ideological considerations that govern the national response. The chapter commences with the context important for understanding the narratives followed by the analysis of the national discourse. The analysis is split into the three parts, which discuss national understanding of climate change risks, economic considerations and the importance of global political perspective in the national take on the issue. It concludes with the discussion on the specifics of national rhetoric and patterns of national governance that should be considered for improving national responses to climate change.

Background

Although climate change is a global challenge, some states are more exposed to its negative effects than others. Kazakhstan is the 9th largest country in the world and the majority of its territory is covered with steppes and deserts. The country experiences extreme continental climate with national averages between -9 to -12C during winter months and 22 to 23C in summer (World Bank Group 2021:5). The temperatures vary greatly from the country's Northern to Southern parts, and are prone to high fluctuations, for example, the capital, Astana, featured temperatures from -52C to 5C were registered on a very same day in different years

(ibid.). However, it is not only specific geographical conditions but also economic, political and social circumstances that explain national concern about the issue.

While Kazakhstan is the most economically developed country in the region (World Bank, n.d.), it features low adaptative capacity due to its socio-economic circumstances and political regime. Kazakhstan is the 9th largest crude oil and 14th largest natural gas exporter in the world and has one of the largest natural gas reserves (CIA 2021). Its economy has been growing steadily since the 1990s powered by vast hydrocarbon resources and now oil and gas production constitutes the foundation of the national economy with fossil fuel exports accounting for 21% of GDP as of 2020 (IEA 2022a). Furthermore, energy sector powered by coal accounted for 16% GDP and 5% of the workforce in 2019 (COMSTAT 2020). Hence, addressing climate change comes as a challenge for the economy based on the brown industries. The authoritarian governance entails further burdens to effective climate action.

In authoritarian political regimes, the government comes as the main actor of knowledge construction (McCarthy 2019). Given that the climate change concern is an excellent tool to govern the society thanks to the notion of risk inherent in discourse, ideological considerations permeate the construction of climate discourse (Feindt and Oels 2005, Luke 2011). The ideological narratives spread to the other spheres involved in climate change mitigation. As such, Kazakhstan features hierarchical governance with key decisions made by the President (Kusznir 2018), and local decisionmakers are often unable to address the local specific climate issues. Regarding science, Kazhydromet and Zhasyl Damu are authorised research bodies under governmental jurisdiction that provide advice for national policymaking (Yesserpekova 2010). While non-governmental domestic actors are technically allowed to intervene in these processes, there are several obstacles posed by the state in reality, for example, the data obtained by the main research units is not openly accessible to the non-state experts and research entities (Mirzabayev 2023).

As to the public sphere, media in Kazakhstan is ‘an overwhelmingly dysfunctional market in which the Government plays a disproportionately big role’ (Nussipov 2019:13). The state is a key influencer on the media agenda as almost all TV, print, online and radio outlets are owned by the government or by private news agencies which promote a strong pro-government agenda. Consequently, the independent outlets face difficulties to operate in the country – the support from the foreign donors is limited by the state, and censorship of the critical discussions online has been growing in the past years (Writing and Auyezov 2021).

Hence, there is no real media competition in the country due to the government's control (Heinrich and Pleines 2018). The situation is similar with NGOs as most of the non-state organisations in Kazakhstan are government-backed (Knox and Yessimova 2015). Some of those do not hide their ties with the state, for instance, the 'Association of ecological organisations of Kazakhstan' is headed by Aliya Nazarbayeva, the daughter of the ex-President. Furthermore, while there are environmental NGOs, none of those focus on climate change (environmental activist, Zoom interview, 4 May 2021). As a result, there is a very limited space for alternative climate change knowledge as the discursive space is dominated by the state. The ideology-influenced knowledge results in a narrow vision of the problem hampering national capacity to address the issue. This is true for the public level, too, as limited knowledge and focus of the national wins is inherent to authoritarian states' rhetoric (Mittiga 2022) limits social resilience to the issue (Deng and Chen 2017).

Against this backdrop, the state's attention to the issue has been growing in the past years. The Ecological Code of the Republic of Kazakhstan was introduced in 2007, which represented the beginning of the initiative to control GHG emissions both at the national and enterprise levels. A few years later, Kazakhstan had ratified the Kyoto Protocol and joined global climate action (World Bank Group 2021:3). In a few years, under the Paris Agreement in 2015, the state committed to reduce the GHG emissions to 15% below 1990 levels by 2030 or 25% should the international support be provided (Ministry of Energy of the RK, 2017). Ever since the government has been increasing national climate goals and, in February 2023, the President Tokayev signed the commitment to achieve carbon neutrality by 2060 (Decree of the President of the Republic of Kazakhstan No. 121, 2023). This is to be achieved via improved energy efficiency and saving, RES instalments, limited support to the fossil fuel industry and gradual phase out of coal production (ibid.). In particular, the renewable sector has reached 3% in national energy mix in 2020 and the ultimate pledge is 50% share by 2050. Afforestation is an important part of national action, as over a half of the emissions are to be absorbed by the national green fund (IEA 2022a:15), and the 'Green Belt' project – initiated by Tokayev in 2020 – aims to plant over 2 billion trees in the near future (regional climate policy expert, Zoom interview, 4 March 2021, see also World Bank n.d.). The net-zero commitment has given a new impetus to the national climate policy – the Environmental Code №400-VI updated in 2021 provides stricter requirements to what is to be achieved by the state institutions, and the increased intermediate pledges are to be increased are expected to be announced in the updated

NDC, which is currently under the approval process (state climate adaptation expert, interview, Astana 8 December 2022).

To shed light on the discourses emerging from this complex context, a range of official documents (*see Table 5*) and media outlets (*see Table 6*) as well as 17 expert interviews were analysed (for the detailed methodology, see chapter 4). The rest of the chapter represent the findings.

Table 5. Kazakhstan: national legislations.

Document	Released date	Description	Relation to climate change
Strategy Kazakhstan 2050: A New Political Course of the Established State (Strategy 2050)	December 14, 2012	Provides a long-term vision for strategic development of the state. The key	Transition to a low carbon economy; Natural resource management
Concept for Transition of the RK to a Green Economy (Green Economy Concept)	May 30, 2013	Sets the ground for systemic transformations to a green economy	Transition to a low carbon economy;
Concept of Innovative Development of the RK until 2020 (Concept to ID)	June 4, 2013	Sets strategic plan for transition to innovative economy	Developing RES and energy-saving technologies
Plan of the Nation - 100 Concrete Steps (100 Steps)	May 6, 2015	Sets a response to global socio-economic challenges and a strategy for economic growth	Developing energy-saving technologies and attracting foreign investors
The new Environmental Code of the Republic of Kazakhstan No 400-VI ЗРК (Environmental Code)	January 2 2021 (adopted) July 1 2021 (entered into force)	Covers the national objectives in regard to environmental protection, both at the global level and the country-specific ones	Discusses national climate change adaptation and the contribution to global climate action

Table 6. Kazakhstan: media articles by the event.

Newspaper/event	Climate Ambition Summit (Dec 2020) 12.11.20 - 12.01.21	EXPO 2017 08/06/2017 – 08/09/2017	Paris Conference (COP 21) Dec 2015 23/10/2015 – 22/12/2015	Newspaper description
Kazakhstanskaya Pravda (KP)	7 articles	22 articles	11 articles	biggest broadsheet newspaper; state-owned; in Russian
The Astana Times (AT)	3 articles	7 articles	11 articles	International-oriented; business; state-owned; in English

Vlast.kz (Vlast)	5 articles	7 articles	3 articles	critical coverage; privately-owned;; in Russian
Total: 76	15 articles	36 articles	25 articles	

Climate change in national discourse: vulnerabilities, reasons and action.

The key vulnerabilities.

Overall, the concern about climate change effects faced in the country is well-present in the national discourse. The Green Economy Concept (2013) states that 'Kazakhstan is facing a situation where its natural resources and environment are seriously deteriorating across all crucial environmental standards', and the risks posed to food and water security are acknowledged in all analysed legislations. As to the scientific community, the interviewees acknowledge the 'non-negotiable fact' (environmental scientist, Zoom interview, 19 January 2021) that atmospheric temperatures in Kazakhstan are growing faster than on the world's average. Besides the heat stress, the country is projected to witness a wide range of temperature anomalies, increased frequency and intensity of extreme weather events and altered precipitation patterns (Ministry of the RK 2017:13). The occurrence of heatwaves, sandstorms, strong winds and intense precipitation have increased significantly in the past years (World Bank Group 2021), and the issues occur unevenly across the country, which makes it more difficult to address them (climate scientist, Teams interview, 19 January 2023). In the past years, extreme weather events have become more frequent; destroying households, energy and water supply infrastructures, and causing increased mortality and huge economic losses (ibid). The prominent examples of such events are 2010 and 2014 heatwaves and increased riverine floodings increase in the Almaty region over the past decade (Ministry of the RK 2017:14).

While the concern over the biodiversity loss has been a starting point of climate change discussion in Kazakhstan (regional climate policy expert, Zoom interview, 4 March 2021), the current concerns featured in the national discourse are food, water and energy crises. Increased periods of droughts and floods and their unpredictability have a significant effect on the agricultural sector and there has already been a decrease in harvest volumes caused by altered weather conditions (climate scientist, Teams interview, 2 March 2021). This has a serious impact on the local households and national economy as agriculture, despite recent decline since mid-1990s, still accounted for 18% of employment in 2017 (World Bank 2018). This is worsened by the fact that land production in Kazakhstan is predominantly monocultural with

wheat accounting for 80% of grain production (World Bank n.d.). Given little variety in crops, unfavourable weather conditions for wheat result in the major agriculture crisis, and the negative effects are to progress as climate change in the country is unfolding by the second-to-worst scenario (climate scientist, Teams interview, 19 January 2023, see also IPCC 2022). The peak of agriculture crisis is expected to hit towards 2050 with particularly adverse effects on wheat productivity which is the country's key crop (climate policy expert, Zoom interview, 3 March 2021). People are already experiencing the problem: 'in a bad year, the whole North is left without money... severe droughts for the past few years have been affecting the crops and farmers have lost a lot of income' (climate policy expert and activist, Teams interview, 23 February 2021). Projected reduction in yields up to 50% by 2050 will have negative effects both on the national exports and domestic food security (UNESCAP 2013). Besides the food crisis, scientists raise concerns about the negative impacts on the ecosystems as degradation of pastures provoked by climate change stimulates extensive breeding putting in danger wild animals and vegetation (climate policy expert and activist, Teams interview, 23 February 2021). Consequently, the agricultural sector has become a priority of the forthcoming National Adaptation Strategy, which will be included in Kazakhstan's updated NDC for the first time (state climate adaptation expert, interview, Astana 8 December 2022). Besides that, the action is already underway – the UNDP led Climate Promise initiative introduces green technology in agriculture and educates the farmers. The government and Kazhydromet are active participants of this initiative.

Freshwater deficit is another focal point of national climate change discourse. Water is distributed unevenly across the country where 78% of the urban population and less than 35% of rural people have access to safe drinking water (Bekturganov et al. 2016). Kazakhstan will face severe seasonal water shortages in 20 years (Deng and Chen 2017), indeed, the observations show a rapid melting of the icecaps in mountainous areas of Kazakhstan and shifting peaks of the river flows (regional climate policy expert, Zoom interview, 4 March 2021), and there are very visible effects such as shrinking of the Ural river and the Taldykol lake (climate change policy expert, Zoom interview, 22 February 2021). The water crisis is not only acknowledged by scientists but it is also at the core of the official rhetoric, where it is entangled with concerns over national security, social wellbeing and economic development (Green Economy Concept 2013). The concerns are that the freshwater crisis will deepen regional tensions as Kazakhstan's increased water demands would be difficult to cover by the upstream countries, whose water resources are shrinking as well (Strategy 2050, 100 Steps, see

also Zhupankhan et al. 2018). Besides the cross-border conflicts, the health risks for those living in the water-crisis-prone areas are acknowledged as well (Bekturganov 2016), and there is increasing attention of the state to the latter (state climate adaptation expert, interview, Astana 8 December 2022). Last, the water crisis affects the national energy sector, in which hydropower plays an important role (Rivotti et al. 2019). The risks are exaggerated by poor technical facilities (IEA 2022a), yet, the interviewed experts consider the government's attention to its modernization being limited (e.g., climate change policy expert, Zoom interview, 22 February 2021).

The above concerns are reflected in the media. Across the national outlets, alarmism – emphasis on the future negative effects and urgent need for action – is the most popular narrative. It was most prominent in KP and TCA being expressed through the headings like 'Last chance' (Chernov 2015) and supported by the evidence of the negative climate change effects around the world. Notably, this narrative, besides the few exceptions, draws attention to the global climate change effects, for instance, glacier melt in the Arctic and increased frequency of weather anomalies, instead of the domestic issues. In KP, there are also signs of catastrophic discourse – that destructive effects of climate change are unavoidable even if immediate action is taken (Foust and O'Shannon 2009). As such, 'the unbearable heat will cause the death of millions of earthlings by 2100…there is practically no chance for people to withstand natural disasters' (Nurgaliev 2015). This narrative can be explained by journalists' aspiration to maximise the audience's attention to the topic (Boykoff and Boykoff 2007) or their lack of understanding of the topic (climate scientist, Teams interview, 2 March 2021). Alarmism and catastrophic narratives remain popular as those do not require in-depth research and consultancy of the local experts. While this may work, alarmism and dramatization of the issue are the discursive strategies which shift public attention from the local climate effects and lowers agency since climate change is portrayed as a non-negotiable matter, an issue that the outcome of which does not depend on the one's action (Carvalho 2005). The independent Vlast is the exception in this regard, paying attention to national circumstances and representing the non-state actors - civic society, local activists and scientists. The presence of more sophisticated climate reporting paves a way for the citizens to learn more about the local agenda and relate to the activists, yet, the online nature of Vlast means that the outlet is not accessible for all. On a positive note, attention to the topic has been growing among Kazakhstani media in recent years (climate policy expert, Zoom interview, 3 March 2021, see also Makhanov 2021). Indeed,

the NGO experts noticed intensified enquiries from the journalists asking to comment on the issue (climate policy expert and activist, Teams interview, 23 February 2021).

The reasons and effects of climate change.

As to the causes of the issue, in the national discourse, human activity is seen as the main reason for climate change. In particular, an absence of even slightest scepticism among the national climatologists challenges the argument of Dronin and Bychkova (2018) that the post-Soviet climate scholars tend to account for natural reasons of climate change. There is also no scepticism in the official rhetoric (e.g., Strategy 2050, Green Economy Concept), although, there were a few alternative ideas in the media, where climate change was pictured as a result of both natural and anthropogenic reasons. While in AT and Vlast these narratives were rather an exception, they appeared frequently during 2017 KP coverage. The natural reasons include the cyclic nature of climate, variations in the luminosity of the Sun, the Earth's orbit movements, marine and geological processes, and the El-Nino, a climate pattern that describes warming of surface waters in the eastern tropical Pacific Ocean. There was also uncertainty expressed regarding the future trend - whether global climate will warm or cool depends on the alterations in Gulf Stream flow (Makhambetova 2017). KP referred to an anonymous scientific expertise, while in Vlast with its generally consistent referencing practice, the article arguing for the reasons for climate warming being purely natural was the only one not supported by any evidence (Vlast 2015).

Notably, the mentions of the positive effects of climate change are present in the national discourse being mentioned in the media, official rhetoric and, notably, by climate scientists. As such, Environmental Code (2021:186) defines adaptation as ‘the process of preventing and reducing losses and using the benefits associated with the observed and predicted impacts of climate change’. As such, to adapt to climate change means not only to address the risks to ecosystems, human health and economy but also ‘take advantage of the opportunities associated with climate change’ (ibid.). Indeed, the Strategy 2050 (2013) brings attention to the gains from increased vegetation periods, and this positive outlook is pronounced in the national leading newspaper (KP). The interviewed climatologists agree that the trend would not benefit national agriculture as the current climate scenario projects a deepening freshwater deficit over the next decades (climate scientist, Teams interview, 19 January 2023). However, the misconception is much present among rural people adding to public vulnerability (interview state eco-NGO representative, Zoom interview, 25 January 2021). Furthermore, there is a widespread idea that increased precipitation is a good thing, while in reality it leads to sudden

water losses (ibid.) Last, while acknowledging the negative impacts of climate change, one of the interviewed experts noticed that the air quality in the cities may improve as increased precipitation in winter will push pollutants to the ground (climate policy expert, Zoom interview, 3 March 2021).

The approaches to climate action: political development and a limited role of science.

Regarding the action, the political rhetoric tends to focus on mitigation of climate change with the GHG emissions regulation being at the core of national climate strategy (Green Economy Concept, Environmental Code). The matter of adaptation, however, has mainly been the topic of scientific discourse, however, recently, it has been increasingly discussed at the political level (state climate adaptation expert, interview, Astana 8 December 2022). The Climate Change Adaptation Unit was formed under the Ministry of Ecology, Geology and Natural Resources in 2021, and the Environmental Code (2021) has a dedicated chapter addressing the matter. Yet, the experts point at the insufficient development of national climate research, which is an essential component of the adaptation strategy as an understanding of the place-specific occurrences is essential to address and anticipate the climate change effects. One of the interviewees described the state of national climate research rather harshly calling it 'very outdated, backward, completely inadequate to those urgent problems, and lagging behind international science' (environmental expert and activist, Zoom interview, 4 May 2021). There are seemingly two key factors explaining the present agenda: current politics and the country's historical past.

After the collapse of the Soviet Union with its unified system of climate research, the scientific community has dissolved as the researchers were not institutionally bonded anymore (Vakulchuk et al. 2022a). As in the rest of CA, in Kazakhstan, the early years of independence are associated with economic and political crises and, consequently, little to no financial support was allocated for climate change research and monitoring (ibid.). While today's economic situation allows Kazakhstan to invest in climatology, the support from the state is still lacking, as a result, many important research activities are not performed as there is no one to execute them. As one of the scientists shared, 'for the last three years we have almost no funding at all[...] we cannot carry out the research that otherwise could compete at the world level' (climate scientist, Teams interview, 2 March 2021). In Kazakhstan's reality, the scientists have to search for the funding themselves, and it is usually foreign bodies who are open to support the projects (environmental scientist, Zoom interview, 19 January 2021).

Wages in academia, especially for young researchers, are very low, and scholars choose to work for private companies either foreign research projects (ibid.).

Notably, the most recent environmental legislation, the Environmental Code (2021) has among its main points the advancement of climate change research and monitoring in the country. However, monitoring, i.e. observing the current trends via the existing framework of knowledge is seen as a key means of action while the research is mentioned vaguely. The climate science as an actor of is given a minimal attention, instead, the executives of research and monitoring activities are 'authorised central executive bodies and local executive bodies' (ibid:187). Furthermore, the state has a monopoly in the area of environmental monitoring with one authorised body being KazHydromet, the leading national climate research and monitoring unit. As such, the situation in Kazakhstan reflects the green governmentality project described by Luke (2011). That is, climate change is approached by the elites as an ideological project, where science comes as means for producing evidence for the dominant discourse. This also partly explains the absence of the state's attention to the climate research as it is not the advanced knowledge that is needed but rather a monitoring data, which fits the argument. Notwithstanding, there are several research institutions that finances were allocated to, in particular, Nazarbayev University, which was established in the name of the ex-President and has been heavily invested in, contributing to the image of the innovative state (environmental scientist, Zoom interview, 19 January 2021). However, in order to address national vulnerabilities and to compete at the global research arena, the state should increase financing across a larger number of research institutions across the country (ibid.).

In sum, while the concern about the negative effects of climate change is well present in the national narrative, the action proposed at the political level do not match the anticipated risks. Insufficient climate research is a key issue as a limited knowledge about the coming changes and means to address those significantly increases national vulnerability. Instead, scholars are considered as a means to produce the evidence for the political climate rhetoric as the climate science functions are reduced to monitoring activities, followed by reporting the data to the government. As for the media, the climate change coverage leans towards alarmism and dramatization, that is, the journalists are focused on attracting the audience to the topic rather than informing the people about the effects, reasons and other specifics of the complex matter. Besides the obvious importance of the audience interest in the media production, this is also explained by the lack of knowledge about the issue among the journalists themselves,

which is logical given the absence of the topic on the national agenda until the past decade. For this very reason, the policymakers are lacking understanding about the issue. As such, instead of focusing on the local vulnerabilities associated with the issue, climate change is seen as predominantly a matter of global politics and economic concerns. The specifics of the discourses emerging from this perspective are discussed in the following sections.

Climate change as a matter of economic concerns.

The idea of green economic development.

In the official rhetoric, the aforementioned national vulnerabilities are largely viewed as a matter of economic concern. While the effects of droughts, floods and heatwaves on social security are considered, it is the impacts on the national economy which are given the most attention. In 2013, the state has adopted the Concept to Transitioning of RK to the Green Economy, which, essentially, is an attempt to align the economic growth with the environmental protection. As such, by moving from an extensive, resource-based development to developing new energy sources and increasing their efficiency, the state aims to achieve economic prosperity and a sustainable future. The economic interests seem to come first, however. The overarching aim expressed in the legislation is not the environmental protection, but rather, a geopolitical concern of economic interest-driven state. As such, 'transition to Green Economy will enable Kazakhstan achieve the proclaimed goal of entering the top 30 developed countries of the world' (Green Economy Concept 2013:3). This translates into how the green action is approached in the country, that is, 'initiatives that not only improve the environmental situation but also result in increased economic benefits will be prioritized' (ibid:6).

This 'win-win' discourse (Wilson Rowe 2013), i.e., viewing climate action as an opportunity for economic growth, is also embraced in the national media: 'If there was no global warming, it would be worth inventing' (Zhumagulov 2017). As such, it will facilitate economic development through diversified energy exports, and improved energy efficiency will lower spendings from the budget. Furthermore, alternative energy sources contribute to the national security addressing the foreseen traditional resource crisis. An emphasis on success in addressing climate change construct the image of the strong state reinforcing government's legitimacy at the domestic (Koch and Tynkkynen 2021) and regional levels (Kudaibergenova 2015). Green economic development will contribute to social welfare addressing employment and equality matters via creating a pool of green jobs, and protecting public health from the effects of the heavy industries and anticipated climate change impacts ('100 Steps'). The latter

reflects Hajer's (1995) idea of green governmentality in the era of ecological modernisation, in which concern about economic costs of climate change is framed as a concern about social welfare in order to strengthen legitimacy of the government. Indeed, the official climate discourse is tailored to the available solutions it has to offer (Rutherford 2007). The confidence about managing the issue reflects an instrumental approach to the environment carried from the Soviet era, where climate change was seen just as another issue requiring technological fix (Kudaibergenova 2016, Doose and Oldfield 2018). This attitude to nature is well-present in the official rhetoric with its focus on innovation (Concept to ID) and viewing natural resources primary as a force for economic development (Strategy 2050).

Consequently, the focus on economic considerations embodies the attempts to calculate climate change. In the official rhetoric, the mitigation component of climate action prevails over the adaptation one. Climate change is viewed in a numeric fashion, that is, being calculated as financial gains and losses, and, importantly, as GHG emissions. Decarbonisation is the key element of climate action in the national discourses. It reflects the discourse dominant in Western democracies, which narrows climate action to mitigation and calculation of GHG emissions (Doyle et al. 2015). As to Luke (2011:97), this serves as another mechanism of political control, and represents Foucauldian governmentality expressed in 'the continuous 24×7 management of Nature and Society through combating greenhouse gas emissions'. As such, it does not matter how the climate change occurrences per se are addressed, rather, the indicator of a good action is a numeric estimate that is positioned in discourse as a right one by a powerful actor. Hence, seen as a subject of green economy discourse, the physical occurrence of climate change is not what matters, rather, the GHG emissions reports estimate the success of the national action.

Indeed, the image of the innovative state is another subject of the green economy narrative as Kazakhstan is portrayed as pioneering innovation in the renewable energy sector. The country has promising wind and solar capacities (Samruk-Kazyna 2018), and alternative energy development is at the core of national climate action (Green Economy Concept, Concept to ID). The sector has been growing since 2010, reaching 3% of the total energy mix in 2020, i.e., the first pledge of the national commitment. As of 2022, 130 facilities have been installed in Kazakhstan most of them being solar and wind (IEA 2022). Innovation discourse is among the key discussions in the newspapers, especially in the internationally oriented AT, where national RES development and associated international partnerships receive a regular

positive commentary. Yet, the experts see that the share of RES in the national energy mix is low (IEA 2022a:14, Sabyrbekov et al 2023). Most of the interviewed scientists and policy experts argue that energy diversification is primarily a ‘tribute of fashion’ (climate scientist, Teams interview, 2 March 2021) and more present in discourse rather than in reality.

Another green initiative contributing to national image is the national Emission Trading Scheme (ETS) which launched in 2013 and aimed to limit industrial GHG emissions through taxation mechanisms. The scheme has become the first initiative of its kind in the post-Soviet space, and this fact was emphasised in the official rhetoric (e.g., 100 Steps, interview 6) and in the media (KP, Vlast) portraying Kazakhstan as a leader of climate action in the region and beyond. The importance of the scheme for the elites also reflects the green governmentality paradigm, in which the environmental impact assessment and accountancy serve as means of state’s control over the country’s businesses (Lovell and MacKenzie 2011). In Kazakhstan, the state-owned entity Jasyl Damu serves this purpose. Notably, despite numerous amendments, ETS has not proved to be effective due to some serious flaws including corruption and the large number of free quotas allocated for coal-fired facilities (climate change and sustainability expert, Zoom interview, 3 February 2021, IEA 2022a:16). This comes as another example of how the features of the political regime in the authoritarian state hamper the green action (see also Schreus 2011). Notably, the Environmental Code (2021) serves as another attempt to make the scheme work as the document outlines the new, stricter regulations obliging the private actors to report on their emissions, furthermore the GHG monitoring instalments have to be the ones approved by the government.

Green economic development in the fossil fuel-based economy.

'The end of hydrocarbon era' (Strategy 2050:11) is another important reason for green development. That is, future devaluing of fossil fuels threatens national wealth sustained by hydrocarbons, and climate action comes a necessary step to protect national economy. In this context, energy diversification serves as a response to changing global markets rather than as environmental concern (climate change and sustainability expert, Zoom interview, 3 February 2021). As most of the developed countries have committed to decarbonisation, Kazakhstan’s fossil-fuel based economy is under threat, hence, resource diversification is a necessary step to protect the economy (ibid.). National economy has experienced downfall in 2015-2016 due to global devalue of fossil fuels, and economic losses will deepen if Kazakhstan proceeds with ‘business as usual’ (Atakhanova and Azhibay 2023). Permanently increasing carbon taxation adopted by the most of Kazakhstan’s importers is another reason for minimizing the

environmental impact of the 'brown' industries – clean production and national green policy overall have become essential requirements for successful hydrocarbon exports. Meanwhile, the government continues to subsidize hydrocarbon production, justifying it using social security considerations, as the energy means should be affordable to all (ibid., state climate policy expert, Zoom interview, 26 February 2021). The industry has been growing - oil production reached its peak in 2019, and there are further plans to double the output by 2025, and coal, which accounts for 70% of the country's energy output, is also legitimized through the appeal to social security (IEA 2022a). It is a reliable, ready-available energy source, and the industry is a key employer in the country: 'Low-carbon development is not at any cost… we are talking about a just transition and there is a social load we have to mind' (environmental economy expert, in written, 4 February 2021).

Notably, the fossil fuel sector remains of a key importance in both the state's economic projects. Just like in Russia (Tynkkynen 2018) fossil fuels serves the ideological interests being appropriated as a discursive tool for nation-building and advancing legitimacy of the government. The concern about a weakened national identity, a result of the years under the SU patronship, is pronounced in the modern Kazakhstan (Heathershaw 2010, Kudaibergenova 2016). Furthermore, the scholarship highlights the government's attempts to advance its legitimacy through the rhetoric of green development and sustainability (Schatz 2008, Kudaibergenova 2015). The present analysis has identified similar patterns, furthermore, one of the key objectives of the '100 Steps' is to develop 'the large-scale project […] "Big Country – Big Family", which will strengthen Kazakhstan's identity and create conditions to form one civil society' (2015:9). Strengthening the idea of the nation is entangled with the government's attempts to increase its domestic legitimacy, as such, the opening slogan of the main national legislation, the Strategy 2050 (2013), proclaims the 'new political course of the established state', that is, emphasising the positive political change and the solidity of the independent Kazakhstan. In this document, fossil fuels are positioned as a matter of national pride, being viewed as a foundation of the strong state Kazakhstan envisions itself. As the Strategy states, 'oil and gas complex remain the powerhouse of our economy' and 'a guarantee of safety for present and future generations' (ibid:17). Fossil fuels will facilitate the geopolitical position of Kazakhstan at times of resource deficit: 'We have been blessed with abundant natural resources and other countries will need to rely on us for their resource needs' (ibid.). As such, Kazakhstan is succeeding thanks to clever management of the fossil fuels executed by the strong political

leader. The people of Kazakhstan belong, in turn, to the strong nation they should be proud to be a part of.

As to the media, KP mirrors the official narrative. It possesses an interesting example of how the fossil fuel legacy is joined with the green economy rhetoric: '[RES development] would become a significant example for others due to the fact that at the moment Kazakhstan is a producer and exporter of hydrocarbons' (Zhumagulov 2017). That is, fossil fuel-based economy is seen as a given, not a questionable national characteristic, while the green energy means are an addition to the economy of the responsible, forward-looking state. Meanwhile, AT and Vlast criticize the fossil fuel legacy calling it 'dependence addiction' (Humphrey 2015). However, there is still a positive framing of the sector as a guarantor of the Kazakhstan-EU relationship (Zhumabayeva 2017). Interestingly, the resource abundance narrative is still present in AT despite the newspaper's orientation to the foreign reader. To match the Western discourse of sustainability performed in the outlet, the focus of the discussion has moved to the renewable sector, that is, Kazakhstan's wind and solar energy potential. The public seem to be sharing the official position (Koch and Perreault 2019:621), which represents another success of ideological workings through climate change discourse in the country.

While the hydrocarbon industry flourishes, Kazakhstan remains miles away from achieving its goals on greening energy production (Sabyrbekov et al 2023). Indeed, in the national climate rhetoric, the green action narrative is at odds with the idea of resource nationalism (see also Koch and Tynkkynen 2021, Poberezhskaya and Bychkova 2022). This discursive pattern is common in resource nationalist states (Wilson 2015), representing the attempts to use all means to advance national and global image as well as economic growth. Meanwhile, the state keeps the 'no responsibility' attitude charging the Western end consumer for the fossil fuel emissions produced domestically (Poberezhskaya and Bychkova 2022) either blaming the Soviet governance for the present environmental situation (Kudaibergenova 2016). Dubuisson (2022:419) conceptualizes the latter as a 'responsibility paradox' noticing the tendency of CA states to blame the Soviet approach to development while carrying on with the same means of production.

In all, in Kazakhstan, climate change is approached from the globally-established point of view, i.e., anthropogenic issue, which needs to be managed through GHG emissions regulation and development of green technologies. Meanwhile, in the official discourse, the narrative of economic growth outweighs the environmental concern. Considering that the

hydrocarbon sector is still growing faster than the renewable energy one, an enthusiastic attitude towards climate action mostly exists in discourse: 'there is no climate policy in Kazakhstan…only its imitation and attempts to deceive the world community' (environmental activist, Zoom interview, 4 May 2021). Considering the authoritarian political regime and the presence of SU attitudes to environmental management, the change of attitude to climate change seems challenging. However, economic security and national identity concerns have a potential to cause – and have already contributed to – positive shifts (Nugumanova and Frey 2017). The national green initiatives acknowledged in this chapter, while not always successful, evidence this progress.

The international perspective of the national climate change discourse

Climate change as a global challenge

Notwithstanding highly pronounced national vulnerability to climate change, the official rhetoric tends to focus on the global aspect of the issue. As such, climate change is portrayed as a matter of global politics requiring joint efforts of the foreign actors, and it is the state's responsibility to 'preserve, protect and restore the health and integrity of the Earth's ecosystem' (Environmental Code 2021:16). Here, it is argued that a performed concern contributes to Kazakhstan's status in the political arena. Consequently, globalisation of climate change as the state's discursive strategy addresses a multitude of the national interests – from power to economics. Indeed, in the media, global political events have received the highest attention among the rest of climate change-related discussions, which is reflected in the choice of the discursive events, i.e. the samples for discourse analysis (*see Table 6*). As such, over the past decade, the most discussed events were the 21st Conference of the Parties (2015), during which the global Paris Agreement came into force; The EXPO: Future Energy (2017), the international showcase of the green innovation achievements held in Kazakhstan; Climate Ambition Summit (2020) where the President announced national ambition to achieve net-zero by 2050.

The focus on global rhetoric represents the government's effort to find its position in the world with the limited resources and to have an influence on those 'new networks of continuous and multiple relations between population, territory and wealth' (Foucault 1991b:101). The climate discourse comes handy to advance the national influence – this was evident through the resource nationalism and green economy rhetoric where Kazakhstan was portrayed among the world's green economy leaders and as a guarantor of global security in the face of the

resource crisis. The narrative goes beyond the climate topic as the state aspires to become a vital geographical point and a cultural bridge connecting the Eastern and Western worlds (Strategy 2050). Furthermore, the idea of the global climate change protects national power rooted into its fossil-fuel economy. The parallel can be drawn with Hovden and Lindseth's (2004:67) study who viewed 'thinking globally' discourse as an opportunity for the resource-wealthy states to maintain fossil fuel industry while complying with the global climate commitment. The discourse emphasises the importance to reduce the global GHG emissions and, following this logic, the national emission levels are of secondary concern. Furthermore, national oil and gas production is considered beneficial for addressing the global climate crisis as substantial foreign supply will decrease the use of coal abroad.

Climate change as means to advance the global image

Besides these power interests, the image aspirations apparent in the focus on the global climate politics in the national climate change rhetoric are linked to the aforementioned identity struggle associated with the country's historical past (Kudaibergenova 2016). Indeed, some still find it difficult to explain what Kazakhstan is without referring to SU (regional climate policy expert, Zoom interview, 4 March 2021). The state recognizes the issue, in particular, the English-language AT was launched by the Ministry of Foreign Affairs to increase the presence of the state in the global political arena (Kusainov n.d.). As such, the newspaper serves as a tool to advance Kazakhstan's international image portraying Kazakhstan to the foreign actors in line with the government's envisions of the country. Furthermore, the EXPO 2017 held in the capital is a noteworthy representation of the image building efforts. The showcase of the green energy achievements served the purpose beyond advancing global environmental action as it has allowed to demonstrate the recent developments of Kazakhstan to the international community (Koch and Tynkkynen 2021). Indeed, as AT mentioned, EXPO will tackle the misconceptions about the country: 'people think wrongly about Astana, like it is a place where horses and yurts are[...] They will understand that Astana is modern when they come to visit' (Zhumabayeva 2017). Also, the media portrayed the state as a leader of global decarbonisation efforts: 'rather than sit around and talk about the problems, Kazakhstan has hosted an event entirely focused on solutions' (Seisembayeva 2017). The image work is also done by the policymakers themselves as the tours to the recently opened solar energy cite have become a must in the programme for the visiting officials (environmental policy expert, Zoom interview, 24 May 2021). Last. the OSCE general conference organized in Kazakhstan from its oil revenues' profits in 2010 served a similar purpose (Fauve 2015). Through the event, the state

has promoted the idea of 'an open, dynamic and successful country, an image which is in serious disjuncture with the authoritarian nature of the regime' (ibid:110).

Similar discursive patterns are observed at the regional level as Kazakhstan projects itself as CA climate action leader and the medium of the regional cooperation in tackling the issue. The official discourse portrays Kazakhstan as a regional leader in developing innovative approaches to address climate change (Green Economy Concept 2013) and a guarantor of regional security in the face of a regional water crisis (Strategy 2050). Several climate change-related initiatives proposed by the state strengthen this image: a GHG emissions report system uniting the region with Caucasus and Eastern Europe and Kazakhstan's Official Development Assistance programme demonstrate 'just how mature and valuable the country's role is for the region' (Seisembayeva 2017). The image of the regional leader is actively constructed in all analysed media outlets where national ETS scheme was used as main evidence of Kazakhstan pioneering climate action. Indeed, one of the interviewed officials noticed that while the rest of CA is concerned about the issue, it is only in Kazakhstan where actions follow (State eco-NGO representative, Zoom interview, 25 January 2021). That is, climate action is viewed as a matter of a regional competition serving as a source to advance Kazakhstan's influence over its neighbours (see also Poberezhskaya and Danilova 2022). Meanwhile, most of the interviewed experts do not view the state as CA climate action leader. While Kazakhstan has been ahead of the rest of the region in its taxation and green energy development efforts, this is mostly because the action has started earlier, but now most of the region pursues green development (state climate adaptation expert, interview, Astana 8 December 2022). Indeed, as another expert mentioned, there is barely any regional collaboration initiated among the CA governments, and all the most prominent initiatives are executed by the non-state bodies with the help of the international organisations (state climate change policy and energy expert, in written, 4 February 2021). Furthermore, Kazakhstan have the highest GHG emissions in the region, which clash with the promoted image: 'we position ourselves as an example to the rest of the region but, in fact, we have not shown a significant progress' (climate scientist, Teams interview, 2 March 2021).

An economic aspect of the international climate action

Kazakhstan's global climate change discourse also embodies economic interests - while the state is portrayed as an important global player, it is represented as a developing state when it comes to financing. For example, the 'Green Bridge' initiative proposed by the state is intended

to ensure financial support for the developing countries' climate action, that is, this action represents Kazakhstan as an aspired and responsible state, yet is subject to foreign funding (Kozhanova 2019). Attracting investments for facilitating the energy sector is among the national aims (100 Steps), indeed, KP actively discussed the importance of foreign investments to achieve national pledges (e.g., Abenova 2017). Through AT coverage, the state has expressed its gratitude to foreign donors, mainly EBRD, ADB and World Bank, therefore, stimulating further investments. Besides the media, national NGOs are also used as a tool to fulfil national interests. The presence of the civic society in climate action is important to comply with the Western values – a 'just transition' to the sustainable economic development (European Commission, n.d.). One of the prominent examples is the International Centre of Green Technologies and Investments, the state-backed NGO launched on the basis of the EXPO (environmental activist, Zoom interview, 4 May 2021). Indeed, the efforts have been paying off - in 2018, financial support accounted for $93 million (IRENA 2019) with the main investor being the European Bank for Reconstruction and Development (EBRD) which has provided EUR 300 million of total revenues (Ministry of Energy of the RK 2017). Currently, the Green Climate Fund is the key investor in the national climate action (GCF n.d.). Recently, however, it has been difficult to attract the funds using this narrative as the investors prefer to support less developed CA economies like Tajikistan and Kyrgyzstan (state climate adaptation expert, interview, Astana 8 December 2022). Hence, it is suggested that the image of the strong innovative state will phase out the developing state identity in the near future, which might give a further spin to national green development.

There are further tools, which help to achieve both the image and economic interests. Overall, a strong relationship with the foreign actors is one of the key priorities of the national climate strategy (Environmental Code 2021). Consequently, discursive alignment with the Western rhetoric is present in the national climate discourse (Kudaibergenova 2016). This was evident in the official documents, in particular, the issues of equality and gender are to be addressed via green economic development (Green Economy Concept 2013, 100 Steps 2015). Also, the attention to public agency and increased role of civil society in the environmental policymaking is among the objectives of the most recent environmental strategy (Environmental Code 2021). Furthermore, expectations of the foreign actors are used to justify national political choices (e.g., Concept to ID 2013), and the media mirrors Western values, advising to learn about sustainable lifestyles of the developed countries (KP 2020). The former

role of Tokayev as a Director-General at the UN's Geneva office adds to this strategy as the President knows how to position the state and achieve certain interests in the global arena (climate change policy expert, Zoom interview, 22 February 2021). Indeed, the narrative featured in the national documents is well-considered by the state workers: 'the national reports are the face and image of the country... they can significantly influence international political relations' (state climate change policy and energy expert, in written, 4 February 2021).

Notably, the presence of the Western democratic values is uncommon for authoritarian, resource-rich states (Ross 2001), and in Kazakhstan this discursive turn was rather an unpredictable effect of seeking international support in the early phase of the country's independence. As 'foreign approval' was a national priority (Kassen 2018:314), the state had to pursue the values of democracy and environmental concern. The foreign actors were welcomed to aid national development and were therefore able to influence domestic policymaking; as a result, the certain features of national policies initially considered as 'democratic performance', were inhabited in the real political processes (Schatz 2006:279). The government, however, albeit the intention to be a part of the community of the Western developed economies, is cautious about preserving its own national identity. As Laruelle (2014) notices, the government performs the hybrid identity combining the attempts to preserve authentic features of the nation, and transnationalism, i.e., portraying itself as a part of the global community.

The dual impact of the external interests

Last, several experts noticed that while the political interests at the global level have been motivating the government to introduce the green initiatives, it is these aspirations that also explain incoherent policymaking. The key criteria in climate decision making is not the local circumstances but matching the agenda of Kazakhstan's key donors and business partners - the EU, China and Russia (climate change policy expert, Zoom interview, 22 February 2021). Consequently, the ambitious climate action goals set by the government are, essentially, an attempt to ensure stable financial flows as 'any investor likes goals' (ibid.). To date, the hierarchical decision-making practiced in the authoritarian state makes it possible to place the commitment, which serves geopolitical interests, while being questionable in its feasibility. As one of the interviewees mentioned, 'the reason for the now unattainable goals [NDC] is not only the emissions that Kazakhstan produces, but also bad analytics... the goals were set to satisfy Nazarbayev's ambitions' (regional climate policy expert, Zoom interview, 4 March 2021). Furthermore, prioritizing the international agenda affects national research as the state

values foreign climate experts over the national scientists. For instance, international experts from the UNDP were chosen as responsible for the solar map of Kazakhstan while using data collected by Kazhydromet (environmental scientist, Zoom interview, 19 January 2021). Not only does this become a barrier to an effective response to local issues, given the country's unique weather conditions, but also hampers the development of national research. As many of the interviewed scientists noticed, the relatively low level of national climate science is majorly a result of a lack of financial and institutional support from the state, while money is spent on inviting foreign experts (climate scientist, Teams interview, 2 March 2021).

The above discussion has highlighted the identity concerns, power aspirations and economic interests embedded into the national discourse of global climate change. Indeed, Koch and Tynkkynen (2021:533) argue that the interest in foreign investment 'goes a long way to explaining Kazakhstan's iconic sustainability initiative'. Furthermore, at the political level, climate change is seen as means to advance the state's position globally, that is, relevant action is reasoned by image considerations rather than by environmental risks per se. Meanwhile, these ideological standpoints still have a positive impact on national climate policy stimulating national commitments and implementation of the valuable climate initiatives.

Implications of the national governance patterns on the national climate responses

The effects of the political present and past

While a number of experts see possibilities for Kazakhstan to meet NDCs submitted under the Paris Agreement (e.g., climate change and sustainability expert, Zoom interview, 3 February 2021), the majority of the interviewees doubt the capacities of the state to do so (e.g., climate change policy expert, Zoom interview, 22 February 2021). The 'business as usual approach' – holding on to fossil fuels - will lead to exceeding baseline emission levels (e.g., climate policy expert and activist, Teams interview, 23 February 2021), and some argued this already happened (environmental policy expert, Zoom interview, 24 May 2021). The main issue is prioritizing those image and economic interests over actual climate action (state climate adaptation expert, interview, Astana 8 December 2022), and there are further barriers to effective climate response, which arise from the authoritarian type of governance. Decision-making processes in Kazakhstan are hectic, short-sighted, and the process is opaque: 'the most serious decisions are made in a sauna, or elsewhere, over some beer, where no one wrote anything down' (climate change policy expert, Zoom interview, 22 February 2021). The decisionmakers choose not to carry responsibility for announced commitments prioritizing

their reputation there and now over taking the risk of initiating new and uncertain climate actions (ibid.).

This attitude has been stimulated by frequent changes in the state's environmental policy structure. From 1992 to date, the institutions assigned for climate mitigation were re-formed five times with the Ministry of Ecology, Geology and Natural Resources being the responsible body as of 2021. Those in-charge have been changing at an even higher pace, which resulted in the loss of institutional capacity – there are only few decisionmakers with relevant backgrounds (climate policy expert and activist, Teams interview, 23 February 2021). In particular, execution of renewable energy policy is assigned to the Ministry of Energy with no inclusion of the Ministry of Ecology, which results in RES expansion that is approached withlittle consideration of the environmental impact from these developments (ibid., see also Mouraviev 2021). Hierarchical government and disunity of institutions further decrease the sense of responsibility among decision makers and does not allow cross-sectoral cooperation (Piazza 2021).

The hierarchical governance and a limited engagement across the institutional structure is also can be traced to the Soviet paternalist approach carried by political and economic institutions - a lack of flexibility and 'minding its own business' (environmental policy expert, Zoom interview, 24 May 2021). As such, the elites are not willing to part with the Soviet approaches to politics and economy as the approaches established over the years of SU rule are thought to ensure popular support (Kudaibergenova 2016, Cooley 2012). That is, while promoting the democratic and sustainable future under the New Kazakhstan ideology (Kudaibergenova 2015), the government is cautious about letting go completely of the political framework, which has kept the regime stability through the decades. Today, local stakeholders carry on traditional governing approaches despite being educated in line with democratic values (Tazhina et al. 2019). Indeed, one of the experts noticed that this strategy is beneficial for the government as it takes responsibility from the current decisionmakers allocating it to the past: 'we are a more colonial country, so what [...]it is convenient[...] this is a socio-political genotype' (environmental policy expert, Zoom interview, 24 May 2021). These patterns of governance are also prominent in the fossil fuel sector, where switching to green energy has been viewed as an inappropriate reorganisation of the business (ibid.). The situation has been changing, however, with the help of international organisations. In particular, ETS paved a way to communicate climate change to the 'brown' industries, and there has been a positive change

in their attitude to decarbonisation (climate change and sustainability expert, Zoom interview, 3 February 2021).

Public action: an overlooked aspect of the national climate politics

The importance of environmental education is acknowledged in the national strategies as the as the government prioritizes 'fostering environmental culture in the society, promoting environmental knowledge at all levels of education, raising environmental education and awareness' (Environmental Code 2021:16). The matter is given a high importance, as such, environmental culture, i.e. conscious interaction with nature, is seen as 'one of the main personal values in the Republic of Kazakhstan, which creates the basis for not only human self-awareness development, but also for the state well-being growth' (ibid:129). As such, advancing environmental knowledge comes as the government's strategy to advance its influence at the individual level, and is appropriated for nation-building purposes uniting people in green action in the name of the state. The number of educational initiatives have been increasing over the past years, however, those are insufficient and mostly led by the international organisations with the government's engagement being rather limited (Yergaliyeva 2020). As such, the awareness of people about the climate change reasons and effects, as well as knowledge about relevant action, has been growing. The initiatives are still limited and mostly take place in the national leading universities, that is, knowledge is available to the selected societal groups, i.e. educated youth (regional climate policy expert, Zoom interview, 4 March 2021). This has its positive implications as youth climate activism has been actively growing (ibid.). Yet, recent online surveys of public opinion have shown that climate change is not among the key issues of the citizens' concern (Makhanov 2021). Interestingly, that environmental education, while considered by the government, has not received full attention.

Meanwhile, the idea of 'enviro-disciplines', the codes of conduct created through eco-knowledge (Luke 2011), could be used as another mechanism to govern the society. However, the number of the state's initiatives is growing, that is, the technique might be embraced in the near future, following the Western experience, i.e. 'green citizen' model (Rutherford 2007). Indeed, manifestations of green energy in the political discourse and, consequently, in the media, may have had a positive influence on public perceptions. Kazakhstani are supportive towards switching to renewables – the recent survey showed that 75% of the population support the idea of switching to RES and the number of households sustained by the renewable energy means is growing (UNDP 2023).

Besides insufficient education initiatives, overall economic vulnerability of civil society explains a lacking engagement with the topic. A complicated socio-economic situation persistent across the country, especially in its remote and rural areas, makes people focus on making ends meet, rather than on environmental issues: '[climate change] is something so amorphous, somewhere out there, in Europe... we have more serious problems here' (climate change and sustainability expert, Zoom interview, 3 February 2021). Furthermore, there are vocal environmental problems beyond climate change, as such, air quality remains the top environmental issue on the public agenda (Makhanov 2021). Kazakhstan air is ranked the 36th 'dirtiest' in the world and this is particularly pronounced during the winter months when the coal combustion reaches its peak (IQAir, 2022). It is over these periods, as one of the experts mentioned, when the public discussion on the environmental decay rises up (state eco-NGO representative, Zoom interview, 25 January 2021). Freshwater scarcity is the second-important matter on the public agenda as many experience this directly (Sabyrbekov et al 2023), and the water-related issues consistently make it to the national media coverage (Beris 2020). As such, civil society is not ignorant towards the environmental issues, indeed, there is a tangible concern about visible climate change effects experienced by local populations (Makhanov 2021). Yet, a limited presence of scientific discourses on the public agenda further limits public understanding of causes and effects of climate change. As the present analysis has shown, rather than informing people on the nature of climate processes, national media tend to discuss the topic as a political issue either frame it in alarming terms leading to limited public understanding of causes and effects of climate change (see also Poberezhskaya and Danilova 2022). As a result, people are concerned about poor harvests and freshwater deficit but do not link them to the climate issue per se (state climate adaptation expert, interview, Astana 8 December 2022).

Regarding public activism, despite democratization initiatives under Tokayev's leadership, civil society still contributes little to national policymaking (climate change policy expert, Zoom interview, 22 February 2021, see also Dubuisson 2020). This poses another barrier to the state to recognize and address local climate change vulnerabilities, and lowers public agency, as people do not feel able to, address the issue, nor do they feel accountable for this (Kusznir 2018). The Environmental Code (2021) emphasises the importance of including civil society in the environmental decision making, yet, once the environmental activism into political sphere, the initiatives are suppressed by the state representatives (CIVICUS n.d.). Furthermore, activists are often viewed as the government's critics and brought to justice,

which further limits public willingness to take an active stance (Mustafina 2021). The reason for this is a lack of understanding of what environmentalism is, and the government's hesitance to allow the signs of resistance to the political regime (ibid.). That is, the multiple opinions are welcomed in the pronounced democracy insofar those do not embody the unauthorised criticism of the government. Notwithstanding, the movements concerned with the freshwater crisis are an exception in anotherwise absent environmental activism presence. In particular, there have been several initiatives to protect the Aral Sea and the Taldykol lake (Lillis 2021). While the former – the Aral Sea desiccation – has been a matter of government concern with some relevant initiatives in place to address the issue, the detriment of the Taldykol was initiated by the government itself. Despite the numerous public protests have been taking place since 2021, the lake was drained to be replaced with new housing developments (ibid., see also Bekbassova 2023).

Conclusion

In sum, in Kazakhstan's national discourse, and attention to the issue of climate change has been growing over the past decade. The climate scientists are warning about accelerating negative climate impacts, the topic makes it to the media coverage, and activists are concerned with the current environmental agenda. However, in the authoritarian state, the government comes as a key actor of the discussion. As such, it is the interests of the political elites that inform the discourse rather than an environmental concern per se. There is an awareness about the negative effects the issue has on the country's ecosystems and social welfare, however, economic and ideological considerations govern the response to the issue.

The study has found that the key concern underpinning a growing attention to climate change is economic losses from climate change effects and from the anticipated global fossil fuel devalue. The former informs the initiatives aimed on building resilience, improving energy efficiency, advancing climate change monitoring and so forth. In turn, the net-zero future comes as a main motivation to diversify national energy sources. To date, however, Kazakhstan has not shown any noteworthy achievements in the RES sector, which is explained, again, by the economic interests as the state is hesitant to part with its hydrocarbon-based economic approach.

These financial considerations are much more complex, however. Economic prosperity is seen by the state elites as a key to advancing Kazakhstan's global influence and strengthening legitimacy of the government at the domestic level. As such, the image of the powerful global

player under strong leadership is thought to be achieved through forceful economic development and the idea of the progressive, innovative state taking responsibility for the global green future. The green economic development guarantees the prosperous future for the people, while the bold climate pledges inform the global community about the attitude and capacities of the state. Furthermore, demonstrated willingness to tackle climate change is helpful to maximise financial support from the global actors.

Meanwhile, the fossil fuel industry also comes as a component of the ideological project considered as another governing source used to increase domestic control and build a sense of the nation. The importance of global recognition and domestic influence in the political discourse is traced to the country's past. Recalling the spectrum of socio-economic and political challenges faced by the newly independent state upon SU dissolution. Hence, it is not only reasonable concerns about energy affordability/social security but also economic and ideological considerations that explain national approach to climate change in which renewable energy development goes in hand with mining expansion.

Chapter 5. Uzbekistan: rebuilding national image through proactive climate politics

Uzbekistan is the region's most populous country, and its exceptional vulnerability to climate change is to aggravate under the pressure of population growth (World Bank Group n.d). Given its downstream position and abundant hydrocarbon resources, the characteristics shared with Kazakhstan, national climate change discourse embeds some of the patterns discussed in the previous chapter. However, there is a number of distinct narratives, which this study attempts to interpret via the country's socio-cultural context as well as considering the role of the authoritarian state in mediating the discourse. While national environmental issues have been attracting the interest of political scholars, the research has been focusing on the matters of water security (e.g., Chikalova 2016, Kuzmina 2018), and the fossil fuel aspect (Yuldashevich 2020, Vakulchuk et al. 2022a). Yet, there is a limited knowledge about national climate change rhetoric. Meanwhile, the understanding of its specifics would benefit national, regional as well as global responses to the issue. This study is among the initial attempts to fill this academic

gap. The first section of the chapter highlights certain socio-economic settings useful for making sense of climate rhetoric, while the following sections analyse the identified narratives. It concludes discussing the impact of the ideological aspects of discourse on the national climate action.

Background

Uzbekistan is a double landlocked, downstream country with an arid and continental climate (World Bank Group n.d). Around 78% of its territories covered with semi-desert steppes and deserts, including desert areas in the western part of the country formed by the desiccated Aral Sea (ibid.). It is these conditions that explain the country's high level of vulnerability to climate change effects, especially to decrease in freshwater availability. Most of Uzbekistan's freshwater resources originate outside of the country coming from the upstream Kyrgyzstan and Tajikistan via the Amu-Darya and Syr-Darya rivers (Alimdjanov 2020).

This dependence is escalated by agriculture being one of the key sectors in national economy. The sector contributed 19% to the country's GDP in 2021 (World Bank Data n.d.c). In particular, cotton, a highly water-demanding crop, accounts for 15% of the total exports (Turp-Balazs 2021). Furthermore, the sector plays a vital role in terms of socio-economic security, sustaining many individual households and employing about 23% of the population (World Bank Group 2022:39). Yet, intensive farming of the Soviet era is still practiced today (regional climate change expert, Zoom interview, 7 February 2022, see also Yuldashevich 2020). Almost 90% of freshwater goes for crop irrigation, meanwhile, outdated infrastructure and farming practices result in over a third of freshwater being lost before reaching the crops (World Bank Group 2022:115). Consequently, Uzbekistan was rendered the 4th 'worst water waster' in the world (Chikalova 2016:7). Unsustainable farming translates into land degradation processes amplifying food security issues posed by climate change (World Bank 2022:56, climate scientist, interview, Tashkent, 21 June 2022).

Meanwhile, Uzbekistan is a resource-rich country and the 3rd largest gas producer in Eurasia (UNECE 2020:268), and also has considerable oil and coal reserves. National gas and coal extraction have been expanding in the past years, and development of these sectors is a priority of national energy policy (ibid.). Natural gas combustion forms relatively insignificant amount of GHG, hence Uzbekistan's fossil fuel economy contributes as little as 0.37% to the global emissions (IEA 2021:3). However, since the early 2000s, Uzbekistan has been exporting up to 25% of its gas to the neighbouring China, Russia and Kazakhstan (ibid.:5), while national

energy needs are fulfilled mostly with coal despite its negative effects on the local environment and public health (ibid.). Furthermore, produced energy is poorly distributed across the country adding to vulnerability of those living in the remote areas (regional climate change expert, Zoom interview, 7 February 2022).

The climate change concern was almost non-existent in the official discourse until the 2016 governmental change. Although Uzbekistan has been a member of UNFCCC since 1993 and signed the Kyoto Protocol in 1998, the term of ex-President Karimov was associated with little attention to the environment and deepening authoritarian rule (Schatz 2006, Yuldashevich 2020). After Karimov's death, Shavkat Mirziyoyev has come to the office, and this is when national agenda has turned towards democratisation and global cooperation (Zhiltsov 2018). In particular, the environmental issues have become sound in the official discourse: 'With the previous President… the situation was different. But with Mirziyoyev has begun to pay great attention to the green economy, ecology, the Aral Sea' (environmental scientist, interview, Tashkent, 29 June 2022). The new government has given more space for the public sector in climate politics and inclusion of civil society in decision making was declared in the key national legislations (Alikhanov and Seitova 2022). The number of NGOs has been growing since 2016 (Kim 2020:79) as the state has eased the accreditation procedures (climate change policy expert, Zoom interview, 11 February 2022). The activists have also mentioned increased support to the sector: 'Much has changed with Mirziyoyev […] I was very pleased to be awarded a medal, the recognition of my fight for human rights in the field of ecology' (environmental journalist, Zoom interview, 28 February 2022).

As to the public sphere, during Karimov's term, the government was controlling and intimidating work of oppositioners, civil activists, and the media (Human Rights Watch 2011). While Uzbekistan still scores low in terms of media freedom (RSF 2023b), media experts have acknowledged substantial increase of freedom over the past years: 'we now see liberalization of the media landscape, in this sense, there has been a shift since the time of Karimov […] we feel this effect in many areas, including the ecology topic' (climate change policy expert, Zoom interview, 11 February 2022). Consequently, the outlets have been communicating problematic environmental issues. For example, the media spotlighted underinvestment in energy and water infrastructures development TT (2018), deforestation run by the businesses (Gazeta 2018) and a lack of information about climate change available to the public (Gazeta 2021). Furthermore, the government is receptive to the critics, for example, it was the journalists who influenced

the government's take on the deforestation issue: 'we wrote a petition, and this was the final point for the government to introduce a moratorium on axing trees ... no one gives permission for that now' (environmental journalist and educator, Zoom interview, 21 March 2022). Also, the diversity of coverage is allowed under the new leadership, as one of the journalists sharply pointed: 'now, everything that is not prohibited by law can be published. That's it' (media expert, interview, Tashkent, 21 June 2022).

Regarding climate policies per se, Uzbekistan ratified the Paris Agreement in 2018, launched a long-term environmental adaptation strategy (Environmental Protection Concept 2019) and set the ground for systemic shift to a green economy (Green Economy Strategy 2019). The most noticeable recent step in the climate policy field, however, was an update of Uzbekistan's Nationally Determined Contributions (NDC) to global climate action. The new pledge, announced in 2021, is to reduce GHG emissions per unit GDP by 35% by 2030 from 2010 level instead of 10% goal of 2017 and achieve carbon neutrality by 2050 (Republic of Uzbekistan 2021). This is to be achieved largely through integration of alternative energy sources, hence, the state aims at 25% RES in its energy mix by the end of the decade (ibid.). Uzbekistan has got some significant solar potential, which is almost four times the country's primary energy consumption (IEA 2021:36). Recently, the country is seen as a regional leader in terms of RES instalments with almost 12% of RES in national energy mix (ibid:37). There are also significant afforestation initiatives, i.e., the Green Uzbekistan and the Green Aral Sea programmes (UNECE 2020). There are also initiatives set to strengthen public resilience, in particular, through education and sustainable farming initiatives (Republic of Uzbekistan 2021).

To make sense of the current national attitude to the climate crisis, the study has analysed a range of narratives emerging around the climate change topic. Given the correlation between the governmental change and the discursive swings, the analysis has given particular attention to the role of ideological factors in shaping the discussion. Through the analysis of the official documents (*see Table 7*), media articles (*see Table 8*) and the range of expert interviews (14 in total), the chapter seeks to find out who constructs national climate discourse and how.

Table 7. Uzbekistan: national legislations.

Document	Released date	Description	Relation to climate change

Program of actions for environmental protection of the Republic of Uzbekistan for 2013-2017 (Environmental Program)	May 27, 2013	Sets strategic plan of the environmental protection for 5-year period. In 2018, was updated till 2022.	Transition to a low carbon economy through innovation; importance of eco education
Concept of environmental protection of the Republic of Uzbekistan until 2030 (Environmental Protection Concept)	October 30, 2019	Provides a long-term vision of national environmental policy	Vulnerability to the issue; global and regional cooperation; science development
Strategy for the transition of the republic of Uzbekistan to a "green" economy for the period 2019-2030 (Green Economy Strategy)	October 4, 2019	Outlined the strategy for a systemic shift to a green economy	Reduction of GHG emission in all economic sectors
Updated national contribution of Uzbekistan to global GHG emissions reduction (NDC Uzbekistan)	2021	Updated national NDC and national action in each of the related sectors	Focuses primarily on climate change

Table 8. Uzbekistan: media articles by the event.

Event/newspaper	**Narodnoe Slovo (NS)**	**The Tashkent Times (TT)**	**Gazeta.uz (Gazeta)**
Paris Agreement signed (February-April 2017)	0 articles	4 articles	7 articles
Paris Agreement ratification (August-October2018)	4 articles	8 articles	5 articles
The 2019 heatwave (September-October 2019)	2 articles	3 articles	7 articles
The 75th UN Assembly (September-October 2020)	8 articles	1 article	0 articles
The 2021 heatwave (July-September 2021)	10 articles	5 articles	12 articles
Total: 76			

National vulnerability to climate change: a growing concern

The climate change-related risks constitute a significant part of the national narrative. The official rhetoric emphasises Uzbekistan's exceptional vulnerability to climate change: 'The ongoing global warming trends pose a great risk to human health and economic development… Uzbekistan belongs to the countries most vulnerable to climate change' (Environmental Protection Concept 2019:3). Besides the increased prominence of droughts, heatwaves and extreme weather events in the country (e.g., climate scientist, interview, Tashkent, 30 June 2022), the growth of attention has to do with the Presidential change. Mirziyoyev holds a PhD in water engineering gained at the Tashkent Institute of Irrigation and Melioration, which explains the leader's attention to the environment, especially to the water-related issues and climate risks : 'he [Mirziyoyev] knows agriculture well, he is a good specialist… he graduated from the university where I studied' (regional climate change expert, Zoom interview, 7 February 2022). Consequently, the environmental challenges, especially those linked with water security, receive higher attention than ever: 'the first President said that we can have enough of everything, but there will never be enough water […] but Mirziyoyev was very clear: if we don't save water, we don't see our future' (ibid). The positive change is also reflected in the official documents: 'Election of […] Shavkat Mirziyoyev in 2016 and beyond changing strategic priorities gave new dynamism to the national development' (NDC Uzbekistan 2021:7), and in the media (e.g., NS 2019). Furthermore, the official discourse acknowledges the weak points of national green politics which are being addressed under the new leadership (Green Economy Strategy 2019:2). Thankfully, the leader has brought relevant experts to the office at the start of his term, in particular, to the Ministry of water (climate change expert, Zoom interview, 18 March 2022) and the Ministry of agriculture (environmental scientist, interview, Tashkent, 29 June 2022).

The change at the political level has also translated into the development of national climate science, as what was previously a leading unit of SU climate research has lost the potential during the turbulent years of post-independency (e.g., environmental scientist, interview, Tashkent, 21 June 2022). The lack of climate research is acknowledged in the official documents and development of the national expertise is among ten key objectives of the national environmental policy (Environmental Protection Concept 2019). Indeed, over the past years, the state has been increasingly investing in the related initiatives, in particular, in climate forecast and monitoring, the development of which was recently placed into a legal framework (NDC Uzbekistan 2021). Also, the scholars were receiving increased research

grants (climate scientist, interview, Tashkent, 21 June 2022), and the long-awaited climate change-focused course has been recently opened in the National University of Uzbekistan offering higher stipends to attract interest to the field (climate scientist, interview, Tashkent, 30 June 2022). The state intends to go further, i.e., to ensure the international accreditation of national research facilities so the scholars may fully join the global community (Environmental Protection Concept 2019).

The key risks: freshwater deficit and social security

The interviewed scholars named decreasing freshwater resources, changing weather patterns and land degradation to be 'the three blocks that include major climate change processes' and pose a threat to the country's development (regional climate change expert, Zoom interview, 7 February 2022). Given the country's geographical position, a freshwater deficit is at the core of the national climate discourse: 'We really have serious problems. Water for Uzbekistan is a very acute issue' (climate scientist, interview, Tashkent, 30 June 2022). Reduced availability of, and increased demand for, freshwater leaves 20% of population struggling to fulfil their freshwater needs (World Bank Group 2022). The scholars acknowledged major water shortages nationwide in 2022 and its effect on social wellbeing. In the Southern regions of the country, this had serious effects on agricultural productivity and public health, and also triggered migration (environmental scientist, interview, Tashkent, 26 June 2022). A further decrease in water availability by 2050 is expected to deepen the challenges (Yuldashevich 2020). Given this, and the background of the leader, the water issues are central in the official discourse as well. The key environmental policy legislation raises concerns primarily about water-related risks when mentioning climate change: 'In the absence of appropriate measures, the country may face a shortage of water resources, an increase in the number of droughts and hazardous events' (Environmental Protection Concept 2019:4). Also, the efficient water management is considered one of the key steps on Uzbekistan's way towards green economy (Green Economy Strategy 2019).

Besides the water topic, the scientists highlighted the extreme weather events increased in the country over the past years: 'it's not just rain, but a lot of rain, or severe drought periods worsened by the sandstorms' (environmental scientist, interview, Tashkent, 21 June 2022). In the context of agriculture, extreme weather events occur in the form of droughts, mudflows, landslides and hails resulting in shrinking crop volumes each year (ibid., see also Yuldashevich 2020). Furthermore, the experts are concerned about the impact of extreme weather

occurrences on public health. While people in Uzbekistan are used to a seasonal heat, high temperatures during prolonged time periods have a serious impact on those with health conditions (UNECE 2020). Toxic sandstorms are a country-specific phenomena caused by the land mismanagement and exaggerated by climate change (environmental scientist, interview, Tashkent, 29 June 2022). The saline and sand masses from the sea basin incorporated in the wind flows affect health of many, as around 22% of population live in the sandstorm-prone areas (CIA 2020). Consequently, the scholars insist on action: 'we need to be prepared that situation will only worsen…. Adaptation is really, really urgent' (climate scientist, interview, Tashkent, 30 June 2022). Indeed, the state has made public resilience to extreme weather events one of the key priorities of national climate policy (NDC Uzbekistan 2021:28).

It is also worth looking at how the media communicated the climate risks to the reader. The alarming coverage is the prominent feature of the national coverage being dominant in NS and Gazeta. As such, the newspapers outline the worrying future scenario: 'climate change requires immediate solutions. If we leave these problems to children, they will no longer be able to solve them, it will be too late […] there is no time to wait' (NS August 8, 2021). The national independent's coverage tends to discuss social challenges caused by climate change across the country, e.g., farmers' vulnerability (Gazeta 2019) and the water quality issues (Gazeta 2021). This strategy, i.e., representing the issue as a local matter, is a beneficial strategy to draw public attention to the topic. It also encourages people to address the crisis: 'It is wrong to pretend that we have plenty of water and we can use it carelessly [...] We should always envision the desiccated Aral Sea' (Gazeta April 25, 2017). Furthermore, the national independent used the climate topic to criticize state policies:

> We drove ourselves into a hole [...] In order to get out of it, you first need to stop digging it. Yes, everything costs money, but inaction will cost us the most. And the highest price we'll have to pay is subsidizing fossil fuels and denying what's clear as day. (ibid.)

Meanwhile, the outlets have also attracted the readers' attention by portraying climate change as a catastrophe: 'The world is on the brink of disaster due to global warming' (Gazeta July 6, 2021). The national media portrays climate change as a deadly, hardly avoidable tendency: 'In 500 years, the Earth may become uninhabitable. In the worst-case scenario, humanity will die out as a biological species. It's all because of global warming' (NS September 29, 2021). This coverage of the issue does the opposite, by diminishing public agency (Foust

and O'Shannon 2009, Boykoff 2011). Indeed, the scholars express concerns about the overtly negative portrayal of climate change as it does not reflect the real picture:

> They [journalists] only show the destroyed ships, the dead sea…. But there is life around, people actually plant things, we implement the Sustainable Gardens project there…but this is not shown, journalists want to show catastrophe as this attract public attention. (climate scientist, interview, Tashkent, 21 June 2022)

The causes of climate change

As to the reasoning, the anthropogenic factor of climate change was not doubted in either of the observed discursive fields. The official rhetoric acknowledges the flows of the national approach to nature as a key reason for the climate crisis: 'Low level of energy efficiency of the economy, irrational consumption of natural resources ... impede achievement of priority national goals and objectives in the field of sustainable development countries' (Green Economy Strategy 2019:2). Indeed, Environmental Protection Concept (2019) aims to address unsustainable use of energy, water and lands in the country as these issues provoke the environmental crisis. Indeed, the media did not feature any narrative that would contradict the consensus on anthropogenic climate change: 'humanity is waging a ruthless, self-destructive war on nature… We are not only witnesses of the impending catastrophe - the Pandemic of Nature - but, in many ways, its culprits' (Alikhanov 2020). Furthermore, TT claims that any of the natural reasons offered by the scholars 'seem to be not enough to outweigh anthropogenic effects on climate as the temperatures are breaking the record' (TT August 6, 2021). This absence of scepticism in all three analysed outlets can be explained by the dominance of the man-made climate change discourse at the official level, and by the country's climatic conditions under which climate change effects are getting increasingly apparent (climate change policy expert, Zoom interview, 11 February 2022). Another explanation is the country's historical heritage – the Aral Sea devastated under the Soviet industrialisation politics (Loodin 2020) is a prominent topic in both media (NS, Gazeta) and official discourse (e.g., Environmental Protection Concept 2019). In this sense, anthropogenic impact on nature is rooted in the national discourse being entangled with the criticism of SU environmental politics as an antipode of the national take under the new government. The similar appeal to the Aral issue has been observed in Kazakhstan's discourse (Kudaibergenova 2016).

It is interesting, however, that variations of climate scepticism were apparent among the interviewed scientists. While acknowledging the impact of human activity, two of the interviewed scientists accentuated the natural reasons: 'climate change has always been there […] Naturally, man had an influence on this ... But we must understand that climate change is inevitable and we must get used to it' (environmental scientist, interview, Tashkent, 21 June 2022). Notably, natural explanations of the issue exists among the older generation of academics whose expertise is rooted in the Soviet climatology (climate scientist, interview, Tashkent, 21 June 2022). The above narrative, recognition of both natural and anthropogenic factors, was also observed by Doose and Oldfield (2018:23-24): 'differing viewpoints typically revolved around the relative contribution of one factor or set of factors, rather than an outright rejection of a particular approach'. As such, there was no explicit consensus on the nature of the issue among SU climatologists - while anthropogenic climate change was a dominant narrative, natural factors were still prominent explanation. Another observation is that interviewed climate sceptics hold a nature-centred approach: 'we cannot intervene in nature with our own laws, instead, we must conform to law of nature… if there is no nature - there will be no us' (environmental scientist, interview, Tashkent, 21 June 2022). Another scholar has compared people to 'the parasites on the body of our planet' (environmental scientist, interview, Tashkent, 29 June 2022). This narrative is interesting considering the instrumental approach to nature, which dominated SU climate science (Oldfield et al 2015) and can be explained by looking at another feature of SU science tradition, which emphasised the intrinsic value and preciousness of nature (Dronin and Bychkova 2018). Considering all the above, the natural reasoning of climate encountered in Uzbekistan's science discourse, first, does not rule out anthropogenic factor and, second, does not serve a justification for the abuse of the environment. Furthermore, the new generations of climatologists emerge after the end of the Soviet era, overall, tend to follow the global consensus on anthropogenic climate change (climate scientist, interview, Tashkent, 21 June 2022).

Last, some of the interviewed activists and journalists seem to misinterpret the role of the Aral Sea in climate change processes, seeing it as a main reason of the observed changes: 'Now it is very clear how the climate has changed over the past 20 years, and of course, this is majorly the influence of the Aral' (environmental journalist and educator, Zoom interview, 21 March 2022). While the Aral disaster has substantially affected the climate of the region, the anthropogenic factors are the key drivers climate change, and it is climate crisis that exaggerated the desiccation processes, not vice versa (Lioubimtseva 2014). That is, explaining

the climate crisis solely by the Aral catastrophe caused years ago during SU rule comes as a barrier to civil society to recognize its own impact on nature and to act accordingly (environmental scientist, interview, Tashkent, 26 June 2022). As one of the experts noticed, the media promotes the misconception as climate change and the Aral Sea often go along in the media articles (interview Alisher), arguably since the Aral has been 'an ecological symbol of Uzbekistan's media' (Kosimova 2021:25), a popular topic the journalists are comfortable with. Indeed, relevant examples were found in the main national outlet: 'Intensive climate change, scarcity and pollution of water resources, reduction in the area of glaciers in […] all this only a short list of the results of the dying of the Aral Sea' (Alikhanov 2020). Furthermore, in the official discourse, the separation of the topics is not obvious and, while not giving wrong claims, can be misunderstood by lay people. An example of this is Mirziyoyev's speech at the 75th UN conference:

> Another acute problem of our time is global climate change. […] Unfortunately, these negative changes pose a serious threat to the sustainable development of Central Asia. I would like to once again draw attention to the disastrous consequences of the drying up of the Aral Sea. (ibid.)

In sum, in the national discourse, climate change is set firmly as an issue, which poses serious risks to the national security, social wellbeing and economic development. At the political level, the new President's rhetoric has brought climate change into a spotlight. Naturally, in the past years, the media have been giving more attention to climate change, however, coverage still remains low – over the 2017-2020, only 95 articles focused specifically on climate change were published across all registered media in the country (Kosimova 2021:28). In attempts to draw public attention to the complex scientific topic and in the absence of thorough knowledge on the topic (ibid., environmental journalist and educator, Zoom interview, 21 March 2022) the journalists tend to exaggerate and shape scientific observations on the issue. Alternatively, the media reduce the topic to the global political agenda, indeed, three out of five selected discursive moments reflect the international climate change negotiations (*see Table 8*), and TT covered only two topics – political relations and climate financing. On the positive side, there are initiatives to advance national climate reporting held by the regional and international actors, in particular, the Central Asian Bureau for Analytical Reporting (CABAR.asia), CAREC, and the Centre for the Development of Modern Journalism

for the Republic of Uzbekistan (MJDC). The journalists also participate in the regional projects held by US-based Internews; it held Uzbekistan-focused initiatives in the country's early independency period but lost its accreditation being labelled a foreign agent a few years later (media expert, interview, Tashkent, 21 June 2022). As to scientific community, climate research has received a further consideration thank to Mirziyoyev's concern and the expertise in the environmental matters. Notably, there is still certain climate scepticism among the scholars stemming from the SU research tradition. Furthermore, there are variations of how the issue is reasoned across all the actors of national discourse. One thing is common, however – a recognition of human impact on climate change processes and determination to act to mitigate a climate crisis.

National vulnerability to climate change: a real concern or an aspect of the 'new' authoritarian regime?

Overall, in the official discourse, the risks climate change poses to people, that is, public vulnerability, is a main reason to act on the issue. As such, a dissent state of the environment is 'a necessary condition for improving the standard of living and health of the population of the Republic of Uzbekistan and ensuring the wellbeing of the future generations' (Environmental Protection Concept 2019:2). In a similar fashion, the green economy policy places the quality of living conditions and economic welfare among the key issues to be addressed via green action (Green Economy Strategy 2019). The main national newspaper maintains on the narrative: 'The stability of the state stands on three following factors: economic growth, social protection and environmental well-being' (NS June 25, 2021).

The appeal to public prosperity in the official climate change discourse, besides Mirziyoyev's expertise mentioned earlier, can be explained by the new government's attempts to further legitimation. In Uzbekistan, deepening poverty and public tensions under Karimov's regime resulted in increased demands for liberalisation, which were addressed in the new approach to the governance under Mirziyoyev's term (Schmitz 2020). The concern over social welfare comes as an element of 'authoritarian upgrading' (Schiek 2018) or 'enlightened authoritarianism' (Schmitz 2020), that is, performed liberalisation while retaining the essence of authoritarian leadership. Notably, an appeal to social security to attract public support is a common technique used in the 'new authoritarian' regimes, in particular, in neighbouring Kazakhstan (Omelicheva et al 2015) and Russia (Tynkkynen 2018). New authoritarianism represents 'an ideology of progress and soft repression' (Schiek 2018:93), with progress being achieved via liberalisation of economy, opening to global markets and obtaining democratic

values. Omelicheva et al (2015) observe all of these steps in democratisation processes across post-Soviet CA states, and those have become particularly noticeable under Mirziyoyev's term (Bellefontaine 2022). At the official level, this was reflected in human rights, public security, social equality and tolerance as well as liberalization of the economy and other democratic values being manifested in the national development strategy passed shortly after the power change (Decree of the President of the Republic of Uzbekistan 2017).

That is, instead of legitimisation of the state via control and repressions typical for traditional autocracies, the 'new' authoritarian Uzbekistan performs a caring attitude towards the people and addresses those points of public discontent expressed during Karimov's term, for example, demands for reducing poverty via liberalisation of economy (Junisbai 2012). In a climate change context, this is expressed in green economy rhetoric, which primary goal of which is to improve the people's living conditions through economic diversification, addressing water and energy security matters and new employment opportunities (Green Economy Strategy 2019). As such, economic considerations in national climate discourse, again, contribute to the preformed concern about people, specificly, their economic welfare. Notably, attention to civil welfare is commonly used to prevent social upheavals associated with unwanted regime changes, in particular, in the new autocracies across Asia (Schiek 2018:94). Economic considerations are still important, though, as NDC Uzbekistan (2021:6) stresses that national climate action 'does not hinder the economic development'. Indeed, as one of the political experts reflected on the process of updating national GHG reduction pledges: 'they [the state] realized that this goal is attainable without much harm to our economy. After all the calculations, we realized that, in principle, we can be more ambitious' (climate change policy expert, Zoom interview, 11 February 2022). Also, in both the official rhetoric and the media, while the positive impacts iof green action, e.g., new employment opportunities and energy security are discussed (e.g., Gazeta 2021, NS 2021), a financial aspect is also covered in terms of economic losses from inaction rather than in terms of benefits. For instance, Gazeta (July 6, 2021) warns about the damage to Uzbekistan's ecosystem up to $200 billion by 2030, and CEP (2019) highlights the economic losses from the reduced crops. Hence, an economic aspect is presented as a reason to act on climate change to avoid national decline – not as an economic opportunity, which is a main discourse in Kazakhstan's rhetoric (see chapter 4).

The standalone narrative in this rhetoric is RES development with its biggest appeal to economic gains. As such, besides addressing national energy security issues, the renewable sector has 'a high priority both economically and in terms of climate change' (NDC Uzbekistan 2021:10). This narrative has been fast appropriated by the stakeholders, too. Among the industries and private businesses, there is an understanding that the investment pays off: 'now, especially in export industries, they see that quality is cost-effective, better for business and environment' (climate change policy expert, Zoom interview, 11 February 2022). Among both politicians and private stakeholders, the narrative can be explained by the interests on the global arena, that is, an engagement in the global green energy discourse fosters profitable business cooperation and foreign investment flows (Poberezhskaya and Bychkova 2022). As to the resource nationalism rhetoric identified in Kazakhstan, the narrative is not prominent in Uzbekistan, albeit the country's vast natural resources. Instead, the officials justify their fossil fuel economy, in particular, coal combustion, again, using social security concerns: 'fearing social upheavals, unemployment, economic stagnation, the government could not take such risks… switch fully to alternative energy' (climate change economy expert, Zoom interview, 24 February 2022). Consequently, there is no sign of resource-pride in media, too. The state-backed newspapers are silent on the topic, while the independent criticized the fossil fuel sector expansion (Gazeta 2019). This rhetoric, however, contradicts the real actions. Despite national gasification plans outlined in the official documents (e.g., Environmental Protection Concept 2019), a major part of the resource is exported (climate change expert, Zoom interview, 18 March 2022).

Another observation is that the topic of the environment itself in the official rhetoric comes as a governmentality instrument. The environmental reforms in the authoritarian states can serve as means of 'symbolic legitimacy' (Wang 2018), that is, creating the discourse around the reform process itself, which is thought to advance the state's credibility at the domestic and global levels. As such, in China, the actual results of the reforms were of a second importance, while the rhetoric was thought to advance the discourse of 'ecological civilisation' which promotes national strength, tradition and greatness of the state (ibid.). Indeed, similar techniques, i.e. advancing the image of the strong state were identified in Kazakhstan's legacies (see chapter 4). In Uzbekistan, acting on climate change comes useful to demonstrate the state's care about the people. As the President noticed in one of his public speeches: 'the interests of man above all else […] and we need to pay more attention to improving the environmental situation' (President of the Republic of Uzbekistan 2020). Furthermore, in the official

discourse, afforestation initiatives are reasoned by the social welfare concerns rather than reduction of GHG like in Kazakhstan's case. The government seems to be able to advance its legitimacy through effective climate action responses, i.e., most of the experts notice the positive change in climate action with the new President. As such, some interviewees mentioned they are confident in the government's ability to achieve its recently increased decarbonisation pledges: 'we are now developing rapidly, especially solar energy, the government obviously works in this regard […] if it continues this way, I think 35% [GHG] decrease is possible' (climate change expert, Zoom interview, 18 March 2022). Another representation of increased support are the recognition received from scientists for financing the research (climate scientist, interview, Tashkent, 21 June 2022) and positive attention to climate activism (environmental journalist Zoom interview, 28 February 2022) mentioned earlier. Furthermore, some of the regional climate policy experts acknowledged the state's precedence in terms of climate adaptation in the region: 'Uzbekistan is definitely championing climate change adaptation in CA now… but we [Kazakhstan] will catch up soon' (state climate adaptation expert, interview, Astana 8 December 2022). Indeed, the media highlights national adaptation efforts, in particular, in the Aral region, as the state has been 'taking systematic measures to mitigate the negative impact of global climate change and the drying up of the Aral Sea on the local livelihoods' (Gazeta February 10, 2017). Given that the Aral matter has been a main point of public environmental concern (Kosimova 2021), the improvements in the area can strengthen the readers' trust in the new leader.

Considering the state's appeal to public welfare, it comes logical that the adaptation topic is given a high importance in the official discourse (Alikhanov and Seitova 2022). Over the past years, the state has been working on the National Adaptation Strategy (NAP), which was set to be released by 2020. Yet, despite the financial support from GCF and expertise offered by UNDP, the process has not been finished yet (UNDP n.d.). Furthermore, the experts noticed that the initiatives aimed to increase public resilience have to rely primarily on the outside donors. For example, the Sustainable Gardens project, which helps the people in the Aral region to diversify traditional agriculture is sponsored by UNDP (climate scientist, interview, Tashkent, 21 June 2022). Similarly, the 'Green Farmer School', the educational project aimed to introduce the green approaches to agriculture to the farmers of the Aral, is financed by the local Bank of Agriculture: 'It took a long time to convince the bank, to explain that it is profitable for them to give subsidies to farmers' (environmental scientist, interview, Tashkent, 26 June 2022). Indeed, while the matter of environmental education is sound in the official

discourse, i.e., 'solving the environmental problems is impossible without the broad participation of civil society, and the level of environmental education is of particular importance' (Environmental Protection Concept 2019:7), in practice, it is not prioritized sufficiently (climate scientist, interview, Tashkent, 21 June 2022). Under the limited budget, policymakers tend to overlook the environmental awareness component: 'We all already know that the environment must be loved and protected…there is nothing new to add' (environmental journalist and activist, Zoom interview, 28 February 2022). There are some governmental initiatives in farmers' education, though: 'The Ministry of Agriculture is engaged in educational activities and also holds very useful practical workshops' (environmental scientist, interview, Tashkent, 29 June 2022). Hence, the overall experts' stance on the national action can be vaguely characterise as following: 'There are positive steps, but they are not yet enough' (environmental scientist, interview, Tashkent, 21 June 2022).

In sum, in the national discourse, the wellbeing of the nation comes as a main reason to act on climate change. While this attitude is quite expectable from the civil activists as well as scientists who are the first to realize and communicate climate risks, concern about the people is also dominant in the official discourse. It is argued here that the appeal to people in the government's climate rhetoric is underpinned by the President's expertise in the environmental matters as well as used as a tool for gaining a popular support. But, despite this focus on domestic matters, the global dimension, i.e. engagement with the outer world in addressing climate crisis, is still an important angle of the narrative. The purposes of this rhetoric, however, in some ways differ from those observed in the previous chapter. The next section discusses the matter in further detail.

Uzbekistan's global climate discourse: a reflection of the government's transformation

The term of Mirziyoyev has marked an increased openness of Uzbekistan to the global world. Serving as a Prime Minister during Karimov's term, the now-President was well-aware about Uzbekistan's economic problems arising from its isolation, in particular, in terms of foreign trade and investment (Schiek 2018:90). Since 2017, the state has been performing the 'New Uzbekistan Strategy', one of the aspects of which is active engagement in international business. This openness to the outer world is also reflected in national climate politics. Just like in Kazakhstan, climate change is mostly discussed as a global issue. The state sees itself as a 'part of a global movement to mitigate and reduce modern environmental challenges' making 'every effort' to prevent global climate crisis (Environmental Protection Concept 2019:2). The

collective response seems to be an only way to decrease negative effects of climate change as 'GHG emissions do not know any borders […] Uzbekistan shares the opinion of the world community on the need to make every effort to prevent global climate change' (NDC Uzbekistan 2021:5).

As to an economic aspect, the positive evaluations from the international actors against the human rights record are key to attracting financial support, therefore, the developing states are particularly interested in matching the liberal values (Dietrich and Murdie 2017). Under Mirzoyoyev's term, Uzbekistan has been successful in attracting international financial means to national climate action (Emazarov 2020). The key donors are the Green Climate Fund (GCF) and the European Development Bank (EBRD), with its record high EUR607 million investments in 2021 mostly allocated to renewable energy and energy efficiency development (Usov 2022, see also Obydenkova 2022). The significance of the foreign donors for national climate action is highlighted in the official documents: 'Uzbekistan's funding needs for effective climate change mitigation and adaptation remain significant' (NDC Uzbekistan 2021:13). The media also contributes to the narrative, in particular, foreign-oriented TT has not only been emphasising exceptional national vulnerabilities, 'Uzbekistan is one of the countries under most intense climate change effects' (TT March 10, 2018), but also the need for help in addressing them. For example, covering European Investment Bank's 2018 financial help, the outlet states:

> Any tangible goals, particularly in the areas of development and the environment, are only achievable through joint action and cooperation, and we are happy to see this spirit in the relationship between the EU and Uzbekistan. (TT October 17, 2018)

Notably, almost a third of the newspaper's articles acknowledge the foreign contribution to national climate action, and this cannot be directly linked to the state's narrative as TT is a privately owned newspaper (Dumont et al. 2023). As one of the media experts explained: the appeal to the foreign actors is dictated by the newspaper's own interests as the outlet is relatively new (established in 2016) and sponsored by rather similar organisations (media expert, interview, Tashkent, 21 June 2022). Nevertheless, this discursive feature should not raise concerns about the quality of the source: 'This is good newspaper and we should not judge these alignments – they are essential to survive and grow' (ibid.).

In this light, it is worth noticing the role of the Aral Sea as an object of national discourse. The official discourse portrays the desiccation of what was the largest CA water reservoir as 'one of the biggest environmental disasters in recent history' (NDC Uzbekistan 2021) with Uzbekistan being hit particularly hard by its consequences. The International Fund for saving Aral Sea (IFAS) has been established in 1993 as a joint initiative of CA states to attract international funds to solving the issue, with Uzbekistan being one of the particularly active initiators (IFAS n.d.). In 2018, the International Innovation Centre for the Aral Sea (IICAS) was established under the President's Mirziyoyev initiative aiming to address both the Aral Sea crisis and climate change (NDC Uzbekistan 2021). A year later, the Aral region received an international status of a zone of environmental innovations and technologies (ibid.). The experts explain it by the state's attempt to amplify the foreign financial support to national environmental action as drying of the Aral Sea is a more obvious illustration of national vulnerability than the direct effects of climate change:

> I see that recently the Aral Sea and the climate are more connected because the government wants to attract foreign funding to solve the problems of the Aral Sea. In this particular direction of climate adaptation, there is serious international finance, while in other areas it is much less ... Therefore, this strategy is correct from the point of view of establishing international relations, and climate change will probably create an additional problem for the Aral Sea ... But the reason for the drying up is not climate change. (climate change expert, Zoom interview, 18 March 2022)

Recently, Uzbekistan intended to host the 76th UN conference in the Aral Sea region to increase international attention to the issue (Alimdjanov 2020). Notably, the experts criticized the overt attention to the Aral issue in national climate policy, while the other serious domestic challenges such as land degradation (climate scientist, interview, Tashkent, 30 June 2022) and glacier melt (climate change expert, Zoom interview, 18 March 2022) are not given attention they deserve.

Globalisation of climate change can not only be explained by economic terms. An independent Uzbekistan, just like other CA countries, has emerged in the global governmentality era (Heathershaw 2010), or 'green globalism' politics (Luke 2011:99). In this governmentality mode, the interstate communication and shared values outweigh the focus on

national territories and resources, hence, viewing climate change as a matter of collective response is inherent for the 'global performance' states developing their identities during this globalisation era (Heathershaw 2010). What is specific to Uzbekistan's case, though, is that national climate change rhetoric, and its alignment with the Western values specifically, is thought to advance legitimacy of the state at the domestic level. In the 'new autocracies', an openness to the world is commonly used to strengthen a domestic regime (Schiek 2018:91). For example, in Uzbekistan's official and media rhetoric, climate change is often discussed along with the topic of gender equality. As such, climate action is seen as an opportunity to reduce the gender gap, and women participation in climate policies as an essential of effective action (NDC Uzbekistan 2021:26). Indeed, one of the experts has acknowledged a real improvement in this regard: 'The gender issue has now become very relevant - there are already a lot of women in the Parliament and in the ministries, they occupy leading positions' (environmental scientist, interview, Tashkent, 29 June 2022).

The narrative is sound in the media, too, as the three analysed newspapers have brought the gender matter to a spotlight in 2021. As such, TT (August 6, 2021) emphasises an essential role of women in solving climate crisis: 'Women are disproportionally affected by climate change, however, they possess some great potential […] ideas and leadership to solve them'. NS (2021) also discussed an importance of women in the local-level environmental decision-making processes, while Gazeta (2021) has focused on the benefits for women in the green jobs sector, the narrative expressed by the officials in the National Green Economy Strategy (2019). Notably, the narrative reflects on the concerns of the international actors about an absence of a gender aspect in Uzbekistan's green policies (UNECE 2020:3). The fact that the narrative has emerged in the national rhetoric just a year later demonstrates a high importance of the global discourse to the national official and media actors. Yet, several experts pointed to the lack of real understanding of these matters arguing that the narrative is mostly a tribute of fashion: '…they [policymakers] often have no idea what they are talking about...they learned these trendy words but not their meaning' (environmental journalist and educator, Zoom interview, 21 March 2022). On a positive side, media have been drawing attention to growing climate activism in Uzbekistan, especially among youth, covering recent public initiatives, e.g., protests against deforestation (Gazeta 2019) and the campaign aimed to raise awareness about the Aral Sea issue (Gazeta 2021). Besides contributing to public knowledge about climate change, covering green activism in media contributes to public agency increasing prominence of and mobilizing people around climate initiatives (Stevenson and Dryzek 2014).

In the current political environment, national NGOs has been receiving substantial support from the large international organisations such as World Bank and UNDP (environmental scientist, interview, Tashkent, 26 June 2022, see also Ernazarov 2020). Yet, some activists acknowledged the overt influence of the international organisations - while being financed, national action is in a way hindered by the foreign support: 'Often international organizations come with an established agenda... yes, the problems they want to solve are important, but we would like them to consider what is the most relevant for us today' (environmental journalist Zoom interview, 28 February 2022). Furthermore, the political actors contribute to this tendency, launching NGOs 'in order to join the international project and take the money […] it would be great if international organizations prioritized the real NGOs' (ibid.). Several interviewees raised similar concerns pointing to the overt dominance of the foreign actors in national research and decision-making processes: 'International actors push their ideology a little too much, intervening with our research while not considering our specific conditions […] that's why many of our experts avoid this type of cooperation' (e.g., regional climate change expert, Zoom interview, 7 February 2022). Recalling Heiss (2019), the increased support to NGOs can be viewed as means to attract the foreign funds via this democratic performance (see also Kim 2020:74).

As to national climate science, globalisation politics positively impacted its development as the state has been supporting knowledge exchange between the scholars and the foreign colleagues. Still, several experts expressed their concerns about a lack of prominence of national scientists in the global climate discourse, for instance, none of the national experts are contributing to the IPCC reports. Notably, it is not a quality of research that comes as a main barrier: 'the IPCC is trying to maintain a regional balance ... even if a scientist from CA does not publish in 'Science' and 'Nature' every day, they will still welcome him' (climate change expert, Zoom interview, 18 March 2022). The reasons of this disintegration are limited understanding of global scientific community's culture, how to reach to the foreign bodies, and a language barrier (ibid.). Notably, some scholars link this to 'scientific closure', i.e. restriction of the international knowledge exchange under Karimov's term (Markowitz 2016). However, none of the interviewees confirmed this argument that cooperation was there at all times (climate scientist, interview, Tashkent, 21 June 2022). Instead, the experts attribute this exclusion – as well as the overall decline of climate science in the post-Soviet Uzbekistan – to broader economic and political challenges in the period of early independency (climate change policy expert, Zoom interview, 11 February 2022).

A regional dimension: advancing geopolitical power through a joint climate action

As to Uzbekistan's position in the regional discourse, Mirziyoyev's term has marked active attempts to cooperate with its neighbours. As the national independent has noticed, 'now the [CA] dialogues have become more rational and specific. Political statements that have been made recently set positive expectations' (regional climate change expert, Zoom interview, 7 February 2022). Opposite to the 'regional hegemon' attitude performed under Karimov's rule (Bohr 2004), cooperation with CA states is one of the current national priorities, in particular, in the field of climate change (NDC Uzbekistan 2021). Recently, Uzbekistan hosted the Green Economy Regional Conference in 2018 and the Second Central Asia Climate Change Conference in 2019, as well as representing the region as a part of the joint imitative at the COP 26 (Buranelli 2023). The state also continues to be a proactive member of the IFAS (regional climate change expert, Zoom interview, 7 February 2022). This can be explained by the government's awareness about Uzbekistan's dependent geographical position in terms of water supply as well as by the recognition of the risks for regional security: 'climate change will deepen the tensions between the countries of the region, hence, damaging the social security, in particular, of those living in Fergana Valley and the Aral Sea regions' (Environmental Program 2013:8, see also Chikalova 2016). Besides the nation-focused reasons, the cooperation is underpinned by the recognition of shared environmental challenge:

> It is now crucial to unite efforts to solve the environmental problems of the region, taking into account our common interests […] I am convinced that we will be able to achieve a balance of interests, because it is our common future which is at stake. (Mirziyoyev cited in TT August 24, 2018)

As to the mentioned common interests, it is also financial aspirations that explain the efforts to improve regional relationship. Some of the experts explained the joint initiatives as means to position CA vulnerability to climate change as an international issue, hence, to attract foreign funds more effectively: 'The pavilion at COP26… well, the event itself is essentially political and cooperation of CA countries was also a performance, attracting the global attention to our issues' (climate change policy expert, Zoom interview, 11 February 2022). Furthermore, some view the national efforts in regional collaboration as an attempt to mitigate the risks climate change has on the national water security (climate change economy expert, Zoom interview, 24 February 2022). As such, one of the national development objectives is to

resolve water conflicts with the upstream Tajikistan and Kyrgyzstan (Environmental Protection Concept 2019:10) the relationship with whom were tense before Mirziyoyev's term and a new take on the regional policy (Alimdjanov 2020). Furthermore, an active stance in the regional action advances the government's image at the domestic level - the media represent Uzbekistan as a patron for less developed neighbours, e.g., reporting on humanitarian aid to Tajikistan (NS 2018).

Consequently, some noticed that a regional cooperation on climate change is happening rather on paper than in reality (regional climate change expert, Zoom interview, 7 February 2022). Besides the concerns over resource allocation and economic development in each country, identity concerns also impede cooperation. The states strive to rebuild their national identities lost over the years under SU rule, and political cooperation, while being beneficial in terms of regional security, does not exactly contribute to this aim. In case of Uzbekistan, the sense of divide was deepened over Karimov's term as the isolation from the regional dialogue was the part of 'the Uzbek Model' of national development (Egamberdiyev and Taldybayeva 2020:32, see also Adams 2010). On the positive note, the leaders of the CA countries understand the shared nature of the environmental challenges and it is this understanding that endures regional action. As one of the experts put it:

> What unites us is an understanding of our common challenges, and we have similar cultural values: historical roots, attitude to nature, customs, language… Answering the question of what distinguishes us is more difficult. Ever since we [CA countries] have gained independence, we have been seeking to form a self-identity. These is our disconnect factor, but sill there is more in common since our problems require joint efforts. (regional climate change expert, Zoom interview, 7 February 2022)

Among the aforementioned common attitudes to nature, are some unsustainable approaches to nature that were practiced in SU era, and are still carried in modern CA countries, in particular, in Uzbekistan (Yuldashevich 2020). This issue is acknowledged in the official discourse: 'the inefficient management system and intensive use of natural resources have led to the formation of common environmental problems in the countries of Central Asia' (Environmental Protection Concept 2019:4). Notably, some of the experts see this commonality as beneficial in terms of CA dialogue as the shared ways of thinking and acting

on the environment create a good ground for changing these behaviours in aligned way, hence, strengthening CA take on the region's climate challenges (environmental scientist and activist, Zoom interview, 27 March 2022).

In sum, as one of the experts noticed, currently 'it is a honeymoon period [between the CA leaders], when a lot of questions have moved off the ground' (climate change policy expert, Zoom interview, 11 February 2022). Under Mirziyoyev's leadership, the state has been increasingly open to cooperation with the neighbours. As the leader stated in his speech during the 2018 the Green Economy Regional Conference: 'Today's historic summit will surely give a powerful boost to the partnership in Central Asia. Today we are reiterating our firm readiness for cooperation' (TT August 24, 2018). Last but not least, Uzbekistan' climate rhetoric does not only reflect the state's position in relation to global and regional actors, but also serves the government as means to advance its national legitimacy, rectify regional security concerns and to foster economic development. This combination of the reasons behind the discourse comes logical in the current political setting - Mirziyoyev's 'upgraded' authoritarian governance performed in the developing post-Soviet state, which is still in the process of building its national identity. While being ultimately in the interest of the government, these reasons behind the climate narrative have a positive impact in terms of national climate action and sustainable development as such. For example, the appropriation of the democratic values has stimulated the state's attention to the issues of gender inequalities and inclusivity and the engagement with the neighbours has been strengthening national resilience to the climate change effects (climate change expert, Zoom interview, 18 March 2022).

Unveiling the impact: national governance patterns and climate action

Since ratifying the Paris Agreement in 2018, Uzbekistan has been demonstrating a remarkable effort to address climate change. This is particularly prominent in the energy sector with the actively growing number of renewable energy installments and actions to improve energy efficiency (IEA 2021). Recently, the state has increased its NDC from 10% to 35% GHG reduction by 2030, and the experts see the new pledge as achievable (climate change policy expert, Zoom interview, 11 February 2022). Notably, in Uzbekistan's case, there was no explicit criticism of the decision-making processes – the President's background coupled with the importance of image for the leader resulted in a considerate climate politics. While these developments are clearly positive, it is worth looking into the role of ideological aspects in national climate action. The importance of the national policies being successful for

legitimizing the authoritarian government positively impacts national climate action (Schiek 2018) where the efforts to address public vulnerability to climate change, i.e., adaptation initiatives, are partly driven by legitimacy concerns of the new authoritarian state.

However, some of the characteristics of the 'new' authoritarian regime still hinder national responses to the issue. Economic liberalization and appropriation of Western values does not necessarily translate into the increase of freedoms. In this regard, Wilson (2005) points to the 'virtual politics' in the post-Soviet states, that is, falsification of democracy to benefit in the national and global arenas. Similarly, Schiek (2018) refers to Uzbekistan's governance as a performance, a technique common in the post-Soviet landscape – reproducing the discourses of democracies to integrate into the global community, while still leaning on authoritarian ideas. While the moves towards liberalization cannot be denied, Uzbekistan remains an 'authoritarian state whose institutional framework and Presidential system are not up for discussion' (Schmitz 2020:2). Despite the official claims about the importance of the civil society in climate action, i.e. 'Solving the problems of environmental protection is impossible without the participation of civil society' stated in the key environmental policy document (Environmental Protection Concept 2019:7), and the measures taken to 'radically increase the role of civil society institutions in the process of democratic renewal of the country' (Decree of the President of the Republic of Uzbekistan 2018) real opposition is still restricted (Egamberdiyev and Taldybayeva 2020). Under Mirziyoyev's governance, the number of NGOs has been grown by 30% over the period 2014-2020 (Decree of the President of the Republic of Uzbekistan 2018), however, 66% of those are state-owned (Matvienko 2021). Indeed, one of the activists noticed that 'there are about 17,000 NGOs across the country now but only 3-4 of those are truly non-governmental' (environmental scientist and activist, Zoom interview, 27 March 2022). Drawing on the existing studies, it is argued here that the government are creating these organizations to gain foreign and domestic approvals. Nationally, the growing non-state sector creates an impression of democratization among civic society increasing, therefore, a popular support to the leader (Heiss 2019). Meanwhile, the truly independent ENGOs like Ecomaktab, Ecoforum, and the Union for Defence of the Aral Sea and Amudarya find difficulties to be heard by the government and are financed almost exclusively by the foreign bodies: 'we [activists] gather among ourselves discuss the problems, again, among ourselves and that's all... anything that does not reach decisionmakers' (environmental journalist and activist, Zoom interview, 28 February 2022, see also Kuzembayeva et al. 2019). As to the global perspective, it is an interest in funding that explains

non-state actors being included in policymaking: ‘NGOs are involved because these are the requirements of international organizations that finance state projects, for example, the World Bank... but our proposals remain unrecognized’ (environmental scientist and activist, Zoom interview, 27 March 2022, see also Henderson 2003).

As to the media, while criticism of the national environmental politics has been appearing in both state-owned and independent outlets, the journalists still acknowledge the limitations, in particular, self-censorship as the journalists remain cautious about covering potentially political topics, including national climate action. Just like in the other two case studies (Freedman 2014), there are no official limitations on what can be published, yet, not all topics are welcomed to be discussed publicly, especially the political ones (Makarenko 2020). Although climate change is not explicitly political topic, its coverage focuses on the national take on the issue, and this is where the freedom is at stake: ‘the topic [climate change] is problematic because it does not give solutions, but only raises problems ... and then, you never know… self-censorship works’ (environmental journalist and educator, Zoom interview, 21 March 2022). While the methods of governmental control have loosened, there are still indirect mechanisms of influence, for instance, the officials may order the private actors not to support the media outlet via advertisement purchases (ibid.), or the state representatives claim an article to be 'false’, which leads the reporter to a risk of losing an accreditation for violating media law (Prokscha 2021). It must be mentioned, however, that self-censorship is also an effect of economic instability of the media outlets. That is, the agenda is influenced by the private actors purchasing the advertisement – the main mean of national outlets’ survival: ‘Independent media is, first of all, need to be financially independent … we don't have that yet. That’s why we still only dream of high-quality journalism’ (media expert, interview, Tashkent, 21 June 2022).

In regard to the citizens’ voices, the local state representatives tend to obey the authority of the senior decision makers: ‘there is a fear… to overstep, to go against the main agenda… a fear to lose a position’ (climate change economy expert, Zoom interview, 24 February 2022). This results in the issues of translation - the local public agenda is miscommunicated. Furthermore, this can be explained by the respect to the authority rooted into the legacy of the authoritarian rule. This translates into relatively low agency at the society level: ‘the biggest obstacle [to increased public agency] is the praise of age, aksakals, servility... a patriarchal mentality’ (environmental scientist and activist, Zoom interview, 27 March 2022). The SU

heritage comes as another explanation of the limited public agency - the development of independent civil society was limited by SU elites who 'controlled virtually all resources, spaces, and media that might have been used by citizens to facilitate collective action' (Newell and Henry 2016:790). Hence, people are still not used to take action and expect to be led by those with higher ranks: 'People do not believe in themselves, they think someone will come and sort everything out… they were grown listening to the fairy tales of Soviet power' (environmental scientist and activist, Zoom interview, 27 March 2022).

Lastly, as in the rest of the case studies, limited public action is explained by a lack of knowledge. Despite the importance of the educational component given in the analysed documents (NDC Uzbekistan 2021, Environmental Protection Concept 2019), the initiatives are given low priority when it comes to implementation. Under the limited budget, policymakers tend to exclude the environmental awareness aspect from the agenda: 'We already know that the environment must be loved and protected ... it really is not a complicated matter' (climate change economy expert, Zoom interview, 24 February 2022). There is a number of initiatives led by the non-state actors, for example, the Climate Box, the Eco-Cleaner, the Super Leo, Rodnichok, but those are insufficient and often do not reach to the rural areas where knowledge is needed most (climate change and energy expert, Zoom interview, 11 February 2022). Furthermore, there is an absence of the practical information on how to act on climate change in the media (ibid.). On a positive note, the increased prominence of the climate topic on the national agenda has already led to the growth of public awareness (Veckalne et al 2022). Increased attention to the matter, however, might be the reflection of intensified climate change effects on agriculture, hence, comes primarily as a concern not for the environment but for the means of own survival (regional climate change expert, Zoom interview, 7 February 2022). Indeed, active national ENGOs withhold a potential to amplify public agency (environmental scientist and activist, Zoom interview, 27 March 2022), the point which was acknowledged in the national independent newspaper: 'participation [in climate action] is necessary, first, of the population itself in the form of free public associations independent of the officials' (Gazeta July 6, 2021).

Recalling Stivenson and Dryzek's (2014) emphasis on civic participation in environmental politics, a further increase of public freedoms and democratization of decision-making processes is needed to strengthen national response to climate change. Uzbekistan's population, especially its rural part, possess some tangible knowledge about climate change

effects and the ways to address those (environmental scientist, interview, Tashkent, 26 June 2022). These place-specific narratives and experiences, however, do not receive enough attention from the policymakers as well as the international climate change experts working in the country (ibid.). Meanwhile, consideration of those in national legislations and development projects would strengthen national capacity to address the climate crisis. Furthermore, in the agricultural sector, the state ownership of lands limits farmers' agency, i.e. investment in green technologies is a more difficult thing to do when it is unclear to whom the land will belong in the future (regional climate change expert, Zoom interview, 7 February 2022). As such, just like in Kazakhstan, centralized hierarchical policymaking leads for an array of climate change effects and associated vulnerabilities being not dealt with (environmental scientist, interview, Tashkent, 26 June 2022).

Conclusion

In all, this chapter has reflected on how the representations of climate change in national discourse link to country-specific socio-cultural and ideological aspects. The latter has proven to be the key factor that shapes the narratives, which is understandable considering that despite liberalisation observed over the past years, Uzbekistan still ranks among most authoritarian countries in the region (Freedom House n.d.). As such, it has been observed that increased attention to climate change in the official discourse reflects the governmental change (see also Pickering et al. 2020), i.e., Mirziyoyev's genuine concern about the environmental challenges faced by the country (Zhiltsov 2018). This has facilitated the development of national climate research development, which is another representation of the power/knowledge at work (Oels 2005). Also, the increased attention paid to the issue is an element of the 'global performance' governance (Heathershaw 2010), i.e., broader globalisation processes happening in the country since 2016 thought to strengthen the government's positions internationally as well as locally.

Hence, it is argued here that discursive alignment with the developed states strengthens the legitimacy of the government domestically, and, in this sense, climate change is a topic of the Westernized discourse (Schiek 2018). Furthermore, climate action is portrayed as an act of caring about citizens, a technique which has proven helpful in mobilizing public support in 'new' authoritarian states such as Uzbekistan (ibid.). As for the regional narrative, Uzbekistan's recent openness to cooperating on climate issues is dictated by national security concerns. However, efforts to lead regional climate action are also part of the state's attempts to increase its influence in CA (Dadabaev 2019). In sum, national climate change discourse in Uzbekistan

takes sophisticated form, combining genuine concern about the effects of climate change for the country as well as serving the elites' interests. In one way or another, national policymakers are the main actors in shaping and directing the discussion.

Chapter 6. Climate change discourse in Kyrgyzstan: vulnerability concerns and foreign funding

Kyrgyzstan's upstream position sets the country apart from the two case studies presented earlier. Indeed, it is the geographical characteristics, which account for both the country's geopolitical advantages and vulnerabilities in the face of climate change. Kyrgyzstan is one of the key region's water suppliers, meanwhile, the geographical characteristics also make it the most vulnerable country to climate change in CA. This is a major obstacle to the national development, and, to date, Kyrgyzstan is far behind its downstream neighbours in terms of economic development (World Bank Group and ADB 2021). The country's political climate is also different from the ones in Kazakhstan and Uzbekistan – while still being considered authoritarian, the state features the highest levels of public freedom (Freedom House n.d.). The government has been subject to frequent change, and civil society is allocated an important role in the national efforts to address the climate crisis. Combined, these characteristics provide a distinctive context for the understanding of a national climate change discourse. While Kyrgyzstan's vulnerability to climate change has been attracting the interest of political scholars, the research has mostly focused on the media coverage of the issue (e.g., Toralieva 2011, Sultanalieva and Freedman 2015) and public activism (Wooden 2013). This study is thought as one of the initial attempts for a more profound understanding of the national climate narratives, in particular, its ideological aspect. Essentially, it finds that besides the risk posed by climate change in the country, the national discourse is informed by economic interests, national identity concerns and the government's attempts to stabilise the political regime. These aspects are described in this chapter.

Background

Kyrgyzstan is a landlocked country situated in the upper stream of Central Asia and, like the rest of CA countries, its climate is arid continental (Lipka 2017). The pace of climate change

in Kyrgyzstan is significantly higher than global average as temperatures are expected to rise by 5.3C by the 2090s from the baseline period under the highest emissions pathway (IPCC 2022). The country is situated between the two major CA mountain systems, the Tian Shan and the Pamirs. The geographical position makes Kyrgyzstan an essential regional actor - the glaciers situated on its territory are essential water reservoirs, which, along with the Syr Daria river originating in the country, covers domestic water needs as well as most of Kazakhstan's and part of Uzbekistan's demands (Bernauer and Siegfried 2012). Meanwhile, the mountainous nature makes the country one of the most hazard-prone in the region, which is to intensify by climate change (World Bank Group and ADB 2021:5).

Given that over 80% of the country's territory is located within the Tian Shan mountains, most of Kyrgyzstan's population live in the foothills, which makes them particularly vulnerable to climate change effects (ibid.:2). Kyrgyzstan is one of the poorest countries in the world with 25.3% poverty rate in 2020 (ADB 2022), and the complicated socio-economic conditions are to be intensified by climate change. While the role of agriculture in national economy has significantly reduced in the past years, contributing 14.7% of GDP in 2021 (World Bank Data n.d. a), the sector remains essential in terms of social welfare. Most of the rural households rely on agriculture and breeding, and about 40% of the population are employed in the sector (USAID n.d.). Consequently, climate change effects pose significant risk for national food security, in particular, landslides and droughts are issues which have been increasingly intense and frequent across the country (Lipka 2017).

Meanwhile, Kyrgyzstan contributes just 0.03% to the total GHG emissions and is among the countries with the highest clean energy rates (Republic of Kyrgyzstan 2021:12), due to country's relatively low level of industrialisation (World Bank Data n.d. b), and because national energy production is based on hydropower (IEA 2022b). At the same time, national energy production remains dependent on coal, which contributes 40% to the country's energy mix (ibid:27). So far, energy consumption by far exceeds its production, and heavily subsidised tariffs pose a barrier for attracting investments for greening the energy sector (Green Economy Program 2019:5). Furthermore, sustenance of national energy means on water resources deepens national vulnerability to climate change effects, i.e., natural hazards and water deficit, in particular, increasing competition between the energy and agricultural sectors (World Bank Group and ADB 2021). Reliance on hydropower, paradoxically, also stimulates coal combustion as an alternative energy source in the absence of water. Coal is the second most

important energy source in the country, and the output has more than quadrupled since 2010 albeit the environmental impact (IEA 2022b:28). Another site of the environmental harm is gold mining, which accounts for 10% GDP and 40% of national exports (IBRD and World Bank 2023), despite being a driver of glacial melt (IEA 2022b).

Kyrgyzstan's political context has posed an additional challenge for national ability to address climate threats. Since gaining independency in 1991, the country has taken the course to democracy adopting all the relevant political institutions under the presidency of Akayev, the first leader of the newly independent state. As of today, Kyrgyzstan scores the highest of in CA in the democracy index, in particular, in the civil liberties (Freedom House n.d.). Over the next years, however, the country has been experiencing constant political change with four Presidents having taken over each other, with themost recent President – Japarov – stepping into office in 2021. The political upheavals – driven by public concerns about progressing economic decline, corruption and yet limited freedom – have furthered national instabilities and, consequently, shifted the attention from environmental matters and reduced national ability to act on climate change. Consequently, in 2020, the country ranked 75th out of 181 in the Global Environmental Performance Index (World Bank and ADB 2021:4).

Albeit the late start in the adaptation process, the present government is determined to address the climate crisis. Over the past decade, the state has been advancing its climate action. At the domestic level, the first climate action plan was included in the National Strategy for Sustainable Development (2013) followed by the national climate change Adaptation Strategy (2015) passed in 2015 and updated in 2020. National climate policy was amplified via the introduction of the Climate Investment Programme (2018), which has attracted necessary financial support for climate action. Today, the National Strategy for Sustainable Development (2018) provides the base for climate adaptation and mitigation initiatives in the key sectors, and the Green Economy Development Strategy (2019) draws a pathway to economic growth via decreased environmental impact.

As to the global climate policy, Kyrgyzstan joined the UNFCCC in 2000 and the Kyoto Protocol in 2003, submitted its first NDC in 2015 and ratified the Paris Agreement in 2019. In 2021, the state increased its NDC pledges to 15.97% GHG emissions reduction by 2030, or 43.62% should foreign financial support be provided (NDC 2021). Later that year, at the 76th session of the UN General Assembly Japarov announced carbon neutrality pledge to be achieved by 2050 (UN Audiovisual Library 2021). Currently, the National Strategy and

Climate Change Adaptation Plan is under development, too (World Bank and ADB 2021:22). 2022 was declared the Year of Mountain Ecosystems Protection and Climate Resilience in Kyrgyzstan, and the state also initiated the International Year of Sustainable Mountain Development. Under this agenda, national afforestation 'Muras – Green Heritage' and glacier protection 'Save Glacier' initiatives have been ever more active (UNECE 2022).

To shed light on the climate change discourses emerging from this complex politico-economic circumstances, the study analyses national legislations on climate change (*see Table 9*), media coverage (*see Table 10*) and the conducted expert interviews. The findings are discussed through the rest of the chapter.

Table 9. Kyrgyzstan: national legislations.

Document	**Released date**	**Description**	**Relation to climate change**
Updated Nationally Determined Contribution of the Kyrgyz Republic (NDC Kyrgyzstan)	September 24, 2021	States updated national NDC and actions to be taken by sector to achieve the objective.	Identifies national contribution to global GHG emissions decrease
Program for the Development of a Green Economy in the Kyrgyz Republic for 2019-2023 (Green Economy Program)	March 29, 2019	Creates the base for the national transition to Green Economy for a four-year period	Focuses on climate change mitigation – GHG emissions decrease via RES and afforestation; and adaptation – strengthening resilience to extreme weather events and limited food/water resources
National Development Strategy of the Kyrgyz Republic for 2018-2040 (Strategy 2040)	October 31, 2018	Provides a long-term vision of national development, including environmental aspect	Strategy on climate change adaptation a natural disaster risk reduction – Point 3.2
Priority Directions for Adaptation to Climate Change in the Kyrgyz Republic till 2017 (updated to 2020) (Adaptation Strategy)	January 1, 2015 *Updated to 2020	Passed as a part of the first NDC submission Sets the state's climate change adaptation priorities and orders to develop sector-specific adaptation strategies	Identifies climate change vulnerabilities in key sectors; Outlines adaptation strategy; Identifies responsible actors for sectoral adaptation
Program and strategy of the Kyrgyz Republic on Transition to Sustainable Development for 2013-2017 (Program to SD)	January 21, 2013	Sets strategic plan for a transition to sustainable development The first legacy to highlight climate change	Focuses on climate change adaptation in energy, agriculture, water sectors and risk management;

		effects and a need for action	Promotes RES development

Table 10. Kyrgyzstan: media articles by the event.

Newspaper/event	**Pre- COP 26 discussion** April-June 2021	**Ratified Paris Agreement** September – November 2019	**Signed Paris Agreement** September – November 2016	**Newspaper description**
Vecherny Bishkek	15 articles	7 articles	15 articles	Privately-owned broadsheet newspaper, in Russian
Times of Central Asia	3 articles	3 articles	2 articles	International-oriented; business; state-owned; in English
Slovo Kyrgyzstana	10 articles	7 articles	12 articles	State-owned official newspaper, in Russian
Total: 74	28 articles	17 articles	29 articles	

Understanding the coming climate crisis

In the national climate change discourse, the country's vulnerability is a prominent topic in official, media and experts' rhetoric. As NDC Kyrgyzstan (2021:3) acknowledges, Kyrgyzstan is 'extremely vulnerable to climate change and economically dependent on the most climate-sensitive sectors of its economy due to geographic, regional and socioeconomic conditions'. Indeed, the national climate change adaptation strategy renders the situation 'critical in terms of transition to irreversible climatic changes' (Adaptation Strategy 2015:2). The freshwater and food crises, energy shortages, economic losses from the infrastructural damages and health risks are the central objects of the discussions on national vulnerability. Besides the impact, national rhetoric also focuses on the range of circumstances, which explain Kyrgyzstan's exposure to the negative climate change effects.

The key vulnerabilities

Risks of freshwater shortages is the most popular topic in the national rhetoric overall as it finds its place in the official, media and expert discussions. The government's concern in this regard is focused on social welfare – food crises, deepened poverty and serious impacts on health were acknowledged in most of the analysed legislations (e.g., Adaptation Strategy 2015, Green Economy Program 2019). Furthermore, the water crisis poses a threat to national progress: 'a reduction of water resources as a source of energy generation and irrigation, may jeopardize Kyrgyzstan's achievements in sustainable development' (Green Economy Program 2019:3). For this reason, water management comes among the main action points in national climate policy outlined in the recently updated NDC Kyrgyzstan (2021). Indeed, as stated in Program to SD (2013:1), 'preservation of natural resources is the fundamental basis for the country's sustainability'. While the interviewed experts share the official point, many of them pointed out that it is not only specific geographical conditions but also water mismanagement that explain freshwater decrease patterns. 'In reality, there would be enough water, we [Kyrgyzstan] have rather good capacity in this regard… but the approaches to its use need to be changed' (environmental scientist, interview, Bishkek, 2 June 2022), one of the water experts noticed, recalling the aforementioned losses in the water-powered energy sector. The pattern continues in the agricultural sector, as Kyrgyzstan's worn-out irrigation facilities result in 28% water losses annually impacting the food security as well (World Bank and ADB 2021:19).

As in Kazakhstan and Uzbekistan, food security is another topic actively discussed in relation to climate change: 'among the main future challenges to address is providing our population with adequate amount of food' (Green Economy Program 2019:2). Intensified droughts, intense precipitation and snowfalls as well as mudflows and temperature anomalies have significantly reduced national agricultural productivity over the past years (environmental scientist, in written, 21 July 2022). With climate change, it has been increasingly difficult to prognose climate patterns and therefore to adapt to the new conditions. As one of the scientists noticed, the capacities are further supressed by the financial aspect: 'In order for science to give real results and scientific forecasts, it must be adequately supported by the state' (ibid.). Indeed, all interviewed scientists have mentioned financial constraints as the key barrier for advancement of national climate research. As in the rest of CA, Kyrgyzstan has faced a decline of its climate science after the independency (Vakulchuk et al 2022a), and, as one of the climatologists noticed, the research activities that would go beyond climate monitoring has

started to appear only in 2013 with the help of the foreign experts, in particular, GIZ (climate scientist and educator, Zoom interview, 16 June 2022). As one of the experts noticed, GIZ continues working with KyrgyzHydromet, in particular, on the systems of early warning to anticipate the climate impacts on the agriculture (climate policy expert, Zoom interview, 16 June 2022).

Another point of concern is extreme weather events. Climate change has already added to the frequency and intensity of natural hazards (World Bank Group n.d. b). Among those, experts have highlighted heat waves, floods, heavy rains and landslides as most frequently occurring in the country: Consequently, it is the emergencies that stimulate climate change discussions in the country as those 'show to all sectors of society, regardless of whether they are just residents or decision makers, that there is a real problem [climate change]' (environmental expert, Zoom interview, 5 July 2022). Indeed, security issues and economic losses are the focal points of concern of the policymakers as the extreme weather events damage vital food and energy chains and deepen economic instability: 'with climate change intensifying, extreme weather events are expected to become more prevalent, putting at risk a large proportion of the country's economic output' (Green Economy Program 2019:10). Program to SD (2013:48) states that 'the country fully depends on the state of its ecosystems' acknowledging that essential national needs such as energy, food and water are dependent on the state of the environment. Climate change, in turn, 'creates risks of a rapid deterioration of economic indicators in case of depletion of natural resources' (ibid.). Since its independence, Kyrgyzstan has experienced 19 climate-related hazards, which resulted in US$76 million in damages and the future costs are to grow tremendously (EM-DAT 2022). It is these economic concerns that underpin dramatization of climate change identified in Kyrgyzstan's official discourse – the situation is described as 'critical' and climatic changes as 'irreversible', leading to 'a wide-scale poverty and deterioration of the population's health' (Adaptation Strategy 2015:2). Furthermore, the officials are uncertain about their capacity to address climate change-related losses as the costs estimated for managing extreme weather events and water crisis exceed the national budget, the concern acknowledged in Green Economy Strategy (2019:8). The occurrence of these doubts in the official documents is a notable feature of the national discourse and, being the aspect of Kyrgyzstan's global political discourse, will be recalled later in the chapter.

In regard to the media coverage, the attention of the journalists to climate change has been growing in the past years (Lee 2021). The increase in climate change coverage is not striking, however, and the number of publications per year mostly depends whether there were important political events, in particular, international ones or the visible impacts of climate change on people (ibid.). Indeed, the present analysis demonstrated that the overarching topics in the national coverage are the ratification of Paris Agreement and COP26 and the narratives around those focus, in particular, on the consequences climate change has on the population – i.e. the discourse of danger (Oels 2012). As such, 'global warming' seems to be 'not far off' (SK September, 21, 2016). As the national broadsheet VB warns the reader, 2020 would be critical for the global security if no action is taken; hence, 'it is important not only prevent 'the Earth's fever' but do everything to lower the temperature' (Lapteva 2019). TCA (July 1, 2019), in turn, points to 'tremendous economic damage to the whole region' discussing climate change tendencies in CA. The majority of the warning messages, the alarmist rhetoric, were identified in 2016 and 2021 articles, which is explained by the record-high summer temperatures observed in the country in these years (NDC 2021:2). The temperature increases will turn the region into a desert in foreseeable future if no action is taken (VB 2016). There is also catastrophic rhetoric alongside alarmism, for example, the claims like 'chances are, people will disappear still in 2021' (VB November 22, 2016), and calling climate change a 'pandemic with no remedy' (Gunger 2021). Alarmist and catastrophic narratives can be explained by the journalistic norm of dramatization – the negative coverage attracts readers' attention to the otherwise boring topic (Ereaut and Segnit 2006). Indeed, one of the experts shared her professional experience in this regard: 'I realized it is necessary to put sensational headlines […] it's bad that you lure with a headline while there is serious information inside […] but well you have to' (media expert, interview, Bishkek, 3 June 2022). Furthermore, alarmism - calls for action to save the future – appear in the discussions around the announcement of the 2022 mountain and glacier protection national agenda (e.g., VB 2021). This represents power/knowledge at work – the increased government's attitude to solve the issue has arguably led to the shift from covering the climate challenges as irresistible to being solvable (Oels 2013).

What is unique for Kyrgyzstan's case is that national rhetoric draws not only on the vulnerabilities to social and economic sectors but leaves a significant space to the country's natural wealth itself – the concerns about the loss of biodiversity, i.e. the 'unique mountain ecosystems' and forests (SK September, 27, 2016). In particular, the country's glaciers are the

central object of the official and media narratives: ‘of particular concern is the intensive melting of the Kyrgyz glaciers, which are natural reservoirs of water resources in Central Asia’ (ibid.). National mountains and glaciers ensure national security providing the country with freshwater (Strategy 2018) and ensuring stable energy supply (Green Economy Program 2019). Interestingly, the glaciers almost do not appear within the scientists’ rhetoric. Among all, only one scholar, who is glaciologist, highlighted the ice melt per se as a key climate concern: ‘the [glacier] reduction has been very intensive […]. In the southern regions, where the mountains are not high, the glaciers have greatly degraded’ (environmental scientist, interview, Bishkek, 2 June 2022). The dominance of the topic in the official discourse may be explained by the ideological aspect and economic interests. Domestically, an emphasis on the resource wealth may come as an element of nation building strategy as the image of the country possessing unique natural resources strengthens the idea of the nation (Tynkkynen 2018). Internationally, focus on the endangered natural resource highlights national vulnerability, which, in turn, helps to attract foreign help. More on these topics will be discussed later in the chapter.

Explaining climate change

As to the reasoning, national vulnerabilities are attributed to the two main factors: natural conditions, which aggravate the risks, and the flows of national development policies. As to the first, SD (2013:51) claims that it is ‘natural conditions that create serious threats to national development, country’s people and economy’, indeed, NDC Kyrgyzstan (2021:7) notices that ‘natural cycles […] generally form a negative background’. Such explanations also occur in the national outlets, for example, climate change is attributed to the country’s mountainous nature (TCA 2016). Indeed, the scientists point to the geographical position and climatic characteristics, which act like ‘climate change multipliers’ (policy expert , interview, Bishkek, 15 June 2022). With that said, in all analysed discursive fields, climate change itself is considered human-driven. While recognizing unfavourable natural conditions, Program to SD (2013:51) acknowledges that ‘no lesser number of development threats was caused by man’, and Green Economy Concept (2019) is focused on the solutions, which would reduce human impact on nature. As to the expert discourse, while no climate scepticism was identified, one of the climatologists justified the instrumental approach to nature practiced in the country during the SU rule and in the first years of independency. As such, the Aral Sea deterioration is reasoned by the national needs: ‘there were bad and good things […] there was a need for cotton, plus population growth… Central Asia was the leader in population growth in the USSR’ (environmental scientist, interview, Bishkek, 2 June 2022). This position, recognising

negative human impact yet seeing it as necessary for development, recalls Oldfield's (2016) observations on how the SU political discourse with its emphasis on development and national resources impacted the scientific discourse. The scholar expressed a similar position towards a more recent case of the environmental harm, i.e. Kumtor gold mine exploitation:

> well, they destroyed one glacier [...] not a very large amount of the glacier was destroyed […] At the end, the question then needs to be raised – do you need gold or water. And in the early 90s, Kyrgyzstan needed to restore the economy… Kumtor helped us with that, and we should use the mine for the benefit of the people. (environmental scientist, interview, Bishkek, 2 June 2022)

As to the media coverage, climate scepticism, while present, is a rare occurrence, it was identified in four articles out of the total 74. All of those articles emphasised natural reasons of climate change and were identified in the national broadsheet VB. As such, climate change was attributed to the effects of the El Niño phenomenon (VB October 11, 2016, see chapter 4), furthermore, the issue is leading to 'the coldest winter in a century' and one should expect 'global cooling' (VB October 11, 2016). Indeed, one of the experts noticed that the recent increase of extreme cold temperatures during the winter months is commonly misinterpreted as a sign that climate change is not happening (environmental expert, Zoom interview, 5 July 2022). Yet, the presence of human impact was acknowledged in some of the articles: 'even without taking into account the "human factor", the temperature will rise by another four degrees' (VB September 28, 2016). Notably, all of these articles were found in the 2016 articles, and no signs of climate scepticism were identified in the later coverage. This can be explained by the increased attention of the state to the quality of media reporting on the issue, i.e., among the actions outlined in the Adaptation Strategy (2015:37) is 'development and dissemination of information materials on adaptation to climate change, including through the media'. Hence, in national discourse, while climate change is occasionally explained by the natural dynamics, human action is the main cause across all analysed discursive fields.

Ideological groundings of national climate change discourse: civil freedom and the government

The matter of environment, and climate change in particular, is the important aspect of the national policy. As Strategy 2040 (2018:5), the key national legislation, states, 'the growing

pressure of mankind on the Earth's ecosystem, expressed in changes in the global climate and demography, require a new model of the country's development'. The future Kyrgyzstan is pictured as 'a country with a favourable environment, developing in harmony with nature, preserving unique natural ecosystems and wisely using natural resources for climate-sustainable development' (ibid:4).

Furthermore, the official rhetoric develops an image of the state where social wellbeing is of the highest value. That is, the overarching national aim is to build 'a strong, self-sufficient, developed state, in the centre of which is a person as the highest value, his life, health, rights and freedoms' (Strategy 2040 2018:5). As such, the reasoning behind the green economy strategy is to prevent poverty and health issues (Green Economy Program 2019:2). Furthermore, the rhetoric consistently points to the matter of equality – one of the main values in a pronounced democratic state. The environmental crisis comes as a threat in this regard as 'it is the poor demographics, and especially women, children and the elderly that will become most vulnerable to it [climate change]' (ibid.). The rhetoric points to the females' exceptional vulnerability and highlights their potential to be key actors of climate action: 'it is necessary to consider the role of women in the development of policies, not only as recipient of policy, but also as important agents of its development and implementation' (NDC Kyrgyzstan 2021:18). Like in Uzbekistan, these appeals to social security and equality can be seen as means for advancing legitimacy and building a beneficial image at the global scale. While this applies to the present case, too, it is also this narrative, care for the people, comes as a sight of observing governmentality at work. The official climate rhetoric embodies the attempts to build a nation – manage and align individual identities and behaviours to the model proposed by the state. These patterns are discussed below.

The idea of building a new nation is at the core of Kyrgyzstan's development project as 'a citizen identity is the basis for strengthening the country's sovereignty and well-being' (Strategy 2040 2018:8) The people, 'Kyrgyz zharans' as the legislation names them, are seen as 'integrated into the process of nation-building, […] united by civic identity and pride for their country' (ibid:7). Strong individual agency is an important aspect of success in the process – the citizens' 'creative energy' is a vehicle of the national development, and everyone should have a 'sense of ownership and responsibility to the fate of the state' (ibid). Importantly, as a part of the development plan, the state aims to raise 'a generation of citizens with a positive environmental outlook and awareness of responsibility for the preservation of the country's

natural resource potential' (ibid:48). This appeal to individual agency in solving the environmental crisis comes as an element of the governmentality project – the climate change concern is appropriated to generate a 'specific kind of self-governing subjects' (Rutherford 2017:3), where behaviour is calibrated along the idea of environmental protection. That is, the behaviours and identities, i.e. the technologies of the self, while seemingly uncontrolled, in reality are constituted in and through power (ibid.). The creation of 'ecoknowledges' is important part of forming subjectivities - it is knowledge that polices behaviours for the sake of environmental protection as reasoned, and to sustain the specific mode of power as intended (Luke 2011:97). Reflecting these basics of the governmentality project, the importance of climate change education is acknowledged in all analysed legislations, in particular, 'building public understanding of the seriousness of the climate threats faced by the country' is one of the core objectives of NDC Kyrgyzstan (2021:18). The climate change aspect is to be integrated in the curriculum at all educational levels starting from the kindergarten (Adaptation Strategy 2015:38) and beyond - the awareness-raising activities are also targeted at policymakers, business and farmers (Green Economy Program 2019:80).

Furthermore, in Kyrgyzstan, an emphasis on people and their role in the national development comes as a legitimation mechanism. This is different to other case studies, where the main actor of legitimation process is the state. In Uzbekistan, for example, the official discourse focuses on the government's determination to protect its people (Schiek 2018), while in Kazakhstan, it is the state who will lead the nation towards economic prosperity (see also Tynkkynen 2018, Lewis 2021). As one of the activists mentioned, 'our people have very high agency and they do not trust the government… considering our political situation over the past years, this is not surprising' (climate change economy expert and activist, Zoom interview, 22 June 2022). Hence, empowering people is an important part of attracting popular support. Notably, criticism of the government's climate action identified in the media and in the recent legislations also can be explained by the efforts to perform the liberal state. For example, the broadsheet VB covers young activists demanding that the state take real action: 'the roadmap for the protection of mountain ecosystems was never presented to the public […] the state does not do enough' (Basarbek 2021). Furthermore, Green Economy Program (2019) highlights the flaws of national politics that aggravate climate change: 'The current trend of economic development based on the achievement of GDP growth in the short run at the expense of natural resource depletion' (ibid:4). The critical messages touch upon national takes on the water and land management, excessive coal combustion and so forth, i.e., 'currently, the national

economy mostly uses resource-destroying technologies' (ibid:5). The presence of criticism in the official rhetoric can be, indeed, seen as the act of free speech. It can also be seen as a reflection of the frequent power change – in this case, the newly elected leader criticizes the issues of the present policies they are willing to change. Hence, criticism of national environmental approaches comes as a criticism of the past leadership, which is one of the signs of populism rhetoric.

Another tactic which both contributes to nation building and legitimation is populist rhetoric – criticism of the prior rule and promising a better future (Laclau 2005). The narrative is evident through numerous governmental changes, in particular, in Sustainable Development Strategy (2013) drafted soon after Atambayev took office, and in Strategy 2040 (2018) passed under Jeenbekov's leadership. Kyrgyzstan's past is described as a 'nation without priorities or twenty years in survival mode' (Program to SD 2013:5), and blame is allocated for those difficult years of the 'bad governance, corruption and criminalization […] during the rule of the first two Presidents' (ibid.). Under the new leadership, this is to be changed, and the civil society has an important part in this process: 'this is not the end of the road, this is the beginning of a new journey […] WE should TOGETHER and confidently move forward, and WE TOGETHER will achieve our goal!' (ibid:109). Hence, this narrative both advises individual action and increases public trust in the leader. As to the environment, Strategy 2040 (2018:6) criticizes the previous government for the 'inability of the until-recently-existing system […] to put the country on the path of sustainable development' and 'practicing a resource-intensive economy with no consideration of the environment' (ibid:48). Indeed, the image is facilitated via state-owned media, which channels to people messages like 'the word of the President is not a sparrow' (Asanalieva 2016), and 'the President has the power and will to fulfil all promises' (SK May 7, 2021). Last, as one of the experts shared (climate policy expert, Zoom interview, 16 June 2022), the current leader used environmental concern as an instrument to get into power as he turned public attention to the issues, in particular, climate change, emphasising an absence of a real concern – and an action – under the past leadership:

> environmental issues that were very relevant yet overlooked for a long time, they became Japarov's best card […] the first person began to argue why it should be him to come to power and solve these issues. As far as I know, the Minister of the Environment, a very close person to the first person, has been informing these arguments.

Last, both individual subjectivities and the nationhood are constructed via the appeal to cultural heritage, in particular, the attitude to nature traditionally practiced in the country. As Strategy 2040 (2018) sets it:

> We must create an ideology for the Kyrgyz citizen of the new millennium, based on our culture, in which spiritual values and attitudes towards each other, family and nature are higher than material wealth. (p. 5)

Indeed, the Constitution of the Kyrgyz Republic (2021:1) manifests 'acting on behest of our ancestors to live in peace and accord, in harmony with nature' as one of the core national values. As some of the interviewees interpreted the aforementioned 'spiritual values', the narrative appeals to the nation's nomadic past: 'the worship of nature is in culture […] there is respect for nature at the DNA level' (media expert, interview, Bishkek, 3 June 2022). Public attitude towards the environment has changed during the years of Soviet rule as being a nomad has become unpopular in the backlash of the new vision of the future and development, and large-scale industrialisation caused a loss of cultural knowledge and traditional practices (Wooden 2013). The centralised governance of SU also had its impact on the individual concern as 'decisions were made by the top authorities, and the population cared little about the environment' (environmental scientist, Interview, Bishkek, 2 June 2022). Since the late 90s, the attempts to reconnect with the ethnical heritage have been revived in Tengrism, the worldview (it is also viewed as ideology either religion, interpretations differ, see Lee 2018), rooted in Turkic-Mongol tradition. The worldview manifests the central role of nature in the organisation of the world, seeking to 'connect Turkic peoples with nature, with the vast steppe of the Kazakh landscape or the glorious mountain peaks in Kyrgyzstan' (Isaacs 2021:458). Just like the official rhetoric, this emphasises ecologism and individualism to guide human-nature interaction. Notably, being rooted in the ideas of the territory and traditions, Tengrism reinforces a sense of identity and comes as a form of resistance to the globalisation processes happening across CA during the post-independency years (Laruelle 2007). In the past years, Tengrism has been reviving in both political and public spaces being sound in the speeches of the former Presidents Akayev and Bakiyev (Isaacs 2021). Yet, the religious idea is not institutionalized and has a relatively small number of followers (ibid., see also Lee 2018). Notably, the rhetoric was found in the analysed documents found in the modern official discourse, e.g., Strategy 2040 (2018:6) sees national development 'inextricably linked with the

preservation of Kyrgyzstan as a country of snow-white peaks and emerald lakes'. That is, the country's natural resources come as a discursive element of the identity building process – it is Kyrgyzstan's unique natural features that distinguish the nation (Koch and Perrault 2019).

In regard to the civil society, the number of ENGOs in the country has been growing, indeed, the national union of the environmental NGOs, the Green Alliance, is a part of the governmental system (climate scientist and educator, Zoom interview, 16 June 2022). In particular, youth climate activism has been institutionally supported, and the recent initiatives, for example, the 2022 Fridays for Future initiative held in Bishkek and afforestation activities have gathered a record high number of young people (activist, Zoom interview, 4 July 2022). Most of the interviewees acknowledged that Kyrgyz people, overall, have a proactive stance towards the environmental issues (e.g., media expert, interview, Bishkek, 3 June 2022, see also Nasritdinov 2021). This, however, maybe come not as a proof that the governmentality project is working, but, oppositely, as a result of the years of political instability. Indeed, the recent 2019 charges of the ex-leader Atambayev with corruption and the fraudulent 2020 parliamentary elections contributed to public agency powered by mistrust in the state (Putz 2021). As one of the experts mentioned: 'In Central Asia, people are very active, they know their problems without asking the government, and how to solve them too…' (environmental scientist, Interview, Bishkek, 2 June 2022). Indeed, as Wooden (2013) notices, the environmental concern among Kyrgyzstan's society has been not only mobilizing people to act but also has been a driver to express more general criticism to the political regime. In particular, it is a concern about the water and energy crisis caused by the unsustainable resource management policies have contributed to the wider public upheavals and led to the overthrow of the former President Bakiev (Wooden 2014). Hence, the environmental concern among the society is dictated not only by public awareness about the looming issues but also used as a tool for political resistance. As to the cultural component, several experts confirmed the attachment to nature prominent in Kyrgyzstan being an attribute of cultural capital: 'yes, people care, and it is the reflection of our cultural heritage, not the COP26' (climate change economy expert and activist, Zoom interview, 22 June 2022). Indeed, the historical knowledge is widely used today to adapt to climate change today in the rural parts of the country, for example, the water management through specific irrigation techniques (environmental scientist, interview, Bishkek, 2 June 2022). The experts see a significant potential in developing this idea of environmentalism as a part of cultural identity in promoting green behaviours, as this is the idea

people seem to be more in tune with than reasoning green action by an abstract global climate crisis (climate policy expert, Zoom interview, 16 June 2022).

Kyrgyzstan in the global climate action: an active stance informed by the economic interests

Similarly, to Kazakhstan and Uzbekistan, Kyrgyzstan's climate change discourse is linked to the state's interests on the global arena, contributing to the state's international image and economic interests. These motivations have been discussed earlier (see chapters 4 and 5), however, it is in Kyrgyzstan where aspirations for funding the other forms of support are particularly prominent (see also Arynov 2022) and have certain implications on domestic climate policies.

The country's developing status paired with exceptional vulnerability to climate change is one of the key narratives within the national discourse. As discussed above, in the official rhetoric, Kyrgyzstan is rendered the most vulnerable country in CA due to its exposure to the extreme weather events (Strategy 2040 2018:106), and, due to the developing status of the country's economy, help of the international actors is essential to address the risks. An emphasis on the developing status paired with the aforementioned claims about the state's incapacity to address climate change on its own are the discursive tools to mobilize external help (Rajao and Duarte 2018). Indeed, as Green Economy Program (2019) states, 'for a lower middle-income country susceptible to frequent natural disasters, investments are significant' (ibid.:7), […] 'the implementation of many adaptation measures depends on the successful mobilization of external funding' (ibid:14). In particular, 63% of the climate budget is expected to come in the form of international assistance (ibid:7). Notably, investments in climate action is a popular topic of the media coverage, in particular, international TCA dedicated almost a half of the analysed coverage to the discussions of the financial help provided by the donors. Furthermore, national climate policy is reasoned directly by the financial interests: 'ratification of the Paris Agreement expands the possibilities of obtaining international support for the development' (Lapteva 2019). Also, Kyrgyzstan's participation in COP26 was presented as an 'opportunity to attract more support from donors in the fight against climate change and allow the republic to be the first in the Central Asia to present itself as an active international player' (VB, May, 7, 2021). This narrative creates the idea of climate change as a matter of political and economic actions, hence, may hinder public agency (Carvalho et al. 2017).

To fulfil the needs, the Climate Investment Programme (2018) under the Climate Finance Centre was created to provide a legal base and coordinate attracting investments, and has been working successfully (climate scientist and educator, Zoom interview, 16 June 2022). Currently, EBRD is a key investor in national climate actions (NDC 2021:65) with plans to allocate further $55 million support to the energy efficiency projects (Usov 2022). Other important international donors are ADB and GCF (Adaptation Strategy 2015:3). Furthermore, there are multiple organisations offering expert knowledge such as IRENA, GIZ, UNDP, and FAO (NDC 2021:5, AS 2017:3). In particular, the most recent NDC (2021) and Green Economy Program (2019) were drafted with the assistance of UNDP and GIZ. Participation of the foreign experts in constructing the official discourse is another explanation of criticism towards national climate action identified in the legislations. Notably, while this discursive alignment to the donor's rhetoric rather comes out of practical interest (Heiss 2019), it is beneficial in terms of national climate response – as Obydenkova et al. (2022) observed, following the donor's agenda has already made a positive impact on climate action across CA.

As the 'correct' goals are important for attracting funds (climate policy expert, Zoom interview, 16 June 2022), national rhetoric emphasises Kyrgyzstan's determinacy to act on the global climate crisis. National media outlets present Kyrgyzstan as an 'active participant in global action to prevent global environmental threats' (VB November 12, 2019) and 'standing for the collective efforts save the planet' (SK September, 27, 2016). The global nature of climate change highlighted in the national rhetoric is important in terms of the economic wins. In particular, Kyrgyzstan's mountains and glaciers are portrayed as the natural heritage and water resource of the global importance, hence, the international community should contribute to their protection. As such, Kyrgyzstan has proposed to make 2022 the International Year of Sustainable Mountain Development, without attempting to cover the intentions: help of the international partners is thought to 'strengthen the country's ability to monitor the state of glaciers' (SK, May, 7, 2021). Also, national climate actions align with the global climate strategy, and GHG reduction is one of the key objectives as Kyrgyzstan has recently increased its national commitment despite 'being a low emitter' (NDC Kyrgyzstan 2021:3). Furthermore, in Kyrgyzstan's case, green economic development, a persistent narrative throughout all the three case studies, mainly contributes to the national image at the global arena. Similarly, Kyrgyzstan's ambitions in the renewable energy sector, i.e., an intention to achieve 25% RES in the national energy mix by 2030, is not only to advance national energy security but also to demonstrate the country's determination and potential for creating innovations (ibid.)

Besides economic interests, this rhetoric also finds its explanation in the national image concerns - participation in global climate action will help to change the global actors' vision of Kyrgyzstan. As such the Sustainable Development Strategy (2013:106) articulates the concern about the country's global image: 'in contrast to many other former Soviet republics, in these 20 years, Kyrgyzstan failed to find its rightful place in global economic processes'. Indeed, the former President, referring to the economic and political turbulences in the post-Soviet Kyrgyzstan, stated: 'Kyrgyzstan will no longer be associated in the world with poor government and people' (ibid:107). Meanwhile, national intentions to integrate into the global community coincide with the concerns over sovereignty. In the official rhetoric, the national development and identity are rendered 'highly prone to negative impacts of external projects' (ibid:7). As such, in its climate change policy, the state intends to create its own path: 'There is no need to copy foreign models, to become "the second Switzerland" or to carbon copy anybody […] we should find our own development path and rely on our own capabilities' (ibid:8). Similarly, Arynov (2022) points to Kyrgyzstan's perceptions of the global actors being very issue-specific, in particular, the EU is seen both as an opportunity in terms of financing and a threat to traditions and political stability in the country.

Yet, some of the experts noticed that it is these image and economic interests that hinder national climate action - the government is concerned with the global perception of its climate strategy rather than with its effectiveness at the national level. As such, mitigation policies are prioritized over the adaptation ones: 'the government tries to follow the global trend with an emphasis on the mitigation part. The adaptation part, while exists, is rather an 'added value'' (environmental expert, Zoom interview, 5 July 2022). For instance, the renewable energy pledge is thought to be achieved via hydropower sector expansion, which will only deepen national vulnerability to freshwater deficit and natural hazards (ibid., see also Deng and Chen 2017). Meanwhile, there were no significant projects so far to convert Kyrgyzstan's considerable solar and geothermal potential as this requires more time, funds and expertise to invest (IEA 2022b). Furthermore, some of the interviewed scientists noticed that an overt focus on funding restricts climate research. While the national policy attracted funding and expert support, for example, from GIZ and UN, to national climate units, it is also financial motivation that prevent national climatology to address the most relevant challenges faced by the country (climate scientist and educator, Zoom interview, 16 June 2022). As such,

> there is no understanding of how important the research is […] the goal is to show that yes, the country is really vulnerable, and thus to ensure a good financial flow. This is the only area of research financed and supported by our government. (ibid.)

Also, a focus on the foreign policy results in decisionmakers valuing foreign experts over the national scientists, who arguably have a better knowledge about the country's specifics, which are essential to consider in the climate strategies (environmental scientist, in written, 21 July 2022). Instead, the government has been approving the strategies tailored to the foreign bodies' financing preferences (ibid.). Notably, the criticism towards the global angle of the national climate policy has been sound in the public sphere as well. As the national independent VB put it, 'in Kyrgyzstan, the state sees in ecology only opportunities to attract grants […] And there is no such understanding that ecology and climate are the matters of life and survival' (VB April 27, 2021).

The regional dimension of national climate change discourse: between the interstate cooperation and conflicts

Kyrgyzstan's relationship with its CA neighbours is another important aspect of national climate change discourse. There is an understanding of a shared impact the issue has on the region and there are intentions for cooperation in tackling those, yet the complex relationship between CA countries also creates a ground for the regional security concerns to be prominent in Kyrgyzstan's climate rhetoric.

The official climate discourse develops the country's position at the regional arena via an emphasis on natural resources, i.e., the importance of Kyrgyzstan's freshwater reservoirs for the security of the region, especially for its downstream neighbours Kazakhstan and Uzbekistan. Furthermore, mountains and glaciers enable Kyrgyzstan's potential to become the main energy supplier in the region (Strategy 2040 2018:42) and to champion CA low carbon transformation as the country has got 'some serious potential to develop green energy sources' (ibid:91, Ulitina 2019). Notably, this image of the important regional player comes as another reason for the government to act on climate change - the government sees national resource protection as its duty in terms of securing water and energy stability for the fellow CA states (Program to SD 2013:7).

Furthermore, regional cooperation is seen as an essential element of effective climate action given the shared character of climate change vulnerabilities between CA countries

(Strategy 2040 2018:109). Furthermore, climate change effects intensified in one of the countries have an impact on the neighbouring states given regional co-dependency on water and energy production, therefore, cooperation is the only way to decrease the negative impact (TCA 2016). This narrative is evident across the timeframe of the analysis, for example, the state representative SK highlights that 'the minister voiced the position of Kyrgyzstan, saying that for sustainable development and security, the countries of Central Asia should strengthen trust and cooperation' (SK September 27, 2016). The intention was proved by Kyrgyzstan's participation in the regional climate initiatives and, in particular, joining CA pavilion at COP 26 in 2021. Notably, the national experts' positions on the latter are sceptical. As one of the policy experts noticed,

> I was surprised to see a united pavilion […] I honestly have not heard of such [thing] as a united Central Asia […] so far my impression is that at the state level they still adhere to their internal policies, documents and norms (climate change economy expert and activist, Zoom interview, 22 June 2022).

The other experts see regional unity performed in Glasgow as 'driven by donors discourse', and 'still very much just words [and not a] positive development of the regional dialogue' (environmental expert and educator, Zoom interview, 12 July 2022). Meanwhile, participation in the regional climate change initiatives for the country's own interests as it will attract the assistance of both neighbours and international organisations to national needs such as glacier protection and advancement of domestic climate research (environmental expert, Zoom interview, 5 July 2022). Notably, covering Kyrgyzstan's participation at COP26, the national broadsheet VB pointed not only at the advantages at the global level but also at the country's superiority over its neighbours: 'for the KR this [COP26] is a good way to declare itself as a reliable international partner […] In Central Asia, no country has yet been active on climate change' (VB May 7, 2021).

These allures to the regional competition appear frequently in the national climate discourse. While similar narrative has appeared in other case studies, i.e., Kazakhstan's aspirations to champion CA green development and Uzbekistan's image as the regional cooperation leader, in Kyrgyzstan, it arises from the unresolved regional conflicts sparked after the SU dissolution, as newly emergent independent states faced pressing security issues, in

particular, in terms of water allocation (Smith 1995). Climate change increasingly affects water availability in the region, hence, the water topic is vocal in CA climate discourse (World Bank Group and ADB 2021:19). In Kyrgyzstan, the topic is particularly sound given that Kyrgyzstan is a key water supplier to downstream countries, in particular, Uzbekistan (Chikalova 2016). As VB acknowledges, the country's 'precious glaciers […] feed not only our country, but the entire Central Asian region' (Lapteva 2021). Hence, the concern about the perceived unfairness of regional water allocation are at the core of national climate discourse.

The matter is acknowledged in the national media as such, having a significant supply of fresh water, Kyrgyzstan yet does not receive adequate economic compensation for preserving water resources that are significant for the entire region (e.g., SK 2021). Indeed, in the political circles, the climate discussion focuses on this issue as well as on the benefits the downstream neighbours have from climate change effects in Kyrgyzstan (policy expert, interview, Bishkek, 15 June 2022). An example of those is the mudflows, which shuffle down the fertile soil from Kyrgyzstan's to Uzbekistan's territories aiding the neighbour's agricultural productivity (ibid.). Notably, Uzbekistan's climatologists found these claims being purely political and scientifically not proven (climate scientist, interview, Tashkent, 21 June 2022). In this light, it comes with no surprise that in 2016, the state terminated its membership in the first regional cooperation initiative, IFAS, which activity includes not only the Aral Sea restoration, but improving climate resilience in the region (IFAS n.d.). The main reason was a limited role in decision making, followed by a lack of trust as the experts doubted the budget money would reach the Aral Sea (policy expert, interview, Bishkek, 15 June 2022). Hence, the position towards regional cooperation on climate change in the official discourse is questionable – aspirations for a joint action are hindered by discontent about the regional resource politics. As one of the experts noticed, 'regional cooperation is essential for us to achieve our climate pledges… It is very unfortunate that we have not seen any meaningful steps so far' (ibid.).

Discussing climatization of security field phenomena, Oels (2012:197) argues that the main reason for the state to act on climate change is, essentially, not the environment but stability of the given state (see also Bigo 2008). Indeed, as mentioned earlier, in Kyrgyzstan's official discourse, the matter is among key topics within climate discourse. The security concerns, especially those about the increased resource competition, also intervene with the protectiveness of a national identity. In the present case, the idea of the nation, so important in the rhetoric of all analysed case studies, is majorly sustained by the national resource wealth

(Luke 2011). Hence, it is also the identity concerns that pose further obstacle for the countries to embrace cooperation.

As to the media coverage, the discussions of climate change as the regional matter were not explicitly prominent, just three articles out of the total, all located in the pro-state SK. The narrative focused on the importance of the regional cooperation: 'for sustainable development and security, the countries of Central Asia should strengthen mutual trust' (SK September, 27, 2016). Notably, this narrative, in some cases, is paired with the aforementioned concerns about the water management issues which are to worsen under the impacts of climate change (SK 2016) and, oppositely, the importance of cooperation (VB 2021). These allures to regional security, while contributing to the national identity building, may, however, distort the readers' stance towards climate action – i.e., promoting allocation of responsibility for climate change to parts of security conflict (Schafer et al 2016). On the positive side, however, Kvaløy et al (2012) point at the potential of this discourse to stimulate public interest, and participation, in national climate politics.

As to the non-state actors, amplified regional conflicts deepened the decline of the national climate research in the early years of independence – the collapse of the Soviet centralized research system left Kyrgyzstan with little expertise as the core climate units were situated outside the country, i.e. in Uzbekistan and Russia: 'ties were cut, and Kyrgyzstan was left in a slightly bad position […] lagging behind' (interview 3). Furthermore, reflecting the agenda in political sphere, national research was focused on the security matters over the first decade of the independency, hence, climate research was outside the spotlight (Heathershaw and Megoran 2011). The situation has been improving, however, with more studies appearing in climate scholarship (Vakulchuk et al 2022a), and national climate scientists have been collaborating with the colleagues across CA, especially with the ones from Uzbekistan (environmental scientist, interview, Bishkek, 2 June 2022). Likewise, national NGOs take part in regional initiatives and communicate with the colleagues: 'we have like-minded people in the region, and together, we are doing very good work informing about climate change' (interview Omar). As to the media, regional cooperation is especially prominent in the educational initiatives aimed at advancing climate change reporting, with the regional projects run by the CABAR.Asia and Internews being the most significant initiatives (environmental journalist, Bishkek, 1 June 2022). These positive tendencies can be seen both as an evidence of increased climate change concern on the national agenda as well as a reflection of the

observed improvements in the regional relationship happening at the political level (environmental expert, Zoom interview, 5 July 2022).

Implications of the national governance on the approaches to climate change

In 2021, Kyrgyzstan has increased its NDC, committing to reduce its GHG emissions almost by half by the end of the decade as a subject of international support, and by 2050, it is planned to reach carbon neutrality. The national concern about and willingness to act on climate change is also reflected in the intentions to update the climate change adaptation strategy by 2026 (UNDP 2021), and the recent changes in the institutional structure, as such, the State committee on ecology and climate was created to dedicate more attention to the climate change than ever before (Kyrgyz Republic 2021). Yet, the experts doubt feasibility of the current climate pledges arguing that the goals, and the official climate change discourse overall, do not match the action taken so far. The key reason for that, notwithstanding the aforementioned government's appeal to a civil society, is a limited space given to the non-state sector in national climate action.

The country's complicated political situation with the frequent governments turnover is especially problematic when the involvement of the expertise outside the government is limited. First, continuous changes of those in charge for climate politics result in a loss of institutional knowledge, i.e., the expertise accumulated through the years of working on the problem, and knowledge on the topic among the newcoming policymakers is still limited (environmental expert, Zoom interview, 5 July 2022, NDC Kyrgyzstan 2021:19). Second, the unstable political climate leads to incoherent, and not always feasible, climate action strategies driven by the populist rhetoric. Furthermore, the traces of the Soviet approaches to governance hinder national climate action. The low individual agency across CA countries is the pattern developed over the years of SU rule with its collectivist ideology (Wooden 2013), and Kyrgyzstan's government has not turned away from hierarchical ruling patterns (climate change policy and economy expert, Zoom interview, 18 July 2022). This results in the localized climate change vulnerabilities being addressed insufficiently as the national climate action strategy is developed with little involvement of the local governments (ibid.). Indeed, middle-range policymakers tend to hesitate taking initiatives, avoiding the negative implications this might have on their careers (environmental scientist, interview, Bishkek, 2 June 2022). Another feature of national policymaking is rooted in the regional mentality – politicians avoid raising negative issues, which comes as a major barrier to solving those: 'in Central Asia, it is common

to pretend that everything is fine... to downscale the problem' (environmental journalist, Bishkek, 1 June 2022).

A number of experts noticed that, since 2017 when the ex-President Jeenbekov took the office, scholars have been increasingly involved in climate change policymaking: 'it is in the legislation that we [scientists] should always be the part of these processes'(climate scientist and educator, Zoom interview, 16 June 2022). Yet, the recommendations are often not reflected in the legislations (ibid.). Furthermore, while there has been a positive dynamic in climate research development, it is not explicitly linked to the state. The key sponsors are international organisations, while the government's intervention is minimal (environmental scientist, in written, 21 July 2022). Insufficient government support for the research comes from the limited knowledge on the topic among policymakers, as they predominantly handle climate change as a matter of foreign policy. As one of the experts reflected on the training for the policymakers held before the COP26: 'we need high climate commitments to take more money, this is what they [policymakers] learned… greenwashing language is absorbed very quickly' (climate policy expert, Zoom interview, 16 June 2022). Even in the renewable energy sector, despite recently increased low carbon pledges (NDC Kyrgyzstan 2021) there is almost no research due to the absence of state funding (IEA 2022b). On the positive side, a number of research development initiatives were passed recently under the 2022 mountain protection agenda.

Arguably, scientific discourse impacts the narrative produced by the civil sector. It is NGOs where the national climate expertise is concentrated as many climatologists have moved from research to the non-profit organisations given the aforementioned financial constrains (climate change economy expert and activist, Zoom interview, 22 June 2022). Hence, scientific knowledge is the inherent part of public discourse as it influences NGO initiatives addressed to civil society. The state realises the potential and is open for collaboration: 'non-profit organisations are involved in decision making, for example, Green Alliance, UNISON, BIOM have actively commented on the new NDC' (climate policy expert, Zoom interview, 16 June 2022). Yet, again, participation in politics does not always equal impact: 'to hear and to listen are different verbs. They [policymakers] can hear us, but to listen […] well, you understand - this is politics' (climate change economy expert and activist, Zoom interview, 22 June 2022). While public participation in decision making is still rather symbolic (Aarhus n.d.), the influence of the international NGOs on national climate policies is significant as conforming to the global values help to meet domestic aspirations such as economic interests and an international image (Kendall-Taylor and Frantz 2014). Furthermore, the pattern represents

geopolitical dynamics reflected in green governmentality – an influence of the developed states over the developing ones through the non-state agents (Luke 1995:70).

Importantly, the government recognizes the importance of media in constructing national climate discourse. As the Adaptation Strategy (2015:9) notices, 'journalists do an invaluable service by maintaining public interest in the climate change topic'. While the country's media landscape remains the most diverse in CA, having the highest number of the independent outlets (RSF n.d.), a number of recent legislations passed under Japarov's rule have limited media freedom (IREX 2022). Criticism of the national climate policies identified in the recent media coverage, hence, comes as a necessary element of discussion to sustain performed democracy (Shevtsova and Turdubayeva 2017). Notably, a 'moderate' censorship also comes from the foreign donors (Freedman 2012), indeed, one of the interviewed journalists experienced pressure from both the government and a prominent international NGO, having been asked to delete her critical article about climate change education activities in the country (environmental journalist, Bishkek, 1 June 2022). Furthermore, the facets of the authoritarian governance hinder the quality of climate reporting. As Turdubayeva (2021) argues, limited journalistic freedoms go hand-in-hand with the radical change of the way media works, i.e. digitalization with its increased demands for free expression – this leads to 'fragmented professional culture' as the journalists find it difficult to maintain professional coherence, appeal to the reader and obey the limits of freedom.

At the civil society level, however, the interest towards climate change has been growing, primarily among the young people thanks to the education programmes and NGO initiatives in place (climate scientist and educator, Zoom interview, 16 June 2022). The national universities are the only spaces educating on the subject, and even there the relevant disciplines are scarce (environmental expert and educator, Zoom interview, 12 July 2022). The aforementioned national educational initiatives are lacking coherency, and climate change is still not a mandatory topic in the curriculum. Furthermore, the real actions of the state are minimal as mostly foreign donors who sponsor the current awareness-raising initiatives (climate scientist and educator, Zoom interview, 16 June 2022). In line with the other case studies, a lack of education and limited media coverage hinder public ability to link observable environmental issues with climate change processes: 'people are concerned about air pollution and droughts, also mudflows, but not about climate change' (environmental journalist, Bishkek, 1 June 2022). That is, although there is tangible public awareness and agency regarding the issue, insufficient education hampers the public's capacity to adapt to and mitigate climate change.

Conclusion

In sum, as the present analysis has shown, national climate change discussions touch upon a complex set of matters, which extend far beyond the environmental concerns. It has become apparent that in the self-identified democracy, the government still serves as a key actor of climate change discussion. A country's climate change vulnerability is at the core of discourse, where the extreme weather events with their negative impacts on the national development are the main reason to act on the issue. At the domestic level, the point is appropriated in the exercise of green governmentality – the allures to the individual responsibility to strengthen national resilience. Vulnerability is also emphasised in the state's attempts to the nation building – an emphasis on the fragility of the country's natural resources along with the calls for unity in protecting those from adverse climate change effects strengthen collective identity. Furthermore, climate concern is appropriated as means to strengthen popular support towards the ever-changing national leaders.

In the government's rhetoric the vulnerability aspect is being instrumentalised to benefit the state at the global level. Through the allures to the environmental risks and demonstration of the willingness to act on the global climate crisis, the state attempts to advance the national image internationally and to fulfil its economic needs. Notably, while the participation of the global actors has already had a positive impact on the national capacities to address climate change, Kyrgyzstan's alignment to the external rhetoric also hinders the effectiveness of national action. The climate change discourse also embodies the regional aspect, i.e., the relationship with its neighbours, which is not surprising given the shared climate change vulnerabilities in Central Asia. In Kyrgyzstan's case, however, the openness for cooperation clashes with the unresolved regional conflicts and national identity concerns. As to civil society, the appeal to the people as subjects of climate action is a positive feature of national climate policy. The non-state actors have been increasingly involved in national action, which has stimulated the attention to the issue among the activists and the media. Yet, at this point, the impact of these actors, and scientists, on national climate action is not sufficient to change those negative patterns of the government's take on climate change.

Chapter 7. Climate change narratives in Central Asia: confronting the threat or (re-)producing ideology?

Foucault (1975:52) famously argued that knowledge is both subject to and the object of power. Indeed, one can see that understanding the risks posed by climate change has been impacting the governments' approaches to the matters of economic development, security and international relations over the past decades. However, the knowledge about the issue also comes as a site of performing power, as such, the interpretations of climate change are crafted skilfully to advance certain interests and views (Oels 2005). The present study looked at the textual reproductions of climate change in the three CA countries. It has been shown that in CA, where the effects of climate crisis are particularly adverse, the knowledge about the issue is used not only to address the issue but also to advance the interests of the political elites at the national, regional and global levels.

This chapter discusses how the findings contribute to the theoretical body of knowledge on the discursive production of climate change. Through each case study, it has been shown that ideology mediates ideas about climate change. The critical discourse framework suggested by Carvalho (2008), with its emphasis on the dynamics of power and knowledge, has been proven exceptionally helpful in understanding the mechanisms and reasons behind the construction of climate change agenda in authoritarian states. The chapter commences with the discussion of the power dynamics in discourse, i.e., who are the main actors of discourse production and how the political environment explains that. Then, it discusses the ideological standpoints, i.e., the reasons and interests of powerful actors, which mediate interpretations of climate change in the three countries, and what are the strategies used to achieve the goals through narrating the issue. Furthermore, the discussion continuously addresses the contextual aspect of discourse, i.e., historical, cultural and other circumstances, which, while being not explicitly linked to the physical characteristics of climate problem still influence the knowledge about it. The chapter concludes with the discussion on how the knowledge about the mechanisms of discourse production can be useful for advancing national takes on climate change.

Actors and ideology in climate change discourse production

The government: pioneering knowledge production

As acknowledged through this study, the complex nature of climate change requires multiple knowledges to be involved in addressing the issue. Indeed, Hajer (1995:44) called the environmental issues 'communicative miracles' where the representatives of different

disciplines come together to offer the solution for the environmental crisis. Indeed, the management of climate change requires information on its natural and socio-economic effects, resources available to address the issue and so forth. However, it has been argued that it is the political elites who take the lead in navigating how climate change is interpreted and addressed (Carvalho 2007). Indeed, the present study has found that in Kazakhstan, Uzbekistan and Kyrgyzstan the dominant actor of climate change discourse production is the government. Scientific, media and NGOs' narratives are considered selectively by the elites and instrumentalised as the elements of a green governmentality project, i.e., political control masked under the environmental consciousness (see chapter 2). Hence, national climate change discourses are viewed here not as a reflection of the multi-actor discussions but as manifestations of the government's agenda. Notably, the dominance of the political elites in climate change discourse is nothing new in the scholarship and has been observed across various political regimes from authoritarian states (Poberezhskaya 2016, Schreus 2018) to democracies (Carvalho 2007, Oels 2013). What is remarkable about CA cases, however, is that the power hierarchy is highly pronounced in climate change discussions. Power dynamics is prominent even within the political circles, as not all policymakers possess the same level of influence when it comes to addressing climate change. As the power is executed in a top-down fashion, the interests of the dominant political actors take over addressing the local climate issues.

Notwithstanding the dominant role of the political actors, Foucault (2019:95) called to consider all actors of a given governmentality project: 'where there is power, there is resistance, and yet, or rather consequently, this resistance is never in a position of exteriority in relation to power'. The below section considers the role of the key actors of the studied climate discourses and discusses why particular understandings of the issue are more salient than the other (Feindt and Oels 2005).

Scientific community: unrecognised importance of scientific knowledge

As Rutherford (2017) argued, science is the major form of rationality when it comes to understanding the environment serving as 'an authoritative voice to speak for the wellbeing of nature' (ibid:2). The topic of environment is a point of the focal engagement for science and the government (Luke 2011:101), indeed, climate strategies should be decided in close collaboration between scientists and policymakers. However, this is not always the case, in particular, it could be argued that in authoritarian settings, it is the government who produces

knowledge, i.e., 'the rituals of truth' (Foucault 1991a:194) even when it comes to knowledge about nature. In the studied CA countries, while the importance of national climate research is emphasised in the official discourse, it is still the state who dominates climate change discussions. Indeed, as Lyotard (1984:46, cited in Luke 2011) argued, in the modern global environmental discourse, 'the only credible goal is power. Scientists, technicians, and instruments are purchased not to find truth, but to augment power'. While this being the case in all three CA states, the use of climate expertise to advance the governmentality project is overlooked by the political elites. The national research expertise receives a limited attention in the political rhetoric, which reflects the overall lack of interest in the physical issue per se.

Instead, the foreign scientists and experts take a role of an authorised epistemic community (Haas 2007) as the official climate discourse predominantly refer to knowledge produced by the foreign scholars. This represents the global green governmentality model described by Luke (1995:70), in which the international organisations and climate experts are preferred actors of climate change knowledge construction. This comes from the interest in the foreign support to national climate action. Indeed, the allowance of discursive intervention by the external actors is a common discursive technique to benefit from the climate change narrative in the developing authoritarian states (Gverdtsiteli 2023). In Kazakhstan, it is the image interests, i.e., positioning the state as an active member of the international community, that result in the national climate politics driven by the global expertise. In particular, as the national climate politics focuses on the global GHG emissions reduction, the green energy research receives most of the government's support while the climatology is lacking financial means for development. This appears logical given the dominance of the green economy narrative in the country - as climate change is turned in terms of costs and benefits, science provides a service to the government, becoming a source for 'solving' the environment and creating economic profits (Luke 2011). While there are some considerable expert potential in national climate science, this is downplayed due to those ideological aspects – instead of investing in the national scientific development, the state chooses to invest in the high-visibility green projects and events (Koch and Tynkkynen 2021, Poberezhskaya and Bychkova 2022).

In Kyrgyzstan, dominance of the foreign expertise is majorly explained by the financial interests. While material support is essential for capacity to address the climate risk, this approach comes at the expense of effective national responses as the strategies offered by the international experts are lacking knowledge about place-specific climate change effects.

Furthermore, the presence of foreign expertise in low-income countries is known to reduce the urgency of developing national climatology taking the country further away from addressing local climate effects (Lahsen et al. 2010). Notably, the lack of local expertise also can be linked to the Soviet collapse, which resulted in the very limited climate expertise within the newly defined Kyrgyzstan's borders (Vakulchuk et al 2022a). While there are yet few efforts made by the state to advance the national expertise, the foreign discourse could be helpful in this regard as the invited experts motivate the policymakers to finance national research (climate change policy expert, Zoom interview, 16 June 2022, Obydenkova et al. 2022).

Uzbekistan is an exception from these tendencies - the political interests in funding, while they do exist, do not explicitly clash with scientific underpinnings of the discourse. As such, there is a considerable presence of the national experts in the policymaking, and the government supports national research financially. This reflects the ideological standpoints of the key actor of discourse, that is, the professional background of the President in water engineering explains the attention given to the environment under the current leadership. Furthermore, the country was a center for SU climate science development, and upon the end of the Soviet regime, Uzbekistan was left with some of the most valuable climate experts. Considering all these factors, today, the level of national climate expertise remains the highest across the region, an opinion shared among both local (climate scientist, interview, Tashkent, 30 June 2022) and regional experts (climate scientist, Teams interview, 19 January 2023).

Interestingly, the aforementioned political interests at the level of global politics result in climate scepticism being virtually absent from national climate discussions. In the three CA countries, political and media rhetoric majorly conform to the globally accepted idea of anthropogenic climate change albeit some of the countries' scientists have shared the 'sceptical' ideas. That is, while a virtual absence of climate scepticism in the discourses of authoritarian, resource-rich states is surprising considering the presence of scepticism in similar economic and political settings (e.g., Wilson Rowe 2013) and among the climatologists in the post-Soviet space (Doose and Oldfield 2018), neglection of national science is among the key explanations of the dominance of the anthropogenic climate discourse. Further reasons are discursive alignment with the Western climate rhetoric and material events, i.e., aggravating effects of climate change, which has been increasingly evident across CA (IPCC 2022).

In conclusion, prioritisation of the foreign actors has negative implications, for example, it hampers national climate research development and the projects executed in the region by

foreign organisations are often lacking efficiency due to the neglect of the countries' local specifics (Rudzite and Kluczewska 2021). Meanwhile, the scientific research on climate across the three countries has a large room for improvement. This, however, also reflects the power elites' lack of interest in the real developments of climate change in the countries and prioritisation of the benefits from the cooperation with the developed states. At the same time, the authoritarian political regimes and the courtesy of SU still pose barriers for the national experts to engage with the foreign colleagues, however, recently democratization tendencies in the studied states facilitated cooperation. Yet, it is, again, limited financial support to the research from the government and a lack of understanding of how to engage with the global scientific arena are the main factors which limit scientific engagement in the global dialogue (Vakulchuk et al 2022a, Mirzabayev 2023).

Media: informing about climate change or conveying ideologies?

It is argued that media is a powerful actor of discourse as it has a key role in creating the agenda mediating public perceptions about a particular matter and actors involved (Carvalho and Burgess 2005). Media is a helpful instrument to form national capacity to address climate change making scientific knowledge accessible for the public and policymakers (Weingart et al. 2000) and gatekeeping the national takes on the issue (Carvalho 2007). Meanwhile, in all analysed cases, the potential of media is used differently. As Carvalho (2005:1) argues, the media are 'instrumental for a range of social actors to advance or justify specific options in relation to climate change'. Indeed, in the observed cases, climate coverage is largely used to advance the interests of the political leaders rather than to inform people on the physical issue. This is reflected in the prevalence of the media discussions praising national climate policies and participation in the international climate action in all studied cases. Similar tendencies have been observed across various geopolitical landscapes from the authoritarian resource-rich economies like Russia (Wilson Rowe 2013, Korppoo 2020) to the Western democracies (Backstrand and Lovbrand 2006, Boykoff 2011). That is, media coverage of climate change should be analysed with an awareness of the ideological interests of actors dominant in a given society.

Consequently, the quality of climate coverage is affected by the political regime. Limited governmental initiatives towards improving the quality of climate change reporting are the result of the media being perceived as a tool for sustaining the ideology rather than advancing public knowledge – the attitude to the media traced from SU (Richter 2008). The issues faced

by the independent media, in particular, censorship and limited institutional and financial support from the government (Turdubayeva 2021), hinder their capacities to advance the quality of climate coverage, while stable investment flows enjoyed by the state-owned media make it unnecessary to expand the expertise, in particular, the quality of` climate change coverage. As journalists balance between both financial and political censorship concerns, the media struggles to maintain coherency and purpose in its reporting, especially when it comes to the complex topic such as climate change.

However, it is also the elites' interests that allow some level of criticism towards national climate policies (Schatz 2008). In the three CA countries, the presence of the alternative media has been growing, which reflects the liberalisation tendencies observed across the countries (e.g., Akimov 2015, Schiek 2018). The presence of alternative opinion is an important part of preforming democracy (Schatz 2008) and the critical discussions appearing in the state-owned newspapers are the elements of this discursive performance. Notably, in Kazakhstan, criticism of the national climate politics was found in the main national newspaper while being absent from the independent outlets. Hence, critical voices are just another element of the governmentality project appropriated by the political elites to perform a democratic state where alternative opinions are welcomed. However, this is not to claim that the government's control over media has faded away - while there is no strict prohibition of the particular topics, there is still indirect censorship witnessed by the journalists. In particular, self-censorship is a widespread phenomenon - while there is no guidance on the topics to avoid, the journalists are cautious about how to cover environmental topics. This is a great representation of biopower at work, i.e. an individual self-regulates its acts to conform with the power regime, even if the roles are not pronounced (Rutherford 2017). As such, in Kazakhstan, open criticism of the national environmental politics may lead to the prosecution of the speaker (CIVICUS 2021), while in Uzbekistan, negative comments on the political leaders while discussing climate change may have various implications, for example, revoking a licence from a journalist.

There are some foreign funding resources, however, which allow the existence of reporting that is not influenced by the state. Indeed, there are several positive developments arising from the critical coverage, e.g., in Uzbekistan, media was able to perform as a watchdog of the state's environmental policy, which resulted in stopping deforestation action (environmental journalist and educator, Zoom interview, 21 March 2022). Hence, the assumption that media can influence policy making via articulating public opinion (Wilson

1995) is found to be applicable to the authoritarian models. This, however, also may come as an intended democratic performance – the state has allowed the criticism on the matters it was ready to address. For example, national approaches to hydrocarbon industries across the analysed states are an inexistent topic in the climate change coverage given that the resource politics is not a subject for public discussion and, indeed, amendments.

Overall, the present study argues that the interests of political elites dictate climate change coverage. Consequently, the climate crisis has become an object of politico-economic media discussions rather than a standalone matter. Notwithstanding, the analysis has shown that the prominence of climate change in the media has been growing in the past years. While there is a very limited data to confirm a stable growth, there are similar observations on the climate coverage in Kyrgyzstan (Lee 2021) and Kazakhstan (Poberezhskaya and Danilova 2022), which support these findings. However, given that the increase of attention to the topic is aligned with the political agenda around the issue, this positive tendency cannot be expected to remain unless the political elites are interested in the topic (see also Carvalho 2007). Considering the power changes observed across the region since its independency, it is questionable whether and how long climate change will be receiving media attention.

A civil sector: advancing climate action or the political regime?

Public participation in environmental politics is an essential element of a successful response to climate change (Stevenson and Dryzek 2014), indeed, the importance of civil society in solving environmental issues is acknowledged in the political discourses of all analyzed countries. However, the present study has shown that the reason for involving the people in climate action is to further the government's influence at the domestic and global levels. As such, the impact of the domestic non-state actors on the dominant discourse of the state is limited and mediated by the political elites. Hence, the present study contributes to the argument that the appeal to the civil sector in autocracies is instrumentalized to advance governments' positions domestically (Ahmed and Potter 2006, Heiss 2019) and globally (Kendall-Taylor and Frantz 2014). In the studied CA cases, governance is performed through imitations of democracy instead of oppression, a tendency common in transitioning autocracies (Bruun and Rubin 2023). That is, instead of prohibiting alternative opinions, those are controlled or even produced within the dominant discourse as the political elites closely cooperate with the public sector.

An example of the above is instrumentalization of NGOs for sustaining political regime in Uzbekistan. Extending Heiss's (2019) claim that in Uzbekistan NGOs are appropriated by the state as sites of the government's control over society, the present study has observed similar tendencies in context of climate activism. Most of the non-state organizations in the country are state-owned, coming as servants of the government (Kim 2020), and instead of highlighting the climate challenges and mobilizing people to address them, the newcoming green NGOs praise the government's climate action. Meanwhile, the opinions of the independent activists, while seemingly given space in the decision-making processes on climate change, are barely considered in the political decisions (see also Egamberdiyev and Taldybayeva 2020). As such, while formally climate activism is allowed, the limited number of NGOs exist in cooperation, rather than cooptation, with the official actors. This is the case in Kazakhstan, too, where the government, while acknowledging the importance of NGOs for performing democratic regime, controls the presence of criticism in the national discourse (Schatz 2008). The substantial criticism of the state in the public spaces, even if governed, creates the idea of freedom among civil society, hence, it is the cooperation between NGOs and the government that acts as the main proof of democratization processes (Ziegler 2016). Indeed, in the studied cases, there are constraints posed by the state to civil initiatives, with some of those having a repressive character (Kuzembayeva et al. 2019, Mustafina 2021). Consequently, the present study identified the prevalence of support over criticism of the state in the narratives of Kazakhstan's climate activists.

Climate activism in Kyrgyzstan presents a different case, however. The complicated political past explains the country's most plural discursive landscape in CA and the presence of real independent activism (Lewis 2021:84). The country features a number of climate change-focused NGOs, and public agency in the country towards climate change is overall strong (climate scientist and educator, Zoom interview, 16 June 2022). This, however, finds its explanation beyond the actual climate change concern. Instead, here it is argued that in Kyrgyzstan, climate change activism is reasoned not only by the issue per se but also is the reflection of the public dissatisfaction with the wider political situation (Wooden 2013, see also Brannen et al. 2020). That is, the climate change topic is appropriated to express political concern and mistrust in the leadership incurred over the years of instability. Yet, as to Nasritdinov's (2021) recent observations of green activism in Kyrgyzstan's capital, public opinion still matters little when the political elites' interests are involved. Furthermore, under

Japarov's leadership the freedom of speech and public activism have been decreasing (Human Rights Watch 2022).

Meanwhile, certain representatives of the non-state sector have some considerable influence on how climate change is approached. Just like in media and scientific fields, the interests at the global arena motivated the governments to allow the international actors cooperate with local non-state bodies (Gandhi and Przeworski 2007). While it is mainly foreign actors who allow the extent of alternative opinion in the countries, this intervention has downsides as well. As such, the foreign bodies have some considerable control over national activists' agendas. The INGOs being the ones to decide what activities will be performed, furthermore, the national NGOs themselves tend to shape their agenda in order to fit into the narratives of the foreign grants' requirements, the feature described as dependent activism (Weinthal and Watters 2014). In Uzbekistan, for example, this has led to several NGOs abandoning the climate topic for matters better supported financially, for example, gender equality (environmental journalist Zoom interview, 28 February 2022). However, there are also positive impacts of the foreign bodies' involvement in climate action and democratization processes in the region (Schatz 2006, Omelicheva 2015). As such, while the climate crisis is commonly associated with further restrictions in the authoritarian states (Ahlers and Shen 2018), in the developing CA countries, the presence of the foreign donors in national efforts to address climate change aids the increase of freedom.

In all, the government leads the climate change meaning-making processes in the three countries, consequently, the understanding of the issue are primarily informed by the considerations of the political elites. The current agenda has resulted in the key national narratives being, majorly, a representation of the ideological premises of the political elites. As Carvalho (2008:170) noticed, 'ideological standpoints are possibly the most fundamental shaping influence of a text', that is, the interests of the powerful actors define how climate change is perceived and verbalized. The below section discusses the key standings, which inform national ideas about climate change. Essentially, those are shared by all three countries. Naturally, one of the narratives evident through all case studies is the concern about the negative effects of climate change. Given the shared nature of climate change effects in the region (Bernauer and Siegfried 2012), it comes logical that it is a discussion on vulnerabilities where the countries' rhetoric finds the common ground. Furthermore, besides the objective concern, the climate change discourses in three countries arise from the number of subjective

matters. The present study has found that the key premises mediating national climate discussions in all three countries are the aspirations to further domestic power, geopolitical influence, and economic interests. The below section discusses why these matters are important and how are those being achieved in the three studied cases.

The ideological standpoints behind climate change discourses: (Re-)building a global identity

The matter of global image is observed in most of the analysed discourses. Reflecting on the risks globalisation and limited resources pose to the geopolitical allocation of power, Luke (1995) emphasised the importance of power concerns and the matter of identity in guiding the global climate change discourse. Indeed, the matter of global identity is essential from the green governmentality perspective as global climate action is essentially a competition over power based on natural resources (Rutherford 2007). Hence, environmental issues become 'transnational security threats' not only in terms of resource availability but also in terms of the allocation of power, i.e., the country's identity (Luke 1995:121). The analysis has shown that the identity is a key aspect to consider when making sense of climate narratives in CA states. The section looks at the images constructed through national climate discourse at the global political level, motivations behind the desired portrayals and what techniques are used to achieve those. In all three countries, the narratives feature strong concern about global anthropogenic climate change and the government's readiness to act on the issue. As Luke (ibid:122) noticed, a global climate concern manifested in global green governmentality mode, while seemingly obeying the idea of sovereignty, is nonetheless 'a manifestation of biopower extended to entire planet'. That is, the global actors advance their ideological standpoints, i.e., national interests, via participation in international climate politics. The analysed countries, however, do not feature aspirations to govern global climate action like some of the developed Western states (Backstrand and Lovbrand 2006). Instead, they instrumentalise climate concern and readiness to contribute to solving a global crisis in a number of different ways worth considering.

The struggle for a global recognition in the successor states

The study has found that an active engagement in the international climate action is reasoned by the countries' historical and political contexts. Heathershaw (2010) argues that globalisation of climate change by CA governments has to do with the fact that independent CA countries emerged as 'global performance states'. There are also global identity concerns, i.e., the distinguished idea about the given country possessed by the foreign actors. The concerns about

a weak global image is the aspect of climate change discourses identified across all case studies. The struggle for identity is a common feature of the post-Soviet CA states due to the years of the Soviet governance with its noticeable efforts put into replacing local knowledges of the republics with the dominant communist ideology, as well as centralised politics, which left local governments with little power (Heathershaw 2010). As a result, upon SU collapse the successor states have faced the array of challenges from addressing the economic impacts of the regime change to establishing new political regimes and defining the idea and the place of the country in the global world. Notably, each of the three observed cases took a different approach to increasing their global prominence through climate discourse.

Kazakhstan's national climate discourse contributes to the national aspirations to gain a reputation of the strong, global political player. Getting a global prominence has been an important political aim since the early years of independence (Kassen 2018). The major point of Nazarbayev's politics was building a transnational identity (Laruelle 2014), which was taken further by the current leader Tokayev, and the intention to contribute to global climate action is among the instruments to achieve the aim. However, the state strives not only towards integrity but to achieving an influential position in the global arena. The official climate rhetoric emphasises national green innovation potential (Poberezhskaya and Bychkova 2022, Koch and Tynkkynen 2021), and the green economic development discourse comes as a main topic of climate discussion in order to focus the attention of the foreign observers on those strong points of Kazakhstan's climate action. Furthermore, the narrative is dominant in the Western democracies, as such, through the green economy rhetoric, the state is able to demonstrate itself as a successful climate action player. Notably, the narrative helps to hide the aspects of climate action which the government is not proud of. The green economic development paradigm narrows climate action to decreasing GHG levels (Doyle et al. 2015), consequently, the national policies are focused on the green energy development and offsetting GHG via afforestation projects, while the matter of national dependence on the fossil fuels is silenced. As such, national climate agenda correlates with the power regime, i.e. the scope of the defined issues in climate discourse are filtered in terms of what the government is able to manage (Rutherford 2007).

Kyrgyzstan's rhetoric also features concerns about the image of the failed state, the result of the series of political turnovers and public upheavals observed in the country since its independence (Cheterian 2010). Global climate action is seen as an opportunity to change the

global perception as the government emphasises its commitment to global climate action. The international actors take a significant, if not leading role in national green action (Nazarov and Obydenkova 2022), and national climate initiatives are primarily driven not by those by financial interest, unlike in the rest of the case studies where the considerations of power take a leading role. Consequently, the state seems to be failing to balance those economic aspirations with the actual priorities in terms of climate action. As such, several experts acknowledged that climate change initiatives pursued by the foreign actors in Kyrgyzstan have limited relevance to the local needs, yet, being the sources of funding, are welcomed by the political elites, while some of the pressing challenges remain not responded (environmental expert, Zoom interview, 5 July 2022). Last, the specific feature of the national climate discourse is a clash between the attempts to integrate into global community and to protect national identity, which comes logically given rather worrying stance of economic development in the country and the aforementioned concerns of the post-Soviet states. Indeed, these variances in how the government views the global actors, i.e., as a partner or a threat, is argued to be issue-specific at the wider political scale (Arynov 2022).

In Uzbekistan's case, national climate discourse comes as a part of liberalisation processes commenced under Mirziyoyev's term, indeed, the very emergence of climate narrative is a reflection of the regime change in the country (Zhiltsov 2018). As such, national climate rhetoric contributes to establishing positive relationships with foreign actors, establishing new ways for cooperation and building the image of the open state committed to global action, an antipode of the image featured during the years of Karimov's governance (Bohr 2004). Notably, the importance of the personal image for the current President has been argued to facilitate national climate responses. As one of the experts noticed reflecting on the national commitments to global mitigation strategy, 'image is everything for our President […] the President promised so he cannot break his word' (media expert, interview, Tashkent, 21 June 2022). Notably, the latter may have also had a negative impact on national climate action as the image concerns do not allow witnessing the challenges faced by the country: 'In Uzbekistan and rest of Central Asia, they [policymakers] like to say this - everything is fine with us, everything is fine, everything is fine ... to hide the problem' (ibid.). Overall, Uzbekistan comes as a vivid example of how the political regime can mediate the understandings of the physical issues. In this case, this influence has brought a positive effect.

Global climate change as a site of economic aspirations

Besides the historical context, active position in global climate discourse is also informed by economic interests. As such, the idea of a global climate change is not used to take off the level of demand from the states to take action but rather invites external help. As such, just like previously observed in Kazakhstan's case (Poberezhskaya and Danilova 2022), no blame to the major global GHG emitters was observed across the case studies. Accentuating the need to level up the Western climate response, which the CA actors are willing to be a part of, is seen here as another strategy to attract the financial resources. The most prominent discursive strategy in this regard, is the commitment to contribute to global climate action while highlighting the developing status of economy, that is a necessity of a financial support to be able to achieve the goals (Poberezhskaya and Bychkova 2022). Across the studied cases, this discursive strategy was the most prominent in Kyrgyzstan, where the aid is claimed to be an essential requirement for successful climate action. In turn, Kazakhstan presents an interesting case as its global rhetoric constructs two opposing identities. Through its ambitious climate action commitments and development plans, the state portrays itself as a strong global player, while identifying its economy as developing when the discourse touches upon the financial needs for climate action. As to Uzbekistan, aspirations for financial support – while they have their place – are the least prominent, indeed, it is the only CA state, which submitted unconditional NDC. Notably, in their global narratives, CA countries have not highlighted their colonial nature, which sets them apart from Rajao's and Duarte's (2018) findings that developing successor states across the world tend to accentuate their colonial identity in global climate rhetoric. The reasons might be that the coloniser, i.e., SU, does not exist anymore (Dubuission 2022), and the CA states' intention to advance their own identities at the global level.

Another discursive strategy to attract funding is framing the local issues within the discourse of climate concern. In Uzbekistan's case, while the Aral desiccation is not linked to the climate crisis, the government has succeeded in making the issue a global concern via establishing the International Innovation Centre for the Aral Sea (IICAS) which is meant to address both the Aral and climate crises. As one of the experts explained, the Aral issue is more difficult to source money for, while climate change is already the issue of a global concern and considerable financial investment (climate change expert, Zoom interview, 18 March 2022). A different angle of this strategy is globalisation of a national natural object, i.e. in the updated national NDC, the Aral Sea is portrayed of a global importance given its role in the

environmental balance of the region and beyond (Republic of Uzbekistan 2021). Similarly, mountains and glaciers of Kyrgyzstan, are portrayed as important for the future of global ecosystems, that is why they require collective protection, which Kyrgyzstan has asked for under the 2022 International Year of Sustainable Mountain Development initiative.

A discursive alignment with the values of the global climate action leaders is another strategy, which helps both to attract financial investments and to improve the image at the international scale. As such, national legislations address the issues of gender equality and racism, human rights and inclusion of civil society in the political processes. In this light, climate change narrative serves as a site for performing 'virtual politics' of democracy (Wilson 2005), i.e., democratic values expressed in discourse are thought as a performance for the international audience rather than enacted in reality. This discourse advances the national images in the global arena geopolitical positions of CA states. However, regional relationship is the field where identity concerns are most prominent.

Climate change and power in the regional perspective

For CA countries, obtaining not only territorial but cultural separation from the neighbours came as an essential element of establishing as independent states after the decades under the SU regime. The need to be well distinguished from the rest of the region was aggravated under increased security concerns, which came with the need to access previously shared natural resources. Indeed, as Smith (1995) writes, 'nowhere in the world is the potential for conflict over the use of natural resources as strong as in Central Asia'. The allocation of water resources has become a particularly contested matter, which sparked interregional conflicts and took interstate relationship downhill (Chikalova 2016). Climate change intensifies the tensions over resources and threatens sovereignty of the territories, hence, it is only logical that the mater of regional security is the key object of climate discourses within the region. As to the identity concerns being vocal in national climate narratives, this is best explained through the concept of green governmentality. Natural resources and territories are fundamental elements of national identity, hence, a need to protect nature in the modern political discourse is informed not only by the objective risks posed by the environmental crisis but also by a concern that the deficit of natural resources will harness the geopolitical influence of the given state (Luke 1995). Notably, the case studies feature different discursive strategies in attempts to anticipate the resource crisis and advance their influence at the regional scale.

Uzbekistan's rhetoric features the most positive attitude among the key studies constructing the identity of the regional peacemaker, i.e., promoting the idea of collective action on climate change. Here, this discursive position is viewed not only as a reflection of Uzbekistan's dependence on the upstream neighbours' water resources, but also as means to contribute to the state's influence in the region as well as its global identity. Promoting peace in the region helps the state to move away from the 'regional hegemon' image, which was developed under Karimov's term and limited some development opportunities for the state (Bohr 2004, Egamberdiyev and Taldybayeva 2020). However, the peacemaker attitude also embodies attempts to increase the state's influence in the region, that is, guiding climate action in the region is an opportunity to influence CA agenda.

In Kazakhstan, the narrative of green development contributes to the regional image of the state. Through its climate discourse, Kazakhstan portrays itself as a regional leader of climate action, the narrative also embodies the message of Kazakhstan's leadership in economic development. Essentially, the regional dimension of rhetoric is used to solidify the state's global influence, that is, to be viewed as the leader of CA. Notwithstanding, the experts across the analysed countries noticed that the state hardly hits the mark, with Uzbekistan showing the best progress in minimisation of environmental impact and building national resilience (state climate adaptation expert, interview, Astana 8 December 2022). As to the openness to climate change cooperation within the region, Kazakhstan's discourse features the least discussions in this prospect, indeed, this tendency stretches beyond the topic as there is a very limited representation of the state as a part of the region (Sharipova and Burkhanov 2021).

In Kyrgyzstan, the regional aspect of climate discourse also features willingness to cooperate in addressing the climate crisis. At the same time, national rhetoric attempts to solidify the state's influence in the region via the reference to the water resources located in the country and covering majority of CA needs. This narrative both promotes the image of the strong state as Kyrgyzstan is portrayed as a key regional security player responsible for protecting the neighbours in the face of climate change, while also demanding more economically advanced Kazakhstan and Uzbekistan help in protection of the water resources. Importantly, Kyrgyzstan's discourse features most conflict-charged stance towards the neighbours, portraying climate change as a security issue for the region. This attitude roots in the early post-Soviet period as the water allocation policies between the newly formed states were perceived unfair by Kyrgyzstan, and these conflicts did not allow the state to benefit from

its hydropower sector (Pomfret 2021). Furthermore, an emphasis on security in the national discourse reflects that the developing economy feels itself vulnerable among the economically stronger neighbours, whose demands for freshwater are to increase in the face of climate change (Bigo 2008). In all, the performed aspirations for the regional cooperation are prominent more in discourse and less in action. In contrast, those security concerns, have already impacted the wider green action agenda as Kyrgyzstan terminated its participation in IFAS explained by the malcontent about the power dynamic within the regional project (climate change activist, Zoom interview, 4 July 2022). Consequently, the security matters are seen here among main barriers to Kyrgyzstan's true involvement in regional cooperation on climate change.

Notwithstanding, CA states have been demonstrating openness to joint climate action, the most prominent manifestation of which was consolidation of the CA states at the COP 26 in 2021 manifesting the idea of unity in '5 countries – 1 region – 1 voice' narrative (CAREC 2021). Indeed, the political scholarship pointed to the positive developments in joint environmental action within the region (Gleason 2018:162). Yet, in line with Buranelli (2023), the present study argues that regional cooperation is rather a discursive performance aimed at the international community. Indeed, the interviewees could not think of any prominent interstate initiative undertaken, indicating that cooperation exists but on the non-state level, e.g., between the climatologists and ENGOs (e.g., climate scientist and educator, Zoom interview, 16 June 2022). At the political level, the pronounced willingness for joint action is instrumentalised by the countries' leaders to maximise financial help from the global actors (Buranelli 2023, see also Alimdjanov 2020). In this light, Buranelli (2023) advises the international donors to focus on national initiatives rather than regional ones as this would eliminate the obstacles posed by CA governments' interests and allow more effective monitoring of the progress. Putting this in theoretical perspective, regional cooperation represents a discursive coalition (Hajer 1995), in which the three states with different interests came together led by several common interests. However, as Hajer and Versteeg (2005) point out, the creation of such coalitions does not mean to unite the actors for real, given the conflict of the rest of the interests. In CA, besides the disputes around resource allocation, there are identity concerns. As one of the experts noticed, 'since the countries have gained independence and their place in the world, each of them seeks to strengthen national self-consciousness […] this is the factor that parts us' (regional climate change expert, Zoom interview, 7 February 2022). However, the expert added that 'there is still more in common, since our common

problems require joint efforts' (ibid.). Indeed, the scholarship acknowledges that separating oneself from the rest of the region does not contribute to efforts to revive national identity as interconnectedness and diversity are unique characteristics of CA states that form their historical heritage (Akchurina 2019). Hence, embracing these close ties within the region will not diminish, but rather contribute to, rebuilding the authentic cultural heritage of the states.

The global and regional aspects of climate discourses represent the geopolitical aspect of green governmentality framework (Luke 1995) as the political influence within and beyond the region is one of the key ideological standpoints advanced in the states' climate change rhetoric. Furthermore, the analysed narratives attempt to strengthen relationship with the Western states and seek benefits arising from international cooperation on climate change. As such, there is a multitude of domestic considerations that dictate the countries engagement in the global politics. This presents a fruitful field for the future research as the region has been traditionally viewed in the political scholarship from the global security perspective, i.e. as the element of 'great game' (Heathershaw and Megoran 2011). Meanwhile, the foreign policies of CA states should be approached individually and considered from the angle of the countries' domestic interests rather than just being viewed as a response to the global political dynamics (Dzhuraev 2021). This perspective seems especially important for advancing nation-level climate politics. Furthermore, there are also the matters rooted in the blurred national identities, which take the states further away from their green goals. While the identities of the successor states feature aspirations to follow the Western approaches to climate change (Rudzite and Kluczewska 2021), the presence of the Soviet traces in how the state, and the environment, is managed, hinders its success. Indeed, the present study has found that, at the regional level, the unresolved conflicts around the resource allocation and the Soviet-grounded identity issues make it more difficult to embrace collective action.

Ideological standpoints behind climate change discourses: advancing domestic political regimes

As the analysis has shown, the concept of the nation is sound in climate change discourses across all case studies. Commonly, the post-Soviet CA countries have been viewed as 'nationalising states', i.e., the officially established nation-states yet being 'insufficiently national' (Brubaker 1996:79). This is considered to be the outcome of multiple factors: centralised Soviet rule and a little role of the local governments, the communist regime with an absence of the independent nationalist movements and separation of the territories inconsiderate about the cultural component upon SU collapse, - all of these pushed the new

governments to manufacture new identities (Cummings 2009). To date, as Beacháin and Kevlihan (2015:495) noticed, 'the construction of genuine nation states remains an elusive goal in all of post-Soviet Central Asia'. Indeed, the present analysis has identified the attempts to develop the idea of the nation and to create a sense of unity among the citizens within the climate change discourses. Nation building in CA has received a significant scholarly attention over the past decades (Isaacs and Marat 2021), and the present findings on how this is achieved through green rhetoric add a new, 'green' dimension to the existing research. Furthermore, the analysed discourses embody attempts to state building, i.e., legitimation of the government, which is commonly coexists with nation building processes in the authoritarian states (Isaacs and Polese 2015). As an outcome of post-independency power turnovers and public mistrust in the leadership, the attempts to increase popular support while retaining the tight control over the civil society is argued to be one of the key variables explaining climate rhetoric across the three countries. Indeed, similar processes were observed in the postcolonial developing authoritarian states across the world (Rajao and Duarte 2018, Gverditseli 2023). The case studies feature different techniques of approaching these two objectives, which are discussed below.

Legitimation through climate change adaptation in Uzbekistan

Uzbekistan possesses a stand-alone case as the 'nationalising' efforts were not observed in the official climate change rhetoric. The reasons for absent 'nationalising' efforts in Uzbekistan's case is that climate change is relatively new topic of the political discourse, i.e., it has appeared when the concern about national identity was already not sound in the country. The importance of nation building has scaled down, given the large-scale efforts dedicated to the matter under the deeply authoritarian regime of Karimov and his policies addressed to grow the individual sense of national belonging (Adams 2010, Sharipova and Burkhanov 2021). Notwithstanding, the efforts to legitimise the state are evident in Uzbekistan's climate rhetoric.

Reflecting the general shift of legitimation techniques from the 'discourse of danger', i.e. constructing legitimacy on the idea of external threats, Mirziyoyev's regime has focused on advancing economic development and social security in the country, the approach known as legitimacy through performance (Lewis 2021:77). This discursive technique is prominent in the national climate rhetoric supported by actions, as such, the state has been successfully advancing its renewable energy sector and has shown significant improvement in water and energy saving. Considering the vocality of the financial aspect, national rhetoric at a certain

extent represents the modern green governmentality discourse described by Luke (2011), as such, 'the state has never hided that decisions are economy-driven […] attention to environment came with the new policymakers who calculated the costs of eco crisis' (regional climate change expert, Zoom interview, 7 February 2022). However, the idea of economic growth alone, unlike in Kazakhstan, does not serve legitimacy project. In Uzbekistan, it is an emphasis on the social prosperity that is thought to strengthen popular support as the government strives for the image of the caring patron, and financial development is seen as an element of social wellbeing. As such, national legacies discuss climate change largely in terms of risks it poses to people, e.g., food and water crises, and these narratives go along with the arguments that the state will protect society from negative consequences. Notably, the care for the people in the official narrative has been transformed into action as Uzbekistan features the most advanced climate change adaptation component across the analysed countries (state climate adaptation expert, interview, Astana 8 December 2022, see also Alikhanov and Seitova 2022).

Globalisation efforts discussed earlier also contribute to the legitimation project, as such, Uzbekistan's active stance on global and regional climate politics contribute to efforts to gain civil support, which is a common technique in upgraded autocracies (Schiek 2018). Indeed, describing the patterns of the modern authoritarian environmentalism, Gverditseli (2023:167) argued that 'cooperation with international actors is therefore exploited to strengthen national legitimacy'. As such, national climate discourse is entangled with the calls for interethnic peace, equality and human rights. The current attitude, hence, does not only address those image concerns at the global arena, but also legitimises the state by performing democratisation processes, given that the neglect of human rights was a nodal point of public dissatisfaction during Karimov's rule (Schmitz 2020). Yet, while there have been positive developments in terms of human rights and media freedom, there is still much to be desired from the state of democracy in the country (Lewis 2021:78). For instance, while the number of NGOs has been growing, those are majorly state-backed and serve as sites for the ideological intervention in the public discourse (Heiss 2019). As such, albeit their original mission, the pronounced non-state bodies are the elements of governmentality project solidifying the regime. Similarly, media are controlled by the elites to reinforce their hold on power. As such, the government recognizes the inhabitancy of the resistance in the exercise of power acknowledged by Foucault (2019) and addresses it becoming an agent of the public discursive field itself. In all, performance-oriented legitimation techniques have had a positive impact on national climate

action, however, performed in the authoritarian states, they still constrain the effectiveness of action as there is little real concern about individual agency. A lack of appeal to the individual action takes Uzbekistan steps away in terms of mitigation and especially mitigation of the issue.

Advancing Kazakhstan's political regime: balancing the hydrocarbon legacy with green action

The latter argument is also applicable to Kazakhstan's climate discourse, in which the green economic development narrative contributes to the national governmentality project. The green economy discourse contributes both to nationalising and legitimising processes. As to the former, the green rhetoric builds the image of the strong, progressive nation, the ideal claimed in 'Kazakhstan 2030' strategy (Kudaibergenova 2015) and performed for the people via the EXPO 2017 campaign (Koch and Tynkkynen 2021). Similarly to the governmentality function of other public performances in the country (Adams and Rustemova 2009), the event can be seen as a site of nation building, an act to signify the fact of belonging to the new Kazakhstan. Furthermore, a green economic narrative portrays the state as a strong lead of a new development mode, hence, building a popular support to the political leadership via portraying it as not only capable to address the vulnerabilities, but also to capitalise on addressing climate change. The discourse creates social institutions, which come as sites of governmental control, i.e. the development of the new enterprises, in which people are patroned to perform the new green identity is the part of the green economic reform (Luke 2011). Legitimation of the authoritarian political regime through an economic performance, just like in Uzbekistan, has been giving positive results in terms of climate action (Lewis 2021:76). The focus on financial gains instead of social security, however, translates into the national policies being focused on the climate change mitigation component, e.g., energy diversification and taxation schemes, while adaptation has received significantly less attention so far (state climate adaptation expert, interview, Astana 8 December 2022). Furthermore, viewing climate change in primarily financial terms may result in the green politics, which actually does not benefit the environment, an example being RES development going hand in hand with active crude oil production.

Notably, Kazakhstan presents itself an interesting case where resource nationalism go along with aspirations to 'green' the economy. Notably, this is a common case of resource-rich autocracies, e,g, China's government attempts to merge resource dependency and climate concern in the nationalising project (Schreus 2011). In Kazakhstan, abundant natural resources are among key means for nation building creating the idea of the strong, successful hydropower

nation (Koch and Perrault 2019). McCarthy (2019:307) called this feature 'the conflation of nature and nation', i.e. the politicisation of nature when it becomes understood as the element of national identities and development prospects. It is this standpoint that explains the contradiction of discourse as climate change poses a threat not only to economic wealth of the states but also to the ideologies and political order sustained by the resource narrative (Oels 2013). Domestically, the state manages to combine both, seemingly contradictive, discourses. As such, fossil fuels are justified via appeals to social security based on the traditional energy sources and, overall, the hydrocarbon economy and climate concerns do not clash in public-oriented discourse (media). The topics are still coincided in the national legacies emphasising the state's efforts to reduce environmental impact through innovation in energy saving and green energy, while the actual reduction of fossil revenues is omitted in discourse. As such, sustainable development discourse comes handy for the state to explain the co-existence of the polar approaches to the environment (Poberezhskaya and Danilova 2022:444). Yet, the idea of sustainability is somewhat fractioned in reality considering the inefficient energy means, poverty, lacking infrastructures and 'business as usual' approaches performed by the state (Koch and Tynkkynen 2021:535). Notably, this finds the explanation not only in banal hesitance to invest in all-round development but also in the country's Soviet heritage. As such, the postcolonial identity retained within the elites who see pursuing with the Soviet approaches to politics and economy as a way to ensure popular support (Kudaibergenova 2016, Cooley 2012). That is, while promoting the democratic and sustainable future under the New Kazakhstan ideology (Kudaibergenova 2015), the government is cautious about letting go completely of the political framework, which has kept the regime stability through the decades.

Climate change and beyond: the environment as a cornerstone of advancing the political regime in Kyrgyzstan

In Kyrgyzstan, climate change discourse comes instrumental in the government's efforts to both build the idea of the nation and legitimise the government. These concerns about both aspects of successful power regime are the most prominent in this case study, which finds an explanation in the complicated post-independency period marked by the years of political instability. Recurrent changes of the leadership and public upheavals have resulted in unstable political regime, something known as 'failed' or 'weak' state in the political scholarship (Rotberg 2002). In Kyrgyzstan's case, the concerns about the unconsolidated regime are entangled with the fear of the weakened idea of the nation that is why the state attempts to both legitimise itself and revive national identity (Laruelle 2012). Among others, the latter is

attempted through nationalist ideas (ibid., see also Sharipova and Burkhanov 2021:105), for example, the signposts to the country's historical heritage (see chapter 6) is a distinctive feature of the state's climate discourse. Consequently, resource nationalism is an important element of Kyrgyzstan's climate discourse. In this case, the notion of national resources does not sustain the idea of economic prosperity and being a strong state, like it was demonstrated in Kazakhstan's case. Instead, the country's unique mountains and glaciers are utilised in discourse to reinforce the ideas of geopolitical sovereignty and nationhood. Indeed, McCarthy (2019:307) notices that attachment of the nationalist projects to 'specific environments, territories, and the alleged existential struggle for scarce resources' is a particularly common practice in autocracies.

The idea of the citizen is also inspired by country's past as the official discourse accentuates the need to witness the historical legacies of nomadic culture where nature being a central moral value. This narrative is inspired by Tengrism contributes to both global and national identity building projects as it reinforces the individual's attachment to a physical place and comes as a form of resistance to the globalisation processes happening across CA (Laruelle 2007). As to the first point, strengthening links between the place and the people is a positive approach in terms of advancing environmental agency – as Schultz (2000:403) has noticed, the extent to which "people include nature in their cognitive representation of self" correlate with the level of environmental concerns. As to the global aspect, it is an interesting pattern considering the aforementioned presence of the Western values in the state's discourse, as such, the Western identity does not pose a threat to the idea of the nation. This comes as another evidence that the ideological point of the discourse is an aspiration to be distinguished from the CA neighbours, i.e. the issue of a limited identity within the region. Meanwhile, at the global level, the aim is not to stand out but to become an organic part of the international dialogue. This discursive position, i.e., aspiring to separate from the rest of CA yet connect with the global community is viewed not only as means to strengthen national identity and attract foreign financial support but reflects the attitude of the civil society. As Rudzite and Kluczewska (2021) noticed, people in CA since the late years of the Soviet rule viewed themselves as independent, forward-looking citizens different from their neighbours yet increasingly open to become a part of the Western community.

The matter of civil agency has an important place in Kyrgyzstan's climate discourse and comes as a way to legitimise the state. An appeal to the individual importance of each citizen

in achieving national goals, in particular, those of climate policy, is prominent in the official climate rhetoric, and come as a representation of green governmentality in work (Rutherford 2017). In the political discourse, a citizen is portrayed as an essential actor of the national environmental project, as such, the matter of resistance in the state-people relationship is managed by the microlevel governance techniques rather than by creation of new social institutions, like it was observed in Uzbekistan. Furthermore, the positive vision of the people expressed in the official rhetoric, i.e. acknowledging their intelligence, resilience and strength of civil society, coupled with the values of freedom, equality and human rights, builds public trust in the government. Hence, besides governing public action, the narrative solidifies the individual sense of attachment to the nation and legitimizes the leadership. Another path to domestic legitimacy is the aforementioned notion of stability, which come as a logical reflection on the complicated political past.

Furthermore, the populist rhetoric is a distinct feature of Kyrgyzstan's climate change discourse. The 'green' concern is nothing new in populist rhetoric as the environmental issues are appropriated to criticise the dominant expansionist mode of governance, which enforces the environmental degradation and, consequently, the negative effects on social welfare (Isaacs 2022). In Kyrgyzstan, the calls for nature protection voiced by the President present the current political regime as a better alternative to the past rule as the past governments are presented as unable to recognise and address the environmental issues faced by the country. Notably, there is no blame allocated to the Soviet leadership despite the long-lasting impacts of SU environmental approaches on Kyrgyzstan's territory. This comes as a further argument that the main aim of the rhetoric is to attract popular support to the present leader by weakening the image of the political elites recently ruling the country, which are still present on the national political agenda. Another common feature of eco-populism is the concern about the loss of the 'place' (ibid.). It is inherent in Kyrgyzstan's discourse, too, as the narrative reflects the concern about the lost national identity. While the rhetoric may have a positive impact in terms of drawing public attention to the environmental issues, the nationalist attitude is potentially harmful in terms of addressing global climate change. The official discourse views nature predominantly as means of cultural identity, something common in eco-fascist rhetoric where nature is seen as national wealth, i.e., a resource used to set the nation apart the rest of the world (Beeson 2019). Hence, it is doubtful that the national climate action is informed by the right reasons, i.e. mitigating global environmental change. Rather, it is concerned with the ownership

of natural resources and territories, the image of the recent political successor and, as it was shown earlier, with the financial gains coming from performed global action.

Last, the legacies of SU also explain legitimisation efforts and, indeed, are still prominent in the national takes on the environment. As such, in all countries, the instrumental approach to the environment was observed in the narratives of both political actors and the climatologists whose expertise was formed back in SU. As to the policymakers, it is a postcolonial mentality that partly explains the carried attitudes. Indeed, Kudaibergenova (2016) argues that legitimation through old governance patterns is thought by Kazakhstan's political leaders as a path to maintaining popular support. It is argued here, that it is these legitimacy concerns along with the cultural continuity of knowledge and objective means of green action, i.e., the capacity to amend the infrastructures built during SU era, explain the traces of the Soviet discourses in national climate narratives. As to the second point, viewing nature as an instrument for national development was an element of the SU ideology (Oldfield et al. 2015), hence, nature was considered not an independent entity but as an object of action. This reflects Foucauldian (2002b) idea of the 'death of subject', that is, once the matter is seen as an object of power, it loses its own value and becomes an instrument for achieving certain goals. Hence, the SU legacies of knowledge about nature are another angle that explains why climate change, despite its adverse impacts in the region, is instrumentalised in the studied countries.

How can we use this knowledge to better address climate change?

As Hajer (1995:63) argued, the human-nature discourse is the result of continuous discussion between the actors from different fields that come together and establish new meanings. In line with the research on climate change governmentality (e.g., Oels 2005, Luke 2011, Rutherford 2017), the present study has shown that interests behind the discourse are translated in the approaches to climate change. These interests go beyond the concern about the state of the nature, whilst considerations of domestic power, transnational influence and economic interests become significantly important in forming climate discourse. As such, in Kazakhstan, the economic interests and the government's agenda at the global political level are well-reflected in discourse as climate action is seen as means to boost the country's economic status, which the government sees as a way to global influence and stability of the domestic political regime. In Uzbekistan, the 2016 power change has marked globalisation processes, and the environmental background of Mirziyoyev is reflected in the increased attention to climate change in the national policies. Furthermore, it is argued here that increased climate change

concern serves the government's attempts to legitimise the domestic power and become an integral part of the global political and economic agendas. Meanwhile, in Kyrgyzstan, frequent changes at the state's level are reflected in unstable climate policies and weakened institutional knowledge about climate change, hence, the capacity to address the issue is impacted by the wider political dynamics. Furthermore, the climate change topic comes handy in the present leader's attempts to gain support at the national level and benefit economically from the foreign actors. Understanding the reasons behind a certain way of narrating climate change can be used to influence the views or directing the action of those dominating the discourse (Hajer and Versteeg 2005). In CA, the international experts, given their high presence on the national agendas, can act as agents of change, using this to motivate national policymakers to more effective climate action. The below discussion suggests the ways this knowledge can be used in the national and regional climate policy perspectives.

In the studied countries, climate change is largely seen as a subject of international politics and economic reforms, that is, the considerations of power and wealth are not less important than the natural effects of the issue (Buranelli 2023, see also Koch and Tynkkynen 2021, Poberezhskaya and Danilova 2022). This is a reflection of the political regimes performed in the countries as the ideological interests in autocracies are argued to outweigh the environmental concern per se (Beeson 2010, McCarthy 2019). This does not mean that climate change should be depoliticized completely as the socio-political implications of the climate crisis are important reasons for people to be concerned about and willing to act on the issue (Carvalho et al. 2017). Rather, the matter should be prioritized at various levels, i.e., local climate change effects and relevant actions should be given attention not less than global political matters in both media and dominant political discussions (Fletcher and Cortes-Vzquez 2020). Furthermore, grassroot initiatives and valuable lay knowledge about climate change desrve more attention from both climate change experts and policymakers in the region. The limited consideration of these matters by government representatives and international experts, who are two key actors in the region's climate change discourse, reflects a broader issue of ignorance of public opinion within the expert discursive field, as acknowledged by Wynne (1993). Incorporating public knowledge into the states' policies and INGOs' initiatives would enhance climate change resilience in the studied states (regional climate change expert, Zoom interview, 7 February 2022).

Furthermore, climate change education is an essential element of strengthening national capacities to address the climate crisis, yet, relevant initiatives are lacking in all the three studied cases. The importance of public engagement pronounced in the countries' official rhetoric in conjunction with limited educational projects in place is seen as another discursive strategy to fit in the foreign agenda. It should be noted, however, that more education programmes, while enhancing public resilience, could deepen authoritarian regimes by providing the governments with another means of control over civil society. That is, creating the codes of conduct through climate change education would facilitate generation of self-governing subjects, i.e., contribute to the state's governmentality projects (Rutherford 2007, Luke 2011). The parallel can be drawn with the practices of the SU era where collectivist ideas and an emphasis on the strong political leaders sound in the environmental narratives left a little space for an individual agency towards 'green' issues (Wooden 2013, Kusznir 2018). On the positive side, climate change education also has a potential to increase public awareness and stimulate production of alternative discussions, which may both contribute to the climate action and challenge hegemonic narratives of political elites (Pickering et al. 2020). Notably, democratisation has been an inherent part of the national policies in the past years; regardless how genuine those processes are, they had a positive effect, for example, in Uzbekistan, NGOs are increasingly involved in the national policymaking (ADB 2021).

As to the states' historical past, there are ways in which the SU heritage can benefit current climate change responses. One of the ways to do so is to revive the climate change research tradition, which was strong in CA during the Soviet era. Indeed, the experts across the three countries emphasised the necessity of developing national climate science to address the place-specific impacts of climate change not covered by the initiatives led by the global actors. The traditions of the Soviet climatology with its focus on the empirical observations rather than on computer modelling, which dominates Western research, would bring more attention to the needs in the adaptation sector. That is, the countries' engagement in the global climate discourse would ensure the mitigation part is considered, while the attention to the local specifics voiced by the scientists will strengthen the adaptation part, and the overall understanding of climate change as the local issue happening right now, not a global tendency modelled for the future. Indeed, in Uzbekistan, which today possesses the most advanced climate research in the region, the climate change adaptation agenda stands out among the other CA countries (state climate adaptation expert, interview, Astana 8 December 2022).

Furthermore, development of climate research would benefit national governmentality projects as well as identity- and nation-building projects. Scientific community does not always act as a primary source of knowledge, yet, it serves as an instrument for those in power to justify certain claims and actions (Carvalho 2007, Oels 2013). Hence, the need to invest in climate research can be communicated to the political elites in terms of benefits, i.e., positioned as a key for more independent climate change policy making backed by the place-specific knowledge instead of relying on the foreign experts. As to the image-building, developing climate science while emphasising the renowned role of the SU research on the global arena is a good way to build the global identity and a sense of the nation in the countries, that is, cultivating the pride of the past and current research achievements. This fits particularly well into Kazakhstan's climate politics with its emphasis on technology and innovation. To date, the state of CA climate research has a large opportunity for growth (Mirzabayev 2023). While there are some considerable developments in Uzbekistan, in both Kazakhstan and Kyrgyzstan, the governments' support to climate science is limited.

As to the regional level, the interstate cooperation on climate change seems challenging due to the unresolved conflicts and security concerns, but one can see that, essentially, the grounds of climate change rhetoric in the three countries are similar. The key drivers of climate action are the financial interests and image considerations at the global level, security concerns and power aspirations in the regional perspective, and legitimisation of the political regime nationally. Collective climate action brings a prospect for the improved political climate in the region as freshwater availability, the cornerstone of the regional conflicts, is influenced by the environmental change. As there is already a good understanding of the shared vulnerabilities, more region-focused initiatives will both strengthen the countries' resilience to negative effects of the issue and further contribute to the sustainable development of the region. As such, regional climate action has a potential to soften the cross-border conflicts and solidify economic security of the states given the green action would slow down the freshwater and food crises as well as allow to anticipate the damages from extreme weather events. The Soviet past is still evident in the commonalities among the national approaches to climate change both in politics and science, and the complicated early years of the independence have left the common aspirations for stability. This mutual understanding between the countries, a legacy of the shared historical past, is a great advantage, which creates a solid foundation for the joint action and eliminating misunderstandings between the actors (regional climate change expert, Zoom interview, 7 February 2022). The key step towards the regional cooperation is shifting

the perception from climate change as a multiplier of security issues to seeing it as an opportunity to let go of the social and political challenges (ibid.). Yet, the main ground for the regional cooperation on the issue is the financial interest, i.e. the funds allocated by the international players to the climate action in the region. As a result, regional cooperation is yet rather a discursive performance for the global community rather than a coherent set of action (Buranelli 2023). Hence, it is important to search for and highlight the other common interests the CA leaders may have. In particular, it would be useful that the foreign actors shift the focus in their rhetoric away from the economic terms of climate action and bring attention to the importance of the interstate initiatives, which are still scarce in CA. Hence, while the economic motivation is indeed important, prioritizing it may lead to a weakened regional dialogue narrowing climate action to coalitions between the international actors and the government.

Conclusion

The present study has argued that, although the effects of climate change are increasingly prominent in CA, the dominant discussions are majorly led by the spectrum of ideological and private interests rather than by concern about the issue per se. Understanding the underpinnings of the narrative is important because it is the ideas and intentions, rather than physical occurrences that inform action. Given the exceptional vulnerability of the region, anticipating, and advancing national climate change responses is an essential task with a little room to be postponed (e.g., Sabyrbekov et al. 2023). In this light, social constructionist perspective has proven useful in making sense of the meanings allocated to the climate crisis. Critical analysis of the discourses emerging around the climate crisis in the three CA states has shed light on how those meanings have become what they are, i.e., who mediates climate change knowledge as well as how and why they do this. With its attention to an ideological aspect inherent in discourse, the approach has highlighted the exercises of power induced through the ideas about the world.

The study has found that, in the inquired authoritarian states, climate change comes as a site of biopower, that is, the relevant discussions reinforce the government projects in the ways not obvious for the recipients of the message. Instead of the oppressive enforcement of the ideology, the aims of power elites are achieved through creating new knowledge. Indeed, as Foucault (1991a:194) famously argued, ‘power produces; it produces reality; it produces domains of objects and rituals of truth. The individual and the knowledge that may be gained of him belong to this production’. Notwithstanding, there are several structural factors, which

mediate the processes of discourse production, i.e., their economic and geopolitical settings as well as historical past. The latter aspect has been given a particular attention in the present study acknowledging an important role of SU legacies in theorising modern CA states (Isaacs and Marat 2021) and a lack of attention to culture-historical context in critical discourse scholarship (Carvalho 2008).

In all, climate change rhetoric in the studied autocracies is majorly mediated by the government. Scientists and activists have a limited impact on the national rhetoric, while the media, albeit there are some critical discussions, mostly comes as a tool to reinforce the dominant narratives. Consequently, it is the political elites' interests that guide the narrative. Those interests revolve around the three common themes, global identity- and nation- building processes as well as a financial aspect, being grounded in the countries' socio-economic, political and culture-historical circumstances. As such, in Kazakhstan, the importance of the global image and oligarchical government are reflected in climate change being discussed majorly in green economy terms and global political perspective. In Uzbekistan, the 2016 change of the political regime is reflected in the approaches to the climate crisis, and the focus on the adaptation component of the climate issue is, essentially, an attempt to solidify the government's legitimacy. Last, in Kyrgyzstan, an unstable political climate is reflected in erratic and incoherent climate policies; meanwhile, climate change is a big matter in the national rhetoric being appropriated by the political leader to gain a popular support. It needs to be mentioned, however, that the present analysis is one of the initial inquiries in the environmental discourses in CA. The perspectives for the future research are discussed in the concluding chapter.

Conclusion

Contribution to the scholarship and prospectives for future research

Being among the initial inquiries into climate change discourse in CA, the present study addresses the call for broadening the geography of climate change discourse studies (Leipold et al 2019). Besides better understanding the specifics of climate rhetoric in CA, knowledge about the distinct region broadens the scope of global climate discourse studies, that is, advances understanding of synergies between power, governance, environment and knowledge (Rutherford 2007:35). In particular, the present project has served as an initial enquiry into

climate narratives in Uzbekistan. Yet, there are still two CA countries, Turkmenistan and Tajikistan, for which knowledge about climate narratives remains absent.

Furthermore, acknowledging the limitations of the present study, i.e., its focus on the dominant discourses, which are the ones of the political elites in the studied authoritarian states, it is called for further research on the discourses the project has not looked at, in particular, those of civil society. The narratives of lay people were not inquired in the present project, while those are valuable sources of knowledge about place-specific climate change effects and adaptation practices. This links to the limitations, which stem from the project's focus on Russian language, i.e., knowledges about climate change narrated in native languages are not reflected in the present study. Therefore, further inquiries of public narratives in CA, in particular, those existing in rural and remote societies withhold a significant potential for advancing climate change resilience in the region. Indeed, national experts might not be aware about public knowledges and experiences of localized climate change effects, while consideration of those in climate policies would enhance adaptive capacity of the states. Research studies in this direction will contribute to decolonization of the region in the global political scholarship and to democratization processes in CA states by vocalizing marginalized voices. In doing so, scholars are encouraged to reflect on relevant academic literature in native languages, which would not only advance place-specific findings but also enhance 'green' critical studies by highlighting the nuances of climate change discourses Western-focused scholarship has not yet been able to capture (Leipold et al 2019).

The present research also enriches the body of comparative studies (Leipold et al 2019) within critical discourse scholarship offering an outlook on the narratives in the three CA states. In CA context, comparative analysis of the narratives has potential to reframe the idea of climate change from the matter of regional tensions to the issue to be addressed collectively. As such, in contrast to the scholarship focused on the matters of security and regional conflict (Marat and Isaacs 2021), the present study offers a positive outlook on the opportunities for cooperation in the region where climate action has been increasingly seen as a ground for cooperation (Buranelli 2023).

Opposite to an established view of the region as an element of major geopolitical processes (Heathershaw and Megoran 2011), the study looked at domestic sites of climate change discourse production in CA. It highlighted the links between the authoritarian rule and national climate action, in particular, the barriers to effective climate policy arising from the

specifics of the political regimes. The focus on a domestic arena has the potential to boost public and political agency bringing attention of the policymakers, stakeholders and civil society to the local flows instead of allocating responsibility to colonial perspective to the Soviet past and international actors (Poberezhskaya and Bychkova 2022). Also, knowledge about the national discourses and reasons behind them is helpful for the external actors to create more effective cooperation with CA (Dzhuraev 2021). However, further studies considering the countries' political settings are needed to understand the factors mediating discourse development, its stability and change, and local possibilities to challenge dominant climate narratives (Feindt and Oels 2005). In particular, the studies, which would embody communication of the findings to civil society would help to spread awareness about the synergies between current political regime and dominant ideas about climate change, that is, would potentially empower public action and resistance (Wodak 2001b).

It was not the main objective of the study to explore the historical context of the climate discourses, however, it has become clear that this aspect holds a significant potential for better understanding of national climate discussions. As such, the study highlights the importance of analysing the contextual settings of discourse, in particular, genealogical ones (see also Jäger and Maier 2016) and calls for the future studies in this direction. E.g., a longitude examination of climate change media coverage in the region looking at how climate change discourse was evolving during the years of SU rule. Also, climate change discourses in science across CA countries is an understudied yet an important research enquiry considering the fundamental role of scientific community in climate change knowledge production in Soviet CA as science was 'a tangible, important, and influential social phenomenon during the Soviet period' (Sievers 2003:253). The present study is an initial step in this direction.

Meanwhile, there is a substantial scholarship interested in the region's colonial past, but mentions of the environmental issues in these studies are limited and do not include climate change. The present study has demonstrated how climate change discourse is used in the processes of nation building and legitimisation of the government. In particular, it has furthered knowledge on synergies between populist rhetoric and ecologism (Isaacs 2022) in its analysis of how climate change concern is instrumentalised to attract popular support in Kyrgyzstan. A greater attention to the environmental matters within political and cultural CA scholarships has a potential to advance understanding of the mechanisms of governance and nationalising processes in the region.

Last, it is called for further studies on discursive effects, i.e., how the climate change narratives are translated into material and institutional practices on the ground (Carvalho 2008). While the present study reflected on how the discourse is translated into climate policies in the three states, it would be beneficial to look at how established ideas about climate change affect practices in the public sectors, e.g., in the industries and everyday public behaviours.

Final remarks

Despite CA's high vulnerability to climate change, green action has been a complicated matter across the region. In particular, over the years of post-independency, Kazakhstan, Uzbekistan and Kyrgyzstan have focused on solving economic, social and political challenges, consequently, environmental issues were overlooked. The abundance of fossil fuels has dictated strategies for economic development. In Kazakhstan and Uzbekistan, hydrocarbons were the vehicle for economic growth and an important tool to advance global status, while the coal industry provided energy security domestically in all three countries. However, climate change effects have been intensifying with the countries witnessing agricultural crises provoked by droughts and floodings, destroyed infrastructures caused by extreme weather events, and increased mortality and migration, among other issues. Recently, the three countries have been demonstrating increased concern about the issue and have significantly increased their climate action. The present study has found, however, that in the analysed countries, the interests of the dominant actors mediate national approaches no less than a concern about high vulnerability to climate change. Combining the three case studies, the project has offered an overview of the multitude of social, political, cultural and economic factors, which shape the climate narratives in CA.

The study has shown that the political elites are key actors of discourse production. As such, power dynamics were proven to be a crucial factor to consider in making sense of climate change rhetoric. Due to authoritarian political regimes in the countries, the narratives of civil activists and media are shaped by the governments' agenda. While the interviewed activists and media experts expressed criticism towards the state's climate policies, this rhetoric does not significantly impact national climate change discussions. These commentaries, however, were crucial to deepen the understanding of the mechanisms of and reasons behind the dominant climate change discourses in the three states. The hierarchical nature of climate change decision making takes the countries steps away from addressing the climate crisis effectively. The voices of scientists, activists and media workers are instrumentalised to

advance the interests of the political elites, which results in a rather narrow vision of climate change challenges faced by the countries. As one of the experts (media expert, interview, Tashkent, 21 June 2022) noticed,

> In Kazakhstan it all went to economic terms due to their oligarch, money-driven government. In Kyrgyzstan, ongoing changes at the political level reflected in incoherent climate policy with no one is responsible for the decisions made earlier... In Uzbekistan… it was not good but the President has changed, and now it seems like we are taking a right direction.

Meanwhile, the foreign actors, which have been highly present in the CA states since the early years of post-independency are the second-important actors of national climate discourses. As to national science, the higher involvement of the local experts is needed to address place-specific climate issues and to make actions more efficient by considering the national capacities, knowledges and approaches. With the exception of Uzbekistan, the states prioritized the international partnerships over developing national climate science. Guided by the geopolitical and economic interests, the governments of Kazakhstan and Kyrgyzstan prioritize foreign experts when it comes to advising national climate action. As a result, national research units are significantly lacking financial and institutional support of the state to address local climate matters.

An absence of open debates around the national climate action limits public engagement in the matter and does not motivate the government to pursue better action (Deng and Chen 2017). While the presence of NGOs has been growing across the three countries, this is argued to be an act of democratic performance to advance the public support and recognition of the global actors rather than real inclusion of civil society in climate action. As such, many of those are state-backed, being created to praise the government. The national NGOs are significantly lacking institutional and financial support from the state, and the activists' influence on the national climate policymaking processes varies from very limited to none. Meanwhile, the international actors are taking a lead on the civil initiatives across the three CA states, which reduces the effectiveness of such initiatives as the foreign organisations lack understanding of the local specifics. At the same time, while climate change education is stated as an important direction of national development in the national legislation's, those initiatives are very limited;

hence, the attention to public awareness in the national discourse is seen as another means to align with the Western climate change rhetoric.

Regarding the media, it has been found that the coverage in the national newspapers largely reflects the government's agenda. However, there is still certain plurality of discussions, as such, the criticism of the national climate action was identified in the media reporting in all three countries. Over the past years, the media freedom in the studied CA states has been increasing and, unlike the widespread belief, the experts argued that the reporters are able to express critical opinions, in particular, on climate change, without putting themselves under threat. However, the freedom still has its limits. In Uzbekistan, for example, the media outlets are obliged to register themselves under the government structures, and while there are no explicit limits on the freedom of expression, the journalists remain cautious and practice self-censorship. Furthermore, it is argued here that the critical coverage of climate policies remains under the government's control, and critical media discussions are another tool of a democratic performance. Indeed, in Kazakhstan, the critical opinions were found only in the state-owned national media outlet. Furthermore, despite several cases when the public concern reflected in the newspapers impacted the government's action, overall, the experts doubt the capacity of the media to alter national climate policies. That is, only those claims of a civil society that do not clash with the national interests are to be addressed.

As to the reasoning, i.e., ideological standpoints of those manufacturing discourse, across the three countries, economic interests are inherent in the climate change narratives. The financial factor explains the fact that national intentions to decarbonisation and nature protection go along with an expansion of the fossil fuel sector. As such, the economic considerations have its own specifics across the three states ranging between a pure interest in foreign funding in Kyrgyzstan, an intent to gain national and global influence via economic development in Kazakhstan, and considerations of foreign trade in Uzbekistan. The various reasons, however, dictate a single narrative as the countries follow the globally accepted idea of anthropogenic climate change with signs of climate scepticism being rather an exception.

An intent to regional cooperation, which has been increasingly present in the countries' narratives over the past few years, is also argued to be primarily an instrument to advance the elites' interests. The joint emphasis on the region's vulnerability and its developing status along with an intention to contribute to the global climate action make the individual efforts to attract financial support more effective. Furthermore, this rhetoric fulfils geopolitical aspirations, for

example, Kazakhstan via portraying itself as CA climate action leader facilitates its image of a key global player. In Uzbekistan, the image of a peacemaker, an initiator of the regional cooperation, benefits the state's image internationally, while embodies aspirations to further political influence in CA. Yet, the regional action is more evident in the countries' global narratives and less so in concrete actions with unresolved interstate conflicts being the main barrier towards more effective regional climate politics.

As to the national governance, the present study has found that, indeed, the climate change concern is used in the three states to advance their governmentality projects. The national climate change discussions do not only inform citizens about the matter but also have an ideological function mediating public perceptions of the state. As such, climate discourses contribute to the nation building processes and strengthen legitimacy of the political leaders in the post-independent states.

There are noticeable variations in means used by the countries to achieve the aforementioned goals. In Kazakhstan, the national wealth is at the core of the government's attempts to strengthen its legitimacy as climate change discourse focuses on the strong political leadership, which leads citizens towards the economic prosperity. Meanwhile, the praise of national hydrocarbon resources goes along with the green rhetoric in attempts to attract public support. In Uzbekistan, the government's legitimacy is thought to be strengthened by prioritising the citizens' welfare in the official climate discourse as public vulnerability is pronounced as the key reason to act on the climate crisis. Kyrgyzstan presents a particularly interesting case as nationalising and legitimising efforts in climate discourse range from populist rhetoric to the appeals to an individual agency and revival of the national cultural past. Notably, resource nationalism is still an important element of national discourse, but, in the absence of hydrocarbons, mountains and glaciers are utilised in discourse to reinforce the ideas of geopolitical sovereignty and nationhood.

It has become evident that a historical context is important to consider making sense of their climate change narratives. Attention to Foucault's (2013) emphasis on a genealogical angle of discourse interpreted as a context in Carvalho's (2008) discursive framework, has allowed to identify the impact of SU legacies present in climate change narratives of the modern CA states. The countries' collective past under SU leadership dictates those concerns over national and global identities, and legitimacy of the state. Furthermore, SU legacies materialise in the current climate action as an instrumental approach to the environment

practiced under Soviet rule remains present today. It is found in the narratives of SU-generation climate scientists and in the political rhetoric, in particular, in Kazakhstan, where maintaining the legacies of the past is thought of as a means to secure public support for the government. Furthermore, the hierarchical climate change policymaking, besides being an attribute of the authoritarian states, is also seen as traced from SU era. Likewise, the communist ideology and centralised governance practiced in SU is reflected in the limited agency and responsibility towards climate action both among policymakers and civil society.

In all, the hierarchical governance is seen as a major obstacle for effective climate action as the interests of the limited elite group direct the takes on the global environmental issue. If the state will lose interest in the climate action, the adverse impacts of the issue will be not addressed albeit the vulnerability of the countries. Given a lacking institutional support to the non-state actors and certain limitations in place, activists, scientists, and journalists would not have enough capacity to address the matters. Indeed, a lack of attention to raising public awareness about the issue would lead to people hesitating to act even in the face of growing climate risks. On the positive side, the CA leaders have been increasingly willing to address the issue. Notwithstanding the fair part of these intentions are arguably a discursive performance, this moment holds a good opportunity to mediate the dominant perspectives on climate change, i.e., to make the decision makers realise the multitude of effects climate change withholds for CA. Knowledge about the specifics of national climate narratives discussed in this thesis are thought as a helpful material in doing so.

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1. Climate change and sustainability expert, Zoom interview, 3 February 2021
2. State climate change policy and energy expert, in written, 4 February 2021
3. State climate adaptation expert, interview, Astana, 8 December 2022
4. Environmental scientist, Zoom interview, 19 January 2021
5. State eco-NGO representative, Zoom interview, 25 January 2021
6. Environmental economy expert, in written, 4 February 2021
7. Low carbon development expert, Zoom interview, 17 February 2021
8. Climate change policy expert, Zoom interview, 22 February 2021
9. State climate policy expert, Zoom interview, 26 February 2021

10. Low carbon development expert, Zoom interview, 1 March 2021
11. Climate scientist, Teams interview, 2 March 2021
12. Climate policy expert, Zoom interview, 3 March 2021
13. Regional climate policy expert, Zoom interview, 4 March 2021
14. Environmental activist, Zoom interview, 4 May 2021
15. Environmental policy expert, Zoom interview, 24 May 2021
16. Climate scientist, Teams interview, 19 January 2023
17. Climate policy expert and activist, Teams interview, 23 February 2021

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18. Climate change and energy expert, Zoom interview, 11 February 2022
19. Environmental journalist and educator, Zoom interview, 21 March 2022
20. Environmental scientist and activist, Zoom interview, 27 March 2022
21. Regional climate change expert, Zoom interview, 7 February 2022
22. Climate change policy expert, Zoom interview, 11 February 2022
23. Climate change economy expert, Zoom interview, 24 February 2022
24. Environmental journalist Zoom interview, 28 February 2022
25. Climate change expert, Zoom interview, 18 March 2022
26. Climate scientist, interview, Tashkent, 21 June 2022
27. Environmental scientist, interview, Tashkent, 21 June 2022
28. Media expert, interview, Tashkent, 21 June 2022
29. Environmental scientist, interview, Tashkent, 26 June 2022
30. Environmental scientist, interview, Tashkent, 29 June 2022
31. Climate scientist, interview, Tashkent, 30 June 2022

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32. Climate change economy expert and activist, Zoom interview, 22 June 2022
33. Environmental journalist, Bishkek, 1 June 2022
34. Environmental scientist, interview, Bishkek, 2 June 2022
35. Media expert , interview, Bishkek, 3 June 2022
36. Policy expert , interview, Bishkek, 15 June 2022
37. Climate policy expert, Zoom interview, 16 June 2022
38. Climate scientist and educator, Zoom interview, 16 June 2022
39. Activist, Zoom interview, 4 July 2022
40. Environmental expert, Zoom interview, 5 July 2022
41. Environmental expert and educator, Zoom interview, 12 July 2022
42. Environmental scientist, in written, 21 July 2022
43. Climate change policy and economy expert, Zoom interview, 18 July 2022