



Research article

## Harmonization of Soft Power and Institutional Skills: Montenegro's Path to Accession to the European Union in the Environmental Sector

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**Abstract:** This research investigates the alignment of soft power and institutional skills in Montenegro's journey towards accession to the European Union (EU), with a particular focus on the environmental sector. An online survey targeting individuals employed in state institutions directly engaged in negotiation processes, notably the Ministry of Sustainable Development and Tourism and the Agency for Nature and Environmental Protection, was conducted. The research conducted an online survey, distributed before and after the summer recess to accommodate the transition of power following parliamentary elections, aimed at assessing the effectiveness of current personnel and identifying areas for improvement in staffing and negotiation strategies within Montenegro's environmental sector. Employing diverse methodologies, the survey's analysis delved into the demographic, social, and professional backgrounds of respondents. It explored their roles within institutions, involvement in environmental negotiations, and possession of relevant skills and expertise. Furthermore, respondents' knowledge of environmental issues, legislation, and challenges facing the country was assessed to gauge institutional capacity for environmental governance. Demographic data, including gender, age, education and regional origin, were collected to understand gender-specific attitudes and regional disparities in environmental perspectives. The sample of 84 individuals, comprising executives and employees from both institutions, provided insights into the age structure and regional diversity of personnel involved in negotiation tasks for Chapter 27. The selection of the Ministry of Sustainable Development and Tourism and the Agency for Nature and Environmental Protection reflects their pivotal roles in shaping Montenegro's environmental policies and addressing climate change challenges. This study aims to illuminate the dynamics of environmental governance within Montenegro's state administration, contributing to the country's path towards EU accession. The research findings highlight the critical need for Montenegro to prioritize strategic initiatives in personnel management, skill development, and institutional capacity-building within its environmental sector. The implications of this research extend beyond academia to inform policymaking and societal action, emphasizing the urgency for Montenegro to bolster its environmental sector capabilities, fostering both

EU alignment and sustainable governance practices for the benefit of present and future generations.

**Keywords:** environment; soft power; accession; alignment; harmonization; institutional skills; governance; Montenegro; European Union.

## 1. Introduction

Within the realm of academic discourse, the endeavor to delineate Montenegro's trajectory towards European Union accession within the environmental sector demands a nuanced examination of the interplay between soft power strategies and institutional competencies, highlighting the imperative for synchronized efforts to ensure a seamless integration process (Skjærseth, Stokke, & Wettestad, 2006; Zeitoun, Mirumachi, & Warner, 2011). Such a scholarly exploration not only delves into the intricacies of Montenegro's accession journey but also underscores the multifaceted nature of contemporary geopolitics and environmental governance. At its core, the harmonization of soft power and institutional skills encapsulates the complex interplay of political, economic, and socio-environmental factors shaping Montenegro's path towards EU membership (Albro, 2018; Oberthür, 2009; Sine & David, 2003).

Montenegro's pursuit of EU accession in the environmental sector is emblematic of its broader aspirations for socio-economic development and regional integration. In this context, soft power emerges as a crucial instrument for fostering positive perceptions, building trust, and enhancing cooperation among stakeholders, both domestically and within the EU framework. Whether through cultural diplomacy, public diplomacy initiatives, or strategic communication efforts, Montenegro seeks to leverage its cultural heritage, natural beauty, and commitment to environmental sustainability to strengthen its candidacy and cultivate alliances. Nye (Nye, 1990) coined the term "soft power" in 1990, defining it as the capacity to achieve desired outcomes through attraction rather than coercion or payment. This concept is rooted in the appeal of a nation's culture, political ideals, and policies. When our policies are seen as legitimate by others, our soft power grows stronger. This influence was especially evident during the Cold War era, with American dominance in global music and film industries, promoting worldwide consumerism, intellectual freedom, and modern liberal democracy, alongside freedom of expression and creativity (Lee, 2011). Conversely, Craig Hayden views soft power as a significant shift in traditional international power dynamics, where persuasion and culture become integral components of a nation-state's instrumental powers, envisioning soft power as both a creation and utilization tool (Hayden, 2012).

To fully integrate soft power into academic and practical realms, it's essential to consider the concept of neoliberalism (Patalakh, 2018). Soft power emerges from the influence of values, education, media, and other non-military instruments, aligning with the core principles of neoliberalism, which emphasize freedoms such as movement, labor, and trade, crucial not only in European politics and integrations but also a global scale (Martynov, 2020).

The European Union represents a unique form of integration and operation, characterized by an autonomous legal framework (Raunio, 2002). Within this framework, citizens of the Union hold rights and obligations derived from both national and community sources. Consequently, this arrangement diverges from both national and international legal norms, functioning instead on agreements ratified by member states and possessing its legal foundations and institutions. The intricacy of this governance model also stems from its adherence to the Treaty on the Functioning of the European Union (2016) and the Charter of Fundamental Rights of the European Union (2007), as well as international law about common foreign and security policy. Furthermore, the EU engages in specific agreements with candidate countries seeking EU membership, broadening its scope and conferring legitimacy upon its expansion and institutional development. To qualify for EU membership, candidate countries must satisfy accession criteria, undergo reform processes, and demonstrate compliance with EU standards and regulations (Memoli & Vassallo, 2009). These criteria, commonly referred to as the "Copenhagen criteria," encompass stable institutions ensuring democracy, the rule of law, human rights protection, and minority rights, alongside a functioning market economy capable of withstanding EU competition and market dynamics (Memoli & Vassallo, 2009). These conditions were formalized during the European Council meeting in Copenhagen in 1993 (Raunio, 2002; Sudar, 2021).

Montenegro commenced negotiations for Chapter 27, focusing on Climate Change and Environment, during the Intergovernmental Conference in Brussels on December 10, 2018. This chapter encompasses over 200 EU legislative acts spanning across ten key areas, aiming to solidify sustainable development as a guiding principle and ensuring environmental preservation. The policy framework emphasizes proactive measures and a sectoral approach to environmental safeguarding, integrating both horizontal and sector-specific policies. Central to this approach is the recognition of shared responsibility and the imperative to address environmental degradation. The ten areas covered in Chapter 27 include horizontal legislation, water and air quality, waste management, nature protection, industrial pollution control and risk management, chemical management, noise pollution, civil protection, and climate change adaptation. The negotiation process and oversight of the Working Group for Chapter 27 are led by representatives from the Ministry of Ecology, Spatial Planning, and (following recent political developments in Montenegro, specifically the parliamentary elections on August 30, 2020, which resulted in a change in government structure. The former Ministry responsible for environmental protection, previously known as the Ministry of Sustainable Development and Tourism, has been reorganized into the Ministry of Ecology, Spatial Planning, and Urbanism under the new administration. The Office for European Integration, situated within the Government of Montenegro, appoints the contact person for Working Group 27.

Montenegro fulfilled its initial obligations under Chapter 27 by adopting the National Strategy for Transposition, Implementation, and Application of EU Legislation concerning Environment and Climate Change, along with the Action Plan covering the period from 2016 to 2020 (NEAS), on July 28, 2016 (Strategy with AP)(Sudar, 2021). This strategic move, aligned with negotiation stipulations, aims to systematically integrate the entirety of EU laws related to Chapter 27 – Environment and Climate Change into Montenegro's legal framework. Following the Analytical Review Report (screening report) by the European Commission in November 2013, the European Council mandated Montenegro to fulfill these preliminary requirements to initiate negotiations with the EU concerning Chapter 27 – Environment and Climate Change (Government of Montenegro, 2016). The comprehensive national strategy, along with its action plan, will be presented to the European Commission, laying the groundwork for the transposition, implementation, and enforcement of EU regulations concerning environmental protection and climate change. Furthermore, it includes plans for enhancing administrative capabilities and assessing necessary financial resources (Sudar, 2021).

The Strategy with Action Plan delineates its objectives based on explicit recommendations from the screening report for Chapter 27 and conclusions drawn during the initial meeting in May 2014. It places particular emphasis on the water and waste sectors, incorporating strategies for waste reduction and the management of non-recyclable waste, including landfill disposal. Additionally, it addresses policy formulation and administrative capacity challenges associated with climate-related actions. Moreover, the Strategy with AP functions as a cornerstone for the integration, execution, and enforcement of EU environmental and climate change legislation. It encompasses strategies for bolstering relevant administrative capacities and evaluating financial requirements. Furthermore, it facilitates the monitoring of scheduled obligations and measures within defined timeframes, along with the timely planning and procurement of essential financial and technical aid from domestic and international sources, including EU funds, to support Montenegro's competent authorities.

### *1.1. Regulatory Foundations and Institutional Framework for Environmental Protection*

Montenegro embarked on the adoption of the National Strategy for Transposition, Implementation, and Application of EU Legislation concerning Environmental and Climate Change issues, coupled with the Action Plan spanning from 2016 to 2020, with the intent of progressively and comprehensively integrating EU legislation for Chapter 27 – Environment and Climate Change into Montenegro's legal framework (Grozđanić & Cvetković, 2024; G. Grozđanić, V. Cvetković, T. Lukić, & A. Ivanov, 2024; Sudar, 2021). Given that the journey towards EU accession is a multifaceted process that commences with transposition efforts, this analysis will primarily examine this aspect of the Strategy. Since the inception of the Strategy with AP in July 2016 until December 2019, significant strides have been made in bolstering the strategic and programmatic landscape of Chapter 27. This has been achieved through the formulation of six key strategies: the National Strategy for Air Quality Management accompanied by the Action Plan for 2017-2020, the Water Management Strategy, the National Biodiversity Strategy alongside the Action Plan for 2016-2020, the Chemicals Management Strategy spanning 2015-2018, followed by the National Chemicals Management Strategy for 2019-2022, and the Disaster Risk Reduction Strategy featuring the Dynamic Activities Plan for 2018-

2023. Alongside these strategies, several other initiatives have been embraced, including the Action Plan for mitigating adverse environmental impacts, the Municipal Wastewater Management Plan for Montenegro for 2020-2035, and the General Plan for water hazard protection for water bodies of significance to Montenegro for 2017-2022, among others (Sudar, 2021).

By enacting a total of 123 regulations (24 laws and 99 bylaws) from July 2016 to December 2019 to transpose EU legislation into the national legal system, Montenegro has significantly enhanced its domestic regulatory framework concerning environmental and climate change matters. A detailed overview of the regulations enacted during this period is provided in Annex 3. Recognizing the dynamic nature of the European legal framework and the continuous introduction of new regulations, the Accession Programme of Montenegro to the European Union for 2020-2022, endorsed by the Government in February 2020, outlines strategies, programs, laws, and bylaws aimed at fulfilling the remaining targets outlined in the Action Plan of the Strategy, in addition to aligning with new EU acquis requirements and setting forth a timeline for their implementation. By the end of 2022, the Accession Programme aims to adopt ten strategic documents across six areas. These include plans to introduce horizontal legislation, enhance waste management practices, improve water quality management, strengthen nature protection measures, bolster civil protection mechanisms, and address climate change challenges (Sudar, 2021).

Additionally, the Programme entails the enactment of four laws related to waste management, forest conservation, nature protection, and fire protection, accompanied by 36 bylaws addressing various aspects of environmental and climate change issues. Annex 3 provides a comprehensive list of regulatory acts enacted in Montenegro from 2016 to the beginning of 2020, juxtaposed against the backdrop of the COVID-19 pandemic and the political transformations in Montenegro following the parliamentary elections on August 30, 2020. In Montenegro, the institutional framework for environmental protection underwent significant changes until December 5, 2020, following the parliamentary elections held on August 30, 2020, resulting in the formation of a new government. The new Montenegrin government comprises 12 ministries, each with specific areas of responsibility. These ministries include the Ministry of Justice, Human and Minority Rights; Ministry of Internal Affairs; Ministry of Defence; Ministry of Finance and Social Welfare; Ministry of Foreign Affairs; Ministry of Public Administration, Digital Society, and Media; Ministry of Education, Science, Culture, and Sports; Ministry of Health; Ministry of Economic Development; Ministry of Agriculture, Forestry, and Water Management; Ministry of Ecology, Spatial Planning, and Urbanism; and Ministry of Capital Investments.

Additionally, various government bodies contribute to the administration, including the Administration for the Enforcement of Criminal Sanctions, the Police Administration, the Directorate for Protection of Classified Information, and the Nature Administration, among others. In fulfilling obligations related to Chapter 27, thirty institutions, including eight ministries, played vital roles in the previous government. These ministries included the Ministry of Sustainable Development and Tourism, Ministry of Agriculture and Rural Development, Ministry of Health, Ministry of Transport and Maritime Affairs, Ministry of Economy, Ministry of Internal Affairs, Ministry of Finance, and the Ministry of Justice, along with other relevant institutions. Furthermore, three institutions, although not part of the public administration system but majority-owned by the state, were responsible for specific segments of environmental protection.

These institutions included the Public Enterprise for National Parks, the Public Enterprise for Management of Marine Assets, and the Center for Ecotoxicological Testing. Regarding the primary institutions responsible for the transposition and implementation of environmental regulations, notable changes occurred. Initially, the Environmental Agency, established when the Strategy with AP came into force in July 2016, was primarily responsible for implementing regulations across various environmental sectors. However, the agency was abolished as an independent body in March 2017. Its original status as an independent body of state administration was reinstated in December 2018, which it maintained until the end of 2019.

The research conducted an online survey, distributed before and after the summer recess to accommodate the transition of power following parliamentary elections, aimed at assessing the effectiveness of current personnel and identifying areas for improvement in staffing and negotiation strategies within Montenegro's environmental sector. Employing diverse methodologies, the survey's analysis delved into the demographic, social, and professional backgrounds of respondents. It explored their roles within institutions, involvement in environmental negotiations, and possession of relevant skills and expertise.

## 2. Methods

In line with the objectives of this research, an online survey has been crafted for individuals currently employed in state institutions directly involved in negotiation processes. Notably, these institutions encompass the Ministry of Sustainable Development and Tourism, as well as the Agency for Nature and Environmental Protection. The survey was initially distributed to both entities, with subsequent follow-up dissemination after the summer recess. This strategic timing was selected to account for the seasonal break and the evolving political landscape following the recent parliamentary elections, which resulted in a significant transition of power after nearly three decades.

The analysis of the survey employed a diverse range of methodologies and techniques. Through this analytical process, the objective was to explore various dimensions of the state administration's soft power and personnel structure. The overarching goal was to assess whether the current cadre effectively meets both quantitative and qualitative standards. Additionally, the survey aimed to identify potential areas for improvement and inform decision-making processes related to staffing and negotiation strategies within these state institutions.

The questionnaire's structure follows a systematic progression, facilitating a comprehensive understanding of the respondents' backgrounds and perspectives. It begins with demographic and social inquiries, probing into factors such as age, gender, educational background, and professional experience. This initial section aims to establish a profile of the participants, providing context for their responses to subsequent questions. Moving forward, the questionnaire delves into institutional engagements and professional competencies. Participants are asked about their roles within state institutions and their involvement in negotiation processes related to environmental matters. Additionally, they are queried about their possession of specific skills and expertise relevant to their positions. This segment seeks to uncover insights into the institutional capacity and expertise available for addressing environmental challenges.

Finally, the questionnaire explores respondents' knowledge of environmental protection and nature conservation issues. Through targeted inquiries, participants are prompted to reflect on their understanding of key environmental concepts, legislation, and current environmental challenges facing the country. By gauging respondents' awareness and comprehension of these issues, the survey aims to assess the depth of knowledge within the state institutions tasked with environmental governance.

### 2.1. Study Area

Montenegro is politically and strategically committed to Euro-Atlantic integrations, entailing the adoption of international and European standards and norms (Djurović, 2009). Democratic currents in the developed European society and state extend to all spheres of life, with candidate countries committing to accept EU recommendations through reform processes aimed at aligning all segments of development and life with standards geared towards improving living standards and respecting principles and norms for a healthy environment and sustainable development to preserve resources for future generations. Membership in the European Union and the level of development and harmony of society are observed and monitored through chapters in the EU accession process, in which candidate countries like Montenegro participate in negotiations with the EU and undertake the following activities: a) harmonising national legislation with EU legislation; b) implementing reforms in public administration to fulfill obligations towards the EU; and c) preparing the workforce structure for implementing obligations towards the EU.

Negotiations with the EU focus on meeting specified conditions (initial positions), which create conditions for opening certain chapters. It is a political process facilitated through the above-mentioned activities, but ultimately, the state must be staffed and equipped to implement the undertaken obligations, representing the most challenging and costly part of the EU accession process. Becoming part of the democratic values of the European Union is an aspiration that promises Montenegro a path toward quality regulations, high standards of governance, economic and societal development, and improved, more successful, and sustainable protection and utilization of natural resources (Orlandić, 2016). Ultimately, this endeavor aims to provide citizens with a healthy environment and a high quality of life. In December 2011, Montenegro demonstrated its readiness to commit to intensive reform processes by applying for EU membership. This commitment signifies a dedication to joining a community where democratic decisions are made collectively, addressing challenges to

achieve a high quality and safe life for citizens and future generations. The EU legislation is divided into 35 negotiating chapters (with the last two undefined for Montenegro in the accession process). Montenegro has opened all 33 chapters, but three chapters are temporarily closed: Chapter 25 – Science and Research, Chapter 26 – Education and Culture, and Chapter 30 – External Relations (Corpădean, 2018).

The penultimate chapter is precisely Chapter 27 – Environment and Climate Change, considered the most complex in terms of human, technical, technological, and financial requirements. One of the biggest challenges in implementing the requirements of Chapter 27 is taking a sectoral approach to environmental protection and achieving sustainable development. This involves integrating environmental protection into all sectoral policies to prevent, mitigate damage, share responsibility, and maintain biological balance, along with providing necessary financial resources and administrative capacities to guide and follow the process effectively. The Ministry of Sustainable Development and Tourism, as the highest authority for Chapter 27, continually monitors the implementation of obligations from the initial stance and informs both the Government of Montenegro and the European Commission. The Ministry recognizes the importance of intersectoral cooperation and the necessary collaboration of state administration with expert and scientific institutions, civil society, the private sector, and international organizations as links to specific available funds, aiming to achieve the goals and obligations of Chapter 27 in the simplest way possible (Djurović, 2009).

The closure of Chapter 27 will largely depend on the mobilization of available EU funds and other funds in the field of environment and climate change. It also relies on the country's capacity to establish sustainable mechanisms for financing and implementing environmental protection activities, which, with clear operational frameworks, fund inflows, and project selection, will enable the resolution of certain environmental issues on one hand and efficient protection and improvement of conditions in the field of environment and climate change on the other hand.

Montenegro embarked on its reform path towards full and lasting stabilization as early as June 2005, following the Parliamentary Declaration for EU Accession. By signing the Stabilization and Association Agreement (SAA) between the European Communities and their member states, on one side, and the Republic of Montenegro, on the other, in 2007, which came into effect on May 1, 2010, Montenegro reaffirmed its commitment to democracy. In line with the achievements and goals on which the European Union was founded, Montenegro also demonstrated a strategic interest in achieving economic stability and prosperity, and complete freedom of movement for persons, capital, goods, and services, while respecting the principles of sustainable development and environmental protection.

Montenegro's accession process to the European Union, from the moment of acquiring candidate status (December 2010), through the official start of the negotiation process (June 2012), until today, has been significantly conditioned by the establishment of a governance system based on democratic principles. The EU's views are fully embraced, and the country is economically adapting to the Union's system and standards. To adopt EU principles, Montenegro must implement comprehensive reforms in 33 negotiation chapters (from the free movement of goods and capital, fisheries, transport policy, economic and monetary union, to financial and budgetary provisions – Chapters 1-33), including Chapter 27 – Environment and Climate Change, one of the toughest, most complex, expensive, and complex negotiation chapters. Environmental protection and climate change directly impact people's quality of life, and challenges arising from incorrect technological development result in instability and changes in economic systems worldwide, hence the interdependence, importance, and complexity of the given topics. Today, full respect for Chapter 27 is considered indisputable. It is recognized that the chapter itself requires a sectoral approach to environmental protection and achieving sustainable development, implying the integration of environmental protection into all other sectoral policies (Vujović & Nenezić, 2023).

## *2.2. Socio-Economic and Demographic Characteristics*

The study aims to provide a comprehensive analysis of the socio-economic and demographic characteristics of respondents, shedding light on key factors that may influence their attitudes and behaviors towards environmental protection and policy implementation. To begin with, the survey asks participants to disclose their gender, offering the options of female or male. This data has been previously collected in similar studies to gauge the level of interest and engagement in environmental conservation efforts across different gender identities. Understanding gender-specific attitudes

towards environmental issues is crucial for designing targeted interventions and policies that resonate with diverse demographic groups.

Moving on, respondents are prompted to specify their age, with choices ranging from 21 to 60 years old. This question is designed to uncover potential variations in environmental awareness and engagement among different age cohorts. By examining age-related trends, the study seeks to identify which segments of the population are most motivated to acquire the necessary skills and knowledge for promoting environmental sustainability, particularly in the context of Chapter 27 implementation. Furthermore, participants are asked to indicate their geographical region of residence, with options including the northern, central, or southern regions. This inquiry is informed by previous research highlighting regional disparities in environmental attitudes and behaviors. By capturing regional perspectives, the study aims to assess the geographical distribution of environmental concerns and priorities, thereby informing targeted policy interventions and resource allocation strategies tailored to specific geographical contexts.

Overall, by examining the interplay between gender, age, and regional dynamics, the study seeks to offer valuable insights into the socio-economic factors shaping individuals' engagement with environmental issues. Such insights are essential for crafting effective policies and initiatives that address the diverse needs and preferences of the population, ultimately contributing to more sustainable and inclusive environmental governance practices.

In addition to understanding respondents' demographic characteristics, it's crucial to delve into their educational backgrounds. Education plays a significant role in shaping individuals' perspectives and abilities to engage with environmental issues effectively. By exploring respondents' educational attainment, the study aims to uncover any correlations between the level of education and interest or involvement in environmental protection efforts. The survey provides respondents with options to indicate their level of education, which includes secondary vocational education, higher education, or ongoing education. This segmentation allows for a comprehensive analysis of the educational landscape among respondents, shedding light on the distribution of educational qualifications within the surveyed population.

Furthermore, participants are encouraged to provide detailed information about their educational journey. They are asked to specify the type of secondary school they completed, such as technical, vocational, or general education. Additionally, respondents are prompted to share details about their undergraduate studies, including the institution, degree obtained, and field of study. This granularity enables researchers to gain insights into the diversity of educational backgrounds among respondents. Moreover, the survey seeks to capture respondents' ongoing educational pursuits. Participants are allowed to disclose any additional professional development activities they have undertaken, such as courses, certified training programs, or other forms of supplementary education. This section of the survey aims to assess individuals' commitment to continuous learning and skill enhancement, which are valuable traits in the context of environmental stewardship and sustainability efforts.

By comprehensively examining respondents' educational profiles, the study aims to identify patterns and trends that may influence their attitudes and behaviors towards environmental protection. Education catalyzes raising awareness, fostering environmental literacy, and empowering individuals to become active participants in environmental conservation initiatives. Therefore, understanding the educational landscape of respondents is crucial for designing targeted interventions and educational campaigns aimed at promoting sustainable practices and behaviors. The inclusion of educational variables in the survey enriches the analysis by providing valuable insights into the relationship between education and environmental engagement. By exploring respondents' educational backgrounds, the study gains a more nuanced understanding of the factors that shape individuals' environmental attitudes and behaviors, ultimately contributing to the development of more effective strategies for promoting environmental sustainability.

### 2.3. Sample

The sample comprises 84 individuals, encompassing all proficient and capable executives or employees. Among them, 25 (29.77%) originate from the Ministry of Sustainable Development and Tourism (MoSDT), while 59 (70.23%) hail from the Agency for Nature and Environmental Protection (ANEP). These questions aim to capture the representation concerning gender, age, and the region of the participant's origin. Considering the diverse range of completed secondary schools, this ap-

proach proves to be highly relevant. Moreover, the parameter of the participant's region of origin provides crucial insights into the varying approaches to environmental issues and the distinct needs for addressing them within different regions. Given the comprehensive analysis of the state administration's conditions in this study, it becomes imperative to assess the age structure of the personnel responsible for executing all professional tasks in the negotiations for Chapter 27, irrespective of the political context of these negotiations.

The inclusion of individuals from both the Ministry of Sustainable Development and Tourism (MoSDT) and the Agency for Nature and Environmental Protection (ANEP) underscores the comprehensive representation of key stakeholders in environmental governance. By examining the demographic composition of these institutions, this study seeks to uncover patterns that may influence decision-making processes related to environmental policy formulation and implementation. Understanding the age distribution of personnel engaged in negotiations for Chapter 27 is particularly crucial as it provides insights into the generational perspectives and experiences shaping Montenegro's approach to environmental challenges. Additionally, by analyzing the regional origins of respondents, this research aims to identify potential disparities in environmental awareness, resource allocation, and policy priorities across different geographic areas within Montenegro. This holistic examination of socio-demographic characteristics within the state administration offers valuable insights for policymakers, environmental practitioners, and researchers striving to enhance environmental governance and sustainability efforts in Montenegro.

This dataset comprises responses from 84 individuals, with 55% identifying as female and 45% as male. This breakdown reveals a slightly higher representation of women in the state administration engaged in environmental protection and conservation efforts, a trend not unexpected in this field. Notably, only three respondents (3%) originate from the northern and southern regions combined, while the overwhelming majority, 83 respondents (97%), hail from the central region. Such a stark disparity suggests either a lack of regional employment tracking by governmental bodies or a limited interest among individuals in these regions to work for entities like the Ministry of Sustainable Development and Tourism (MoSDT) and the Agency for Nature and Environmental Protection (ANEP). The researcher posits that both factors likely contribute to this phenomenon, potentially stemming from inadequate employment policies in this sector.

Furthermore, there appears to be a notable imbalance in the movement of personnel within the institutions under investigation, particularly evident in the comparison between different age groups. This discrepancy suggests a direct consequence of ineffective personnel management policies. Additionally, the uneven distribution of male personnel across various age brackets exacerbates this issue. When there is a lack of incentives for employment within environmental protection institutions, it can lead to an unfavourable staff structure, resulting in diminished work quality. With insufficient staff members facing heightened pressure and workload, fatigue becomes a significant concern, especially when considering the retirement age limit.

The data clearly indicates that 60% of individuals undergoing further education are female, while 40% are male. While such a gender distribution may not inherently pose an issue, it becomes significant when considering that, according to respondents, all have completed their education. When coupled with the already unfavorable age structure among male respondents, this information paints an unfavorable picture of human resource management practices. Furthermore, the remaining employees not pursuing further education differ only in whether they followed the traditional system or the Bologna Process. The number of respondents undergoing additional training suggests that such endeavors, including courses, certified training, and other educational activities, represent added pressure and burden on employees. It's worth noting that out of the 84 respondents, 16 (19%) have no additional training, comprising two from MoSDT and 14 from ANEP. This suggests that MoSDT's extensive scope and organization require more staff involvement in further education. Conversely, ANEP's focus on implementing and enforcing legal regulations necessitates more detailed additional training. Of the remaining 68 respondents (81%), many are existing staff members participating in various forms of additional training necessary for normal functioning and completing tasks and obligations.

#### *2.4. Analyses of Environmental Governance Dynamics: A Focus on Montenegro's Key Institutions*

In the context of this study, the selection of these two pivotal institutions, the Ministry of Sustainable Development and Tourism, and the Agency for Nature and Environmental Protection holds sig-



nificant relevance. These institutions play instrumental roles in shaping Montenegro's environmental policies and spearheading initiatives aimed at addressing climate change challenges. By focusing on these entities, this research aims to shed light on the dynamics of environmental governance within Montenegro's state administration.

The Ministry of Sustainable Development and Tourism serves as a central coordinating body, responsible for overseeing the implementation of policies and measures outlined in Chapter 27 of Montenegro's accession negotiations with the European Union. This chapter encompasses a wide array of environmental issues, ranging from biodiversity conservation to waste management and climate change mitigation. By analyzing the Ministry's organizational structure, staffing patterns, and policy initiatives, researchers can gain valuable insights into the state's capacity to effectively address these complex challenges. Similarly, the Agency for Nature and Environmental Protection plays a crucial role in monitoring environmental quality, enforcing regulations, and promoting sustainable practices across various sectors. As Montenegro strives to align its environmental standards with EU norms, the agency's efforts are pivotal in ensuring compliance and fostering a culture of environmental stewardship. By examining the agency's functions, resources, and areas of focus, researchers can assess its effectiveness in safeguarding Montenegro's natural heritage and promoting sustainable development.

One of the key strengths of this research lies in its adaptability and scalability. The chosen research model, which focuses on analyzing the socio-economic and demographic characteristics of personnel within key environmental institutions, can be easily tailored to accommodate changes in the political or administrative landscape. This flexibility ensures that the research remains relevant and applicable, regardless of shifts in government or policy priorities. Moreover, the inclusivity of the research design allows for a comprehensive understanding of the workforce within these institutions. By collecting data on gender, age, education, and regional distribution, researchers can identify potential disparities or areas for improvement in workforce diversity and representation. This information is essential for fostering inclusive decision-making processes and promoting equal opportunities within the environmental sector.

Furthermore, the findings of this research are expected to have broader implications for environmental governance and policy-making in Montenegro and beyond. By documenting best practices, identifying challenges, and proposing recommendations for improvement, this study can inform future policy initiatives and strategic interventions aimed at enhancing environmental sustainability and resilience. The selection of the Ministry of Sustainable Development and Tourism and the Agency for Nature and Environmental Protection as focal points of this research reflects their critical roles in shaping Montenegro's environmental agenda. Through a comprehensive analysis of these institutions and their personnel profiles, this study aims to contribute to the ongoing discourse on environmental governance and sustainable development in Montenegro and the wider European context.



### 3. Results

The Ministry of Sustainable Development and Tourism covers various aspects concerning the protection of the environment. After gaining independence in 2006, the state, defined as an ecological state by the Constitution, and engaging in accession negotiations, developed its legislative, negotiating, and organizational capabilities for EU negotiations, which were then considered optimal and cost-effective. Organizational structures have since been variable to achieve the current form. Today, the Ministry includes directorates involved in environmental protection, either directly or indirectly. Directly involved directorates, falling under Chapter 27, encompass the Directorate for Environmental Protection, the Directorate for Waste Management and Municipal Development, and the Directorate for Climate Change and Mediterranean Affairs.

Indirectly involved directorates, not covered by Chapter 27, address areas indirectly impacting the environment. These include the Directorate for Spatial Planning, the Directorate of the Chief State Architect, the Directorate for Construction, the Directorate for Inspection Affairs and Licensing, the Directorate for Competitiveness Development and Tourism Investments, the Directorate for Tourist Destination Development and Tourism Infrastructure, the Directorate for Monitoring Tourist Flows and Tourism Traffic, the Directorate for Accommodation Development, and the Directorate for Valorization of Tourist Sites. This enumeration of Directorates illustrates the Ministry's organizational structure, assessing whether the existing organization, which may be institutionally cumbersome, has personnel sufficiently capable and qualified. Such analysis is divided into two phases: first, eval-

uating aspects such as institution, sector, job position, and years of work in the institution, and second, assessing general professional skills, types thereof, and professional areas of the examinee.

The analyzed example specifically concerns Directorates falling under Chapter 27, with a total of 25 examinees from the Ministry. According to the Law on Civil Servants (Government of Montenegro, 2018, 2019, 2021), job positions within the Ministry include the General Director of the Directorate, the Director of the Department, the Head of the Division, and Advisors from I – III ranks. It is important to note that the systematization of job positions is influenced by the organizational needs of the Ministry and the requirements for complying with legal regulations and harmonizing with EU legislation. In essence, the analyzed Directorates include the personnel mentioned above.

This presentation highlights the significant emphasis placed by Montenegro, through its Ministry responsible for Chapter 27, on specific aspects of environmental protection. The Directorate for Environmental Protection and the Directorate for Climate Change and Mediterranean Affairs receive considerably more attention than the Directorate for Waste Management and Municipal Development, as reflected in their respective staffing levels. Notably, the head of the Directorate for Waste Management and Municipal Development lacks a relevant environmental science education, instead possessing qualifications in social sciences, a noteworthy observation in itself.

It is crucial to stress the imperative of bolstering personnel within the Department for International Cooperation and European Integration, given the substantial workload demanding a larger workforce. This need is apparent in the regulations adopted during the period from 2016 to early 2020, where continuous engagement with the European Commission aimed to secure positive feedback on proposed legislation. Furthermore, the provided tables indicate a satisfactory distribution of job positions concerning additional qualifications. Regarding the age composition of Ministry examinees, there is a concerning bias toward older male candidates, averaging 45 years. While not alarming on the surface, considering the limited intake of new staff, it raises concerns. Conversely, the age profile of female candidates is slightly lower, with an influx of younger personnel, aligning with the Ministry’s goals. An additional crucial aspect for analysis is the requisite work experience for many pivotal roles within the Ministry. Drawing on questionnaire data, the years of experience within the Ministry and overall work experience of the examinees are presented in Table 1, categorized by gender.

**Table 1.** The structure of categorized personnel at the sample from the Ministry of Sustainable Development and Tourism.

Job position of the respondent	Institution							
	Ministry of Sustainable Development and Tourism (MoSDT)							
	Directorate for Environment		Directorate for Waste Management and Municipal Development		Directorate for Climate Change and Mediterranean Affairs		Department for International Cooperation and European Integration	
	Female	Male	Female	Male	Female	Male	Female	Male
Head of Directorate	1	0	0	0	0	0	1	0
Senior Advisor	1	0	1	0	1	0	0	0
Independent Advisor	2	1	0	0	0	2	0	0
Independent Advisor I	1	0	2	2	1	0	2	0
Independent Advisor II	2	0	0	0	0	0	1	0
Independent Advisor III	1	1	1	0	0	0	0	1
Towards the director	8	2	4	2	2	2	4	1
Towards the director	10		6		4		5	

This presentation sheds light on the considerable emphasis that Montenegro places on specific aspects of environmental protection through its Ministry tasked with Chapter 27. The Directorate for Environmental Protection and the Directorate for Climate Change and Mediterranean Affairs hold considerably higher importance than the Directorate for Waste Management and Municipal Development, as evidenced by their respective staffing levels. Notably, the Directorate for Waste Management and Municipal Development lacks a head with pertinent environmental science education, relying instead on personnel with backgrounds in social sciences. This observation carries significant weight on its own.

It is imperative to underscore the necessity for bolstering personnel within the Department for International Cooperation and European Integration, given the substantial workload in this domain demanding a larger workforce. Moreover, the continuous engagement with the European Commission, as evidenced by adopted regulations (Annex 3) spanning from 2016 to early 2020, illustrates a commitment to obtaining positive feedback on proposed measures. Furthermore, the distribution of job positions vis-à-vis additional qualifications data (Tables No. 33 and 34) appears to be adequate based on this analysis.

Regarding the age composition of examinees from the Ministry of Sustainable Development and Tourism (MoSDT), it's crucial to note the unfavorable conditions for male candidates, whose average age stands at 45 years. While this might not set off immediate alarms, the absence of fresh talent entering the workforce poses a genuine concern. On the other hand, the age structure of female candidates shows a slight decrease, suggesting an influx of younger professionals—a trend that MoSDT should actively encourage.

Another crucial aspect to consider in this analysis is the level of work experience necessary for various key roles within the Ministry of Sustainable Development and Tourism (MoSDT). Using data obtained from questionnaires, the work experience of individuals within MoSDT has been evaluated in terms of years, encompassing their overall professional background. This information is presented in Table 2, which categorizes both types of work experience based on gender.

**Table 2.** Years of Work Experience of Personnel from the Sample of Ministry of Sustainable Development and Tourism (MoSDT)

Gender	Work experience	
	Ministry of Sustainable Development and Tourism	Total
Female	147, 6	289
Male	31	86
Total	178, 6	375

The data presented here were gathered by simply aggregating the work experience of the examinees. The table delineates several key points: Female personnel contribute 51% of the total work experience in MoSDT, whereas male personnel contribute 36%. Combined, both genders contribute 47% of the total work experience. The average work experience in MoSDT for both genders is 7.14 years.

A comparable analysis was conducted for the Environmental Protection Agency, involving a sample of 59 examinees. It's worth noting that the job classification within the Agency differs from that of MoSDT. Instead of directorates, the Agency is organized into sectors and departments, with a reduced number of standardized job positions for chiefs and managers. The Agency encompasses various sectors and departments, including Monitoring, Analysis, and Reporting; Nature Protection; Permitting and Consent Issuance; Aarhus Convention Implementation and Pollution Inventory Management; Nuclear and Radiological Safety, and Environmental Projects.

**Table 3.** The organizational and comprehensive structure, as well as the distribution of job positions across sectors and departments in the Environmental Protection Agency (EPA) sample.

The job position of the respondent within the institution	Name of the institution											
	Agency for Nature and Environmental Protection (ANEP)											
	Monitoring, Analysis, and Reporting Sector		Nature Protection Sector		Environmental Projects Department		Sector for Sectoral Issuance and Consents		Implementation and Polluter Registry Management Sector		Department for Nuclear and Radiological Safety and Protection	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Senior Advisors	0	0	1	0	1	0	0	0	0	0	1	2
Indep. Advisors	2	0	1	2	1	1	0	0	0	1	0	2
Advisor I	2	1	2	1	3	5	2	1	0	2	0	2
Advisor II	0	2	1	1	2	0	2	0	1	2	0	2
Advisor III	0	3	0	2	1	2	2	0	0	0	0	0
Total by Gender	4	6	5	6	8	8	6	1	1	5	1	8
Total by Sector	10		11		16		7		6		9	

This table presents the primary focus of activities within the Environmental Protection Agency. Examining the Agency’s initiatives, the table distinctly indicates a significant emphasis on the Monitoring Sector, Nature Protection Sector, and Permitting Sector. Particularly noteworthy is the active involvement of the Permitting Sector, which is tasked with handling the myriad decisions, permits, consents, and opinions required for private activities. Additionally, the Monitoring, Analysis, and Reporting Sector is poised to see increased involvement, as its outcomes will gauge the alignment of planned economic activities with Montenegro’s signed and internationally binding agreements, declarations, directives, and conventions. Furthermore, there’s a conspicuous indication of the necessity for personnel engagement in sectors like the Implementation of the Aarhus Convention, Nuclear and Radiological Safety, Protection from Ionizing and Non-Ionizing Radiation, and Environmental Projects. The operational dynamics of the Agency are contingent upon the evolving dynamics, needs, and negotiations related to Chapter 27, as well as the forthcoming demands of Montenegro’s society and the financial capacities of the state.

In the Environmental Protection Agency, the majority of job positions are filled with profiles delineated by the job classification. Presently, the age composition within the Agency is marginally more favorable compared to that of MoSDT, although this scenario is expected to undergo significant changes upon the imminent relaxation of the restrictive employment policy. Echoing the scenario at the Ministry of Sustainable Development and Tourism, the aspect of work experience assumes paramount importance here, given the substantial responsibilities associated with the Agency’s endeavors. Table 4 provides a breakdown of the examinees’ work experience in terms of years within the Agency, along with their cumulative work experience.

**Table 4.** Work Experience of Personnel Sample from the Agency for Nature and Environmental Protection (ANEP).

Gender	Work Experience: Agency for Nature and Environmental Protection (ANEP)	Total
Female	226	321
Male	272	384,5
Total	498	705,5

The data presented in this report was collected by compiling the work experience of the respondents. This data offers insights into several key aspects: among female personnel, the work experience within the Agency for Environmental Protection accounts for 70% of their total work experience. For male personnel, this figure is slightly higher at 71%. Overall, the Agency for Environmental Protection contributes 70% to the total work experience for both genders. Additionally, the average work experience in the Agency for Nature and Environmental Protection is approximately 12 years.

In the course of analyzing this dataset, it became essential to determine the respondents’ possession of general professional skills. These skills encompass proficiency in areas such as computer literacy, foreign language usage, communication, and case/data analysis. Regarding the possession of general professional skills, the responses were as follows: 75 respondents (89%) affirmed possessing these skills, while 6 respondents (8%) indicated they did not. Additionally, 3 respondents (3%) did not respond.

Those respondents who indicated a lack of general professional skills are typically individuals nearing the end of their careers, where interest in further professional development tends to wane. For those who did not respond, their absence from the analysis does not significantly affect the overall findings, given their small representation in the sample.

An area of concern arises when examining the level of computer literacy within the context of this analysis. Given the pivotal role of the two main institutions in negotiating Chapter 27, responsible for aligning legislation with EU regulations and implementing environmental changes, one would expect a high level of computer literacy. Considering the respondents’ extensive work experience, prompts the question of whether these institutions have adequately invested in enhancing the computer literacy of their staff. Table 5 illustrates the situation in both the Ministry of Sustainable Development and Tourism and the Agency for Nature and Environmental Protection.

**Table 5.** Computer literacy according to the gender of the personnel from the sample of the Ministry of Sustainable Development and Tourism (MoSDT) and the Agency for Nature and Environmental Protection (ANEP).

Level of computer literacy	Institution			
	Ministry of Sustainable Development		Tourism Agency for Nature and Environmental Protection	
	Female	Male	Female	Male
None	0	1	11	19
Basic	0	0	3	2
Intermediate	3	2	0	3
Advanced	11	1	11	4
Expert	6	1	3	3
Total by gender	20	5	28	31
Total by institution	25		59	
Total for the sample	84			

Foreign language proficiency, alongside a deep understanding of information technology, is crucial for all state institutions. As Montenegro progresses towards EU accession and engages in international cooperation, the demand for such skills intensifies. While this analysis primarily focuses on European languages, it acknowledges the importance of proficiency in languages from other regions as well. The proficiency levels considered are basic, intermediate, advanced, and expert. Within the Ministry of Sustainable Development and Tourism (MoSDT), English proficiency is notably high. Although efforts to learn other foreign languages exist, they are primarily driven by individual initiatives rather than continuous organizational endeavors. However, due to the aging workforce, there's a concern that proficiency levels may decline, highlighting the need for a fresh influx of young personnel proficient in foreign languages.

In contrast, the Agency for Nature and Environmental Protection exhibits pronounced English language proficiency among its staff. As negotiations for Chapter 27 progress, a heightened demand for professional-level English proficiency is anticipated. The logical progression from this analysis is an exploration of communication skills, a crucial aspect of personal development for respondents. Communication skills are influenced not only by professional abilities but also by general education, cultural awareness, and technological acumen. Table 6 illustrates the level of communication skills within both the Ministry of Sustainable Development and Tourism and the Agency for Nature and Environmental Protection, categorized by level and gender structure.

**Table 6.** Communication Skills Level by Gender in the Sample of the Ministry of Sustainable Development and Tourism (MoSDT) and the Agency for Nature and Environmental Protection (ANEP).

Level of communication skills	Institution			
	Ministry of Sustainable Development		Tourism Agency for Nature and Environmental Protection	
	Female	Male	Female	Male
None	0	0	4	5
Basic	0	0	2	2
Intermediate	4	3	5	14
Advanced	11	1	12	9
Expert	5	1	2	4
Total by gender	20	5	25	34
Total by institution	25		59	
Total for the sample	84			

Concerning proficiency in communication skills, it is noteworthy that both institutions commonly demonstrate an advanced level of competence. Additionally, within the Agency for Nature and Environmental Protection, there is a significant representation of intermediate proficiency, indicating the potential for further enhancement in this aspect. However, this distribution is expected to

undergo a change and decline in the Ministry of Sustainable Development and Tourism due to its unfavorable age structure. Therefore, it becomes evident that there is a necessity to foster personnel with even higher levels of communication skills, or to implement a rigorous process of enhancement within these institutions to equip the staff adequately for effectively managing the demanding tasks inherent in the negotiation proceedings for Chapter 27.

The negotiation process concerning this chapter entails an adaptation endeavor aimed at optimally aligning all EU legal regulations, international conventions, agreements, declarations, directives, and positive environmental experiences within the EU legislative framework. To execute these endeavors most efficiently, a multitude of comparative analyses involving cases, data, and various information sources is imperative. Particularly noteworthy is the analytical acumen of individuals, which emerges as a crucial skill for these undertakings. This analytical overview should ascertain whether other state institutions should be incorporated within their respective domains. Table 7 delineates the level of analytical prowess within institutions, a category not quantified conventionally but rather emerging from factors such as expertise quality, structural continuity, experience, observational acuity, and inclination towards further research. Consequently, data of the level of analysis inherently bear a subjective nature, and their extent of articulation will be elucidated in the ensuing table (Table 7).

**Table 7.** Level of Analytical Proficiency According to Gender in the Sample from the Ministry of Sustainable Development and Tourism (MoSDT) and the Agency for Nature and Environmental Protection (ANEP)

Analysis level	Institution			
	Ministry of Sustainable Development		Tourism Agency for Nature and Environmental Protection	
	Female	Male	Female	Male
None	0	0	6	7
Basic	0	0	0	2
Intermediate	3	2	2	11
Advanced	13	3	14	11
Expert	4	0	3	3
Total by gender	20	5	25	34
Total by institution	25		59	
Total for the sample	84			

The data presented in the table underscores a notable presence of advanced proficiency levels within both institutions, suggesting promising potential for advancement, especially in specialized areas. The analytical depth within these specialized domains holds particular significance for disciplines within the environmental sector. Notably, a concerning proportion of personnel within the Agency for Nature and Environmental Protection—specifically, 13 respondents (38%)—demonstrate a lack of analytical proficiency. All of these individuals are affiliated with the sector responsible for permit issuance and approvals. This deficiency may stem from the sector’s administrative nature and the inherent complexities of the tasks involved. However, it’s imperative to recognize that such roles demand a level of analytical acumen, regardless of administrative functions.

In the context of negotiations for Chapter 27, Montenegro must enlist personnel who possess both quality and quantity to effectively execute all planned tasks and activities. These negotiations necessitate the collective contribution of advanced professional skills to ensure seamless organization, coordination, and synergy among all stakeholders, all aimed at achieving timely negotiation success. Outlined among the requisite advanced professional skills essential for leadership roles within these institutions/organizations are proficiency in leadership, expertise in management, consultancy/management skills, aptitude in scientific proficiency, and other pertinent capabilities.

Table 8 illustrates the extent to which respondents possess advanced professional skills. In both institutions, consultancy emerges as the predominant skill, as indicated by most respondents. Furthermore, a slight bias towards male personnel is observed in terms of leadership roles, while female staff exhibit a notable advantage in scientific professional skills. Notably, leadership positions display gender parity.

It is essential to underscore that respondents' answers might be influenced by their current roles, heightening subjectivity. Advanced professional skills, including scientific expertise, are influenced by personal motivation for development, transcending one's current administrative role. This principle extends to all skill sets. It's noteworthy that our administration lacks a distinct "manager" category, explaining the absence of responses in that regard. The responsibility for such gaps primarily lies with personnel policies and the financial backing of institutions, which rely solely on state funding. Additionally, it's imperative to analyze the distribution of personnel by their professional domains, aligning with Chapter 27's mandates. This strategic approach aims to identify areas of advancement and potential shortcomings within negotiation parameters (Table 8).

**Table 8.** Ownership of professional skills among the sample from the Ministry of Sustainable Development and Tourism (MoSDT) and the Agency for Nature and Environmental Protection (ANEP).

Type of Competence	Institution			
	Ministry of Sustainable Development		Tourism Agency for Nature and Environmental Protection	
	Female	Male	Female	Male
Leadership	1	0	1	3
Management	2	0	0	2
Counselling	13	5	2	28
Scientific professional skills	4	0	4	1
Other	0	0	0	0
Total by gender	20		5	
Total by institution			84	

Table 9 offers a comprehensive insight into Montenegro's active participation in negotiating Chapter 27. It's evident that both the Ministry of Sustainable Development and Tourism and the Agency for Nature and Environmental Protection played pivotal roles in shaping horizontal legislation, leveraging their existing capacities to the fullest. As the development of horizontal legislation progressed, activities in the realm of nature protection saw a significant boost, leading to a notable surge in personnel dedicated to this area. It's imperative to highlight that the current workforce addressing climate change falls short of Montenegro's needs, considering the urgent global nature of this issue. Similarly, while personnel responsible for air quality, water quality, and waste management are reasonably distributed across institutions, there's a consensus among researchers that the overall allocation remains insufficient.

**Table 9.** Representation of personnel by field with total work experience by field in the sample from the Ministry of Sustainable Development and Tourism and the Agency for Nature and Environmental Protection.

Area	Institutions					
	Ministry of Sustainable Development			Tourism Agency for Nature and Environmental Protection		
	Female	Male	Experience	Female	Male	Experience
Horizontal Legislation	3	1	30	4	7	56
Water Quality	2	1	21,5	1	3	19
Air Quality	2	0	25	3	2	28
Waste Management	1	2	23	2	1	15
Nature Protection	5	0	46	6	5	92
Industrial Pollution	1	0	2	3	5	63
Chemicals	1	0	4	2	2	34
Noise	2	0	26	2	3	51
Civil Protection	0	0	0	1	0	18
Climate Change	1	0	4	1	2	15
Other	2	1	13	0	4	28
Total by Gender	20	5	194,5	25	34	419
Total by Institution	194,5			419		
Total for the Sample				Experience 613,5		

The issue of industrial pollution unveils a discrepancy between the Ministry of Sustainable Development and Tourism and the Agency for Nature and Environmental Protection. With the Agency boasting personnel with a combined work experience of 63 years, doubts arise regarding the adequacy of a single industrial pollution advisor in the Ministry. This concern extends to personnel specializing in chemicals.

Civil protection, however, falls under the jurisdiction of another ministry—the Ministry of Internal Affairs of Montenegro—and wasn't included in this investigation. In the miscellaneous category, the majority of personnel are affiliated with the Agency for Nature and Environmental Protection, particularly in nuclear and radiological safety, ionizing and non-ionizing radiation protection, and environmental projects. On average, employees at the Ministry of Sustainable Development and Tourism boast 7.78 years of work experience, slightly higher than the 7.03 years seen at the Agency. This culminates in an overall sample average of 7.30 years, underscoring the depth of expertise within Montenegro's environmental institutions.

The competencies of the staff mainly revolve around crafting legislative regulations, irrespective of their assigned tasks within their respective institutions. This trend is reflected in Table 10, which illustrates the connection between professional fields and the competencies of the respondents.

**Table 10.** Display of Competencies by Field for the Ministry of Sustainable Development and Tourism and the Agency for Nature and Environmental Protection.

Type of Competence	Institution			
	Ministry of Sustainable Development		Tourism Agency for Nature and Environmental Protection	
	Female	Male	Female	Male
Strategic devel. documents	3	0	1	1
Conducting studies	2	0	0	6
Planning documentation	6	0	5	9
Formulation of legal	3	3	7	9
Development of policies	3	1	7	3
International cooperation	3	1	5	6
Total by gender	20	5	25	34
Total for the institution	25		39	
Total	84			

As indicated by table 10, the earlier observation remains valid, with 22 respondents or 26% actively participating in this aspect. Following the establishment of legal regulations, the primary focus of personnel shifted towards crafting planning documentation, involving 20 respondents or 24%. Noteworthy is the significant role played by policy development in this framework, ranking third in involvement with 17 respondents or 20%. There is a noticeable activity in promoting international cooperation within specific areas of Chapter 27, with 15 respondents or 18% actively engaged. Conversely, minimal participation of personnel is evident in conducting studies, formulating strategic development documents, and various specialized studies. The negotiation process for Chapter 27 will inevitably require heightened personnel involvement, both broadly and especially in this domain. In summary, Montenegro faces the formidable challenge of appointing adequate personnel.

Moving on to address another set of inquiries, we aim to gather the following insights: which competencies are most conducive to the transposition and implementation of Chapter 27?; do current educational programs effectively nurture the essential competencies needed for Chapter 27's transposition and implementation?; what are the two competency areas that should be incorporated into higher education? This segment of the analysis pertains to the entire sample, ensuring a comprehensive understanding of the matter. In Table 11, the attitude of personnel towards which competencies contribute most to the transposition and implementation of Chapter 27 is depicted, with a breakdown of tasks.



**Table 11.** Competencies that contribute most to the transposition and implementation of Chapter 27 – the perspective of respondents from the Ministry of Sustainable Development and the Tourism Agency for Nature and Environmental Protection by gender.

Type of competence	Gender	
	Female	Male
Development of strategic development documents	19	10
Preparation of studies	4	4
Development/familiarity with spatial planning documents	0	0
Development/familiarity with legal regulations	1	2
Development/familiarity with policies	19	14
Knowledge of global and/or EU development policies, etc.	3	8
Other	0	0
Total by gender	46	38
Total for the sample	84	

The data from the table indicates that 29 individuals, comprising 34% of the sample, hold the view that expertise in crafting strategic development documents stands as the most impactful in facilitating the transposition and execution of Chapter 27. This prompts a logical inquiry: if such a viewpoint prevails, why is there such limited involvement of personnel in this aspect of strategic development? Conversely, the predominant perspective among respondents is that policies, as recognized by 33 individuals or 39%, hold the greatest potential for facilitating Chapter 27's transposition and execution. Meanwhile, 11 respondents, or 13%, assert that familiarity with global or European development policies holds the greatest promise. Only a minor proportion, 8 respondents, or 9%, regard proficiency in conducting studies as significant, whereas merely 3 respondents, or 5%, recognize the importance of crafting planning regulations.

Moving forward in the analysis, we delve into respondents' perceptions regarding whether existing higher education or study programs effectively cultivate the requisite competencies for executing Chapter 27. Of the total respondent pool, 52 individuals, constituting 62%, expressed a negative sentiment, whereas 32 respondents, or 38%, affirmed the notion. Among those with negative sentiments, female respondents predominate with 62%, in contrast to male respondents at 38%, with 61% of females and 39% of males expressing scepticism. Conversely, in the affirmative responses, female participation stands at 44%, whereas male participation reaches 56%.

Of the total 32 respondents who provided affirmative responses, 16 individuals (50%) elaborated on their viewpoint. According to their perspective, the Faculty of Natural Sciences and Mathematics (44%) at the University of Podgorica emerges as the most influential, followed by the Faculty of Mechanical Engineering (19%) at the same institution, then the Faculty of Civil Engineering (12%), and lastly, Social Sciences (25%). These findings suggest a natural distribution, with respondents primarily valuing specialized personnel in environmental protection and the institutional fortification of the state. Respondents highlight the significance of economics, legal studies, and European studies in fostering competency development, both in the negotiation phase and in building skills for implementing Chapter 27.

Upon concluding the analysis of this questionnaire section, it becomes imperative to identify the two competency areas that should be integrated into higher education. This inquiry closely correlates with the previous one and serves as a validation of the responses from the preceding question. Respondents emphasize that the current educational system falls short in nurturing the competencies necessary for transposing and implementing Chapter 27. Hence, the suggestion made by respondents, advocating for the incorporation of knowledge about global or European development policies (38%) and the creation of strategic development documents (31%) into higher education, appears highly rational.

This instance underscores the more rapid progress of negotiations for Chapter 27 compared to the alignment of organizational and personnel structures with the demands of this intricate and financially demanding process. Consequently, the relevant institutions within the country must bolster their personnel, and legal regulations should closely adhere to European standards, necessitating a greater number of personnel. Such efforts will ensure the harmonization of all components outlined in the negotiation criteria for Chapter 27.

3.1. Familiarity with environmental protection and biodiversity issues

In the initial set of questions, respondents were tasked with selecting, based on their own opinions and experiences, the most significant area from the perspective of their initial positions. Montenegro, amidst its European integration efforts and negotiation processes about chapters, adopts documents aimed at facilitating the successful implementation of European legislation. This is achieved through the development of its organizational and personnel structure and the synchronization of necessary elements for negotiations regarding Chapter 27. To analyze this set of questions effectively, it is imperative to refer to documents that delineate the state’s stance on issues related to environmental protection and biodiversity. Specifically, these documents include the Strategy for the Development of Higher Education in Montenegro (2016 - 2020) and the Action Plan for Fulfilling the Final Positions of Chapter 27 - Environment and Climate Change. Table 12 presents a breakdown of respondents’ answers based on their respective institutions.

**Table 12.** The most notable aspect of Chapter 27 regarding initial positions - perspectives of the sample from the Ministry of Sustainable Development and Tourism and the Agency for Nature and Environmental Protection categorized by gender.

Area	Institution			
	Ministry of Sustainable Development		Tourism Agency for Nature and Environmental Protection	
	Female	Male	Female	Male
Horizontal legislation	1	0	6	4
Water quality	2	0	1	2
Air quality	1	0	4	3
Waste management	8	4	4	13
Nature protection	6	0	9	4
Industrial pollution	0	0	2	1
Chemicals	0	1	0	1
Noise	0	0	0	1
Civil protection	0	0	0	/
Climate change	2	0	0	4
Total by gender	20	5	26	33
Total for the institution	25		59	

From the viewpoint of the most significant areas concerning initial stances, waste management takes the lead (37%), followed by environmental protection (23%), horizontal legislation (13%), air quality (10%), climate change (7%), water quality (5%), industrial pollution (3%), and chemicals (2%). When reviewing the previous table, three notable indicators come to light: a substantial gap exists in the perceived importance of horizontal legislation among respondents’ initial stances. This discrepancy is particularly striking since more respondents from the Agency for Nature and Environmental Protection prioritize horizontal legislation. The Action Plan for fulfilling the closing positions of Chapter 27 - Environment and Climate Change underscores Montenegro’s continued alignment with horizontal directives, signalling readiness to ensure their effective implementation upon accession. It’s intriguing why such dominance of opinion is not evident in the Ministry of Sustainable Development and Tourism. Respondents from the Agency for Nature and Environmental Protection conclude their work on regulation application and monitoring, asserting that the development of horizontal legislation thus far contributes to smoother and more effective implementation (Table 12).

The nearly identical stance of respondents from both institutions concerning waste management (34%) is noteworthy, indicating careful deliberation on this matter. This uniformity suggests a consistent approach to the initial stances outlined in the aforementioned documents, notably through: formulating and presenting waste management plans encompassing all waste streams (including hazardous, construction and demolition, and industrial waste) and corresponding management strategies; establishing regulations for accumulated “historic” hazardous waste, advancing in the characterization and categorization of hazardous waste in industry sectors; ensuring and labeling storage sites for hazardous waste; compiling a registry of polluters; undertaking initiatives to promote prevention of industrial waste and ensure environmentally responsible disposal; offering increased guidance on constructing recycling facilities for construction and demolition waste (Table

12). In this context, it is crucial to enact all forms of planning documentation, enhance personnel capacity-building processes, execute planning initiatives, oversee implementation, and provide more comprehensive public information. Table 13 displays the areas of Chapter 27 with the most complex closing positions.

**Table 13.** The domains within Chapter 27 present the most intricate final positions - viewpoints provided by respondents from the Ministry of Sustainable Development and Tourism and the Agency for Nature and Environmental Protection categorized by gender.

Area	Institution			
	Ministry of Sustainable Development		Tourism Agency for Nature and Environmental Protection	
	Female	Male	Female	Male
Horizontal legislation	0	0	2	4
Water quality	0	0	2	3
Air quality	1	0	1	2
Waste management	14	0	8	11
Nature protection	3	1	7	3
Industrial pollution	2	0	4	4
Chemicals	0	1	1	1
Noise	0	0	0	0
Civil protection	0	0	0	0
Climate change	0	2	1	5
Total by gender	20	5	26	33
Total for the institution	25		59	

Respondents from both institutions indicate that waste management is the most intricate area, accounting for 40% of responses. Subsequently, the environmental sector follows in complexity, with 18%, while climate change and industrial pollution each garnered 10%. Horizontal legislation, water quality, air quality, and chemicals make up the remaining percentages, at 7%, 6%, 5%, and 4%, respectively. In December 2018, the International Conference on Environment and Climate Change convened in Brussels, culminating in the EU's Common Position, which outlines the final criteria for closing Chapter 27. This stance likely influenced respondents in shaping their answers to this query.

Upon scrutinizing the two tables, it's evident that respondents converge on waste management and environmental protection as the most significant and intricate domains. Furthermore, respondents express near consensus on noise and civil protection as equally significant and complex areas. Notably, respondents from the Ministry of Sustainable Development and Tourism don't regard horizontal legislation as significant or complex, signaling a distinctive viewpoint. Concerning the question of the most financially complex area for closing Chapter 27, respondents' answers closely mirror their assessments of certain areas' significance and complexity. The responses regarding financial complexity by areas and institutions for Chapter 27, according to gender, are outlined in Table 14.

**Table 14.** Financial complexity by areas and institutions for Chapter 27, according to gender provided by respondents from the Ministry of Sustainable Development and Tourism and the Agency for Nature and Environmental Protection.

Area	Institution			
	Ministry of Sustainable Development		Tourism Agency for Nature and Environmental Protection	
	Female	Male	Female	Male
Horizontal legislation	0	1	2	2
Water quality	2	0	1	0
Air quality	0	0	0	3
Waste management	16	3	14	12
Nature protection	0	1	4	2
Industrial pollution	2	0	4	9
Chemicals	0	0	1	1
Noise	0	0	0	1

Civil protection	0	0	0	1
Climate change	0	0	0	2
Total by gender	20	5	26	33
Total for the institution	25		59	

According to the consensus of respondents (54%), waste management emerges as the sector requiring the greatest financial allocation. A segment of the Action Plan aimed at achieving the prescribed milestones within Chapter 27 - Environment and Climate Change delineates explicit procedures concerning the actions necessary to meet the commitments outlined in the plan. It includes delineating the methodologies for executing the designated areas by the pertinent institutions overseeing their implementation, specifying deadlines for the completion of these actions, and identifying funding sources along with an assessment of the necessary financial resources for executing the defined initiatives.

Table 15 presents the distribution of respondents' answers to the question: for which area of Chapter 27 in Montenegro are competencies lacking? A total of 78 responses, constituting 93% of the sample, were deemed valid, while 2 respondents, representing 3%, abstained from responding. Additionally, 4 responses, making up 4% of the total, were considered invalid. Remarkably, none of the participants offered justifications for their selection of the competency-deficient domain. Nevertheless, preliminary data suggests that deficiencies in competencies are evident in the realms of civil protection and climate change, particularly noteworthy given the minimal interest shown by respondents in civil protection during the earlier stages of analysis.

**Table 15.** Chapter 27 areas where competencies are deficient - viewpoint of respondents from the Ministry of Sustainable Development and Tourism and the Agency for Nature and Environmental Protection categorized by gender.

Area	Institution			
	Ministry of Sustainable Development		Tourism Agency for Nature and Environmental Protection	
	Female	Male	Female	Male
Horizontal legislation	1	0	5	5
Water quality	2	0	1	0
Air quality	/	0	0	3
Waste management	6	0	4	5
Nature protection	0	1	1	0
Industrial pollution	0	0	6	2
Chemicals	1	0	1	4
Noise	0	1	1	1
Civil protection	0	1	4	8
Climate change	6	2	3	3
Total by gender	16	5	26	31
Total for the institution	21		57	

The domain garnering the highest consensus regarding competency deficiencies is waste management, with 15 respondents expressing such concerns, followed by climate change (14), civil protection (13), and horizontal legislation (11). Worth noting is that out of the 11 responses of horizontal legislation, 10 originated from respondents affiliated with the Agency for Nature and Environmental Protection. It is imperative to underscore the significance of the findings regarding water quality, where a mere 3% of respondents perceive competency deficiencies. Similarly, the data concerning air quality is notable, with only 3% of respondents indicating such deficiencies.

Table 16 illustrates the distribution of responses to the following question: In which area is the need for capacity strengthening in terms of transposition the most significant? From the entire respondent pool, 86% contributed answers, with the Ministry of Sustainable Development and Tourism predominating over the Agency for Nature and Environmental Protection. Notably, 14% of respondents abstained from answering this particular question. Upon scrutinizing the responses from both Table 15 and Table 16, given the similarity of inquiries, several insights emerge. In the realm of horizontal legislation, no substantial disparities are evident, indicating a unified standpoint among

respondents in this regard. Concerning water quality, a minor fraction of respondents highlighted capacity deficiencies, while a significantly larger segment identified the imperative for capacity enhancement. Although deficiencies in air quality capacities were acknowledged, the urgency for fortification was not as pronounced. Conversely, a favourable trend towards bolstering capacities is discernible in waste management, despite previous observations of inadequacies. While there's a slight shortfall in capacities for nature protection, the demand for enhancement remains substantial. A parallel scenario is observed in industrial pollution.

**Table 16.** Enhancing Capacity Needs in Chapter 27: Perspectives of Respondents from the Ministry of Sustainable Development and Tourism and the Agency for Nature and Environmental Protection by Gender.

Area	Institution			
	Ministry of Sustainable Development		Tourism Agency for Nature and Environmental Protection	
	Female	Male	Female	Male
Horizontal legislation	/	/	4	4
Water quality	2	/	1	3
Air quality	/	/	/	/
Waste management	8	3	5	10
Nature protection	2	/	6	1
Industrial pollution	/	/	1	1
Chemicals	/	/	1	1
Noise	/	/	1	1
Civil protection	/	/	/	3
Climate change	6	1	5	2
Total by gender	18	4	24	26
Total by institution	22		50	

Although deficits in chemical capacities were noted, the current requirements for reinforcement are deemed realistic, given the notable decline in industrial and metallurgical activities. The issue of noise demonstrates a harmonized equilibrium between capacity insufficiency and necessity. However, civil protection presents a complex scenario: while a minority of respondents recognized capacity shortages, a significant majority underscored the necessity for them. Notably, this area wasn't thoroughly examined before these queries, but its subsequent emergence underscores its significance. This underscores an overarching issue of inadequacy in this domain, spanning from legislative frameworks to problem-solving strategies, interlinked with other areas such as noise, chemicals, and industrial pollution. Likewise, climate change, akin to noise, exhibits a balanced equilibrium between capacity insufficiency and necessity.

Concluding this analysis, there arises a requisite to categorize areas based on their imperative for capacity reinforcement in implementation. This necessitates a succinct synthesis grounded in accurately collected data. However, owing to the diverse range of responses, this analysis mandates reliance on average values. Essentially, scores will be aggregated for each area, as per the questionnaire, and then normalized by the number of respondents in the sample. The grading outcomes are detailed in Table 17.

**Table 17.** Enhancing Capacity Importance Across Chapter 27: Insights from Ministry of Sustainable Development and Tourism and Agency for Nature and Environmental Protection Sample.

Area	Graduated value
Horizontal legislation	Fifth (5)
Water quality	Sixth (6)
Air quality	Fifth (5)
Waste management	Seventh (7)
Nature protection	Seventh (7)
Industrial pollution	Sixth (6)
Chemicals	Sixth (6)

Noise	Fifth (5)
Civil protection	Sixth (6)
Climate change	Sixth (6)

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This table indicates that the most significant requirements for enhancing capacity lie within waste management and environmental protection, whereas the least are evident in horizontal legislation, air quality, and noise. Across all sub-areas, there is a general need for capacity strengthening concerning implementation within this chapter. Addressing the personnel shortage can be achieved through effective employment planning strategies, necessitating sufficient financial backing from both domestic channels and EU funds.

#### 4. Discussion

In the discussion of the research findings, we thoroughly examined key insights and implications to better understand the challenges and potential pathways forward regarding Montenegro's accession to the European Union in the environmental sector. We meticulously analyzed data on personnel capacities, expertise, and institutional capabilities, highlighting shortcomings and opportunities for enhancement in Montenegro. This discussion provided deeper insights into important aspects such as personnel management, skill development, and institutional capacity-building, underscored key research findings, and identified guidelines for future actions and policies in the environmental sector.

The comprehensive analysis of the research findings underscores several crucial insights into Montenegro's environmental sector and its journey towards EU accession, particularly focusing on the Ministry of Sustainable Development and Tourism (MoSDT) and the Agency for Nature and Environmental Protection (ANEP). One of the key takeaways from the study is the pressing need to reinforce personnel (V. Cvetković, A. Dragašević, et al., 2021; V. Cvetković, Nikolić, & Lukić, 2024; V. Cvetković, Nikolić, Nenadić, Ocal, & Zečević, 2020; V. M. Cvetković et al., 2021; G. Grozdanić, V. M. Cvetković, T. Lukić, & A. Ivanov, 2024; Raj, Nelson, & Rao, 2006; Shubsachs, Rounds Jr, Dawis, & Lofquist, 1978; Stajkovic & Luthans, 2003; Wei & Yazdanifard, 2014). Within the Department for International Cooperation and European Integration, considering the substantial workload associated with negotiation processes (Gomes, Oliveira, Carneiro, Novais, & Neves, 2014; Stuhlmacher, Gillespie, & Champagne, 1998). The analysis of regulations adopted between 2016 and early 2020 highlights the continuous engagement with the European Commission to secure positive feedback on proposed legislation.

The distribution of job positions concerning additional qualifications (Binici, 2021; Dafou, 2009; Decorte, Van Haute, Demeester, & Develder, 2021) appears satisfactory, indicating a balanced approach to personnel allocation (Grawitch, Barber, & Justice, 2010; Karsu & Erkan, 2020; Shi & Li, 2021). However, there are notable concerns regarding the age composition of MoSDT examinees, with an evident bias towards older male candidates, potentially hindering the infusion of fresh talent into the workforce (Batinovic, Howe, Sinclair, & Carlsson, 2023; N. Ruggs, R. Hebl, Singletary Walker, & Fa-Kaji, 2014). The study also sheds light on the requisite work experience for pivotal roles within MoSDT, revealing insights into the Ministry's emphasis on specific aspects of environmental protection, notably through its directorates. Notably, the lack of a head with pertinent environmental science education within the Directorate for Waste Management and Municipal Development raises concerns about expertise alignment (Abd Manaf, Samah, & Zukki, 2009; Corburn, 2007; V. Cvetković, Öcal, & Ivanov, 2019; V. Cvetković, Roder, Öcal, Tarolli, & Dragičević, 2018; de Oliveira, 2019; Ivanov, Nikodinovska-Stefanovska, & Sudar; Sharholy, Ahmad, Mahmood, & Trivedi, 2008; Sudar, 2021).

Similarly, the analysis extends to the ANEP, showcasing a slightly more favorable age composition compared to MoSDT. However, concerns persist regarding the level of work experience and the need for a balanced distribution of skills (Bublitz & Noseleit, 2014; de Oliveira, 2019; Kasper-Brauer & Leischnig, 2016; Oberschachtsiek, 2012), particularly in sectors crucial for environmental governance (V. Cvetković & Jovanović, 2020; V. Cvetković, Nikolić, & Ivanov, 2023; V. M. Cvetković & Šišović, 2024; Nikolić, Cvetković, & Zecevic, 2020; Thomas, Lane, Ribon-Tobon, & May, 2007; Vona, Marin, Consoli, & Popp, 2018; Zhang, 2019). The research delves into the possession of general professional skills among personnel (Avery, Wallace, Groom, & Thomson, 1996; Rasmussen & Sieck, 2015; Yun & Lee, 2017), highlighting the importance of computer literacy (Bahromova, 2021; Brown,

Morgan, Mason, Pope, & Bosco, 2020; Ktoridou & Eteokleous-Grigoriou, 2011) and foreign language proficiency (Chen et al., 2021; De Wit & Altbach, 2021; Diachkova, Sazhko, Shevchenko, & Syzenko, 2021) in the context of EU accession and international cooperation. While proficiency levels vary, there's a clear need for continuous skill development to meet evolving demands.

Furthermore, the study explores communication skills and analytical prowess (V. Cvetković, Radovanović, & Milašinović, 2021; Cvetkovic & Martinović, 2021; Ramli, Nawawi, & Chun, 2010; Svrđlin & Cvetković, 2019) within both institutions, emphasizing their significance in negotiation proceedings for Chapter 27. The data indicates a generally advanced level of competence, albeit with room for improvement, especially in specialized areas (Falk & Lindström, 2022).

In terms of advanced professional skills, consultancy (Avery et al., 1996) emerges as predominant, with slight variations in leadership roles (Cox, Madison, & Eva, 2022; Eagly & Johannesen-Schmidt, 2001) and scientific proficiency between genders (Vladimir Cvetković et al., 2018; V. Cvetković et al., 2018; V. Cvetković et al., 2017; V. M. Cvetković et al., 2015; V. M. Cvetković, Nikolić, Ocal, Martinović, & Dragašević, 2022; Eagly & Johannesen-Schmidt, 2001; Janković & Cvetković Vladimir, 2020). However, the absence of a distinct "manager" category underscores gaps in personnel policies and institutional support for skill development (Stergiopoulos et al., 2010). Overall, the research offers valuable insights into Montenegro's efforts towards EU accession in the environmental sector, highlighting areas of strength and opportunities for enhancement in personnel management, skill development, and institutional capacity-building. These findings are instrumental in guiding future policy decisions (Newig, Pahl-Wostl, & Sigel, 2005) and organizational strategies (Cline, 2000; Stergiopoulos et al., 2010) aimed at facilitating Montenegro's alignment with EU environmental standards.

The analysis of the data reveals significant insights into respondents' perspectives on the factors influencing the transposition (McPherson Frantz & Janoff-Bulman, 2000) and execution of Chapter 27. For instance, while a considerable portion of respondents highlighted the importance of expertise in crafting strategic development documents (Collier, Fishwick, & Floyd, 2004; Faraj & Sproull, 2000; Hussaini, 2020; Kabir, Hossain, & Haque, 2022; Kaur, 2020; Planić & Cvetković, 2021; Thennavan, Ganapathy, Chandrasekaran, & Rajawat, 2020; Zack, 1999), there appeared to be limited involvement of personnel in this aspect (Collier et al., 2004). On the other hand, the majority opinion favoured policies as the most impactful facilitator (Guimón, 2011; Jacoby & Meunier, 2013), followed by familiarity with global or European development policies (Bharti, 2022). Interestingly, only a minority recognized the significance of conducting studies or crafting planning regulations.

Further exploration delved into respondents' perceptions regarding the effectiveness of existing higher education programs (Al-ramlawi, El-Mougher, & Al-Agha, 2020; Domingo Dela Cruz & Ormilla, 2022; Ocal, 2021; Olawuni, Olowoporoku, & Daramola, 2020; Pereira, Flores, Simão, & Barros, 2016; Shah et al., 2020; Xuesong & Kapucu, 2019) in nurturing competencies for Chapter 27 execution. A majority expressed scepticism, particularly among female respondents. However, those affirming the effectiveness mostly highlighted faculties specializing in natural sciences and mathematics as influential, emphasizing the importance of economics, legal studies, and European studies. Following this, attention turned to identifying competency areas that should be integrated into higher education, revealing a consensus on the need for knowledge about global or European development policies (Tolochko, 2018) and the creation of strategic development documents (Satu, Leena, Mikko, Riitta, & Helena, 2013).

In light of these findings, it became apparent that while negotiations for Chapter 27 progress rapidly, the alignment of organizational and personnel structures lags (Alagaraja & Shuck, 2015). Hence, there is a pressing need for institutions to bolster their personnel and ensure legal regulations adhere closely to European standards (Semler, 1997). The analysis also highlighted discrepancies in respondents' perceptions of the significance of certain areas, particularly regarding waste management, environmental protection, and horizontal legislation. Despite these differences, waste management emerged as a focal point, reflecting a shared understanding of its importance. Ultimately, the discussion underscored the need for comprehensive capacity strengthening, particularly in waste management and environmental protection (Alagaraja & Shuck, 2015; Elshaboury & Marzouk, 2021), to effectively implement Chapter 27. This requires not only enhancing personnel capacity but also ensuring sufficient financial backing and aligning with EU directives.

## **5. Recommendations**

Based on the discussion of the research findings, several recommendations can be made to address the identified challenges and capitalize on the opportunities for Montenegro's accession to the European Union in the environmental sector: a) given the substantial workload associated with negotiation processes, there is an urgent need to reinforce personnel within the Department for International Cooperation and European Integration. This reinforcement should be targeted towards areas where expertise is lacking, particularly in crafting strategic development documents and understanding global or European development policies; b) while the distribution of job positions concerning additional qualifications appears satisfactory, attention should be paid to the age composition of personnel, particularly within the Ministry of Sustainable Development and Tourism (MoSDT). Efforts should be made to diversify the workforce by recruiting younger talent to infuse fresh perspectives and ideas; c) continuous skill development programs should be implemented to ensure that personnel possess the necessary competencies for executing Chapter 27 effectively. This includes enhancing computer literacy, foreign language proficiency, communication skills, and analytical prowess, which are crucial for successful negotiation proceedings and alignment with EU standards; d) specialized training programs should be developed to address specific competency areas identified in the research, such as crafting strategic development documents and understanding global or European development policies. These programs should be integrated into higher education curricula to nurture competencies from an early stage; d) institutions must ensure that legal regulations closely adhere to European standards to facilitate the harmonization of all components outlined in the negotiation criteria for Chapter 27. This requires close collaboration with the European Commission and proactive efforts to address any discrepancies in regulations; e) given the consensus on the significance of waste management and environmental protection, priority should be given to capacity strengthening in these areas. This includes allocating sufficient financial resources, enhancing personnel capacity, and aligning with EU directives to effectively implement Chapter 27; f) regular monitoring and evaluation mechanisms should be established to track progress in personnel management, skill development, and institutional capacity-building. This will allow for timely adjustments and improvements in strategies to ensure alignment with EU environmental standards.

Overall, these recommendations aim to guide future policy decisions and organizational strategies in Montenegro's journey towards EU accession in the environmental sector. By addressing the identified challenges and leveraging the opportunities for enhancement, Montenegro can strengthen its position and accelerate its alignment with EU standards in environmental governance.

## **6. Conclusions**

This comprehensive research provides significant insights into the challenges and opportunities for Montenegro's accession to the European Union, particularly in the environmental sector. Through a thorough examination of personnel capacities, expertise, and institutional capabilities within the Ministry of Sustainable Development and Tourism (MoSDT) and the Agency for Nature and Environmental Protection (ANEP), several key implications have emerged. Based on these results, there is a pressing need to reinforce personnel within the Department for International Cooperation and European Integration, especially in areas where expertise is lacking, such as crafting strategic development documents and understanding global or European development policies.

Additionally, efforts should be made to diversify the age composition of the workforce, recruiting younger talent to infuse fresh perspectives and ideas. Also, continuous skill development programs are essential to ensure personnel possess the necessary competencies for executing Chapter 27 effectively. This includes enhancing computer literacy, foreign language proficiency, communication skills, and analytical prowess, crucial for successful negotiation proceedings and alignment with EU standards.

Furthermore, specialized training programs should be developed to address specific competency areas identified in the research, and integrated into higher education curricula to nurture competencies from an early stage. Institutions must also ensure legal regulations closely adhere to European standards, collaborating with the European Commission to address any discrepancies. Priority should be given to capacity strengthening in waste management and environmental protection, aligning with EU directives and allocating sufficient financial resources. Regular monitoring and



evaluation mechanisms should be established to track progress in personnel management, skill development, and institutional capacity-building, allowing for timely adjustments and improvements.

Scientifically, the findings contribute to the academic understanding of the complexities involved in aligning a country's environmental sector with EU standards during the accession process. By meticulously analyzing data on personnel capacities, expertise, and institutional capabilities, this study provides valuable insights into the specific challenges faced by Montenegro in this regard. Such insights can inform further scholarly research on EU accession processes, particularly in the environmental domain, offering a basis for comparative studies with other candidate countries. From a societal perspective, the implications of this research extend to the citizens of Montenegro and the broader European community. Effective alignment with EU environmental standards not only ensures sustainable development and protection of natural resources within Montenegro but also fosters regional cooperation and stability.

By addressing shortcomings in personnel capacities and institutional capabilities, Montenegro can better fulfil its commitments to environmental sustainability, thereby contributing positively to the well-being of its citizens and the wider European community. Overall, these recommendations aim to guide future policy decisions and organizational strategies in Montenegro's journey towards EU accession in the environmental sector. By addressing identified challenges and leveraging opportunities for enhancement, Montenegro can strengthen its position and accelerate alignment with EU standards in environmental governance.

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**Informed Consent Statement:** Informed consent was obtained from all subjects involved in the study.

**Data Availability Statement:** Data are contained within the article.

**Conflicts of Interest:** The authors declare no conflicts of interest.

## Appendix A

### 1. Questionnaire

#### I. Socio-demographic questions:

##### 1. Gender: (tick)

- a. Female
- b. Male

##### 2. Age: (tick)

- a. 21-25
- b. 26-30
- c. 31-40
- d. 41-50
- e. 51-67

3. Region where you live: (tick)

- a. Northern region (Andrijevica, Berane, Bijelo Polje, Mojkovac, Kolašin, Nikšić, Petnjica, Plav, Pljevlja, Plužine, Rožaje, Šavnik, and Žabljak)
- b. Central region (Podgorica, Prijestonica Cetinje, Tuzi, Danilovgrad)
- c. Southern/coastal region (Bar, Budva, Herceg-Novi, Tivat, Kotor, Ulcinj)

4. Education: (tick, specify)

- a. Secondary vocational education, \_\_\_\_\_ (city) \_\_\_\_\_
- b. Higher education: (university) \_\_\_\_\_, (city) \_\_\_\_\_, degree (VI - undergraduate/3 years, VII1 - 4 years/master, VII2 - master, VIII - doctorate), country \_\_\_\_\_
- c. Current education (if studying): (university) \_\_\_\_\_, (city) \_\_\_\_\_, degree (VI - undergraduate/3 years, VII1 - 4 years/master, VII2 - master, VIII - doctorate), country \_\_\_\_\_

5. Additional professional training: (tick, specify)

- a. Courses (specify: \_\_\_\_\_)
- b. Certified training (specify: \_\_\_\_\_)
- c. Other (specify: \_\_\_\_\_)

6. Institution and employment sector: (tick, specify)

- a) Ministry of Sustainable Development and Tourism, sector/director-ate \_\_\_\_\_
- b) Agency for Nature and Environmental Protection of Montenegro, sector \_\_\_\_\_

7. Years of work in the institution: (specify)

a) (\_\_\_\_\_)

8. Total years of work experience: (specify)

b) (\_\_\_\_\_)

II. Professional skills



9. General professional skills:

Answer: tick the appropriate field (1 = none, 2 = basic, 3 = intermediate, 4 = advanced, 5 = specialized)

a. Information literacy (MS Office, web, email...) 1 2 3 4 5

b. Use and knowledge of foreign languages:

- English
- Russian
- German
- French
- Italian
- Spanish
- Other (specify: \_\_\_\_\_)

c. Level of communication skills (presentation, dialogue...) 1 2 3 4 5

d. Level of case/data analysis knowledge 1 2 3 4 5

10. Advanced professional skills: (tick, specify)

- a) Leadership (position \_\_\_\_\_, \_\_\_\_ years)
- b) Management (position \_\_\_\_\_, \_\_\_\_ years)
- c) Consultancy/management (position \_\_\_\_\_, \_\_\_\_ years)
- d) Scientific (position \_\_\_\_\_, \_\_\_\_ years)
- e) Other (\_\_\_\_\_)

III. Competencies

11. Your professional field (according to Chapter 27 areas): (tick, specify)

- a) Horizontal legislation
- b) Water quality
- c) Air quality
- d) Waste management
- e) Nature protection
- f) Industrial pollution
- g) Chemicals
- h) Noise
- i) Civil protection
- j) Climate change
- k) Other (\_\_\_\_\_)

12. Years of work in the professional field: (specify)

- a) (\_\_\_\_\_)

13. Your competencies for working in the professional field: (tick, specify)

- a) Preparation of strategic development documents, \_\_\_\_\_ years
- b) Preparation of various studies in one of the Chapter 27 areas, \_\_\_\_\_ years
- c) Preparation of planning documentation in one of the Chapter 27 areas, \_\_\_\_\_ years
- d) Preparation of legal regulations in one of the Chapter 27 areas, \_\_\_\_\_ years
- e) Preparation of policies in one of the Chapter 27 areas, \_\_\_\_\_ years
- f) Establishing and implementing international cooperation in one of the Chapter 27 areas, \_\_\_\_\_ years

14. Which competencies contribute most to the transposition and implementation of Chapter 27: (tick, specify)

- a) Preparation of strategic development documents
- b) Preparation of studies
- c) Preparation/familiarity with planning documentation
- d) Preparation/familiarity with legal regulations
- e) Preparation/familiarity with policies
- f) Familiarity with global and/or EU development policies and trends/conventions/strategies
- g) Other (\_\_\_\_\_)

15. Does existing higher education/study programs contribute to and develop basic competencies needed for the transposition and implementation of Chapter 27: (tick, specify)

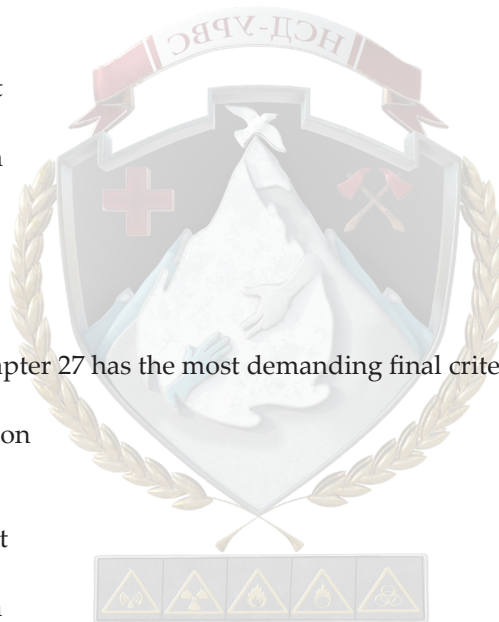
- a) YES
- b) NO
- c) If YES, specify which University/Faculty/Study program: \_\_\_\_\_

16. Which two areas/fields of competencies should become part of higher education: (tick, specify)

- a) Preparation of strategic development documents, in one of the Chapter 27 areas
- b) Preparation of studies, in one of the Chapter 27 areas
- c) Familiarity with planning documentation, in one of the Chapter 27 areas
- d) Familiarity with and acquisition of knowledge about legal regulations and policies, in one of the Chapter 27 areas
- e) Familiarity with and acquisition of knowledge about global and/or EU development policies and trends, in the Chapter 27 area
- f) Familiarity with and acquisition of knowledge about sustainable development and related global and/or EU development policies and trends.
- g) Other (\_\_\_\_\_)

17. From the perspective of initial criteria, choose the most significant area of Chapter 27 for Montenegro. (tick)

- 1. Horizontal legislation
- 2. Water quality
- 3. Air quality
- 4. Waste management
- 5. Nature protection
- 6. Industrial pollution
- 7. Chemicals
- 8. Noise
- 9. Civil protection
- 10. Climate change



18. Which area of Chapter 27 has the most demanding final criteria for Montenegro? (tick)

- a) Horizontal legislation
- b) Water quality
- c) Air quality
- d) Waste management
- e) Nature protection
- f) Industrial pollution
- g) Chemicals
- h) Noise
- i) Civil protection
- j) Climate change

19. Which area is financially most demanding for closing Chapter 27? (tick)

- a) Horizontal legislation
- b) Water quality
- c) Air quality
- d) Waste management
- e) Nature protection
- f) Industrial pollution
- g) Chemicals
- h) Noise
- i) Civil protection
- j) Climate change

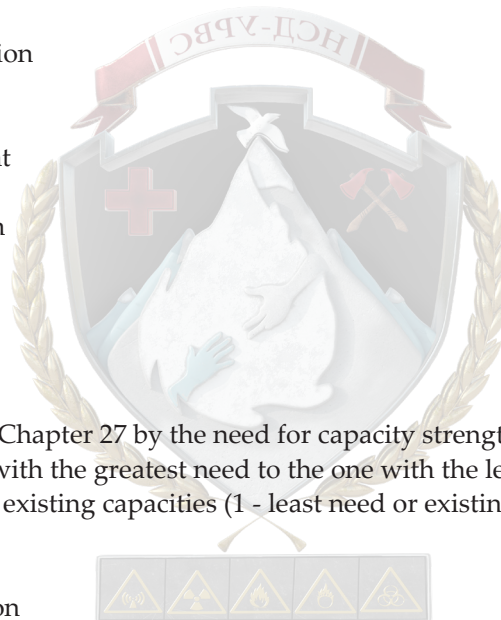
20. For which area(s) of Chapter 27 does Montenegro lack competencies? (Tick one or more)

- a) Horizontal legislation
  - b) Water quality
  - c) Air quality
  - d) Waste management
  - e) Nature protection
  - f) Industrial pollution
  - g) Chemicals
  - h) Noise
  - i) Civil protection
  - j) Climate change
- Specify the type of deficiency for

The selected answer: \_\_\_\_\_

21. Choose one area of Chapter 27 with the greatest need for capacity strengthening regarding transposition. (tick)

- a) Horizontal legislation
- b) Water quality
- c) Air quality
- d) Waste management
- e) Nature protection
- f) Industrial pollution
- g) Chemicals
- h) Noise
- i) Civil protection
- j) Climate change



22. Rank the areas of Chapter 27 by the need for capacity strengthening regarding implementation: from the area with the greatest need to the one with the least need for building and strengthening capacities – existing capacities (1 - least need or existing capacities, 10 - greatest need):

- Horizontal legislation
- Water quality
- Air quality
- Waste management
- Nature protection
- Industrial pollution
- Chemicals
- Noise
- Civil protection
- Climate change

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