Energy Beyond Borders: Understanding the Transformation of the Energy Security Policy in Uzbekistan

A THESIS

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Declaration

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ABSTRACT

Conventionally, energy security is considered to be part of national security and national interest of a sovereign state, due to its existential role for both states and societies. However, the concept and practice of the national interest, which forms the basis of national security, has become increasingly difficult to grasp, when it comes to energy security.

Paradoxically, politics and policies around energy security in Uzbekistan do not seem to be exclusively shaped by the national interest as such, but seems to be responsive to the regional and global challenges. Thus, this thesis suggests to explore the relationship between national energy policies and regional energy security complex. The case of Uzbekistan is very interesting in this regard, since it had not supported regional energy projects before, whereas it has been seeking the collaboration with its neighbors in the energy sphere. In other words, Uzbekistan has gone through a total denial of regional cooperation in the field of energy to initiating an interdependent regional approach to energy security. Why has this shift happened? And what implications it may have for the national interest of Uzbekistan, as well as the for broader understanding of the concept of "national interest" in International Relations is at the focus of this thesis. I argue that: The consistent energy blackouts has been a triggering point to make Uzbekistan shift to take the regional approach in the energy security. This argument unfolds in three steps:

Firstly, I draw a conceptual framework, inspired by Barry Buzan and Ole Waever on "regional security complex" to highlight how a heavily national matter can become a regional issue.

Secondly, I explore the empirical data—collected during my fieldwork between 2022-2023 — seeking to map the role of the national interest, geopolitics, and globalization in the process of shaping energy security policy.

Thirdly, I explore whether Buzan's ideas on "regional security complex" explain the shift in the case of Uzbekistan. I hypothesize that that this approach would be missing the interplay between the national and the regional agenda, as well as fail to identify the degree of each in that process.

Methodologically, this thesis relies on my fieldwork, in which I conducted semistructured interviews, participant observations, and archival research in the public offices responsible for energy policy of Uzbekistan. I triangulated this data through discourse analysis on energy security in Uzbekistan, as well as expert and elite interviews. Conceptually, this thesis contributes to the debate on the changing nature of the national interest amidst the interplay of geopolitics and globalization in today's International Relations.

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INTRODUCTION

Qo'shning tinch – Sen tinch. Your neighbor is in secure, you are in secure. (Uzbek Folk Proverb)

Uzbekistan, geographically, is located in the unique place which connects all Central Asian countries, which makes Uzbekistan a hub of the Central Asian energy infrastructure. Uzbekistan exports its natural gas to Kazakhstan, Kyrgyzstan, and Tajikistan, and provides a transit route Kyrgyz and Turkmen electricity going to that country.

When the electricity went down in Uzbekistan on January 25, 2022, many people assumed it was just a scheduled blackout, that could last at least two or three hours. But it did not turn out the usual blackout, that lasted at least two hours, and anxiety turned to alarm. The energy blackout happened even in the capital of Uzbekistan, in Tashkent. Tashkent International Airport and Tashkent Metro were shut down, and the people got stuck there. There was a mess in the streets. The same power outages have been reported in both Kazakhstan and Kyrgyzstan simultaneously due to the shared power line via the Soviet-built Central Asia Power System, also known as an energy ring or CAPS.

In 2019, the Head of "Uzbekneftegaz" asserted that the workers accelerated their efforts to meet the demand of the people by establishing a 20-hour shift a day. In 2021, the Chairman of the Senate of Uzbekistan "victoriously" claimed that "In general, power outage and not being able to watch TV in the dark was history five years ago. All these problems have now been eliminated now" (Kun.uz), but, it does not reflect in reality, and the "history" is going on. The Uzbek Energy Ministry issued a statement to explain the causes of the blackouts. According to the statement, "Tashkent thermal power plant and the Syrdarya thermal power plant are linked to the Central Asia unified electric grid, as a result, this accident led to the automatic shutdown of both those plants" (Dasgupta 2022). At the beginning of 2023, some parts of Uzbekistan, including Tashkent once again experienced an energy blackout in the frigid winter. Officials pointed out the 'abnormal cold' as a reason for the energy supply disruptions. This energy crisis was a turning point, which highlighted a shift in the energy security policy of Uzbekistan, which this thesis aims to tackle.

In the first decades of independence, energy policy of Uzbekistan has been rather sovereignty-focused and most decision were linked to the national interests. However, regardless of energy being narrated as a national security matter, lately, Uzbekistan started moving towards a more integrated approach to energy security by joining Central Asian Unified Grid, and supporting the regional energy projects. While the above mentioned energy crisis has been a turning point for the shift from the national to the region, the very process and relations between national interest and energy security needs to be tackled deeper.

According to international relations experts, the conventional wisdom and classical definition of the national security is a static, sovereignty- territorial-related, and state-based concept (Morton, Booke 1968). However, the thesis hypothesizes that energy security of Uzbekistan has been influenced by what Buzan in 1991, calls "regional security complex" (Buzan 1991, p.187). In other words, energy security policies have been mainly shaped by the regional (Central Asian), rather than national interests of Uzbekistan. Thus, this research examines the energy security of Uzbekistan and its relationship to the Central Asian energy security complex.

After gaining independence, the Uzbek government took an independent approach (Bisenov 2017) and pursued the policy of the construction of a self-dependent policy of Uzbekistan politically, economically. This independent policy over time turned into "isolationist" policy (Aminjonov 2016), and it reflected in Uzbekistan's energy policy. However, now Uzbekistan, which is rich in gas and oil reserves, as well as the renewable energy sources, is taking active measures to get involved in the regional energy projects, specifically in the Central Asian Unified Energy Grid.

The energy sectors of Central Asian countries were originally planned as a unified system, with each other country contributing various sources to the overall energy security in the region. Kyrgyzstan and Tajikistan provided hydropower, Kazakhstan supplied oil and gas, and coal, Turkmenistan contributed gas, and Uzbekistan provided both oil and gas. The Central Asian Unified Energy Grid was created in the 1960s and 1970s to facilitate the transmission of power among the countries of Central Asian countries. The ultimate goal was to make sure that everyone enjoys the energy security. An economist Bazarbay Mambetov noted, "The energy grid was created as a single mechanism and has been ensuring a reliable, uninterrupted power supply across the region, whether its participants like it or not, we are linked together by this system" (Toralieva 2009).g the independence from the Soviet Union, all Central Asian

countries, including Uzbekistan took an "independent" approach in their policies and pursued the self-dependent policy. Islam Karimov, then the president of Uzbekistan, mentioning the importance of energy development declared, "The Republic will be fully independent when it gains the energetic (energy) independence" (Omorov et al 2010). There used to be the idea of self-dependency, and the policy of self-sufficiency on strategic resources, including gas and oil in Uzbekistan under then the presidency of Islam Karimov. The slogans of Islam Karimov, such as "Relying only on our own strength, our own potential we have to do something", "if we don't act ourselves, no one from abroad will help us" (Karimov 2013, p.20) were reflected in nearly each speech. Karimov emphasized that "domestic production of strongly needed goods (and resources, including fossil fuels) is an important task in ensuring national security..." (Karimov 1997, p.582). The Central Asian Unified Grid was taken for granted and working on its own. As a consequence, the system remained obsolete and the investment was not put to renew the system. Guided in self-sufficient policy, Uzbekistan withdrew from the Central Asian Unified Energy Grid in 2009. Uzbekistan's isolationist energy policy has entailed the breakdown of the energy security in all countries involved in Central Asia.

Conventionally, Uzbekistan, located in the heart of Central Asia ranking 11th in the world for mining and 14th for reserve of gas (International Energy Agency) and has a capacity to meet the energy demand of its population as well as it has the potential to export it. However, the recent blackouts have shown that Uzbekistan does not solely deal with the energy issues. Thus, the Uzbek government under new leadership, is trying to engage widely and support actively regional energy projects in Central Asia for the time being. For example, Uzbekistan rejoined to the Central Asian Electricity Grid in 2017. And, Shavkat Mirziyoyev, who is the current president of Uzbekistan, even recognized that it is impossible to keep sustainable regional development without meeting energy needs (Mirziyoyev 2023). Along with that, the environment in energy field is changing rapidly as First Deputy Director of the Institute for Strategic and Interregional Studies (ISRS) under the President of Uzbekistan Akramjon Nematov stated that the Central Asian governments are paying close attention to the creation of common energy space, and practical steps are being taken to the instigation of the fullyfledged operation of energy ring in Central Asia. (Kun.uz 2021) Nargiz Kassenova noted that the countries in the region are making efforts to maintain energy security by

making their own grids more autonomous and developing new capacity (Toralieva 2009), but neither of them has achieved their desired results.

All Central Asian countries are in attempt to make a common energy space. In theory, as Uzbekistan's then energy minister Alisher Sultanov claimed in 2021 that the country had enough resources for three Uzbekistans, yet, in practice, it seems that solutions to energy issues are likely to lie beyond its territory. The Uzbek government has even indicated that the partnership with Central Asia as one of its top priorities in its Energy Concept to ensure its energy security (The Concept of Providing the Republic of Uzbekistan with Electricity for 2020-2030).

Based on the puzzle, the thesis will seek to address the following research question: Why has Uzbekistan been shifting from the nation-focused energy security policies to region-oriented?

Stemming from the main research question, it raises also some sub-research questions: How is energy security within the national security framework in Uzbekistan evolved? And how much place did energy security occupy in the understanding of national security of Uzbekistan?

The significance and relevance of the topic are that countries, based on the concept of energy sovereignty, have the authority to control, regulate, and manage their own energy. However, it is interesting case that Uzbekistan seems to also take into consideration the interests of its neighboring countries in the energy sphere.

CHAPTER 1

LITERATURE REVIEW

In the part of literature review, the thesis focuses on the formulation of the concepts of national interest, energy security, sovereignty, and energy sovereignty, which is an elusive one and its role within the framework of the national security of the country, as well as the literature about the current energy security condition in Central Asia. The thesis will define some gaps based on the literature review and highlight them in the concluding part.

Sovereignty, in a classical definition, implies that state has independence enter into the agreements, as well as has a capacity to exercise the activities in its territory (Sanchez 2022). Energy has an impact on the dimensions (territory, authority, recognition) of sovereignty. Firstly, state's capability of controlling the flow of energy helps the state achieve independence from outside influence. Secondly, energy resources of the country allow the government to operate, maintain its relationship with constituencies, fund government programs. Thirdly, the control of energy resources empowers the state to achieve security goals vis-à-vis external threats (Sanchez 2022). In the late 1990s and early 2000s, Central Asian countries began implementing strategies to achieve autonomy and self-reliance in the energy field.

Sanchez also brings forward that if a foreign entity (company) holds the control over the state's energy, the state cannot freely regulate the control over its own territory, and eventually, under those circumstances, the state is hardly independent, nor is it, in practice, it is an equal among other countries (Sanchez 2022). Energy sovereignty or independence implies that the state conducts its energy policy without the interference or feeling pressure from the outside influence. However, states have a penchant to delegate the sovereignty stemming from their national interests, to some extent, to achieve the energy security. At this point, it could entail to the minimum loss of the sovereignty.

The energy security is largely considered as a determinant factor of the national interest of the sovereign country. First of all, it is important to know how to define the national interest, as well as should be addressed to analyze the term energy security within the framework of national security. According to Kenneth Waltz, each state pursues its interests, however defined, in ways it judges best (Waltz 1959). States facing with needs will define their national interests.

Firstly, there should be a substantial agreement among stakeholders on the objectives involved, meaning that there is consensus on when a particular goal aligns with the formal criteria for defining the national interest. Secondly, it should be determinable at what level of achievement the national interest becomes activated, which usually does not occur when the risk to a particular national objective is minimal (Nincic 1999). However, the national interest could be interdependent, which signifies that it will be globalized and regionalized. Prior to diplomacy, a policy, which guides the diplomats in their actions, national interests should be defined. But, the term national security is elusive as the Foreign Policy Concepts of Uzbekistan adopted in 1993 and 2012, even though it claims the the foreign policy of Uzbekistan is conducted stemmed from the national interests of the country (Tolipov 2012), and both of them do not define the term what the national interest is.

The pragmatic approach on defining national security

National security is about preserving a state's territorial integrity and sovereignty, as well as its core political and cultural values, against military threats from without and disruptive elements from within, according to the traditional approach pursued by scholars (Chandra, Bhonsle 2015). As threats to national security threats: the use, or threat of use, of force, as a traditional approach. A drastic change in the quality of life for the inhabitants of a state could be from (external/internal conflicts, disasters, or blockages) (Ullman 1983).

Defining national security can be a challenging task because it can mean different things to different people. The American diplomat George Kennan defines that national security is the continued ability of a country to pursue its internal life without serious interference, which is a reasonable definition.

National security is usually defined as an effort to defend core values from international threats. The energy security holds a crucial part of a state's foreign policy and it often drives and dictates the national interests.

However, the approach is unlikely to implement for states in the current time as there are new threats emerging threats which are not only military ones, which means the national security is not exclusively confined to sovereignty and territorial integrity. Moreover, energy security remains an irreplaceable part of the national security. At this critical juncture, the states should take into account the parameters of the interdependency while crafting their natural security strategies. However, what does energy security mean as a concept?

Energy Security as a Concept

At Harvard Climate Symposium, Harvard University Professor Joseph Aldy mentioned that energy security is described as a term whose meaning seems transparent but resists precise definition in part because the meaning is not immediately obvious, because the meaning seems to expand as times go on (Harvard Climate Symposium 2023). There is no consensus on the widely accepted definition of the energy security as it is polysemic. But, it has been the subject of many different fields commencing from policymaking, national energy policies, politics, international relations, and as a national and at the same time regional security issue. Understanding less or more the concept of energy security determines which parameters of energy security will enter the policymakers' attention and will be dealt with within the energy security policy framework, and which aspects of it, on the contrary, will not be taken into account.

According to Mason Willrich, who pioneered to define the term energy security in the 1970s, energy security can be defined as "Assurance of sufficient energy supplies to permit the national economy to function in a politically acceptable manner" (Willrich 1976, p.743). Willrich also made a direct linkage between energy security and political performance of the states.

During the 1980s, there were few efforts made to establish a clear definition of energy security, which can be seen as a reflection of a more stable global situation at the time. Lovins proposed a definition that challenged the notion of energy security being solely tied to maintaining a continuous supply of oil (or general energy availability) (Amory, Hunter 1981). They argued that energy security should be reassessed with a broader framework that encompasses multiple dimensions. During the 1970-1980s years, energy security for importer countries was defined by the stable supply of inexpensive fossil fuels under threats of manipulations by export countries (Colglazier, Deese 1983). In 2012, researchers took a different approach to defining energy security by aiming to address the question of what should be included in the concept.

It is suggested to analyze the condition of the energy security of the particular country by employing the following dimensions: availability, diversity, cost, technology and efficiency, location, timeframe, resilience, environment, health, culture, literacy, policy, employment, military, and the digital dimension:

For example, the availability means the existence of energy resources if they do not exist there is no the concept of energy system. The diversity of energy resources is a critical component of energy security as Winston Churchill the First Lord of the British Admiralty made his famous statement about the diversity of energy by saying energy security lies in variety and variety only (Yergin 1991). Natural gas is the backbone of the total energy of Uzbekistan. Due to the reliance on the single resource, Uzbekistan seemed to neglect the use of the renewables. The cost dimension is about the affordability of energy resources while technology and efficiency emanating from the new technological solutions for production, transportation, conversion, storage, and distribution affect energy security directly and indirectly. Concerning location, this aspect pertains to the geographical characteristics of the energy system and its connection to ensuring energy security, while timeframe deals with the short-term and long-term goal of the country to ensure energy security. Resilience is the ability to withstand in the diverse disruptions, and adaptive capacity to face the force-major spats in energy sources without experiencing consequences. The energy security has an inevitable impact on environment and human as the resources for generating energy come with its ramifications, such as flooding or earthquakes.

Regarding the culture, the occurrence of energy production disruptions that lead to societies being deprived of necessary energy can result in significant social conflicts, which have immediate detrimental consequences (Hughes 2006). For instance, energy blackouts have triggered the social dissatisfaction and, unorganized protests in Uzbekistan in 2022, which these instances barely happened in the country before. Literacy or in this case the utilization of energy information as a means to attain energy security is crucial. In general, individuals with higher levels of education tend to exhibit more responsible attitudes regarding energy security. This is because awareness, knowledge, and education contribute to the development of skilled workers who can effectively operate the energy system in a secure manner (Balmer 2015).

Energy security and employment is considered as a two-way relationship as the world is in transition from fossil fuels to renewable energies. In this case, it is essential to examine the consequences of the ongoing process for fossil fuel exporting countries. Energy security cannot be separated from political interests as they are inextricably interlinked. Achieving energy security is a paramount goal and it affects the decisions, that states make. Last but not least, there is a connection between energy security and military conflicts and in this regard, energy resources can be the proximate cause of a conflict, or the role of instrument as well as the profits from the sale of energy resources could finance the armed conflicts (Proninska 2007). However, Yergin argues that

energy security discussion should be more expanded to include more dimensions (Yergin 2006). Overall, the concept of energy security is more content-related term.

The interconnectedness of energy security and national security

The authors argue that energy should be considered from the point of view of planning and security as issues intrinsic to sovereignty, autonomy, independence and self-sufficiency of States (Santos 2021). The most distinctive difference in energy security concepts is identified between energy importers and exporters, emerging from the emphasis on the security of supply for the former and the security of demand for the latter. For instance, for some states, such as Ukraine, energy security is the critical component for its existence as an independent country on account of energy consumption of economy, a reduction of the internal base of the fuel, and fragile energy complex (Chernyak et al. 2018). Following the argument, scholars emphasize that the case of Ukraine accordingly indicates how energy security is of paramount importance and requires increased attention from the state and public if the state wants to be as a sovereign and independent country (Kharazishvili et al. 2021). It is true that states should weigh up the level of threats coming from energy crisis.

Energy security is understood as an assurance of the ability to access the energy resources required for the development of national power and adequate infrastructure to deliver these supplies to market. In this regard, it is crucially vital to address the links between energy and security, and how the case of energy (in)security affects the national security of countries when it is interdependent at the regional level. Högselius analyzed technical systems (infrastructures): waterways, railways, electricity grids and natural gas pipelines of Central Asia under the Soviet period, and called "hidden integration" in Central Asia (Högselius 2019). The energy security is likely to be a stepping stone for the integration process.

Carlos Pascual and Evie Zambetakis discuss energy geopolitics and put forward that energy politics will define as well as determine the survival of life and argue that failure to meet the demand of the population could 'unravel' even authoritarian regimes along with the democracies (Pascual, Zambetakis 2010, p.9). However, the authors, I think, did not provide particular cases regarding the impact of energy (in)security on the society of authoritarian countries.

Margarita Balmaceda and Andreas Heinrich, these scholars also touched on energy security and its impact in the case of Russia and the European Union (Balmaceda 2019) but the impact of energy (in)security on the national security of the EU is omitted. Felix Dodds, Andrew Higham, and Richard Sherman have analyzed the energy insecurity risks for the peace and stability of the state. An energy system is considered to be insecure if it cannot provide consistent, affordable, reliable, and sustainable energy services to those who need it in a particular country (Choong et al. 2015). As a result, it could definitely bring about the social unrest.

The article, called 'Energy Security is an important component of national security', put forward the proposal that the insufficient meeting of the demands of domestic households and the energy security of the country is a state of protection of the economy and the population of the country from all possible threats to national security in the field of energy (Matsui 2021). As a matter of fact, the energy issue has been indicated as the triggering point of the revolution happened in Kyrgyzstan, in 2010 (Чернявский 2010). When the energy concerns are pressing, it requires swift actions to straighten out.

Phillip E. Cornell examined energy's role in national security at the primary level, that of maintaining the existence of the state. The lack of sufficient energy provision to domestic infrastructure networks can cause the breakdown of a wide range of essential services, from healthcare and safety systems to communication, transportation, emergency response, and basic utilities could be a debilitating factor to the national security apparatus, at the secondary level to the threat to national security. He argues the energy threat to economic welfare derives not only from higher prices but also from price volatility (Cornell 2009). However, the blackouts Uzbekistan has been facing consistently occurred not only due to its own internal grid, but also, externally, because of the Central Asian Unified Grid. So, energy security within national security should be examined at the regional level as well.

The countries activities aimed at ensuring energy security are a crucial factor in designing foreign policy and foreign relations. In this regard, could the energy security concerns be a root of the conflict? Richard Ullman noticed the frequency of conflict over territory and forecasted that as demand for crucial commodities increases supplies appear more precarious, more conflicts over energy resources would arise and furthered that such scramble will often take the shape of military confrontations, whose violent phases will more likely be short, and, first and foremost, such struggles would occur between the neighboring states (Ullman 1983). History has already proven that there have been several instances where energy and energy security issues were linked to national security concerns, as well as tensions among the involved actors. It is

noteworthy that one out of three civil wars occur because of oil (Ross 2008), which brings up the idea that energy resources can be leveraged and a bargaining chip in the international affairs. Based on the Ullman's analysis, Central Asia is facing energy crisis and the country in the region is unlikely to solve its energy issues alone as it is a regional problem. Politicians should conversant with the fact that the energy issue can escalate the conflict in the region.

Defining the energy security at the regional level

As the world is getting more and more globalized, the interconnectedness, in all spheres among states is enhancing than ever before. It is also reverberating in the energy field. The formulation of energy security policy is not exclusively related to one country, but reaches to particularly the regional level. The term regional energy security is defined by Ahmed Elbassoussy. Elbassoussy argues that regional energy security is "Interaction two or more states in energy field, whether, in production, importing, exporting, and transporting of energy" (Elbassoussy 2019). Santos also promotes a regional approach to achieve energy security, and in order to achieve it, he contemplated there must be a political will of governments to prioritize projects (Santos 2021). As Elbassoussy's definition could be instrumental in the formulation of the theoretical framework of the research as well since the Central Asia is likely to be a case for a regional energy security as the power sharing mechanism is interconnected with each other.

There are some characteristics of energy security in Central Asia, which determine the main criteria of energy security formulation in the region, including: the uneven distribution of energy resources, infrastructural interdependence, water-energy linkages, aging energy systems, and seasonal discrepancy of power sharing (Aminjonov 2019). Considering factors, the formulation of energy policies by politicians should take into account simultaneously the interests of all together.

Central Asia is regarded as one of the most understudied regions of the word, but it is a crucial area in terms of energy resources. According to Andrea Padilla, Central Asia is of strategic importance owing to its geographic location and energy resources, is severely affected by the uneven distribution of energy resources, low investment, corruption, and gross mismanagement that prevents the region from harnessing energy security and from seizing opportunities in the energy market. Most importantly, the Soviet legacy in the five countries – Kazakhstan, Uzbekistan, Kyrgyzstan, Tajikistan and Turkmenistan – continues have an adverse impact on the region, which is reflected in their energy policies (Padilla 2019). However, the Soviet legacy has served as a benefit for the region as well since many pipelines, power grids were built. And, it established the grounds, looking back Hogselious's "hidden integration" in Central Asia.

Félix Arteaga examines the root causes of energy (in)security in the context of Central Asia and has concluded that: low standards for maintenance and protection of energy infrastructure; poverty, environmental deterioration, and demographic pressure in areas; bad governance and authoritarianism; According to the author, energy security for the Central Asian fossil fuel exporter, is energy supplies flow evenly from Central Asia to their final destinations– depends on the protection afforded to critical infrastructures and transport corridors through which the supplies move (Arteaga 2010). But, the author fails to explain external factors as the causes of the energy (in)security in Central Asia. Even though the article analyzes thoroughly exogenous, concerning the geopolitics, the political struggle for Central Asian resources between Russia and China, as well as endogenous, including, natural disasters, such as earthquakes, floods, the battle for local sources: electricity, water, terrorist or insurgent attacks on energy infrastructures factors shaping energy insecurity in Central Asia, it does not shed light on the energy-related corruption cases in Central Asia, which is a prevailing issue.

The energy factor could be a contribution for a regional conflict. Previous President of Uzbekistan Islam Karimov told during the one of the interviews that "Water resources could become a problem in the future that could escalate tensions not only in our region, but on every continent, I won't name specific countries, but all of this could deteriorate to the point where not just serious confrontation, but even wars could be the result" (Nurshaev 2012) by referring to the criticism of the efforts of Kyrgyzstan and Tajikistan to build dams to generate electricity from hydrogens. Overall, in a typical resource conflict, the energy factor preponderates.

Another factor, which has a significant impact on the energy security in Central Asia is the collapse of the Soviet Union. In the light of the mutual distrust and geopolitical tensions, the Central Asian countries began to prioritize their national energy independence and focus on the security of their national energy systems, at the expense of regional cooperation (Boute 2019). It has had a negative impact on the regional energy security in Central Asia.

Local scholars also investigated the energy security in Central Asian countries, by placing an emphasis on Uzbekistan. Farhod Aminjanov argues Uzbekistan neither enjoys energy security nor is capable of continuing to subsidize its energy sector without negatively affecting its economy. He also pointed out several factors that prevent Uzbekistan from achieving the highest level of energy security:

- Uzbekistan is a big producer of fossil fuels while the country is the largest consumer in the region;
- The production of energy, its transportation and distribution facilities, and pipes are outdated and grossly ineffective;
- Energy trade among the Central Asian countries is no longer crucial and on the back burner as the country is seeking opportunities to export its fossil fuels beyond the region;
- The authority of Uzbekistan is putting an emphasis on establishing and refining an independent energy system, which affects the perniciously resource-sharing system that ensured the reliability and stability of the energy;
- The higher rate of energy consumption due to the population factor; (Farkhod 2018)

The distrust of Central Asian leaders has had far-reaching implications on the regional projects, and the interdependence has come at cost. It also reflected on the Central Asia's Unified Power Grid. The Central Asia unified energy system was established during the 1980s under the auspices of the Soviet Union to prevent power shortages in any of the participating countries by facilitating mutual assistance among neighboring states. Originally, the project included all five states, but Turkmenistan decided to withdraw from the system in 2003 and synchronize it with Iran. Uzbekistan and Kazakhstan also ceased their participation in the regional grid. Consequently, the lack of coordinated energy distribution and consumption within the joint Central Asian system resulted in overloads and power system blackouts on the 500 kW North-South Kazakhstan lines in the same year (Konurbaeva 2022).

Gulnura Toralieva examined the consequences of the leaving of the common energy grid in Central Asia (Toralieva 2010). According to her, one potential effect would be a rise in the frequency of outages caused by accidents. This is because without a centralized mechanism in place, there would be no efficient way to counteract the impact of power surges by redistributing supplies from one country to another. As a result, the occurrence of power surges or accidents in one country could have a more significant and prolonged impact, leading to increased outages and disruptions. Secondly, the states, who are rich in fossil fuels, like Uzbekistan and Kazakhstan could face the same consequences as the smaller countries, such as Kyrgyzstan and Tajikistan, and argued that the Uzbek energy grid also needs Kyrgyz power in order to regulate a constant current as the same situation applies to Kazakhstan as well. Thirdly, she propounds that the mutual distrust and the breakdown of contracts in the power sharing could have far-reaching negative consequences on the problems of water sharing (Toralieva 2010). However, in 2009, Tajikistan left the energy ring and strained its relations with Uzbekistan in the light of the construction of the Roghun Dam.

Farkhod Aminjonov claimed based on his analysis that Tajikistan and Kyrgyzstan face challenges in achieving energy security independently in the near future. The withdrawal of Uzbekistan from the Central Asian Power System (CAPS) caused the entire system to collapse, leading to unforeseen power supply shortages within Uzbekistan itself. Uzbekistan did not anticipate the severity of the power supply shortages that it would experience domestically as a result of its decision to withdraw from the CAPS (Aminjonov 2016). The decision equally impacted the energy security of all Central Asian countries. The current obstacles in the energy sphere make Central Asian countries reconsider their national interests in the formulation of energy security policies, showing inclination to reshape the common energy system in the region.

In conclusion, the studies have mostly covered from the geopolitics of managing Central Asia, to the ground novelties. Energy security in Central Asia is inextricable from its geopolitical context. However, there are barely studies which try to connect the centralized policy making as Central Asia level regarding the energy, and about its positive and negative impact on the local population. Central Asia consistently shifted from a centralized regional energy market approach to a nation-centered approach. Energy cooperation has been replaced with the national energy independence. However, the current situation in energy security policy requires a concerted regional approach to deal with the energy security issues in Central Asia. At this point, the research fills the gap analyzing the ongoing reforms on ensuring the energy security.

Secondly, the main focus has been put on the water regime in the last ten years as the water security has been implemented as energy security (Anceschi 2018), and the researchers have not looked beyond the energy security or its impact on the local population. Thirdly, it is true that national security is about territorial integrity, sovereignty, and survival but the concept is not suitable to globalized world, and I think it is a relic definition of what national security is. So, new research will be required to analyze the national security concept corresponding to current issues by taking into occasion globalization and regionalization factors as national security could be interconnected with regional security, and interdependency.

Fourthly, energy security is a key component of the country's overall security, and independent countries take all necessary measures to maintain the energy security. However, the case of Uzbekistan has demonstrated that energy security has taken for granted. The lingering gap of analyzing the main causes of this policy should be filled through the research.

The Central Asian Unified Energy Grid has not taken a special place in the field of energy research and there is barely information, which is basic one and does not apply to the current evolving situation in Central Asia. In this regard, the new meticulously thoroughly-widely-analyzed research, engulfing the ongoing geopolitical and regional development in Central Asia, is crucially important.

CHAPTER 2

THEORETICAL FRAMEWORK

Regional Security Complex Theory (RSCT)

It is important to have different access to different energy resources domestically, however, when it is impossible, states seek to different contractual arrangements, commercial agreements. This, in turn, leads to dependence, which seems to be increasing. Energy has always become a priority for national strategic agenda. As a consequence, the terms "countries" and "national" were disengaged because energy has become increasingly sensitive issue linked to the state sovereignty, since it is a paramount for its development (Santos 2021). Therefore, it is crucial to have guaranteed access to energy resources. Energy security is not exclusively technical issue, but economic, diplomatic, geopolitical, and also institutional matter.

The research draws from the Regional security complex theory propounded by Barry Buzan, and later expanded by Copenhagen School for security studies, to address the research question. The school attempted to interpret untraditional security, by expanding the scope of risks and dimensions (Military Sector, Political Sector, Economic Sector, Social Sector, and Environmental Sector) of threats than traditional military ones. The school did not explicitly mentioned implicitly underlined the importance of energy security, as well as its related concerns. As it follows:

The proponents of the school believe in the chaotic nature of international relations since each state is in attempt to maximize its energy security;

- Securing the energy resouces is inextricably interlinked to the military capacity of the states;
- The political security is linked to the ability of forecasting the behaviour of the actors in the global energy sector;
- The Environmental security could be impacted negatively by inconsistency between quick economic development and energy protection (Elbassoussy 2019);

Buzan and Waever's argument in their work published in 2003 is that in order for a specific geographic area to be classified as a Regional Security Complex (RSC), the states within that area must exhibit a level of security interdependence (Buzan, Wæver 2003). This interdependence should be substantial enough to establish a strong and evident connection among these states, differentiating them from neighboring regions in terms of security dynamics. Applying the theory, the interconnected energy infrastructure creates security interdependence.

Security is a relational phenomenon that it is unlikely to comprehend the national security of the particular states without understanding the international pattern of the interdependence. In this regard, as Buzan defined, "if the security of each country is linked to the security of all, then it is unlikely to understand anything without understanding everything" (Buzan 1991, p.187). In this case, Buzan put forward the regional security analysis. But how we define region, which is an ambiguous concept. From the perspective of security, **region** is acknowledged as a distinct and important subsystem of security relations among a set of states, whose fate is that they have been locked into geographical proximity with each other. The security complex term is coined by Buzan, which means that "a group of states whose primary security interests and concerns link together sufficiently closely that their national securities cannot be realistically considered apart from one another" (Buzan 1991, p.187). Considering all, the security complexes characterized by the followings:

- The security complex is composed of two or more countries;
- These states formed a geographically cohesive grouping;
- The relationship among the states are marked by the security interdependence, wheteher it is positive or negative;
- The pattern of security is not to be permanent, but deep and durable (Buzan 1998);

By applying the concept to the energy security, the Regional Energy Security Complex can be extracted and defined based on the vision of Buzan.

The Regional Energy Security Complex Concept

The Regional Energy Security can be defined as the exchange of energy-related activities between multiple states, including production, importation, exportation, and transportation of energy (Elbassoussy 2019). Considering the definition, the interaction, to some extent represent, may represent a source for threast as the fully dependence from one part on the other. For example, the Central Asian's (Turkmenistan, Kazakhstan, Uzbekistan) dependence on the Russian's infrastruture for export purposes imposed the economic repercussions, or Central Asian's countries mutual interdependence on energy security through the Central Asian Unified Grid has been considered as one of the pillars of regional energy security in Central Asia.

The way energy resources are distributed across regions and the level of interdependence in energy security complexes can be likened to the distribution of military power within political and military complexes. Hence, the possibility of a country's involvement in energy security complexes requires primarily assessing the relative strength of energy dependence (Palonkorpi 2018) so the country, involved in the regional energy complex, needs to formulate its energy policy taking into consideration other involved parties.

Regional Energy Security Concept

The Regional Energy Security Concept is shaped by the energy-related interaction of the two or more countries in a geographic proximity, which encompasses energy dependency relationship between the countries involved and perception of this dependency as a threat, is revereberated in securitization. Buzan elaborated the regional security complex theory a bit further and determined that "a set of units whose major process of securitization, desecuritization, or both are inextricably interlinked that their problems cannot be reasonably analyzed or solved apart from one another" (Buzan 2003, p.141). The securitizing formula is that issues will be securitizes when leaders or presidents begin to talk about them, and threats require significant measures or emergency steps to resolve them (Buzan 2003). However, "desecuritization" refers 'in which a political community downgrades or ceases to treat something as an existential threat to a valued referent object and reduces or stops calling for exceptional measures to deal with the threat' (Buzan, Waever). The military, political and societal dimensions of security¹ are concerned by set of states, which constitute security complexes. The economic factor regarding the regional energy security complex is important to analyze. Analogous to Buzan and Waevers's definition, the threats emanating from the energy dependencies are more acute between states located in the geographical proximity. In other words, the disruption of power transmission in one country indubitably impact on the economic, environmental and military, and political security of the involved states.

¹ Buzan in his book (People, States and Fear: An agenda for international security studies in the postcold war era, 1991) took an ambitious approach by defining types of threat by sectors. He assessed that there are not only military and political threats that occupy the traditional heart of national security concerns but also classified societal, economic and ecological threats. Buzan argued that aspect of threats does not remain constant over time, but can be subject to change in response to new developments in the means of threats and to evolutions in states given the nature of their vulnerabilities.

However, energy relations as a subset of economic factors play a key role in defining the regional security complex. In the case of Central Asia, there is a Central Asian Unified Energy Grid, is used to connect five countries in the region. Tajikistan's withdrawal in 2009 from the system due the pressure from Uzbekistan is a case for economic dimension to define the framework of political rivalry. So, economic factors, particularly, energy factor should be taken into consideration in analyzing a security complex.

Energy dependence can be politicized and securitized if it is linked to other dissensions or conflicts (enmity) between states, and these enmity perceptions can be regarded as factors, which turn dependence into negative energy security in the region. Applying the statement to the Central Asian context, it is evident that the disagreements in the water-sharing proposals have reflected on the decisions of the presidents of the Central Asian states, and eventually, it had negative implications on the energy security in the region.

Security systems may undergo four structural options, as follows:

- Status quo balance of power changes and patterns of friendship and hospitality will not affect the structure of the security complex;
- Internal transformation changes in anarchical structures, polarity, or the enmity and amity model;
- External transformation changes of the regional security complexes' borders, meaning its expansion or contraction will change the list of factors; (Buzan, Waever 2003)

Overall, Buzan has shown that national security cannot be understood both sufficiently and realistically from a perspective limited to one particular state while energy security is dependent on the regional dynamics. Regional security system could be described as a mode of the organization of interstate relations aimed at to maintain regional peace and stability, as well as reciprocal benefits. As a matter of fact, the regional security complex exists ipso facto and pays attention on security issues. Through the process of the securitization, a particular security problem is recognized as a threat to national/regional security. The Regional Security Complex Theory is significant to analyze the security problems of the post-Soviet Central Asian States as it enables analysts to comprehend the complicated components of the regional security architecture.

Buzan has demonstrated that national security cannot be understood nor realistically achieved from a perspective limited to one's own state.

RESC in Central Asia

By applying Barry Buzan regional security complex on energy relations between Central Asian countries, we have a modern version called "Regional Energy complex structure" with the same prerequisite conditions of regional security complex of Barry Buzan. Which are, follows:

- Energy Security Complex consists of more than two countries, including five Central Asian countries;
- The energy complex in this case is geographically coherent, and the uniqueness of the case is that Uzbekistan, which connects all Central Asian countries and plays an important role in the transmission of the energy infrastructure;
- The relationship among the components of the complex, particularly Central Asia is on the one hand, Russia is on the other, is characterized by a great overlap (e.g. Central Asia-Russia pipeline), as well as mutual interdependence in the level of energy security among Central Asian states as regional energy complex;
- The pattern of energy security in the regional energy complex of Central Asia is deep, and vital in economic, security, and energy in particular.

Applying the theory to case of the Central Asian Unified Power Grid, also known as an 'energy ring', the thesis argues that it is also the part of the Central Asian regional security complex. Although energy security is slightly touched and took relatively small attention as a part of the economic threats explained by Buzan, the thesis is in favor of the idea that the energy security should be looked through independently through the prism of threats to energy security separately from the economic part.

As U.S. Senator John Thune (Release n.d.) emphasized energy security is national security, and it directly matters to the regional security as well. In the light of facing challenges, including the power disruptions, electricity outages, blackouts emanating from the Central Asian Unified Power Grid (which will be provided further information below), which has been taken for granted, the presidents of the Central Asian region are even more paying attention to patch up the problems and trying to make the energy

ring more operable. The conundrum is that those countries after their independence taking isolation policy and seeking self-reliance, mainly Uzbekistan under Karimov presidency, now are actively getting involved in the increasing capabilities of the energy ring and redefining their national interests in the energy sphere by supporting regional energy-related projects in Central Asia.

CHAPTER 3

METHODOLOGY

Research question and the main argument

The main research question the thesis asks: Why has Uzbekistan been shifting from the nation-focused energy security policies to region-oriented?

Hypothesis: Recognition of energy as a shared resource and a common good in Central Asia has prompted Uzbekistan to transition from nation-centric energy security policy to a more regionally-focused approach.

Sub-questions: How is energy security within the national security framework in Uzbekistan evolved? And how much place has energy security taken in the understanding of national security of Uzbekistan?

To deal with the research question, a case study of Uzbekistan is applicable here because the aim is to illuminate the linkage of the formulation of national energy policy in Uzbekistan and regional energy security complex in Central Asia. As mentioned in the theoretical framework, energy issues could become securitized by political elite and society begin to concern about them – in terms of existential threats against some valued referent object.

The qualitative approach will be applied to deal with the research question. Qualitative work seems to focus on the one or small number of cases, use the in-depth analysis of historical materials, employ the intensive interviews, and to be concerned about comprehensive account of particular event or unit. Even though there are small amount of cases, it helps researchers unearth the plethora of new information from their studies (Keohane 1994).

Based on the research question, the research comprises of descriptive and explanatory research designs, intended to describe the evolution of energy security perceptions, and understand the corresponding energy policy shift within the body of national security in Uzbekistan. As mentioned above, energy security is a subjectively political construct and could be construed variably in different contexts.

Method of Data Collection: semi-standardized face-to-face interviews and archival research

A variety of data have been collected comprising both primary and secondary. In a qualitative study as if we speak a language of "cases and contexts" and of cultural meaning (Neumann 2014). Context of the statement is critical that the meaning of the social action depend on the context.

To analyze the Uzbekistan's interdependence of regional energy complex and to gain views on energy security perceptions, semi-standardised face-to-face interviews have been set up with officials of the Ministry of Energy in Uzbekistan, and the researchers from NUPI – Norwegian Institute of International Affairs, who are conducting research the energy security of Central Asia. To preserve the anonymity of the interviewees in the thesis, they will be identified as "interviewee 1," "interviewee 2," "interviewee 3," and so on, as specified in the table below. However, with the permission of the interviewees, their names will be listed as well.

It is applied a snowball sampling strategy. Leading administrator in the field of international politics, diplomacy, government, and academia (energy/security). Leading professionals in the field of energy, international relations. The main reason is that the chosen experts have a wide knowledge, and conducted the research on the Central Asian energy security, some of them directly got involved the formulation of the National Security Concept of Uzbekistan.

A semi-structured interview guide has been created specifically for the interviews. The guide contained questions related to energy security in general and specific topics such as: Energy Security Concept, perceptions on the evolvement of National Security Concept, and the regional energy security in Central Asia, as well as Uzbekistan's role in it. All face-to-face interviews are audio-recorded (with permission) and transcribed verbatim. Notes have been taken during the telephone interviews. Most interviews lasted between 30-40 minutes, although it could be dependent on the force-major situation. Some interviews are be conducted in Uzbek, and after transcription translated into English by the author of this thesis. The preliminary versions of the interview question are following:

Method of data Analysis

As a method of analysis, discourse, narrative and content analysis will be applied so as to analyze the speeches and readouts, statements of the President of Uzbekistan. The main focus will be put on the speeches of before the blackouts in the system of the Central Asian Unified Energy Grid, and after the instance, as well as, to what extent, the regional energy security has been touched upon by the Uzbek President at the various meetings. The narrative and discourse analysis will be used on President's speeches at Consultative Meetings of the Heads of Central Asian States.

The thesis will apply a discourse analysis. I will scrutinize The Central Asian Unified Energy Grid as a unit of analysis to show, to what extent of the correlation energy security of Uzbekistan is to the regional energy security complex. The speeches and 'books' of the Presidents of Uzbekistan (Islam Karimov and Shavkat Mirziyoyev) have been analyzed as the formulation of the contexts of energy security, national security and regional security are evolved to address the abovementioned sub-research questions. Secondary data have been garnered in the form of political press releases and mass media recordings together with the most important official documents related to energy security strategies, and the perception of threats.

The process tracing method will be employed to explore the energy blackouts and its outcomes for Uzbekistan as well.

These data involved the official documents of the governments related to the energy sphere, including the Presidential decree on the Measures to Radically Improve the Management System of the Fuel and Energy Industry of the Republic of Uzbekistan, adopted in 2019, The Concept for Supply of Electric Power in Uzbekistan 2020-2030, the speeches of the president of Uzbekistan at the regional and international events (conferences, bilateral/multilateral meetings). Moreover, as secondary data, the OSCE Reports on Advancing Energy Security in Central Asia, ADBI (Asian Development Bank Institute) the energy-related working paper series, the reports of the World Bank's Central Asia Water and Energy Program are examined.

Semi-standardized face-to-face qualitative interviews are applied as primary data. Approximately, six semi-structured interviews have been conducted in Tashkent, Uzbekistan, and Oslo in Norway in which at the Department for Climate and Energy of the Norwegian Institute of International Affairs created the platform to conduct the interviews. A purposive sampling strategy can be used. This approach involves intentionally selecting participants who have specialized knowledge and experience in the specific area of interest of the national security studies of Uzbekistan, as well as the energy security. The desired target group has been experts in the energy security field of Uzbekistan in order to obtain specialized insights and perspectives specific to Uzbekistan's energy landscape, policies, and regional energy dynamic. To formulate the part of the correlation of national security and energy security concepts in the National Security Concept, which is not available on the Internet, the interviews with the expert from the think tank (Karavan Knowledge) and professors from the Tashkent State University of Oriental Studies (who have read and conversant with the National Security Concept of Uzbekistan) have been conducted.

Furthermore, the interviews of the then Minister of Energy of Uzbekistan Alisher Sultanov, and the incumbent Uzbek Energy Minister Jurabek Mirzamakhmudov have been examined to look into the formulation of energy policy in Uzbekistan.

It will be triangulated the data, which have been collected from the strategically important documents, including, The Defense Doctrine of Uzbekistan, the Law on About State Security Service of the Republic of Uzbekistan, and will be examined to find out the perceptions about the national security logic of Uzbekistan. And, The Strategy of Actions 2017-2021 and the New Uzbekistan Development Strategy 2022–2026, have been translated from Uzbek by the author of this thesis, and analyzed the development of energy policy. The findings of the research are divided into these two periods: 1992-2016 under the Karimov regime, and post-Karimov period, to comprehend the perspective of the evolvement of energy security and regional energy security.

It will be applied the comparative content analysis on the security documents of Central Asian Countries, including Law of the Republic of Kazakhstan On National Security of the Republic of Kazakhstan, the Concept of National Security of the Kyrgyz Republic, Foreign Policy Concept of the Republic of Tajikistan to depict how these countries perceive the energy security in their national interests.

Limitations and Risks

There could be some inevitable challenges during the process of data collection. Because the thesis includes energy security and national security as inextricably interlinked concepts, it should be mentioned to some expected challenges during the data collection for the thesis. First of all, to get statistical information about the demonstrations and protests I turned to specialists working at the Institute for Strategic and Regional Studies under the President of Uzbekistan (ISRS) as after the energy blackout in Uzbekistan it has been reported that some demonstrations broke out. It is crucially important to analyze the scope, motives, ramifications, and consequences of these demonstrations but they did not provide the data. The second challenge has been reaching out to experts in the energy sector in Uzbekistan which has been a daunting process as experts working in the government sphere manifestly repudiate to give an interview. To address the issue, I have applied data used during the interviews of the Energy Minister of Uzbekistan. Last but not least, the topic is sensitive as there have been possibilities in terms of not having access to information and the main documents, including National Security Concept of Uzbekistan. The problem has been addressed based on the analysis of the expert, who has been conversant with the Concept itself.

Organization of the Thesis

The thesis consists of five chapters. The content structure and progression articulate a coherent narrative, with each chapter building on the previous one. The literature review establishes the foundational understanding of energy security, leading into the theoretical frameworks that contextualize the regional and national dynamics. The methodology outlines the research approach, and chapters 4 and 5 provide a practical application of the theoretical concepts within the specific case of Uzbekistan and the Central Asian Unified Energy Grid, effectively aligning with the central theme of energy security, national interests, and regional dynamics.

CHAPTER 4

ENERGY AS A NATIONAL MATTER: STRENGHTENING NATIONAL INTEREST AND STATE SOVEREIGNTY

Jessica Tuchman, in her article published in Foreign Affairs in 1989, entitled "Redefining Security", argued that the conceptual definition of the national security should be rethought. As she puts forward "Global developments now suggest the need for ... national security to include resource, environmental and demographic issues" (Mathews 1989, p.162). Energy security may seem like a vague concept to pin down, but disruption and turmoil in the energy sector showcase its actuality and how fundamental it is to the state security. In this regard, countries conventionally define the energy security as a part of the formulation of their national security strategies. So, what does the National Security Concept or other security-related documents of Uzbekistan say about the energy security?

The legal and conceptual foundations of security in Uzbekistan are reflected in the following documents: The Constitution of Uzbekistan (2023), the National Security Concept (1997), the Foreign Policy Concept (2012), the Law on "About State Security Service of the Republic of Uzbekistan" (2019), the Defense Doctrine (2018, previously known as Military Doctrine), The Actions of Strategy for 2017-2021, and The Development Strategy of Uzbekistan (2022-2026). A recent-promulgated the Constitution of Uzbekistan includes the part of Defence and Security (The Constitution of The Republic of Uzbekistan 2023), but does not specify what the national security is. As part of efforts to adapt to the emerging security threats, both the National Security Concept and the Foreign Policy Concept were supposed to be reformed whereas theses important documents are still at the development stage. Even though these strategic documents are obsolete, neither of them is available to the public. However, the Law on "About State Security Service of the Republic of Uzbekistan" illuminates how Uzbekistan perceives the state (national) security. According to the official document, **state security** – the condition of security of the constitutional system, sovereignty, territorial integrity and other state interests of the Republic of Uzbekistan from external and internal threats providing it sustainable development and realization of constitutional rights and freedoms of citizens (Law of the Republic of Uzbekistan on the State Security Service of the Republic of Uzbekistan 2019). The nature of external and internal threats in the document is not mentioned, but as part of the **state interests** (state interests of the Republic of Uzbekistan) - conscious requirements of the state for ensuring rule of law, safety and stability for society, protection of the constitutional system, are indicated.

Uzbekistan's Actions of Strategy for 2017-2021 also has outlined the priorities and also taken into account political, economic, and social problems alongside traditional threats within the security issues. For instance, unemployment, poverty, lack of cross-border cooperation, environmental problems, criminalization of the growth of drug trafficking are cited as potential threats to security (Toshotar 2019). In 2022, the logical continuation of The Actions of Strategy of Uzbekistan for 2017-2021, The Development Strategy of Uzbekistan for 2022-2026, in the updated version, was adopted. The unique feature of the all security-related documents, including The Defense Doctrine of Uzbekistan, distinctly states that the regional cooperation in Central Asia is a vital aspect of ensuring national security. But, how is the energy security logic reverberated in the security-related documents? The experts unambiguously maintained the same opinion that the energy security is not listed in the security-related documents, particularly, there is not mentioned in "bold letters" on the National Security Concept of Uzbekistan, which was adopted in 1997 (Boronov 2023). Another respondent also holds the same opinion, and also mentioned that threats to the national security could be different by nature, and Uzbekistan needs to classify each threat to its national security of the country, and its nature. The expert also underscored that energy security should have been included to the National Security Concept of Uzbekistan, but it was taken for granted for years. However, many analysts believe that the classification of the threats to the energy security of Uzbekistan should be clearly indicated in the forthcoming National Security Concept of Uzbekistan.

The discourse analysis on the book "Uzbekistan at the threshold: The Threats to security, conditions of stability and guarantees of development of the 21st century" by Islam Karimov, which has been considered as a replica of the National Security Concept of Uzbekistan according to the expert (Boronov 2023), has been undertaken. It showcased several threats to the national security of the country: regional conflicts, religious extremism and fundamentalism, the great statehood chauvinism and aggressive nationalism, ethnic conflicts, corruption, nepotism, and environmental problems in the book (Karimov 1997). For the record, the National Security Concept of Uzbekistan and Karimov's book "Uzbekistan at the threshold: The Threats to security, conditions of stability and guarantees of development of the 21st century" were introduced at the same time, in 1997. However, the concept of the energy security and the conditions of the sustainable energy security remained undefined and undetermined. Under the presidency of Shavkat Mirziyoyev, the perception of the energy security has mattered to the national security as Mirziyoyev instructed the State Security Service (SSS) (Times 2023) not to the Ministry of Internal Affairs to investigate the corruption and other crimes in the energy field.

For the comparison, Law of the Republic of Kazakhstan On National Security of the Republic of Kazakhstan indicates public security, military security, economic security, political security, informational security, environmental security as types of national security, and enlightens all types of them. Kazakhstan also does not mention the energy security in its National Security Concept.

In 2015, the concerning energy situation in Kyrgyzstan prompted the Defense Council of the Kyrgyz Republic to qualify the energy issues as serious threats to the national security of the country (Boute 2019). The Concept of National Security of the Kyrgyz Republic, which is promulgated in 2021, lists the same threats as its neighboring countries have, however, comparing to other Central Asian states, Kyrgyzstan identifies evidently and lists both external and internal threats to the energy sphere in its Concept of National Security. To show the importance of energy security, one could notice that the words associated with energy (e.g. energy security, energy resources) in the previous Concept of National Security are listed 34 times while in the updated version of which is listed 41 times. The idiosyncratic nature of the Kyrgyz National Security Concept is that it provides a comprehensible definition of the energy security. According to the Concept of National Security of the Kyrgyz Republic, energy security - a state of the economy that ensures the country's energy independence with sufficient and reliable fuel and energy supplies to the country's consumers (Concept of National Security of the Kyrgyz Republic 2021). Both external and internal threats to energy security are illustrated in the Concept. The Kyrgyz National Security Concept states that the exacerbation of water and energy problems in the region of Central Asia in the context of the country's fuel and energy import dependence as an exogenous threat, and the crisis state of the economy and the vulnerability of the republic's energy supply system is demonstrated as an endogenous threat (Concept of National Security of the Kyrgyz Republic 2021). From this point, one can encapsulate that ensuring energy security has always got off the ground under the evolvement of the Kyrgyzstan's national security policy.

Tajikistan also categorizes the threats to energy security as a part of its national interests in the Foreign Policy Concept of the Republic of Tajikistan, accepted in 2015. The document states that promotion of energy independence of Tajikistan is regarded as a crucial part of the national interests of the Republic of Tajikistan in the field of the foreign policy. According to the Foreign Policy Concept, the lack of genuine cooperation in the effective water and energy resources management in the region, is known as hazardous to the national interests of the Republic of Tajikistan (Concept of the Foreign Policy of the Republic of Tajikistan (Concept of the Foreign Policy of the Republic of Tajikistan 2015).

Stemming from the abovementioned National Security Concepts of the Central Asian countries, it can be summarized that the upstream countries (Kyrgyzstan, Tajikistan) put more focus on the development of the energy security concept, by elaborating both external and internal threats to the energy security on their respective strategic documents rather than the downstream states. However, the energy security concept in the case of Uzbekistan seems to have been inextricably linked with the notion of the energy self-sufficiency policy.

As Uzbekistan is a presidential republic, the formulation of policy in each field, starting from politics to the economic policy is initiated by the country's president. This policy is reflected in the energy sphere as well. The notion of self-sufficiency has been dominating priority in the country's political agenda, after the declaration of the independence. This policy reverberated in the first President of Uzbekistan Islam Karimov's speeches, "Relying only on our own strength, our own potential we have to do something", "if we don't act ourselves, no one from abroad will help us" (Karimov 2013, p.20). In the energy sector, as then President Islam Karimov noted that it is obvious that the economic prospects of any state are to a significant degree determined
by the availability of its own energy resources (Karimov 1996). The energy independence has gained momentum in Uzbekistan's economic policy. Islam Karimov wrote that "one of the main priorities of the first phase of economic reforms was to ensure speeding up the fuel and energy complex's development, increasing oil and gas extraction. And in such a way, to safeguard energy independence of the republic" (Karimov 1998). The necessity structural changes have been aligned with the energy sector, which was considered as a critical role in the reforms. Karimov noted that "it was very important to determine key links like oil and oil independence, as well as fundamental industries which could stimulate sustainable growth in the entire economy" (Karimov 1998, p.14). Although Islam Karimov did not explicitly mention the importance of energy security for sustaining the national security, Karimov implied the essence of the natural energy resources several times. Karimov said that "domestic production of strongly needed goods (and energy resources) is an important task in ensuring national security, sustainability and stability on the whole. This task bears both, economic and political meaning" (Karimov 1998, p.582). President Karimov established a legal basis to carry out the state energy policy, and promulgated a number of legal documents in the energy sphere:

- The Presidential Decree On formation of Uzbek state concern of oil and gas industry "Uzbekneftgas" in 1992;
- The Presidential Decree On Deepening Economic Reforms in the Energy Sector on February 21, 2001
- The Presidential Decree On measures on further development of alternative sources of energy on 1 March 2013;
- Resolution on the Uzbek State Inspection for Control over the Use of Petroleum Products and Gas under the Cabinet of Ministers of the Republic of Uzbekistan in 2014.
- Law of the Republic of Uzbekistan On Production Sharing Agreements in 2001;
- Law of the Republic of Uzbekistan On Energy Deposits in 2002;
- Law of the Republic of Uzbekistan On Electric Power Industry in 2009;
- Law of the Republic of Uzbekistan On Joint-Stock Companies and Protection of Shareholders' Rights in 2014;

According to the data extracted from the Ministry of Energy in Uzbekistan, these all energy-related legal framework has been shaped under the government of Islam Karimov. However, the single institution (e.g. Ministry of Energy or Energy Department under the Cabinet of Ministers) to formulate and execute the single energy policy was not established. The whole energy system was regulated by of a number companies and institutions, including the Ministry of Finance, the National Oil and Gas Holding company called Uzbekneftegaz (for the hydrocarbon 81 sector), the Stock Joint Company "Uzbekenergo" (electricity) and its legal entity "Uzbekugol" (coal), and other institutions. Once the Ministry of Power Generation and Electrification which had been found in 1990, but it was later abolished (Decree of President on Deepening Economic Reforms in the Energy Sector of the Republic of Uzbekistan 2001). As a result, the energy system was separated by various regulators, and was not merged into the single entity until 2019.

Uzbekistan, under the Karimov government, has always seemed to enjoy the fact that it developed power and energy system in the entire Central Asian region. As President Karimov underscored that "It is well-known that an economic development of a state depends, to a considerable extent, on its energy base. From this point of view, Uzbekistan has a very strong energy system" (Karimov 1998, p.633). The energy system at that time generated half of the electricity of the Central Asian Unified Energy Grid. Although Uzbekistan increased between 11,4 GW in 1992 to 11,8 GW in 2002 (Sagdullaev 2005), without constructing new electricity-generating capacities Uzbekistan tried to maintain energy security.

In Uzbekistan, Islam Karimov cultivated the idea that political independence cannot be achieved without the achievement of economic independence and with the account of this concept, he worked out the "Uzbek model" of the development. The economic steps have been sketched out in the "Uzbek Model" whereas it did not involve the concrete directions in the energy security. Sadik Safoev, who used to be Uzbekistan's Foreign Minister under the Islam Karimov presidency, now is a Deputy Chairman of the Uzbek Senate, admitted that "The Uzbek model was a wrong policy. Three years ago, our economy was on the brink of collapse" (Kun.uz 2019).

The countries usually use their geographical locations for the geopolitical purposes, especially the transition of energy products. By counting on the threats to the economic development of the country, Karimov mentioned that "there are some political groups on the post-Soviet space who are trying to destabilize situation in the region. They recommend to use the tools of the energy and transport blockade against Central Asia. This is a potential threat to the national interests and security of Uzbekistan" (Karimov 1998). Needless to say, Uzbekistan also used its unique geographical location in Central

Asia to put pressure on its neighbors, particularly in the energy sphere. A clear example is that Uzbekistan sometimes stopped the transmission of energy to its neighbors in the framework of the Central Asian Unified Energy Grid. Islam Karimov's stance on the energy ring was that it was an outdated and unfair system that it did not reflect the realities of independent states (Pannier 2017), and he also elaborated that each country should develop its own energy sources and pay for the services it received from others.

When energy gets borderless: expanding Uzbekistan's energy grid

There is a belief that Uzbekistan is among the few countries, that has sufficient energy supplies to satisfy the energy demand of its population. Islam Karimov mentioning the relevance of the energy sector, noted that "Uzbekistan is fully independent when it comes to the energy independence" (Omorov, Lynch 2010). Following this principle, Uzbekistan withdrew from the Central Asian Power System in 2009. The Uzbek authority tried to launch fully independent secure energy system, by prioritizing meeting the country's energy demands completely from its own resources. However, the policy has come with the negative consequences. Firstly, the energy system in Uzbekistan remained outdated and did not face the renovation. As a result, 60 percent of primary energy loss occurred, and the inefficient infrastructure and the aging energy system cost Uzbekistan about 4.5 percent of its overall GDP per year (Aminjonov 2016).

Secondly, the growth of gas export to foreign countries, especially China. In 2010, Uzbekistan signed an agreement with China on the export of 10 bcm (billion cubic meters) gas per year. The graph (Appendix A) shows that the export of Uzbek gas has been on the upward trend.

Thirdly, Uzbekistan keeps subsidizing the energy sectors, mainly gas so as to keep prices affordable, which makes the gas sector unattractive for the foreign investors.

Fourthly, Uzbekistan did not put investments in the modernization of its energy infrastructure. The country has pursued the vacillatory policy in investing in the mining operations, the pipelines, the geological operations, the oil wells and the gas extraction fields. Indeed, the then Uzbek Energy Minister Alisher Sultanov admitted that real reforms in the energy sector of Uzbekistan has started only in the last three years, and the state did not allocate the investment and subsidy for the development of the energy sector (Sultonov 2021).

Fifthly, the reliance on the single resource, gas is in the generation of the electricity. According to the statistics, nearly 88 percent of electricity manufactured by gas (Statista.com 2022). Great Britain's Prime Minister Winston Churchill famously declared that the key to energy security was diversity in sources of supply. Uzbekistan remained extremely dependent on the natural gas for both export purposes and meeting the domestic consumption. The withdrawal of Uzbekistan from the Central Asian Unified Grid brought about the growth of the gas in the electricity generation since when Uzbekistan used to be a part of the CAPS it received the electricity from Kyrgyzstan and Tajikistan generated by hydro resources.

All potential circumstances have significantly impacted on the achievement of the self-sufficient energy policy, and even faced with the consistent power outages. As a consequence, Uzbekistan had to turn to foreign countries, Russia and Turkmenistan by the request of the blue fuel import. To sum up, the first period of the formulation of the energy policy in Uzbekistan under President Karimov (1991-2016) is characterized by the notions of self-dependency and self-sufficiency, and the national interests in the energy field diverged with its neighboring countries. Eventually, it ended up being isolated from the Central Asian Unified Energy Grid, and the relations with Central Asian countries remained in fiasco.

The incumbent president of Uzbekistan Shavkat Mirziyoyev first time mentioned the importance of the energy at the meeting, aimed at the Issues of further development of the electric power sector (President.uz 2018). President Mirziyoyev underlined that the electrical power sector serves as the driving force behind economic growth, social and economic development, and is an indispensable aspect of daily life. It is difficult to envision life without this essential sector (President.uz 2019). President Mirziyoyev commenced to deal with the energy issues as Uzbekistan started experiencing the "fruits" of its accumulated unresolved energy issues. The stepping stone in the energy sector has been laid by the announcement of the Actions of Strategies for 2017-2021 in Uzbekistan. The Actions of Strategies for 2017-2021 states that the effective energy policy is the basis for improving the competitiveness of the national economy. So, to implement the unified state policy in the energy sphere, in 2019, the Ministry of Energy was established by the Presidential Decree "On measures to Radically Improve the Management System of the Fuel and Energy Industry of the Republic of Uzbekistan" (Ministry of Energy 2019). The new institution is tasked by ensuring the country's energy security and meeting the growing demand of the country's

economy and population for energy resources. The priority areas of further development of the fuel and energy sector of the Republic of Uzbekistan are defined. As a top priority is defined as conducting a unified energy policy aimed at ensuring the country's energy security, meeting the ever-increasing need for energy resources of the economy and the population (Ministry of Energy 2019). But, the noticeable fact is that Uzbekistan took an action in terms of implementing the policy in the sphere of atomic energy. Earlier, in 2018, The Presidential Decree on Measures for the Development of the Atomic Energy in Uzbekistan was introduced. The decree states that currently, the republic's economy and population's need for energy resources is covered by the superior use of non-renewable energy sources, including hydrocarbon raw materials with limited resources. Although the country has a huge reserve of uranium raw materials, the potential of nuclear energy has not been used in practice (Lex.uz 2018). Atomic Energy Development Agency was founded under the Cabinet of Ministers of Uzbekistan, and then-established Uzbek Ministry of Energy. The specialists from the various spheres, including experts from the Security Council under the President of Uzbekistan are included to the Scientific-technical and Expert Council of the Agency. Peaceful use of atomic energy is determined as the main tasks and directions of activities of the Agency.

However, it seems skeptical about the use of atomic energy in Uzbekistan. First of all, the rights to the construction of the Atomic station have been given to Russia without healthy competition. Russia could use it as a political leverage in the long term. Secondly, it could be viewed that the Atomic could be harmful impact for the regional security in Central Asia since Uzbekistan should take into account the interests of the neighboring countries. The implementation of the decision of the evolvement of the atomic station is still moot.

In 2020, President Mirziyoyev underscored that one of the biggest threats to the rapid development of the economy is related to the existing problems in the oil, gas and energy sector (President.uz 2020). The consistent power outages occurred in Uzbekistan starting from 2020. Shavkat Mirziyoyev admitted that we still cannot fully satisfy the demand of our people and entrepreneurs in the stable supply of oil, gas, and electricity (President.uz 2020). President Mirziyoyev emphasized "Thirty years of backwardness in the energy field cannot be addressed in 3 years" (Gazeta.uz 2020). The first time, President Mirziyoyev particularly put an emphasis on the energy sector issues in 2022 during his annual address to the Parliament, called it as a 'pressing issue', and

discussed broadly. Uzbek President mentioned the fact that 25-30 billion-dollars investments are needed to the energy sector to maintain the sustainable development of the country's economy. President Mirziyoyev has openly confessed that "the problems in the field of energy are not new today, investments have not been directed to new gas mining sites, electricity and gas systems have not been modernized for a long time. As a consequence, a lack of clear accounting in the system, the large losses became common" (Mirziyoyev 2022). As a matter of fact, the population of Uzbekistan increased by 13.9 million people in 30 years (Kun.uz 2021), and the industrial plants have reached from 45 thousand to 100 thousand by doubling (Mirziyoyev 2022). Certainly, the ongoing progress, in its turn, brings about the increase of consumption of the energy. In the las six years, the demand for electricity in Uzbekistan has increased at least by 35% doubling (Mirziyoyev 2022). President Mirziyoyev also revealed that 14 trillion sum (1,5 billion dollars) has spent on the energy sector to straighten out the energy issues (Ministry of Energy 2023). To sum up, the formulation of the energy policy in Uzbekistan has been taken for granted for long years. 70 percent of the Uzbekistan's energy infrastructure is more than thirty years old, power generation assets are fifty years old (Asian Development Bank, 2017), which evidently showcase that Uzbekistan has not introduced reforms in the energy field since its independce. The biggest mistake seems to be in the energy sector Uzbekistan committed is "the populist approach" as the first Uzbek Energy Minister Alisher Sultonov referred (Sultonov 2021), by pursuing the "independent" energy policy. Even though Uzbekistan has an enormous capacity to maintain the energy security, the country seems not to have prioritized properly the strategically important sector, and has not achieved the high level of the energy security.

Energy security crisis: the turning point for making national go regional

Charles Ebinger argues that unaffordable, unreliable and unsustainable energy supply can trigger the social unrest (Ebinger, Banks 2013). The consistent power outages have led to the protests in Uzbekistan. In 2018, the first incident indicates that a woman from the Tashkent region set her on fire due to cutting off the gas pipe to her house for no reason (Radio Free Europe 2018). Starting from 2020, people in the region of Kashkadarya gathered outside the office of the local electricity and gas provider to demand the restoration of power, and the same situation occurred in the Andijon,

Namangan, and Ferghana provinces (Pannier 2021). Even in Bukhara, people blocked the main road due to the disruption of gas (Gazeta.uz 2020). In Syrhandarya Province, residents blocked part of the road in the area and burned tires by the side of the road to protest a gas cut-off in their area (Pannier 2021). The OXUS² society (Central Asian Protest Tracker) reports that there have been more than 4 times protests in Andijan over energy issues, and 3 times in Namangan and Bukhara in 2020. The most complaints came from the capital Tashkent, Andijan, Namangan, Ferghana, Samarkand, and Surkhandarya regions over the power outages. The mounting dissatisfaction among the population has virtually led to the criticism on the President Mirziyoyev's reforms. The experts mentioned that Uzbekistan has not experienced such protests on the energy issues in its recent history (Boronov 2023). The social and economic costs of the energy (in)security have been very high. Power outages cost the economy of the country around six million dollars. And, Uzbekistan should draw the conclusions on the civil unrests due to the energy issues. It's important to emphasize that the energy turmoil and the crisis in energy prices played a significant role in prompting widespread protests in Kazakhstan, ultimately shaking the established order and resulting in the resignation of the government and considerable challenges to the incumbent President's position (Aramov 2023).

Comparing to his predecessor, at the strategic level President Mirziyoyev has perceived the development of the energy security with the regional energy security complex. In 2020, the Concept for Providing Uzbekistan with Electricity for 2020– 2030 was adopted. According to the Concept, expansion of trans-boundary trade and strengthening of regional cooperation through the reinstatement and modernization of transmission lines connected to neighboring countries' power systems is defined as one of the top priorities of providing Uzbekistan with energy (Ministry of Energy 2020). Another strategically important document, The Development Strategy of Uzbekistan for 2022-2026 elaborates the steps to deal with the energy problems, and it states the roadmap to achieve the energy security in Uzbekistan. According to The Development Strategy of Uzbekistan for 2022-2026 (Lex.uz 2022), as part of the efforts, it is noted that ensuring the stable operation of the energy system of Uzbekistan with the energy systems of neighboring countries in the region. President Mirziyoyev in his book named "Strategy of the New Uzbekistan", which is published in 2021, outlines the energy

² OXUS Society for Central Asian Affairs: Central Asia Protest Tracker

(in)security has been as a pressing issue due to the rapid economic development and the growth of the population which all Central Asian countries is going through (Mirziyoyev 2021). President Mirziyoyev suggested to the enhancement of the activities of the Central Asia Coordination Electric Power Council, and the expansion of its mandate. Uzbekistan, under the new leadership of President Mirziyoyev, has given a new impetus to the development of the relations with its neighbors in every sphere, and the policy has also reflected in the energy security.

Summing up, the energy crisis, the consistent power outages, as well as the rare protests sparking from the energy blackouts have been a critical moment for Uzbekistan to take a not only regional but even a global approach in the sphere of energy security.

CHAPTER 6.

CENTRAL ASIAN UNIFIED ENERGY GRID: Uzbekistan's role in the Central Asian Energy Security Complex

The energy infrastructure of Central Asia was evolved during the Soviet period without the regards of borders but now separates the different countries in Central Asia (World Bank Report 2010). The unified approach was aimed at the best use of the fossil fuels for the low riparian countries, and make possible the use of the hydropower for the upper riparian countries to maintain overall energy security in Central Asia. There are closely interlinked pillars of the Central Asian Energy Security Complex:

- Energy security availability and affordability of both fossil fuels and the hydropower supply for the needs of both the population and economy;
- Energy export moving energy resources to external (beyond the region) markets to generate revenues;
- Water-energy nexus quid pro quo of gas and oil in exchange of water supplies for irrigation purposes;

The specific feature of the Central Asian Energy Security Complex is its close integration with the water supply.

Geographically strategic location and an inherited energy infrastructure have turned Uzbekistan into a crucial actor, without which any initiatives aimed at improving the energy cooperation in Central Asia would most likely to stall (Asian Development Bank 2000).

The map (Appendix B) shows that both existing and proposing gas pipelines seem to pass through Uzbekistan. The headquarter of the Dispatching Centre of the Central Asian Unified Grid also is located in Tashkent. Moreover, hydro power produced in the north part (Jalalabad) of Kyrgyzstan was not to avoid Uzbekistan in transmitting power to the southern part of Kyrgyzstan (Osh and Batkent regions). The same situation has been applied to Tajikistan. Tajikistan could not provide the electricity to its northern part without bypassing Uzbekistan. Turkmenistan and Kazakhstan used to receive energy supplies from Uzbekistan. However, Uzbekistan has used its geographical and infrastructural capacity for other purposes rather than investing efforts to enhance the regional energy security in Central Asia. Anatole Boute notes that Uzbekistan – untill recently most resolutely opposed regional cooperation in the energy and water sector, even though the World Bank confirmed the potential benefits of the regional cooperation for the maintainance of the energy security in Uzbekistan (Boute 2019). A top official of the Tajik Foreign Ministry Khusrav Ghoibov criticized Uzbekistan's decision from the energy ring as an effort to put pressure on neighbors (Radio Free Europe 2009). The Uzbek government mainly used its sway to block electricity and energy supplies to influence foreign policy of the countries in Central Asia.

Central Asian Unified Energy Grid: Regional Energy Security Complex

It is argued that Central Asian Unified Energy Grid has been both blessing and curse for Central Asia (Vakulchuk 2023). The expert also notes that on the one hand, it could be a platform to facilitate the regional collaboration on energy and other issues due to the interdependence on cross-border electricity and trade and consumption and could have led to the collaboration and interaction, but it has not led so far (Vakulchuk 2023). In this regard, what is the Unified Energy System of Central Asia? Why is it called the "energy ring"?

It is more correctly called the Unified Energy System of Central Asia and Southern Kazakhstan (Appendix C). There were several such energy associations in the former Soviet Union, each of them had its own Joint Dispatch Center, and the Central Dispatch Directorate (CDC) was located in Moscow. The energy interconnection configuration took shape in the 1970s, when 500 kV lines passing through the territories of four republics in Central Asia were combined into a single ring, which significantly increased the reliability of all participants in parallel operation. The configuration of the Central Asian Unified Energy System was designed as a single whole, without taking into account the national borders of the union republics, and worked, like many other energy interconnections, in isolation from the Unified Energy System of the former Soviet Union (Shamsiev 2020). After Central Asian states gained independence, they realized that none of the energy systems can independently provide a full-fledged reliable energy supply to their consumers. Therefore, they established legal mechanisms of the coordination of the common efforts in the energy sector. In 1991, in the city of Ashgabat, the presidents of Central Asian countries signed an "Agreement on parallel operation of the energy systems of the Republic of Kazakhstan, the Kyrgyz Republic, the Republic of Tajikistan, Turkmenistan and the Republic Uzbekistan", and also established the enterprise "Unified Dispatch Management of Energy Systems of Central Asia". On October 27, 2004, the leaders of the Central Asian countries signed an "Agreement On the coordination of relations in the field of electricity in the energy systems of Central Asia" (Shamsiev 2020). The new energy model in Central Asia was completely formulated in 1997 (Bolbot 2020). The agreements in the energy field among the Central Asian states were reached within the framework of the Commonwealth of Independent States (CIS). For example, the Agreement on Coordination of Interstate relations in the power sector (1992), the Arrangement on Parallel operation of power systems (1998), the Agreement on Transit of electricity (2000), Agreement on Mutual assistance in case of accidents at power stations (2002), Agreement on the Cooperation in the field of energy efficiency and conversation (2002), Agreement on Effective use of resources to ensure stable operation of the power systems (2004), Agreement on Formation of the Common Energy market (2005), and even in 2009, the CIS countries adopted the Concept for Energy Sector Cooperation (Aminjonov 2016). There were the simple conditions: Kazakhstan and Uzbekistan have been dependent on the water for the irrigation purposes flooding from Tajikistan and Kyrgyzstan, and the latter did not run the turbines of the hydroelectric power station at full capacity for this purpose. In return, oil, gas, and coal needed to be provided to Kyrgyzstan and Tajikistan. However, Turkmenistan decided to leave the energy ring in 2003, and coordinated its energy system with the Iranian grid. In December of 2009, the Central Asian Unified Energy Grid ceased its activity. Some experts hold the view that the fail of the energy ring was due to the fragility of the energy arrangements and the lack of political co-operation among the countries in Central Asia (Toralieva 2010) while others state that the main reason of the destruction of the energy ring was Uzbekistan's decision of withdrawal from the system (Bolbot 2020). Uzbekenergo's Distribution Office Director Esso Sadulloev claimed that the energy ring was become increasingly unsustainable as certain member states were siphoning off electricity. Sadulloev said, "The Unified Electricity System is beginning to be obsolete, and is the source of confrontation among the participating states" (Toralieva 2009). An energy expert from Kyrgyzstan, Ularbek Mataev believed that the Soviet Union outlined and

built such a viable energy grid that no country will benefit from disengaging from it (Toralieva 2009). This policy has brought about serious implications. Uzbekistan's withdrawal left two million people of the Soghd region (Tajikistan) without power (Toralieva 2010). It also created challenges for Uzbekistan to meet the peak consumption since the Nurek Power Plant (Tajikistan) stopped supplying at peak periods in the morning and evening. It is perceived that it was a side effect (curse) that the energy sector of the Central Asian states became tightly interconnected and strongly dependent upon each other for their electricity (Högselius 2019). Because, the withdrawal of the one country indubitable impact on others. In point of fact, 51 percent of total the Central Asian Power System was generated in Uzbekistan, 15 percent in Tajikistan, 13.8 percent in Kyrgyzstan, 10 percent in Turkmenistan, and 9.1 percent in Kazakhstan (Asia Developmet Bank 2000). Uzbekistan's withdrawal from the energy ring hit Tajikistan the most and left the state in complete isolation, as well as acutely affected the level of the energy security (Aminjonov 2016). Thus, Central Asian countries pursued their isolationist energy policy. The Central Asian states were taking steps to broker new one-to-one agreements with one another while strengthening their own grids. Professor Nargiz Kassenova noted that the Central Asian states were making efforts to ensure energy security by making their own grids more independent, and developing new capacity while Mateeyev argued that the efforts were going against the international trend, which is in favor of regional cooperation and collaboration (Toralieva 2009). Kazakhstan produces more than 80 percent of its energy with coalfired power plants, as well as Uzbekistan continued generated energy from its traditional blue fuel, and Kyrgyzstan and Tajikistan got involved in the use of their hydroelectricity capacity by putting efforts on the implementation of the CASA-1000 (Kyrgyzstan, Tajikistan, Afghanistan, Pakistan) project. However, President Islam Karimov noted that the construction of such dams could provoke military conflicts when the whereabouts of the project (CASA-1000) were aired (Economist 2014). The first time about the need to restore the unified energy system in Central Asia was put forward by Uzbekistan in 2014 due to the shortage of energy (Bolbot 2020) whereas the Uzbek side refrained itself moving forward with the further actions. The same nationalistic approach in the energy sphere continued until the course of leadership in Uzbekistan changed in 2016.

By analyzing the upsides of the Central Asian Power Grid, the energy expert from NUPI (Norwegian Institute for International Affairs) believes that the energy ring could be a major connectivity factor, which would have a spillover factor for the cooperation, in other areas, including economic or business partnerships, cross-border trades. Secondly, the collaboration in economic terms and having the common grid help to distribute the energy to some countries in one time and have constant exchange with those who have a high demand, and this kind of interconnection should be based on the intermittency, can be really helpful for our countries to have a high degree of energy security analyst (Vakulchuk 2023).

The development of the national energy systems was not self-sufficient, and the repercussions incorporated the irrational use of water and energy resources, frequent power outages, consequently entailed to the enfeeblement of the overall energy security in Central Asia.

Central Asian Unified Energy Grid: What place for sovereignty?

The change of the presidential course in Uzbekistan in 2016, pawed the way to pursue the regional collaboration in every sphere, that had been stalled for many years. It has given an impetus to coordinate the energy policy of Central Asia. The Asian Development Bank proposed Tajikistan to continue dialogue with neighboring countries to establish a format for electricity trade and maintain constructive relations with the Central Asian Energy Coordination Council to reconnect the Central Asian energy system at the beginning of 2017 (Chorshanbiev 2017). In 2017, a meeting of the heads of energy departments of the Central Asian countries was held in Almaty, Kazakhstan (Yuldashev 2017). The heads of energy departments of Kazakhstan, Kyrgyzstan, Uzbekistan, Tajikistan and even Turkmenistan took part, and discussed the acute challenges in the energy security in Central Asia. The main subject of the meeting was about the restoration the Central Asian Unified Energy Grid. The Energy Ministers of Central Asian states agreed to the draft of the resolution on the common energy system. The first Central Asian Conference on Energy Reforms was initiated by the government of Uzbekistan, and held with technical assistance from ADB in Tashkent in 2018 (Kun.uz 2019). At the end of the Conference, the declaration was adopted, which consists of nine points and reflects the countries' commitment to develop a common energy strategy for 2030 and cooperate in achieving one of the United Nations Sustainable Development Goal, which refers to "affordable and clean energy." During the Conference, Uzbek Energy Minister Alisher Sultanov mentioned that the governments of Central Asian countries are demonstrating enormous ambitions. Uzbekistan is committed to a financially and environmentally sustainable energy industry (Ministry of Energy, 2019). The Declaration was refered as "historic" by the ADB, that will accelerate cross-border cooperation on energy issues and bring the region one step closer to creating a regional energy market (Asian Development Bank 2019). On July 4, 2019, the Central Asian Conference on Energy Reforms was held in Istanbul. It was the second time that the Central Asian Countries' Energy Ministers convened in 2019. At the end of the meeting, it was adopted the Joint Declaration on The Regional Cooperation in the Energy Reforms, as well as it was signed the creation of a united electricity market in Central Asia. In July 2019, all five Central Asian countries and Afghanistan entered into an agreement to interconnect their electric grids and consolidate their electricity market.

At the presidential level, Uzbek President Shavkat Mirziyoyev conveyed the conciliatory rhetoric. As Mirziyoyev underlined that Central Asia is a single organism that has had a common geographical, economic and cultural space for centuries emphasizing that his regional policy consists of two elements – "not to avoid but discuss the existing issues and to seek reasonable compromises" (Muratbekova 2019). President Mirziyoyev's first official state visit was assigned to Turkmenistan in 2017. Uzbekistan and Turkmenistan agreed to focus greater cooperation in the fields of energy. During his visit, Uzbek President brought up the idea of Turkmenistan supplying electricity to Tajikistan through Uzbekistan's grid (Eurasianet 2017). Eventually, both Uzbek and Turkmen sides reached an agreement on the export of the Turkmen gas to Kazakhstan and Kyrgyzstan through the territory of Uzbekistan (Asia-Plus 2017). Conditions for the regional co-operation have been accelerated.

President Mirziyoyev's efforts to build the good neighborliness reflected in the regional energy initiatives. The then Deputy Prime Minister of the Republic of Uzbekistan, Rustam Azimov in his 2014 speech underscored that "Uzbekistan will never and under no circumstances give its support to this project (Daly 2015) by implying the whereabouts about the construction of the Roghun Dam. However, the rhetoric has changed by coming with the new president in Uzbekistan. The former Minister of Foreign Affairs of Uzbekistan Abdulaziz Kamilov said "the position of Uzbekistan remains that during the construction of such dams, the interests of both upstream (Kyrgyzstan) and downstream countries (Uzbekistan, Turkmenistan, Kazakhstan) should be considered. We do not say that our Tajik friends should cease the construction of the Roghun Dam. Go ahead and build it, but we hold to certain guarantees in accordance with these conventions that have been signed by you

(Tajikistan)" (Eurasianet 2017). The bottleneck, which had been stamping out the Uzbek-Tajik relationship for a long time, has resolved. In 2018, President Mirziyoyev paid an official visit to Tajikistan. As a result of the diplomatic efforts spearheaded by President Mirziyoyev, Tajikistan commenced to provide Uzbekistan with energy after the nine-year interruption in 2018 (Putz 2018). Tajikistan's energy department reported that an agreement on resurrecting Central Asian Unified Power Grid had been reached (Putz 2018). Currently, Tajikistan is working to connect its national grids to the single energy ring in Central Asia.

In 2017, Kyrgyzstan and Uzbekistan reached an agreement for the export of Kyrgyz electricity to Uzbekistan (Ulitina 2017). In the same year, Uzbekistan and Kyrgyzstan signed a memorandum of understanding for cooperation in the Kambarata-1 hydropower project, and the Uzbek side conveyed an inclination to participate in the construction of the plant (Sputnik Tajikistan 2017). Uzbekistan resumed electricity imports from Kyrgyzstan and Tajikistan in 2018, from Kazakhstan in 2019, and from Turkmenistan in 2020 (Sputnik 2020). Uzbekistan showed tendency to support the regional energy initiatives, such as CASA-1000, the Kambarata hydropower project. Regarding the TAPI (Turkmenistan, Afghanistan, Pakistan, India) project, Uzbekistan demonstrated its commitment to take part in constructing the natural gas pipeline. Another exceptional project has been a commencement of the construction of the Yavan hydroelectric station at the basin of Zarafshan. It has been regarded the first joint project between Uzbekistan and Tajikistan. The project was launched in 2022, on the sideline of Tajik President Rakhmon's official visit to Uzbekistan. Expert Hikmat Eren mentioned that the start of the construction of the first major joint project of cooperation in the field of energy – Yavan hydroelectric power station with a capacity of 140 megawatts on the Zarafshan River by the presidents, will play an important role in ensuring the energy security not only of Uzbekistan and Tajikistan, but also of the entire Central Asian region as a whole (Tojimamatova 2022). It can be perceived that President Shavkat Mirziyoyev skillfully used and applied the "energy diplomacy" to win the trust of the Central Asian countries to show that indeed, Uzbekistan is in favor of the regional cooperation with its neighbors in Central Asia. Between 2016-2019, President Shavkat Mirziyoyev pinpointed the energy issues as a focal point in his diplomacy.

In 2020, low water reservoirs made Tajikistan to suspend its electricity exports to Uzbekistan so Uzbekistan had to import from Turkmenistan to compensate and prevent power supply outages in the country (Kun.uz 2020). Therefore, starting from 2020, President Mirziyoyev started drawing his counterparts' attention in Central Asia to immediately deal with the energy issues. Along with that, Shavkat Mirziyoyev puts forward several initiatives on the sideline of the Consultative Meeting of the Heads of the Central Asian countries, which has been a diplomatic platform to exchange initiatives in the multilateral level rather that bilateral. Even in 2019, when the second Consultative the Heads of the Central Asian countries was held in Tashkent (Mirziyoyev 2019), Mirziyoyev showed inclination for the reforms of the regional energy infrastructure (energy ring), but he did not bring up the concrete initiatives. In 2021, the Third Consultative Meeting of the Heads of States of Central Asia took place in Turkmenistan. During the event, President Mirziyoyev discussed the challenges and brought forward initiatives. One of the top priorities of Mirziyoyev's agenda has been energy security. President Mirziyoyev first time used the term "the regional energy security" in his statement. Uzbek President said "...taking into account the growth of national economies and population, the regional energy security issues are becoming more urgent", and Mirziyoyev added "We suggest strengthening the activities of the Electricity Coordination Council of Central Asian countries, expanding its mandate and powers, as well as increasing the level of representation of our countries in this structure" (Mirziyoyev 2021).

On January 25, 2022, the Central Asian's three states, including Uzbekistan, Kyrgyzstan, and Kazakhstan went through the massive blackout. A special commission of the Energia Coordinating Dispatch Center (CDC Energia), involving Uzbek, Kazakh and Kyrgyz experts was established to investigate the causes of the blackouts. And, the commission revealed that the main cause was a power outage in the energy system of Uzbekistan (Uzdaily 2022). President Shavkat Mirziyoyev took part in the Fourth Consultative Meeting of the Heads of States of Central Asian States, held in Kyrgyzstan, in 2022. Even though Shavkat Mirziyoyev at a government meeting raised the issue of disruption of the energy system of the country and the region, pinpointed about the interconnectedness, said "we all experienced that how a technical power outage instantly reverberated through the life of the entire region" (The Tashkent Times 2022). However, in Kyrgyzstan, during his statement, President Mirziyoyev neither brought in the initiatives nor highlighted about the energy blackout in Central Asia. The Fifth Consultative Meeting of the Heads of States of Central Asian States has been held in Tajikistan, in 2023. During the statement, President Mirziyoyev particularly

touched upon the energy sphere, by stressing on the ensuring the energy security in the region. President Mirziyoyev said "Unfortunately, the pace of energy infrastructure development in the region lags behind industrialization and urbanization processes, as well as demographic growth. Today, this is a serious threat to the long-term sustainable development of our countries", and he mentioned "Our region also has great potential for the development of the hydropower sector. We are jointly developing a project to build a hydroelectric power plant on the Zarafshan River in Tajikistan, and we are actively solving the issue of implementing the Qambarota Hydroelectric Power Plant-1 project in Kyrgyzstan" (Mirziyoyev 2023). From President Mirziyoyev's statement, one could understand that the Uzbek President put the energy security above the food security in his statement, which indicates that the energy security has been prioritized. Uzbekistan seems to have understood that the independent grids do not solve the problems of the energy security. Deputy Energy Minister Sherzod Khodjaev admitted that the construction of new power plants will not completely solve the issue of energy shortages in Uzbekistan, and the energy ring will be a great benefit for all involving parties in Central Asia (Khodjaev 2022). Energy expert Rasul Umbetaliev believes that the resurgence of the energy ring would be a trusty step for the development of the energy potential and energy security in the whole region (Bolbot 2020). Tajikistan is also exerting efforts to be a part of the energy grid as soon as possible. Indeed, the Central Asian Unified Grid can be a symbol of the regional energy cooperation in Central Asia. It will also serve as a stepping stone to the long-waited integration process in the region.

President Mirziyoyev's initiatives on energy security have reached beyond the region. The sixteenth summit of the ECO (Economic Cooperation Organization) was held in Tashkent, in 2023. President Mirziyoyev delivered a speech and put forward some initiatives, which also touched upon the energy security. Shavkat Mirziyoyev said "The importance of harmonization of national energy strategies, development of interregional energy resources transmission networks, wide introduction of "green" energy technologies is increasing" (Mirziyoyev 2023), and also proposed the establishment of the Council of Ministers of Energy within the ECO to discuss cooperation issues in detail and to carry out work on a systematic basis. For the comparison, the fifteenth summit of the ECO, held in Turkmenistan in 2021, President Mirziyoyev's statement (Mirziyoyev 2021) shows that the President did not put forward any initiatives in the energy field. Most interestingly, Uzbekistan has never mentioned

the efforts of the development of the use of the atomic energy during the meeting of the Central Asian Leaders' meeting.

It is fair to say that the Central Asian states are unlikely to avoid the energy interdependency on one another. The hydrocarbon-rich Kazakhstan has failed to successfully implementation of its country-wide gasification strategy on providing Southern regions of the country with its own gas. As a consequence, Kazakhstan will import of 30 percent gas to meet the demand from Uzbekistan. Turkmenistan is not able to isolate completely itself from the Central Asian Energy Politics, even though the country is blessed with the energy resources. Existing the Central Asia - China gas pipeline with the 80 billion capacity will be transporting Turkmen gas to China passing through the region, hence, the pipeline is turning Turkmenistan, to some extent, dependent on the transit Central Asian states (Aminjonov 2017). To sum up, the Central Asian energy grid has demonstrated the case that the perception of the national interest in the energy field from the category of sovereignty shifted to the regional interest. In other words, the energy policy of Uzbekistan has formulated beyond its borders as well as Uzbekistan's energy decisions are intimately intertwined with the states of Central Asia, and it has impacted on the energy security of its neighboring country in Central Asia..

The shift from national to regional energy policies in Central Asia, particularly with the reestablishment of a unified energy grid, raises questions about the role of sovereignty and how it may impact national interests. By participating in a unified energy grid, countries in Central Asia are essentially pooling their energy resources and infrastructure for maintain the energy security in the region.

On one hand, participating in a unified energy grid can reinforce national interests in a harmonious way. The state facing energy crisis will be in attempt to deal with the issue at any cost. It can lead to greater energy security and stability for all participating countries. By sharing resources and collaborating on energy infrastructure, each country can benefit from a more reliable and integrated energy supply, which ultimately serves their national interests. A unified energy grid can also reinforce national interests by providing opportunities for economic development and cooperation. By integrating their energy markets, countries in the region can attract investment.

On the other hand, participating in a unified energy grid may potentially undermine national sovereignty in certain aspects since the states have to delegate their sovereignty within the common infrastructure. Countries may have to cede some control over their energy resources or infrastructure to the collective management of the unified grid. This could raise concerns about the potential loss of autonomy in decision-making and resource management, which are key aspects of national sovereignty. Or, the state's sudden withdrawing from the common energy grid could hamper not only the energy security of one state, but all participating states. Since the sudden power outages in the energy system of one country could hamper the economy of the national security of the involving countries in the energy grid. This case has been reflected when the total blackout happened in Central Asian Unified Energy Grid having left Uzbekistan, Kazakhstan and Kyrgyzstan powerless.

In conclusion, the shift from national to regional energy policies in Central Asia presents both opportunities and challenges for national sovereignty and interests.

CONCLUSION

The countries are prone to justify their policies in the energy sphere under the logic of "energy security" or "self-sufficiency," or as exercises of "state sovereignty".

This thesis was aimed to analyze the shift that Uzbekistan has gone through a total denial of regional cooperation in the field of energy to initiating an interdependent regional approach to energy security, and it has been supposed to address the research question:

Why has Uzbekistan been shifting from the nation-focused energy security policies to region-oriented?

Hypothesis: Recognition of energy as a shared resource and a common good in Central Asia has prompted Uzbekistan to transition from nation-centric energy security policy to a more regionally-focused approach.

Uzbek President Shavkat Mirziyoyev highlighted that the experience of the prosperous development of regional cooperation formats shows that they are based not only on objective factors – geographic proximity, historical community, trade, economic, cultural and civilizational ties, also on the growing mutual benefit from close partnership (Kun.uz 2021). President Mirziyoyev underscored that the future of Central Asia will be shaped by every single state in the region (The Tashkent Times, 2017). This logic has reverberated also in the energy sphere.

According to the findings during the research on the energy security field of the country, Uzbekistan has demonstrated that it has not considered energy security as a core component of its national security, and the energy security has been taken for granted. The arguments have been supported by the President of Uzbekistan, as well as Energy Minister of Uzbekistan during the content analysis on the official statements, and the interviews. Furthermore, even though Uzbekistan has ignored the energy security cooperation in Central Asia, the energy crisis Uzbekistan went through, has been a turning point from the national-based approach to the regional approach. The

energy crisis, which happened in 2022-2023 cost the millions of dollars for the economy of Uzbekistan. It also led to the social dissatisfaction among the public.

The formulation of the energy security policy in Uzbekistan has experienced two significant periods:

1991-2016 under President Islam Karimov pursuing the energy security based on the national interests taking the regional interconnectedness for granted under the logic of self-dependency, and also it has been used the geographical location of the country to exert the influence on its neighbors although President Karimov said publicly not to use the country's position as a geopolitical leverage; When Uzbekistan faced an abnormal cold in 2014, President Karimov showed inclination to join the common grid with Kyrgyzstan. But, it came to naught due to some circumstances. Throughout the Karimov's period, Uzbekistan avoided itself importing energy resources. Even, Uzbekistan provided Russia with gas. However, based on the examination of the data, it depicts that Uzbekistan has failed to achieve the complete self-dependency in the energy field.

Since 2016, the incumbent President Shavkat Mirziyoyev has taken a more regional approach to maintained the energy security in Uzbekistan by joining the regional energy projects in collaboration with the neighboring countries. Following the reforms in the energy field, Uzbekistan's position on the regional energy projects (KambarAta, Rogun) has shifted from confrontational to constructive. President Mirziyoyev has applied the energy diplomacy as an attempt to revitalize the relationships with its neighbors. The energy blackouts have accelerated his efforts in this regard. On the incident of the gas disruptions in the frigid winter in 2023, Uzbekistan had to turn to Russia to meet its growing demand. And, after a ten-month preparation, Uzbekistan started importing the blue gas from Russia through Kazakhstan in October 2023. President Mirziyoyev's conciliatory rhetoric in Central Asia has yielded its results since Kazakhstan could have set its conditions to Uzbekistan, if so, it could be unlikely to make this process happen. In 2018, Uzbekistan resumed its gas export to Tajikistan after a six-year pause, and expressed support to the building of Rogun Dam, which used to be contentious issue.

Beyond the region, Uzbekistan seems to take more globalized approach particularly in the green energy by attracting the investment from the Gulf countries. For the first time-ever, two solar stations in the region of Navoi have been commissioned under 100 percent foreign direct investment project. The new projects have been invested by the UAE-based company Masdar, ACWA Power (Saudi Arabia), and Chinese companies. Indubitably, these actions could serve the national interests of Uzbekistan. The renewable energy can save up to 5 billion cubic meters of natural gas. Secondly, the renewables can mitigate the harmful impacts of the climate change, and pave the way to meet the Paris climate goals. Thirdly, President Mirziyoyev stated that Uzbekistan is making initial steps towards supplying green energy to the Asian and European markets in the future (Mirziyoyev 2023). These efforts are likely to make Uzbekistan an energy hub in the green energy. It has been an issue of national importance. President Mirziyoyev in nearly each events, has touched upon the energy security. For instance, President Mirziyoyev has appeared to be one of the key components of the state's national interest.

The National Security Concept of the Republic of Uzbekistan is at the final stage of the development, and it is expected to be adopted soon. It is inferred that the concepts of the national security and national interest will be clearly defined. The energy security as a concept as well as both the external and internal threats to the energy security ought to be listed and formulated unambiguously in the impending concept. In the new concept, the use of the nuclear power plant, and its safety requirements should be outlined as well.

The case of Uzbekistan also showed that national interests are not static but a dynamic concept. National interest has been subject to a continuous change due to many factors. The energy crisis has been a leading factor for Uzbekistan to take the cross-border approach rather than self-reliant one. The energy security should be considered as one of the determinants of the national interest at the same degree with the military sector. Otherwise, even though the state is rich in energy resources, it cannot prevent the country from facing energy crisis unless it goes regional.

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APPENDICES



APPENDIX A

Source: Content by Arslan Vepayev. <u>https://www.researchgate.net/figure/Exports-Of-</u> Central-Asian-Gas-To-China-CAGP-2020_fig3_346755707

APPENDIX B



Source: <u>https://daryo.uz/en/2023/08/07/turkmenistan-largest-gas-exporter-in-central-asia-world-energy-2023</u>

APPENDIX C



Source: <u>https://www.eurasian-research.org/publication/central-asian-countries-power-</u> systems-are-now-isolated-but-not-everyone-is-happy/

APPENDIX D

Figure 24: CAPS transmission lines in 2019

Highlighted in yellow are 500kV loops (both existing, under construction, and planned / suggested) The blue line is a schematic CASA-1000 route – directly enhancing the existing grid only in Datka-Sugd (KG-TJ) and Regar-Sangtuda (inside of TJ) sections. At Sangtuda, there will be a converter into direct current – so to interconnect northern Afghanistan and CAPS through CASA-1000 for parallel work, and have another loop for more reliable delivery from both UZ and TJ, will be impossible).



Source: KDC Energia, VTB Capital Research

Source: <u>https://www.intellinews.com/central-asia-s-electricity-network-</u> underpowered-and-fragmented-169985/

APPENDIX F

Semi-structured expert interview guideline

Brief description of the project:

The aim of the project to is analyze the relationship between national energy policies and regional energy security complex. The case of Uzbekistan is very interesting in this regard, since it had not supported regional energy projects before, whereas it has been seeking the collaboration with its neighbors in the energy sphere. In other words, Uzbekistan has gone through a total denial of regional cooperation in the field of energy to initiating an interdependent regional approach to energy security. Why has this shift happened?

Name:		
Affiliations:		
Agreement on using citations from the interview		With name
in the thesis		Only with affiliation
		Anonymously
Agreement on using tape-recorder during the	Yes	No
interview		
Questions used during the Interviews		

How would you assess the current energy security of Uzbekistan?

How is the energy security defined on the National Security Concept of Uzbekistan? If it is mentioned, what possible issues are considered as threat if it is not, Uzbekistan does not consider energy security as the main pillar of national security, and why?

To what extent does the Energy Ring in Central Asia maintain the regional security?

How would you evaluate the previous and the incumbent presidents of Uzbekistan in defining the regional security and national security?

What does the energy security take an occupation of the National Security Concept of Uzbekistan?

Why has Uzbekistan suddenly changed its foreign policy in Central Asia under the authority of new president, in the field of energy security?

Why has Uzbekistan experienced consistent blackouts, and how is it connected with the energy ring?

APPENDIX G

List of Interviewed Experts

No:	Affiliations		
1	Professor, Department of oriental policy and international relations at		
	Tashkent State University of Oriental Studies;		
2	Professor, Diplomatic Academy under the Ministry of Foreign Affairs		
3	Researcher, Knowledge Karavan, Non-governmental Non-profit Research		
	Institution based in Tashkent		
4	Government official, Development of Renewable Energy Sources		
	Department		
5	Local Researcher, who is Assistant Professor of the National Defense College		
	of the U.A.E		
6	Expert from the Ministry of Foreign Affairs of Uzbekistan		
7	Senior Research Fellow at the Department of Energy and Climate at NUPI		