

THE ENVIRONMENT AND THE ECONOMY: SERBIA'S ACCESSION TO THE EUROPEAN UNION

I. INTRODUCTION

“The future of the environment depends on improving co-operation and sharing information to capture potential efficiencies and create synergy during the process.”¹ In 2012, Serbia officially became a candidate for membership in the European Union.² Before achieving membership, Serbia must complete the demanding task of aligning its national legislation with that of the European Union.³

The *Acquis Communautaire* (the *Acquis*) is the accumulated body of E.U. legislation that binds all Member States to the European Union and with which all applicant countries must harmonize nationally before joining the European Union.⁴ Ap-

1. THE WORLD BANK, JOURNEY TO A CLEANER FUTURE: INVESTING IN PEOPLE AND INSTITUTIONS THAT MAKE ENVIRONMENTAL LAWS WORK XI (2007) [hereinafter JOURNEY TO A CLEANER FUTURE] (declaring complexity of compliance with little guidance).

2. *European Neighborhood Policy and Enlargement Negotiations: Serbia*, EUR. COMM'N, http://ec.europa.eu/enlargement/countries/detailed-country-information/serbia/-index_en.htm (last updated Jan. 21, 2016) (reporting Serbia's official candidate status).

3. See Conclusions of the Presidency on the European Council in Copenhagen, EUR. PARL. DOC. (SN 180) (1993) [hereinafter Copenhagen Agreement] (codifying requirement to take on obligations of membership). The Copenhagen Agreement states:

Membership requires that the candidate country has achieved stability of institutions guaranteeing democracy, the rule of law, human rights and respect for and protection of minorities, the existence of a functioning market economy as well as the capacity to cope with competitive pressure and market forces within the Union. Membership presupposes the candidate's ability to take on the obligations of membership including adherence to the aims of political, economic and monetary union.

Id. at 12. See also EUROPEAN COMM'N, THE EUROPEAN UNION EXPLAINED: ENLARGEMENT 5 (2013), available at http://europa.eu/pol/pdf/flipbook/en/enlargement_en.pdf [hereinafter ENLARGEMENT] (stating country can only join if accession requirements fulfilled); *Glossary of Summaries: Accession Criteria*, EUR-LEX, http://eur-lex.europa.eu/summary/glossary/-accession_criteria_copenhagen.html (last visited Jan. 21, 2016) (defining term “accession criteria”).

4. See ENLARGEMENT, *supra* note 3, at 7 (explaining *Acquis Communautaire* (*Acquis*) set of obligatory rules). The *Acquis* is not negotiable. *Id.* See Patrick Kapios, *Environmental Enlargement in the European Union: Approximation of the Acquis Communautaire and the Challenges that It Presents for the Applicant Coun-*

proximating E.U. legislation is extremely complicated and it takes several years for candidate Member States to fully implement the *Acquis* into their national legislation.⁵ Arguably one of the most difficult chapters that Serbia, and all candidate Member States, must implement is the *Acquis* on environmental protection.⁶ Candidate countries trying to accede are faced with three fundamental problems: institutional challenges; lack of funding; and cultural resistance.⁷

This Note will assess the economic impacts that Serbia will incur as a result of approximating the Environmental *Acquis*.⁸ Part II will discuss the history and development of the environment regulations in the European Union and in Serbia.⁹ Part III will describe the current state of environmental legislation for these respective political entities.¹⁰ Part IV will analyze the impacts on Serbia as a result of economic and environmental changes.¹¹ The analysis will also draw a comparison to the economic impact of Croatia during its accession to the European Union because of its close regional ties.¹² Finally, Part V will

tries, 2 SUSTAINABLE DEV. L. & POLICY 4, 6 (2002) (repeating compliance with *Acquis* obligatory); see also *Enlargement - Acquis*, EUROPEAN COMM'N, http://ec.europa.eu/enlargement/policy-/glossary/terms/acquis_en.htm (last visited Jan. 21, 2016) (defining term "*acquis*").

5. See Branko Bošnjaković, *Implementation of E.U. Environmental Legislation: How It Works, and Lessons Learnt*, 1 PROC. INT'L. CONG. ENERGY & ENV'T. 13, 13 (2006), available at <https://bib.irb.hr/datoteka/266032.EE2006-Bosnjakovic.pdf> (explaining E.U. policy and legislation complications); see also JOURNEY TO A CLEANER FUTURE, *supra* note 1, at 27 (discussing approach to implementation typically involves repetitive system of trial and error).

6. See IVANA VLAŠIĆ & MIRNA VLAŠIĆ FEKETIJA, THE IMPORTANCE OF ENVIRONMENTAL PROTECTION: CROATIA IN THE EUROPEAN ACCESSION PROCESS 328 (Katarina Ott ed. 2006), available at http://www.ssoar.info/ssoar/bitstream/handle/document/6135/ssoar-2006-vlasic_et_al-the_importance_of_environmental_protection.pdf?sequence=1 (stating compliance with Environmental *Acquis* incredibly difficult).

7. See Bošnjaković, *supra* note 5, at 22 (listing central issues candidate countries face).

8. See *infra* Part IV (analyzing Serbia's economic costs and benefits as result of approximating E.U. environmental legislation).

9. See *infra* Part II (recounting history of environmental policy development in European Union and Serbia).

10. See *infra* Part III (describing current state of legislation in Serbia and European Union).

11. See *infra* Part IV (analyzing economic impacts in Serbia from harmonizing with E.U. legislation).

12. See *infra* Part IV (comparing Serbia's accession strategy and challenges to Croatia's); see also JOURNEY TO A CLEANER FUTURE, *supra* note 1, at 4 (noting regional links to Croatia draws useful comparison).

conclude that cooperation and united efforts are the future of environmental protection.¹³

II. HISTORY

A. *The European Union*

The European Union was originally founded in the 1950s as a semi-federal superpower for the purpose of integrating Europe's coal and steel industries.¹⁴ When the founding Member States pooled portions of their sovereignty to create one shared institution, they all gained the benefits associated with size and strength.¹⁵ To facilitate the desire for democracy, the founding members based the European Union on the rule of law.¹⁶ Operating under this system requires drafting a treaty and outlining its objective as it aligns with the objectives of the European Union.¹⁷ All existing Members must then voluntarily approve the treaty before it takes effect.¹⁸

13. See *infra* Part V (concluding cooperation, time, and heavy investments will result in prosperous economies and healthier environments).

14. EUROPEAN COMM'N, THE EUROPEAN UNION EXPLAINED: HOW THE EUROPEAN UNION WORKS 4 (2012) [hereinafter HOW THE EUROPEAN UNION WORKS] (categorizing European Union between federal system like United States and intergovernmental cooperation system like United Nations). The Treaty of Paris, signed April 18, 1951, created the European Coal and Steel Community. *Id.* The Maastricht Treaty, signed in 1992 and entered into force in 1993, officially established the European Union. *Id.*

15. See *id.* at 3 (restating history of European Union creation). Issues of joint interest to the Member States are made democratically when decision-making power is delegated to the cooperative institution. *Id.* Its creation of the single market allows for free movement of goods, people, and services. *Id.* See also ENLARGEMENT, *supra* note 3, at 5 (highlighting benefits of single currency). The creation of a single currency (the Euro) improves the efficiency of the single market. *Id.* The European Union has grown from six founding Member States to 28 and 500 million citizens. *Id.*

16. See Consolidated Version of the Treaty on the European Union, art. 2, Oct. 26, 2012 O.J. (C 326) 17 [hereinafter TOEU] (codifying Treaty founded upon values of rule of law); see also HOW THE EUROPEAN UNION WORKS, *supra* note 14, at 3 (illustrating E.U. system operates on rule of law).

17. HOW THE EUROPEAN UNION WORKS, *supra* note 14, at 3 (explaining procedure under rule of law).

18. *Id.* (reiterating how E.U. treaties work); see also ENLARGEMENT, *supra* note 3, at 6 (stating new members admitted with unanimous consent).

1. *Acquis Communautaire and the Environmental Acquis*

The *Acquis* is the formation of all rules, laws, and obligations of the European Union to date.¹⁹ The concept of the *Acquis* developed from accession negotiations between the European Union and Denmark, Ireland, Norway, and the United Kingdom between 1969-1972.²⁰ This body of cumulated laws and obligations is binding upon all existing Member States.²¹ Before accession can be granted, candidate Member States must comply with all existing obligations of the *Acquis*, as well as implement strategies to foster future compliance with new elements as they are added.²² To manage complying with the enormous amounts of material, the *Acquis* is divided into chapters according to policy areas.²³ Total compliance as a con-

19. Vaughne Miller, *The EU's Acquis Communautaire*, HOUSE OF COMMONS LIBR. (Apr. 26, 2011) available at <http://www.parliament.uk/briefing-papers/SN05944.pdf> (noting creation and purpose of *Acquis*). The *Acquis* contains all treaties and laws, including directives, regulations, and decisions, as well as declarations, resolutions, international agreements, and judgments from the Court of Justice. *Id.* at 2. The estimated total of accumulated laws and obligations from 1958 is around 80,000 items. *Id.* See also *Enlargement – Acquis*, *supra* note 4 (outlining components *Acquis* encompasses); JACQUES ZILLER, INTEGRATION OF THE ACQUIS COMMUNAUTAIRE INTO THE LEGAL ORDER OF NEW AND FUTURE MEMBER STATES 3-4 (2005), available at [http://www.venice.coe.int/webforms/documents/default.aspx?pdffile=CDL-UDT\(2005\)032-e](http://www.venice.coe.int/webforms/documents/default.aspx?pdffile=CDL-UDT(2005)032-e) (presenting contents of *Acquis*). The term comes from the French language, “*acquis*” meaning “that which has been agreed” and “*communautaire*” meaning “community.” Miller, *supra* note 19, at 2 (defining “*Acquis Communautaire*”); see also JOURNEY TO A CLEANER FUTURE, *supra* note 1, at 2 (stating entire legislative body contains over 200 pieces of legislation); ENLARGEMENT, *supra* note 3, at 7 (detailing existing E.U. laws and rules known as *Acquis*). In all, the body exceeds 100,000 pages. ENLARGEMENT, *supra*.

20. See Miller, *supra* note 19, at 2 (summarizing origination of term).

21. See Documents Concerning the Accession to the European Communities of the Kingdom of Denmark, Ireland, the Kingdom of Norway and the United Kingdom of Great Britain and Northern Ireland, art. 2, 27 March 1972 O.J. SPEC. ED. (L 73), at 14 (declaring that new Member States must accept *Acquis*). The document states: “From the date of accession, the provisions of the original Treaties and the acts adopted by the institutions of the Communities shall be binding on the new Member States and shall apply in those states under the conditions laid down in those Treaties and in this Act.” *Id.* See also *Enlargement – Acquis*, *supra* note 4 (outlining requirements of community *Acquis*); ZILLER, *supra* note 19, at 2-3 (citing Treaties establishing binding nature of *Acquis*).

22. Miller, *supra* note 19, at 2 (stating current and new members must adopt all elements of *Acquis*); *Enlargement – Acquis*, *supra* note 4 (explaining characteristics of community *Acquis*); ZILLER, *supra* note 19, at 2-3 (citing Treaties establishing binding nature of *Acquis*).

23. See ENLARGEMENT, *supra* note 3, at 7 (describing structure of *Acquis*); see also *Chapters of the Acquis in Enlargement Policy*, EUROPEAN COMM’N, <http://ec.europa.eu/en-largement/policy/conditions-membership/chapters-of-the-acquis/in->

dition to accession ensures that the joining countries are willing to meet and capable of meeting the standards that the European Union established.²⁴ To this end, the institution as a whole maintains a strong market economy and political stability.²⁵

The Environmental *Acquis* embodies all European law involving the environment.²⁶ Protection and preservation of the environment has been an agenda item for the European Union since the early 1970s.²⁷ In 1993, the Treaty of Maastricht finally gave environmental policy legal status.²⁸ Sixteen years later, the Treaty of Lisbon set out the objectives of the policy.²⁹ It also

dex_en.htm (last visited Jan. 21, 2016) (detailing structure and procedure of *Acquis*). To facilitate negotiations for accession of the Western Balkans, the *Acquis* is split into thirty-five chapters. *Id.*

24. See generally Heather Grabbe, *European Conditionality and the Acquis Communautaire*, 23 INT'L POL. SCI. REV. 249 (2002) (noting conditionality ensures willingness to join).

25. See *id.* at 251 (inferring conditionality ensures maintenance of economic strength and political stability).

26. See JOURNEY TO A CLEANER FUTURE, *supra* note 1, at 2 (defining “Environment *Acquis*”).

27. Chapter 27 – Environment, REPUBLIC OF TURK. MINISTRY FOR E.U. AFFAIRS, <http://www.abgs.gov.tr/?p=92&l=2> (last updated Nov. 11, 2015) (recapping brief history of E.U. environmental policy). The first Environmental Action Program was put in place in 1973. *Id.* There have since been six Environmental Action Programs implemented and talks for a seventh Program are currently ongoing. *Id.* The seventh Program will expire in 2020. *Id.*

28. *Id.* (stating environment gained policy status when Treaty of Maastricht entered force). Some policy basics are “‘polluter pays’, . . . ‘integration with other policies’, . . . ‘high level of protection’, . . . ‘prevention’, . . . and ‘precaution.’” *Id.* See also VLAŠIĆ & FEKETIJA, *supra* note 6, at 323 (stating UN conference in Rio resulted in milestone for environmental history). Prior to the Treaty of Maastricht, the Rio Conference of 1992 resulted in a worldwide agreement that economic development and environmental protection were mutually dependent issues. *Id.* It was agreed that a balance between them was necessary and possible. *Id.* This was truly a worldwide discussion with participants hailing from government representatives, academics, scientists, even Non-Governmental Organizations (NGO) representatives. *Id.* The conference concluded “environmental protection should not be a limiting factor in economic development.” *Id.* Rather, environmental protection is an integral part and motivation for economic development. *Id.* Out of these discussions came the highly popularized theory of “sustainable development.” *Id.* At this time no other principle had such long-term goals that connected “economic, social, and environmental aspects of life.” *Id.*

29. See Chapter 27 - Environment, *supra* note 27 (listing aims of policy). Objectives include “Preserving, protecting, and improving quality of the environment, protecting human health,” using natural resources mindfully, and promoting international measures to deal with worldwide issues such as climate change. *Id.* Sustainability through resource efficiency is a major theme of all environmental policy actions. See also EUROPEAN COMM’N, THE EUROPEAN UNION EXPLAINED: ENVI-

charged Member States with the responsibility of enforcing the policy nationally in conjunction with the European Union.³⁰ Environmental policy is a topic of growing importance as its legislation grows increasingly more complex.³¹ It is so important that a delay in the harmonizing and enforcing process of the Environmental *Acquis* could delay an Applicant State's membership in the European Union.³²

B. Serbia

The European Commission recommended E.U. candidate status to Serbia in March 2012.³³ After a few years of delays due to unsettled issues remaining from Balkans War, accession negotiations with Serbia were finally opened in June 2013.³⁴ A Stabi-

ENVIRONMENT 8 (2013) [hereinafter ENVIRONMENT] (describing key environmental policies and values).

30. See ENVIRONMENT, *supra* note 29, at 6 (stating environmental policy shared between European Union, Member States per Treaty of Lisbon Dec. 1, 2009).

31. See JOURNEY TO A CLEANER FUTURE, *supra* note 1, at 1-2 (summarizing importance of Environmental *Acquis*). Historically, environment law was a single-issue legislation. *Id.* at 2. The modern, more integrated approach using horizontal legislation reflects how the state of the environment affects all sectors of law. *Id.* See also *infra* note 187 and accompanying text (explaining difficulty of implementing *Acquis* because it continually changes). The *Acquis* has been characterized as a "moving target" to illustrate the difficulty States have as they attempt to match their national legislation to a constantly shifting objective.

32. See Kapios, *supra* note 4, at 6 (concluding major importance of Environmental *Acquis* and effect on accession); TOEU, *supra* note 17, at 15 (describing environmental policy as major component of E.U. values). Environmental policy is so fundamental that the Treaty on European Union requires new Member States to work toward "a high level of protection and improvement of the quality of the environment" as a condition upon accession. TOEU, *supra* note 16, at art. 3 (highlighting importance of environmental policy).

33. See EUR. COMM'N., SERBIA 2014 PROGRESS REPORT 3 (2014) (stating European Union granted Candidate Status to Serbia in 2012); *Serbia Country Profile - Overview*, BBC NEWS EUR., Aug. 5, 2015, <http://www.bbc.com/news/world-europe-17907947> (describing Serbia's candidate status as of 2012); *E.U. Enlargement: The Next Seven*, BBC NEWS EUR., Sept. 2, 2014, <http://www.bbc.com/news/world-europe-11283616> (declaring Serbia officially confirmed candidate status in March 2012).

34. See EUR. COMM'N., *supra* note 33, at 3 (detailing history of Serbia's accession efforts); *Serbia Country Profile*, *supra* note 33 (explaining delay in accession talks because Serbian war crimes suspects still at large). Membership talks for Serbia were also conditional upon settling ties with Kosovo. *Serbia Country Profile*, *supra* note 33 (highlighting conditions Serbia must meet before membership talks). Despite political maturity to control its borders, Serbia still does not recognize Kosovo's independence. See also *E.U. Enlargement: The Next Seven*, *supra* note 33 (stating arrest of Gen. Ratko Mladic, former Bosnian Serb commander, greatly improved Serbia's E.U. prospects). European Union Enlargement Commissioner Stefan Fuele gave public recognition that a major "obstacle on the Serbian road to the European Union has

lization and Association Agreement between the European Union and Serbia formally took force in 2013.³⁵ Conferences between the Serbian government and the European Council began in January 2014.³⁶

1. *Environmental Policy*

Serbia's modern environmental priorities originated after World War II during the Communist government period.³⁷ The general attitude, however, was to care for the environment to the extent that it served human prosperity.³⁸ Nature, therefore, was only valuable because of its contribution to the economy.³⁹ The Serbian Constitution, ratified in 1990, illustrates a transformation toward concern for the environment.⁴⁰ The Constitution outlines the environmental policy and its underlying principles, as they exist today.⁴¹ Approximately 300 pages, the Constitution codifies the ideal that "every citizen has the right to live in a healthy environment."⁴² This ideal is in conjunction with a duty

been removed." *Id.* General Mladic was Europe's most wanted war crimes suspect and had been running for sixteen years. *Id.*

35. See EUR. COMM'N, *supra* note 33 (stating Stabilization and Association Agreement negotiations took force in Sept. 2013); *Serbia and Kosovo Reach E.U.-Brokered Landmark Accord*, BBC NEWS EUR., Apr. 19, 2014, <http://www.bbc.com/news/world-europe-22222624> (reporting Serbia and Kosovo agreement to stabilize borders); ENLARGEMENT, *supra* note 3 and accompanying text (detailing criteria for accession). "Regional cooperation and good relations with neighboring countries" are an additional condition. *Id.*

36. See EUR. COMM'N., *supra* note 33, at 3 (stating accession negotiations began Jan. 2014).

37. See Dragana Repak, *Serbian Political Heritage and Its Influences on the Capacity Building in Environmental Policy*, 2 EUR. Q. POL. ATTITUDES & MENTALITIES 53, 58 (2013) (recounting origination of modern environmental values).

38. See *id.* at 58 (describing new attitude toward environment as influenced by Communist government). In this ideal, the value of humans and human activities was prioritized over the value of nature. *Id.*

39. See *id.* (stating environmental value as pertains to economy). Nature was seen as valuable for its contribution to economic progress. *Id.* Economic progress relied on natural resources available. *Id.* "[E]xtensive utilization of the natural resources" fueled economic progress. *Id.* To one extent, economic development was tied to the limit of natural resources available to exploit. *Id.*

40. See generally Repak, *supra* note 37 (detailing history of Serbian environmental policy).

41. See Repak, *supra* note 37, at 58 (stating environmental policies found in Serbian Constitution).

42. See *id.* (describing Serbia citizen's rights to clean environments).

to protect the health of the environment for all people's enjoyment.⁴³

2. Steps Toward Accession

Despite these transforming beliefs and models, Serbia has a long journey before meeting European standards required for E.U. accession.⁴⁴ As a first step in addressing these problems, Serbia created the Serbian Environmental Protection Agency (SEPA) in 2004.⁴⁵ A branch under the Ministry of Environment, Mining, and Spatial Planning (MEMSP), it was founded as a specific organization to manage, collect, and organize data.⁴⁶ SEPA then integrates all the data and produces an annual report assessing the current situation and giving recommendations for further development.⁴⁷ The agency's duties and objectives have evolved as the country makes steps to align its policies with European standards.⁴⁸

43. *See id.* (stating right to live in healthy environment). This right is also a duty that all citizens must protect the environment to preserve the right of all citizens to live in a health environment. *Id.*

44. *See* REPUBLIC OF SERBIA MINISTRY OF ENVIRONMENTAL AND SPATIAL PLANNING, NATIONAL ENVIRONMENTAL APPROXIMATION STRATEGY FOR THE REPUBLIC OF SERBIA 9 (2011), available at <http://www.misp-serbia.rs/wp-content/uploads/2010/05/EAS-Strategija-ENG-FINAL.pdf> [hereinafter NEAS] (summarizing Serbia's work toward implementing necessary conditions to comply with obligations of membership); Repak, *supra* note 37, at 58 (highlighting Serbia's difficult road to meet international standards). The high levels of pollution and "difficult economic and political situation," will require a lot of work to get Serbia's environmental conditionals to an internationally acceptable state. *Id.*

45. *See Republic of Serbia Ministry of Environment and Spatial Planning: Environmental Protection Agency*, ENVIRONMENTAL PROTECTION AGENCY NETWORK, http://epanet.ew.eea.europa.eu/european_epas/countries/cs (last visited Jan. 21, 2016) (stating history of establishment).

46. *See id.* (listing goals for establishment). As a governmental institution its main job requires management, development, and coordination of environmental informational systems. *Id.*

47. *See id.* (discussing SEPA's function of annual report). Other areas of responsibility include data collection from areas such as air, water, and soil quality. *Id.* SEPA's additional objectives including "development and management of the National Environmental Information System, . . . establishing the National Reference Air Quality Laboratory," reporting water quality data and reporting indicators. *Id.* It also "develops indicators of soil quality and soil pressure;" maps "areas at risk of soil pollution and soil degradation[.]" and "assesses the state of biodiversity . . . [and] manages the national allergen pollen detection network." *Id.*

48. *See id.* (describing new activities and responsibilities). In 2008, SEPA was involved in a project on improving environmental reporting systems in accordance with the European Environmental Agency's (EEA) "Core Set of Indicators for the Western Balkan Countries[.]" *Id.* In May 2009, Serbian Parliament passed environ-

III. FACTS

A. *Enlargement*

E.U. membership is highly sought after because of the potential for prosperity and the promotion of freedom and democracy.⁴⁹ Membership is open to all democratic countries of Europe.⁵⁰ Any country looking to apply must comply with the democratic values of the European Union and be dedicated to promoting them.⁵¹ The process of inducting new Member States into the European Union is known as “Enlargement.”⁵² E.U. leaders defined the procedures and conditions for Enlargement in 1993 at the Copenhagen Summit.⁵³ The Copenhagen criteria include three elements: political stability, economic security, and general ability to handle membership obligations.⁵⁴ A candidate Member State’s ability to meet these criteria defines its eligibility for E.U. accession.⁵⁵

mental laws that expanded “SEPA[’s] . . . responsibilities [into] . . . communal and industrial pollution.” *Id.* In particular, some areas of SEPA’s new responsibilities include “noise, waste, packaging, and packaging waste[.]” *Id.* In 2010, SEPA was involved in creating “the European State of the Environment Report (SOER).” *Id.*

49. *See* ENLARGEMENT, *supra* note 3, at 3 (describing benefits for all). Benefits of the single market include higher standards of living as result of economic growth, safer consumer goods, and freedom of choice. *Id.* *See* Kapios, *supra* note 4, at 9 (concluding approximation results in access to transnational economic market).

50. *See* TOEU, *supra* note 16, art. 49 (stating all European democratic countries allowed to seek membership); ENLARGEMENT, *supra* note 3 (explaining reasons for enlargement of European Union).

51. *See* ENLARGEMENT, *supra* note 3, at 5 (describing nations eligible to join). *See generally* TOEU, *supra* note 16 (codifying procedure for E.U. enlargement).

52. *See generally* ENLARGEMENT, *supra* note 3 (giving overall explanation of enlargement procedure).

53. *See supra* note 50 and accompanying text (stating what European countries can join European Union).

54. *See* Copenhagen Agreement, *supra* note 3, at 13 (codifying three elements required for compliance). The Copenhagen Agreement requires a Candidate State’s political agenda be in line with the European Union’s. *Id.* It states “stability of institutions guaranteeing democracy, the rule of law, human rights and respect for and protection of minorities[.]” *Id.* The Copenhagen Agreement also requires a Candidate State’s economic agenda be in line with the European Union’s. *Id.* It states “the existence of a functioning market economy as well as the capacity to cope with competitive pressure and market forces within the Union.” *Id.* Thirdly, the Copenhagen Agreement requires “Membership presupposes the candidate’s ability to take on the obligation of membership including adhere to the aims of political, economic, and monetary union.” *Id.* *See also* ENLARGEMENT, *supra* note 3, at 5 (detailing three criteria required for accession).

55. *See* ENLARGEMENT, *supra* note 3, at 5 (declaring accession to European Union conditional on compliance with all Copenhagen Agreement elements); *see also*

As a democratic institution, all existing Member States must unanimously consent to admitting a new Member State.⁵⁶ When a European country applies for membership, the Council, representing Member States' governments, decides when to accept the application for membership, when to grant candidate status, and whether to open accession negotiations.⁵⁷ Accession negotiations begin with a screening of the Candidate State's current legislation.⁵⁸ A report produced from the screening identifies which areas of the applying country's legislation need to be adjusted in order to meet the requirements of every chapter of the *Acquis*.⁵⁹ When the accession negotiations are complete, the existing members and the Candidate State draft, sign, and ratify an accession treaty to formalize the induction.⁶⁰

B. Chapter 27: Directives and Agencies

Chapter 27 of the *Acquis* covers environmental policy, divided into eight categories.⁶¹ The contents of this Chapter are extensive and include both horizontal and legal issues.⁶² The Environment Directorate-General ("DG Environment") manages the legal acts found in Chapter 27, as all States seeking

Glossary: Accession Criteria (Copenhagen Criteria), EUROPA http://eur-lex.europa.eu/summary/glossary/accession_criteria_copenhagen.html (last visited Jan. 21, 2016) (outlining accession criteria from Copenhagen Agreement).

56. See *Enlargement*, *supra* note 3, at 6 (declaring unanimous vote grants accession).

57. See *id.* (explaining who decides when new members admitted).

58. See *id.* at 7 (highlighting starting procedure for accession negotiations).

59. See *id.* (illuminating process of screening).

60. See *id.* at 8 (outlining procedure for accession and enlargement).

61. See EUROPEAN COMM'N, *supra* note 23 (listing all chapters of *Acquis* in numerical order); JOURNEY TO CLEANER ENVIRONMENT, *supra* note 1, at 2 (listing eight categories of division). Issues in the *Acquis* are categorized as horizontal, air quality, waste management, water quality, nature protection, industrial pollution control, chemicals, and noise. *Id.* In all, the *Acquis* includes over 200 acts of legislation. *Id.* But see _eljka Kordej-De Villa, *Environment and E.U. Accession*, 7 CROAT. ECON. SURV. 135, 140 (2004) (noting *Aquis* consists of 300 legal documents). These documents are categorized into nine groups, adding nuclear safety and radiation protection. *Id.*

62. See REPUBLIC OF TURK. MINISTRY FOR E.U. AFFAIRS, *supra* note 27 (listing contents in chapter 27). Horizontal issues involve issues such as "environmental impact assessment (EIA), strategic environmental assessment (SEA)," and environmental liability. *Id.* Some legal topics promulgated include air and water quality, preserving nature, noise, and industrial pollutants. *Id.*

membership to the European Union must bear them.⁶³ The Applicant State designates an executive agency to establish and implement a strategy for complying with the required directives.⁶⁴ Complying with and integrating these myriad and diverse topics puts a heavy burden on acceding Member States.⁶⁵ Although it is a timely and expensive commitment, the benefits of increased environment standards affect health, the economy, and agriculture.⁶⁶

1. Chapter 27: Directives

Chapter 27 consists of regulations and directives with which Candidate States must abide in order to guarantee harmonization.⁶⁷ Directives are stated goals that all E.U. Member States are required to achieve by a specified date.⁶⁸ Directives, though

63. See EUROPEAN COMM'N, DG ENVIRONMENT (2010) http://ec.europa.eu/environment/pubs/pdf/factsheets/dg_environment.pdf (stating history and goals of DG Environment at creation). The European Commission delegated the DG Environment as the agency in charge of this policy area. *Id.* Its mission is to “protect, preserve and improve Europe’s environment for present and future generations.” *Id.* See Kapios, *supra* note 4, at 6 (stating adoption of entire *Acquis* pre-requisite to membership). The chapter devoted to environmental protection consists of several regulations and Directives. *Id.*

64. See Kapios, *supra* note 4, at 7 (reviewing how agencies in charge of implementation). Applicant States are left to their own devices to implement Directives. *Id.* Thus, to implement the lengthy and complicated elements of the *Acquis*, the Applicant State needs to have a robust administrative infrastructure. *Id.* In reality, the European Union expects that the State does have an administrative body capable of achieving this task. *Id.* See HM GOVERNMENT, TRANSPOSITION GUIDANCE: HOW TO IMPLEMENT EUROPEAN DIRECTIVES EFFECTIVELY 6 (2013) available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/229763/bis-13-775-transposition-guidance-how-to-implement-european-directives-effectively-revised.pdf [hereinafter TRANSPOSITION GUIDANCE] (advising Applicant States to strengthen ministries).

65. See JOURNEY TO CLEANER ENVIRONMENT, *supra* note 1, at 1-2 (stating alignment with *Acquis* huge investment).

66. See *id.* at 1-2 (identifying several areas positively impacted). Benefits span across multiple sectors including improved health, economic growth, increased fish and crop yields, and higher quality of life. *Id.*

67. See *supra* note 4 and accompanying text (confirming European Union’s mandatory compliance with entire *Acquis*).

68. See *Regulations, Directives, and Other Acts*, EUR. UNION, http://europa.eu/eu-law/decision-making/legal-acts/index_en.htm (last visited Jan. 21, 2016) (providing European Union official definition of “Directives”); *Transposition into National Law of Directives Relating to the Internal Market*, EUR. COMM'N, http://europa.eu/legislation_summaries/internal_market/internal_market_general_framework/l22021_en.htm (last visited Jan. 21, 2016) (stating penalty imposed for failure to implement correctly and timely); *Poland Facing Penalty Over Failure to Transpose Renewables Directive*, CLEANTECH POLAND, Dec. 12, 2014, <http://cleantech.cleantechpoland.com/>

binding, allow each State the flexibility of deciding how it will meet the prescribed objective.⁶⁹ Some of the most costly directives in Chapter 27 pertain to pollution, water, and wastewater management; and solid waste management.⁷⁰ If a European country wants to join the European Union, it will be required to comply with the Integrated Pollution Prevention and Control Directive, the Industrial Emissions Directive, the Water Framework Directive, and the Waste Management Directive.⁷¹

The Integrated Pollution Prevention and Control (IPPC) Directive regulates the most significant environmental polluters, including heavy industry, large farming complexes, and waste management facilities.⁷² IPPC requires industrial and agricultural polluters to obtain an environmental permit as a means of controlling pollution emissions in Europe.⁷³ Acquiring a permit

?page=news&id=265&link=poland-facing-penalty-over-failure-to-transpose-renewables-directive (reporting Poland facing penalty for failing to fully transpose Directive). The European Commission has brought a suit against Poland for failing to fully implement a Directive on renewable resources, which Poland was supposed to implement in 2010. *Id.* Poland could face a penalty of EUR60,000 per day since 2010. *Id.*

69. See *Regulations, Directives, and Other Acts*, *supra* note 68 (explaining individual countries must decide how to meet Directive's goal). Directives differ from "Regulations" and "Recommendations." *Id.* Regulations are also binding legislative acts but the individual countries must implement regulations in their entirety. *Id.* Recommendations are not binding, but they allow government institutions to publicize their views and suggested line of action. *Id.* See also *Europa: Summaries of E.U. Legislation on Directives*, EUR. UNION, http://europa.eu/legislation_summaries/institutional_affairs/decisionmaking_process/114527_en.htm (last visited Jan. 21, 2016) (explaining Directive imposes specific result upon Member States). A Regulation is not immediately applicable to Member States once it enters into force because the Member States first must transpose it. *Id.* A Directive, on the other hand, is self-executing and immediately applicable without transposition by Member States. *Id.*

70. See Kapios, *supra* note 4, at 8 (assessing air pollution, water and wastewater management, and solid waste management most costly environmental approximation areas).

71. See *JOURNEY TO A CLEANER FUTURE*, *supra* note 1, at 2-3; 10 (listing most cost intensive environmental sectors).

72. See *id.* at 10 (listing major sectors Directive regulates creating major pollution); *Industrial Emissions*, EUR. UNION, <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uris-erv:ev0027> (June 30, 2015) (summarizing Industrial Emissions Directive purpose, function, and key points). The IPPC was recast into the Industrial Emissions Directive (IED) in 2010. *Id.* The new Directive is a general framework, which integrated and replaced seven existing pieces of legislation on industrial emission. *Id.* Nevertheless, the key points of the IPPC remain the central purpose of the IED. *Id.* See generally Council Directive 2010/75/EU, 2010 O.J. (L 334) 21.9(a)(ii) (recasting IPPC as IED).

73. See *Summary: Integrated Pollution and Prevention Control (Until 2013)*, EUR. UNION, http://europa.eu/legislation_summaries/environment/waste_management/128045_en.htm (last visited Jan. 21, 2016) [hereinafter *IPPC Until 2013*] (summarizing role

is lengthy and requires permit seekers to meet various obligations.⁷⁴ Permit conditions are based on several principles including using best available techniques (BATs) to protect the environment.⁷⁵ For example, one BAT under IPPC requires heavy industrial polluters to use air pollution control technologies and equipment upgrades, while other BATs regulate the design of the technology, installation, operation, and management.⁷⁶ Overall, the IPPC, through the use of permits and BATs, is an effective approach for reformatting national technologies to fit industry standards at the international level.⁷⁷

The Water Framework Directive (WFD) and its derivative, the “Ground Water Directive,” are intended to prevent large-scale water depletion and groundwater contamination.⁷⁸ The increasing social demand for cleaner rivers, lakes, groundwater,

and function of IPPC); *The IPPC Directive: Summary of Directive 2008/1/EC Concerning Integrated Pollution Prevention and Control (The IPPC Directive)*, EUR. COMM’N <http://ec.europa.eu/environment/archives/air/stationary/ippc/summary.htm> (last visited Sept. 6, 2015) (noting history of IPPC Directive). The original IPPC Directive, codified 96/61/EC, was adopted in 1996 by the European Commission. *Id.* The Directive was recast and adopted in December of 2007, and entered force in 2008. *See The IPPC Directive: Towards a Future Policy on Industrial Emissions*, EUR. COMM’N, <http://ec.europa.eu/environment/archives/air/stationary-ippc/index.htm> (last visited Jan. 21, 2016) (discussing history and evolution of Directive). The new Directive was codified 2008/1/EC. *Id.* *See Questions and Answers on the Commission’s Proposal for the Revision of Industrial Emissions Legislation in the E.U.*, EUR. COMM’N, (Dec. 21, 2007), http://europa.eu/rapid/press-release_MEMO-07-623_en.htm [hereinafter *Questions and Answers*] (detailing reason for new casting). The 2007 adoption combined seven pieces of legislation all related to industrial pollution prevention and control to create one single clear and comprehensive piece of legislation. *Id.* *See generally* Council Directive 2008/1/EC 2008 O.J. (L 24) (codifying Integrated Pollution Prevention and Control Directive (IPPC) in 2008).

74. *See* JOURNEY TO A CLEANER FUTURE, *supra* note 1, at 10 (explaining process to obtain permit “can take several years”); *IPPC Until 2013*, *supra* note 73 (listing basic obligations to get permit). Some fundamental obligations include preventing all large-scale pollution; preventing, recycling, or disposing waste in least polluting way possible; and using energy efficiently. *Id.*

75. *See Questions and Answers*, *supra* note 73 (discussing Directive principle as use of Best Available Techniques (BATs)).

76. *See* JOURNEY TO A CLEANER FUTURE, *supra* note 1, at 11 (specifying IPPC promotes technologies and equipment upgrades); *Questions and Answers*, *supra* note 73 (discussing scope of BATs).

77. *See* JOURNEY TO A CLEANER FUTURE, *supra* note 1, at 10 (highlighting IPPC instrumental in retrofitting national technologies in international sector).

78. *See* Cecile Musialski & Laure-Anne Nyssen, *European Energy Law Report X 106* (Martha Roggenkamp et al. eds., 1st ed. 2014) (citing scope of Water Framework Directive (WFD) and Ground Water Directive); *see also* Council Directive 2006/118/EC, 2006 O.J. (L 372) (constituting objectives and scope of Ground Water Directive). *See generally* Council Directive 2000/60/EC, 2000 O.J. (L 327) [hereinaf-

and beaches has led the European Union to introduce the WFD.⁷⁹ To prevent water abstraction and overdepletion, the Member States are required to obtain a permit to extract water.⁸⁰ This permit is necessary in order to protect this precious resource.⁸¹

The Waste Framework Directive (WFD) defines and sets forth basic concepts of waste management.⁸² The Directive obliges Member States to manage waste, such that they do not cause danger or harm to human health and the environment.⁸³ The various activities of waste management are to be applied in hierarchical order.⁸⁴ With an eye toward waste elimination and reduction, waste prevention is of top priority.⁸⁵

2. Chapter 27: Agencies

Complying with E.U. Directives requires transposing the Directives into national legislation.⁸⁶ When legislation has transposed E.U. laws and regulations by adopting the necessary language and adjusting existing legislation to reflect the Directive as a whole, the required institutions, such as agencies or

ter Water Framework Directive] (codifying scope and purpose of Water Framework Directive).

79. See *Introduction to the New E.U. Water Framework Directive*, EUR. COMM'N, http://ec.europa.eu/environment/water/water-framework/info/intro_en.htm (last updated Sept. 11, 2015) (detailing history and origins of WFD).

80. See MUSIALSKI & NYSSSEN, *supra* note 78, at 107 (articulating need for Member States to obtain permit); see also Water Framework Directive, *supra* note 78, art. 11, ¶ 3(e) (declaring registration and prior authorization as basic measures to control water abstraction).

81. See MUSIALSKI & NYSSSEN, *supra* note 78, at 107 (stating importance for Member States to obtain permit).

82. See *Directive 2008/98/EC on Waste (Waste Framework Directive)*, EUR. COMM'N, <http://ec.europa.eu/environment/waste/framework/> (last updated Oct. 28, 2015) (specifying role of Directive). See generally Council Directive 2008/98/EC, 2008 O.J. (L 312) (detailing scope and purpose of Directive).

83. See *Directive 2008/98/EC on Waste (Waste Framework Directive)*, *supra* note 82 (describing requirements for waste management). In particular, waste management must not pose a risk to water, air, soil, plants, or animals. *Id.* Additionally, it should not cause any nuisance such as noise or odors. *Id.*

84. *Id.* (diagramming waste management hierarchy).

85. *Id.* (listing waste management in order of priority). Following waste prevention is preparing for re-use, recycling, recovery, and disposal (in descending order). *Id.*

86. See EUROPEAN COMM'N, *supra* note 3 and accompanying text (detailing requirements for membership).

ministries, must be secured.⁸⁷ Agencies are the institutional bodies that implement, or carry out, the transposed rules and regulations, and thus, environmental agencies will implement the E.U. Directives listed under Chapter 27.⁸⁸

The European Environment Agency (EEA) is responsible for coordinating and exchanging environmental data from all E.U. Member States.⁸⁹ The EEA came into force in 1994 along with the European Environment Information and Observation Network (EIONET).⁹⁰ EEA's primary purpose is to collect environmental data in order to help the community and the Member States "make informed decisions about improving the environment, integrating environmental consideration into economic policies, and moving towards sustainability."⁹¹ Membership to EEA is not limited to Member States, as the EEA includes European countries not currently members of the Union as well as E.U. institutions.⁹²

Croatia's Ministry of Environmental Protection, Physical Planning, and Construction (MEPPPC) is Croatia's executive

87. See *Harmonizing Domestic Legislation with Acquis*, REPUB. OF KOS. MINISTRY OF EUR. INTEGRATION, <http://www.mei-ks.net/en/harmonizing-domestic-brlegislation-with-acquis-> (last visited Jan. 21, 2016) (enumerating necessity of institutions to transpose E.U. legislation into national legislation). *But see* Kapios, *supra* note 4, at 7 (highlighting autonomy of Applicant State to choose how to implement). The European Union does not specify what body is in charge of complying with the *Acquis*, although it does expect an Applicant State has an agency with adequate infrastructure to meet its obligations. *Id.*

88. See *Harmonizing Domestic Legislation with Acquis*, *supra* note 87 (defining "practical implementation" as traditional agency practice). Implementing the E.U. rules and regulations requires that agencies often adjust the infrastructure to allow the agencies to fulfill their obligations required under the *Acquis*. *Id.* See Kapios, *supra* note 4, at 6 (stating environmental authorities in charge of making decisions). Implementation is the process national institutions in charge of the environment consider E.U. environmental obligations when making changes and decisions. *Id.*

89. See *Who We Are*, EUR. ENV'T. AGENCY, <http://www.eea.europa.eu/about-us> [hereinafter *Who We Are*] (last modified Dec. 10, 2015) (reiterating history of European Environment Agency (EEA)).

90. See *id.* (outlining EEA's creation and purpose); JOURNEY TO A CLEANER FUTURE, *supra* note 1, at 26 (noting scope of EEA responsibility).

91. See *Who We Are*, *supra* note 89 (defining EEA's mandate).

92. See JOURNEY TO A CLEANER FUTURE, *supra* note 1, at 26 (listing non-European Union Member States with EEA membership). EEA members of Europe that are not European Union Member States include Iceland, Norway, Lichtenstein, and Switzerland. *Id.* See *Who We Are*, *supra* note 89 (stating E.U. institutions as EEA main clients).

agency responsible for environmental policy and procedure.⁹³ Within the MEPPPC, the Directorate for Environmental Protection (DEP) is the key department in charge of environmental issues.⁹⁴ The DEP tasks include creating policies for sustainable development, protecting the air, water, and soil qualities, as well as protecting plants and animals.⁹⁵ Croatia also employs an Environmental Agency, which operates independently from MEPPPC and whose responsibility it is to collect data for reporting to the government, MEPPPC, and others.⁹⁶

Similar to Croatia's MEPPPC, Serbia's executive agency responsible for environmental dealings is the Ministry of Environment, Mining and Spatial Planning (MEMSP).⁹⁷ This institutional body is Serbia's vehicle for reorganizing the environmental infrastructure to meet the requirements of the *Acquis*.⁹⁸ MEMSP will need to ensure efficient cooperation and communication within itself and between itself and other ministries to ensure successful implementation of Chapter 27 requirements and the *Acquis* as a whole.⁹⁹

3. Chapter 27: Accession Expenses

An applicant country is required to meet all obligations of the *Acquis* in order to join the European Union as a Member

93. See THE EUR. COMM'N – DG ENV'T., TASK 1 – IMPLEMENTATION AND ENFORCEMENT CAPACITIES IN CROATIA FOR THE ENVIRONMENTAL ACQUIS: FINAL REPORT 5 (2005) [hereinafter TASK 1 FOR CROATIA] (stating MEPPPC has prime responsibility for environment); CENT. FIN. & CONTRACTING AGENCY, IPA 2010 CROATIA PROJECT FICHE 17 (2010) (defining MEPPPC's responsibilities). See generally *Croatia*, THE EUR. COMM'N, http://ec.europa.eu/enlargement/countries/detailed-country-information/croatia/index_en.htm (last updated Feb. 2, 2015) [hereinafter *Enlargement: Croatia*] (giving details of Croatia's accession procedure into European Union). Croatia applied for membership in 2003 and began accession negotiations in 2005. *Id.* It officially gained membership status on July 1, 2013. *Id.*

94. See *Task 1 for Croatia*, *supra* note 93, at I (defining job description of Directorate for Environmental Protection (DEP)).

95. *Id.* (outlining DEP's policy duties).

96. *Id.* at 15-16 (describing responsibilities, duties, and tasks of Environmental Agency (EA)). The EA is an essential agency for monitoring the environment, but policy making and amending is the DEP's and MEPPPC's jurisdiction. *Id.*

97. See NEAS, *supra* note 44, at 10 (identifying MEMSP as agency in charge of environmental policy).

98. See *id.* (declaring implementation delegated to executive agency).

99. See *Approximation Process to the E.U. Environment Acquis in the Republic of Serbia*, ENV.NET, <http://www.env-net.org/environmental-acquis/approximation-env-net-countries/serbia/> (last visited Jan. 21, 2016) [hereinafter ENV.NET:SERBIA] (pointing out need for inter- and intracoordination and cooperation).

State.¹⁰⁰ Fulfilling the obligations of the *Acquis* is expensive and it is typically more than a State can afford on its own.¹⁰¹ Although the costs incurred as a result of approximation are quite high, estimations are difficult to make and they vary with each candidate country based on their level of need.¹⁰² Due to the variance of cost based on the State's unique needs, every country should individually prioritize the process for adopting the *Acquis*.¹⁰³

When Croatia underwent accession procedures to join the European Union, it made major legislative adjustments to meet the requirements of the Environmental *Acquis*.¹⁰⁴ MEPPPC is Croatia's executive agency responsible for environmental policy and thus also for implementing the legislative requirements to satisfy the *Acquis*.¹⁰⁵ To implement the legislative changes, the MEPPPC integrated all segments of environmental protection and placed them under its power.¹⁰⁶ The result improved communication and cooperation between all segments of environmental protection, which led to increased efficiency and effectiveness within the environmental sector.¹⁰⁷ Reorganizing Croatia's environmental infrastructure was not an easy fix and

100. See *supra* note 4 and accompanying text (declaring mandatory compliance to join European Union).

101. See Kapios, *supra* note 4, at 6 (noting expense required to comply with *Acquis* greater than State can sustain alone).

102. See *id.* (acknowledging difficulty in estimating expense of implementation); THE EUROPEAN COMM'N – DG ENV'T., TASK 2 - BENEFITS FOR CROATIA OF COMPLIANCE WITH THE ENVIRONMENTAL ACQUIS: FINAL REPORT I (2005) [hereinafter TASK 2 FOR CROATIA] (preferring despite uncertainties, assessing benefits as tool for understanding implications of implementing E.U. Directives).

103. See Kapios, *supra* note 4, at 6 (recognizing Applicant States require various levels of monetary investments depending on need); *Task 2 for Croatia*, *supra* note 102, at II (stipulating Croatia's highly specified harmonization policy caused by historically low environmental investments).

104. See Kordej-De Villa, *supra* note 61, at 149-53 (outlining legislative, economic, and institutional changes needed).

105. See *supra* note 93 and accompanying text (describing role of MEPPPC as executive agency in charge of environmental policy).

106. See Kordej-De Villa, *supra* note 61, at 150 (explaining fragmentation of environmental administration). Individual areas of the environment were divided and controlled by various institutions. *Id.* As a result, the MEPPPC did not have legislative and administrative authority over all sectors of the environment. *Id.* The administrative fragmentation lead to inefficiencies and disorganization. *Id.* Integrating all segments of the environment under the authority of the ministry is the best way to yield efficiency and success. *Id.*

107. *Id.* (reiterating improved efficiency as result of restructuring).

cost an estimated EUR4 billion to EUR12 billion total.¹⁰⁸ Despite the extremely high price, Croatia's monetized benefits range from EUR74.6 million to EUR428.6 million per year as a result of meeting the Chapter 27 standards.¹⁰⁹

Serbia's costs and process of accession can be compared to Croatia's because of its close regional ties.¹¹⁰ Similar to Croatia's MEPPPC, the MEMSP is Serbia's executive agency charged with reorganizing the environmental infrastructure to meet the requirements of the *Acquis*.¹¹¹ Furthermore, MEMSP is also faced with the challenge of increasing communication and cooperation between agencies in order to improve efficiency and effectiveness, a necessity if Serbia is to accede to the European Union successfully.¹¹² The estimated cost Serbia could expect to spend as a result of the approximation process lies around EUR10.6 billion by 2030.¹¹³ Though this number is quite large, the benefits of this investment are monetarily estimated to range from EUR11.214 million to EUR41.722 million per year by 2030.¹¹⁴ Like Croatia, Serbia's monetary benefits of meeting the requirements of the *Acquis* will exceed the cost of implementation.¹¹⁵

108. *Id.* (noting difficulty in institutional reorganization). Through reorganization, the ministry now has the added challenge of assuming new roles and tasks, such as offering environmental legislation and finding funding to support the harmonization process. *Id.* See Bošnjaković, *supra* note 5, at 23 (estimating cost at EUR4 billion). This estimation was calculated taking the cost of ten existing European Union Member States and scaling them down to Croatia's population size. *Id.* See Kordej-De Villa, *supra* note 61, at 155 (stating estimated costs between EUR6 billion and EUR12 billion). The Country Economic Memorandum calculated this cost using the model Poland applied during accession procedures. *Id.*

109. See TASK 2 FOR CROATIA, *supra* note 102, at XIX (estimating benefit at EUR74 million to EUR428.6 million annually). This calculation spans from 1999 to 2025, the year the *Acquis* supposedly will be fully implemented. *Id.* at XX.

110. See *supra* note 12 and accompanying text (stating Croatia and Serbia regional ties make them comparable countries).

111. See *supra* note 88 and accompanying text (addressing role of agencies during accession processes).

112. See NEAS, *supra* note 44, at 10 (pointing to cooperation and communication improvements as necessary procedures for successful implementation); ENV.NET:SERBIA, *supra* note 99 (highlighting necessity of cooperation and coordination).

113. See NEAS, *supra* note 44, at 24 (giving estimated cost in Euros of approximation).

114. See *id.* at 28 (giving estimated monetary benefits in Euros as result of approximation).

115. See TASK 2 FOR CROATIA, *supra* note 102, at III (listing main benefits to Croatia as result of complete accession). Many of the qualitative benefits such as improved health, increased tourism, and less property damage can be translated into

C. Serbian Current State of Environment

Consistent with Serbia's mentality of exploiting the natural resources to enhance quality of life, the Serbian natural environment is rampant with natural assets.¹¹⁶ Despite Serbia's Constitution and law on the environment, implementation and regulation is weak.¹¹⁷ As a result, construction, soil erosion, fragmented land plots, and lack of irrigation threaten agricultural land, which is one of Serbia's foremost primary resources.¹¹⁸ In addition, illegal cutting and deforestation threaten Serbia's massive forests, and result in erosion, loss of soil, uncontrollable flooding, and vulnerable ecosystems.¹¹⁹ To address these issues, coordinating land planning with environmental protection is a major pathway to improving environment conditions.¹²⁰ Although protected area networks are increasing, significant work still remains to integrate national environment policy to meet E.U. standards.¹²¹

Water resources are one of Serbia's and the Balkan region's primary natural assets.¹²² Protection of these precious resources requires management, infrastructure, and other tools to protect

economic benefits. *Id.* Overall, the economic benefits Croatia received ranges between EUR3 billion and EUR24 billion, doubling its highest estimated cost. *Id.* at XX.

116. See JOURNEY TO A CLEANER FUTURE, *supra* note 1, at 6 (discussing Serbia and West Balkan natural assets). Serbia's natural assets include agricultural land spaces, forests, water resources, and biodiversity. *Id.* at 6-7. See also Repak, *supra* note 37, at 58-59 (discussing history of environmental policy focus upon use as means to progress quality of living).

117. See generally JOURNEY TO A CLEANER FUTURE, *supra* note 1 (explaining weak implementation of laws and policies).

118. See *id.* at 5 (listing threats to Serbia's agricultural land). Serbia's total land coverage is 88,4000 Km². *Id.* Sixty-five percent of total land area is used for agriculture, making up 30% of the nation's employment. *Id.* at 6. Almost equivalent, forests cover 26.7% of land area. *Id.*

119. See *id.* at 5-6. (noting destruction from threat of forests).

120. See *id.* at 6 (stressing importance of coordinating land planning with environment protection).

121. See *id.* (stating significant work still remains for West Balkans to meet E.U. standards).

122. See *id.* at 5 (listing primary resources in West Balkan region). Serbia boasts three Ramsar sites. *Id.* at 6. The Ramsar Convention protects specified natural wetlands declared to be of global importance. *Id.* at 6 n.19. With these wetlands comes rich biodiversity and precious ecosystems. *Id.* The West Balkans area is recognized for its high "levels of endemic species," which are four times greater than the rest of Europe. *Id.*

the biodiversity effectively.¹²³ Serbia reported that its water monitoring systems are outdated and its data collection techniques are outmoded.¹²⁴ As a result of a “lack of sewage treatment,” wastewater leakage from old and incomplete sewage networks, as well as industrial waste discharges, the overall water quality of Serbia is poor.¹²⁵ Industrial contamination remains a significant concern, especially because the main source of drinking water derives from the ground.¹²⁶ Significant work and heavy investments are needed to rectify the water infrastructure because none of the West Balkan countries meet the levels that the *Acquis* promotes.¹²⁷

Serbia is recovering from a history of environmental degradation.¹²⁸ Historically, illegal industrial waste disposal was performed on-site because of weak government oversight of air and water pollution.¹²⁹ As the economy prospers and consumption grows, industrial pollutants will become increasingly concerning.¹³⁰ To offset this threat, Serbia began its early preparation for the IPPC directive by giving a broad estimation of IPPC facilities.¹³¹ Serbia’s high estimated number of potential permits, relative to remaining countries in the West Balkan region, indi-

123. See JOURNEY TO A CLEANER FUTURE, *supra* note 1, at 7 (stating Bosnia and Herzegovina, Albania, and Kosovo lack these necessities).

124. See *id.* at 7 (stating Serbian environment documents report low water quality outdated monitoring systems and data collection techniques).

125. See *id.* (enumerating top three major risks to water quality).

126. See *id.* (explaining concerns for industrial contaminants). High levels of bacteria, heavy metals, and other industrial pollutants are a major concern. *Id.* Flooding and “suspended sediments” result from too much removal of sand and gravel from riverbeds. *Id.* Industrial contamination into water tables remains a significant concern because ground water is the main drinking source. *Id.* at 6. Meanwhile lakes and rivers are used for recreation and power production. *Id.* Low well levels cause nitrate from human and animal waste to contaminate drinking water. *Id.* at 7.

127. See *id.* at 7 (noting no country in region has treatment levels at standard *Acquis* set). In general, rural sewage coverage is low and wastewater is mostly dumped into river bodies or “poorly maintained septic systems.” *Id.* See also *supra* note 126 and accompanying text (stating groundwater serves as drinking source for most rural areas).

128. See generally Repak, *supra* note 37 (discussing overall Serbia suffers poor environment quality from lack of policy protection).

129. See JOURNEY TO A CLEANER FUTURE, *supra* note 1, at 8 (illustrating weak government monitoring resulted in on-site disposal).

130. See *id.* (discussing pollution levels will rise as economies grow).

131. See *id.* at 10 (stating Serbia issued broad estimation of IPPC facilities as preparation for IPPC Directive adoption). A total estimated 242 IPPC facilities are in need of a permit. *Id.*

cates its relative readiness for enforcement and capability to administer this technology-reliant Directive.¹³²

Air quality, which the increasing pollution problem—a by-product of a growing economy—increases, is also at risk.¹³³ Industrial and traffic emissions present the region's greatest hazards to air quality.¹³⁴ As large cities expand and endure population growth, the number of vehicles increases, resulting in heavier traffic.¹³⁵ With almost no technological developments for the treatment of metallurgy and chemicals, air quality in industrial areas is most notably affected.¹³⁶ Acid rain stunts the growth of vegetation and simultaneously destroys the buildings and structures.¹³⁷ Heavy investments are required to comply with the IPPC Directive and the Large Combustion Plant (LCP) Directive.¹³⁸

Municipal waste management overall poses a hardship in complying with the *Acquis*.¹³⁹ Though solid waste collection in some major cities reaches nearly 100%, the majority of coverage ranges from 50-80%, and rural areas remain even lower.¹⁴⁰ In the Balkan region generally, most landfills are so far below the required E.U. standards that they are beyond adaptation.¹⁴¹ To address the plague of substandard landfills and to comply with the Waste Framework Directive, most countries use a regional

132. *See id.* (explaining estimates as indications of enforcement and capacity to administer Directive).

133. *See id.* at 10-11 (asserting air quality deterioration as traffic and vehicles increase in cities).

134. *See id.* at 10 (noting traffic and industrial emissions serve as biggest source of air pollution).

135. *See* JOURNEY TO A CLEANER FUTURE, *supra* note 1, at 10 (indicating main source of air pollution in region from traffic and industrial emissions).

136. *See id.* at 11 (explaining lack of control technologies of metallurgy, chemicals, and energy degraded air quality in industrial areas).

137. *See id.* (noting acid rain from pollution deteriorates built environment and retards growth of vegetation).

138. *See id.* (highlighting IPPC and Large Combustion Plant (LCP) as “heavy investment” Directives).

139. *See id.* (identifying waste management as “a challenge”).

140. *See id.* at 11 (summarizing range of waste management coverage from rural areas to cities).

141. *See* JOURNEY TO A CLEANER FUTURE, *supra* note 1, at 11 (summarizing majority of landfills so far below required environmental conditions they cannot adapt). Only 4% of Serbia's landfills are permitted according to E.U. standards. *Id.* at 12. In addition to managing waste sites deemed substandard, Serbia will also need to clean up and remove thousands of illegal waste sites in the country to comply with E.U. rules. *Id.* at 11.

waste system to take advantage of economies of scale.¹⁴² This system would reduce the total disposal facilities and allow many of the unpermitted landfills to close.¹⁴³ Overall, the European Commission's 2014 Serbian Progress Report reflects how the country has a long road to the European Union.¹⁴⁴

IV. ANALYSIS

A. Accession: Strategy and Challenges

Implementing the Environmental *Acquis* in national legislation is required for membership.¹⁴⁵ Far from easy, this task can include an extensive overhaul of the Applicant State's existing policy.¹⁴⁶ Complicating this challenge is that Applicant States often lack a fortified administrative structure capable of achieving the extensive tasks required for successful implemen-

142. See *id.* at 12 (commenting waste management strategies use regional services to benefit from economies of scale).

143. See *id.* (assessing result of regional system means fewer facilities and closure of landfills).

144. See SERBIA 2014 PROGRESS REPORT, *supra* note 33, at 58 (concluding little progress made aligning environmental policy with E.U. standards). There has been no progress regarding horizontal legislation since 2012. *Id.* at 56. Meanwhile, Serbia demonstrated that it continues to work well with the European Environmental Agency through its improved environmental reporting. *Id.* Air quality, water quality, chemicals, and climate change, however, still need significant work. *Id.* at 53, 57. See also ENV.NET:SERBIA, *supra* note 99 (noting full integration of *Acquis* not expected to occur until 2030).

145. See *supra* note 3 and accompanying text (detailing requirements for membership); see also NEAS, *supra* note 44, at 9 (stating Serbia's efforts to implement necessary conditions to comply with obligations of membership). The E.U. Treaty's fundamental aim is to achieve a high standard of environmental protection. NEAS, *supra*. This objective is in addition to sustainable development and integrating environmental policies into all policies. *Id.* See also Vlašić & Feketija, *supra* note 6, at 328 (considering adopting *Acquis* as of "utmost importance"). Beyond the general benefit of a health environment, adopting E.U. standards prevents "environmental dumping" in other countries with looser standards. *Id.*

146. See NEAS, *supra* note 44, at 9 (stating objective "extensive"). The E.U. policy is "wide-ranging," thus the task of implementing it into national legislation is also extensive. *Id.* See also Vlašić & Feketija, *supra* note 6, at 328 (noting accession process regarding Environmental *Acquis* as extremely challenging). The environmental chapter is considered one of the most complicated chapters with which to comply. *Id.*

tation.¹⁴⁷ Approximating the Environmental *Acquis* is extensive, expensive, and time-consuming.¹⁴⁸

The strategy for approximating the Environmental *Acquis* involves three main objectives: transposing E.U. legislation into national legislation; establishing necessary administrative capacity in order to implement, monitor, and enforce the legislation; and developing infrastructure that can comply with the legislation.¹⁴⁹ Individual sectors then employ even more specific strategies tailored to their unique needs.¹⁵⁰ Using this hierarchical approach allows a candidate country to address the challenges of implementation with economic, efficient, and effective action.¹⁵¹ Obstacles of this strategy are categorized into legislative, economic, and institutional issues.¹⁵²

B. Accession: Croatia

When Croatia began its accession process, it too faced the challenge of aligning its national legislation with the Environmental *Acquis*.¹⁵³ The three-pronged approach to transpose the

147. See *supra* note 64 and accompanying text (preferring weak administrative structures complicate implementation of *Acquis*). Government officials need to equip ministries by giving them “robust advice” about the legal duties they must perform. *Transposition Guidance, supra* note 64, at 6 (advising Applicant States to strengthen ministries); see Kapios, *supra* note 4, at 7 (proffering States typically lack capable institutions). Although the European Union expects Applicant States to have administrative structures capable of implementing and enforcing the European Union law, this typically does not exist. Kapios, *supra*. The tasks required to implement often belong to several administrative bodies, depriving the State of coordination and creating inefficiencies. *Id.*

148. See NEAS, *supra* note 44, at 11 (noting applying Environmental *Acquis* not cheap, easy, or quick).

149. See *id.* at 9 (listing three pronged approach to approximation). “Sustained progress” in these three areas is needed for Serbia to succeed. *Id.* See also Kapios, *supra* note 4, at 6 (detailing three elements of approximation). For approximation to succeed, these elements must all be addressed equally because of their highly dependent nature. *Id.*

150. See NEAS, *supra* note 44, at 15 (describing more specified strategies tailored to each sector). Each sector varies in its preparedness to comply, the amount of environmental pressure, and amount of investment from private funds it is likely to get. *Id.*

151. See *id.* (describing using sector-specific plans to achieve objectives as most economic, effective, and efficient method).

152. See *id.* at 10 (explaining legislative, economic, and institutional challenges significant).

153. See TASK 2 FOR CROATIA, *supra* note 102, at I-II (listing challenges Croatia faces for implementation); see also *Enlargement: Croatia, supra* note 93 (giving details of Croatia’s accession history).

legislation, implement the legislation, and establish infrastructure to comply with the legislation proved a successful strategy.¹⁵⁴ The largest challenges Croatia faced were legislative, economic, and institutional.¹⁵⁵

Croatia's approach to environmental policy prior to accession was a general stance.¹⁵⁶ Although overly detailed legislation is not recommended, too general of an approach can also be inefficient if the regulation does not meet E.U. standards.¹⁵⁷ Croatia's legislative deficiency had to be supplemented using supporting regulations in order to meet the requirements of the *Acquis*.¹⁵⁸

The economic challenge Croatia overcame was similar to all countries trying to accede.¹⁵⁹ Similar to Serbia, the cost of transposing the E.U. legislation, implementing and enforcing it, then building infrastructure to support it cost more than the country could sustainably afford using its own budget.¹⁶⁰ Several studies and calculations show the cost of implementing the Environ-

154. See Vlašić & Feketija, *supra* note 6, at 332 (listing steps to accession). Transposing legislation is the first step. *Id.* Implementing and enforcing the transposed acts are the next steps, which demand careful financial planning. *Id.*

155. See Kordej-De Villa, *supra* note 61, at 149-53 (detailing adjustments needed institutionally, economically, and legally).

156. See *id.* at 151 (stating Croatia has general environmental laws). See also *Task 2 for Croatia*, *supra* note 102, at II (noting Croatia's small environmental investments). All countries trying to accede to the European Union have had to address the issue of aligning national legislation with the European Union policy standards. *Id.* Although Croatia has a past of low environmental investments, its efforts will be highly specified. *Id.*

157. See Kordej-De Villa, *supra* note 61, at 151-52 (stating too much detail in policy drafting not suggested). A general policy approach is also cautioned against because the relaxed attitude can lead legislators to not include environmental policy in policies in other fields. *Id.* at 152.

158. See *id.* at 151 (explaining general laws required in support of implementational policies to meet standards). As mentioned, this included the additional challenge of getting legislators to include environmental policies in other laws when they were not interested in doing so. *Id.* at 152. Weakness in applying and enforcing policies are the main problems to harmonization. *Id.* at 163. More cooperation between the Ministries can also increase awareness in the judiciary; this can give protection higher importance within the courts. *Id.*

159. See *TASK 2 FOR CROATIA*, *supra* note 102, at II (stating all European Union Member States face such challenges).

160. See *TASK 1 FOR CROATIA*, *supra* note 93, at 47 (approximating Croatia's Gross Domestic Product (GDP) at EUR25 billion in 2003). Per capita, the GDP was EUR6,000. *Id.* See Bošnjaković, *supra* note 5, at 23 (estimating cost at EUR4 billion); Kordej-De Villa, *supra* note 61, at 155 (stating estimated costs between EUR6 billion and EUR12 billion).

mental *Acquis* could be between EUR4 billion and EUR12 billion.¹⁶¹ Financing this overhaul will therefore require funds from various sources.¹⁶²

The institutional challenge faced by Croatia also included a need to harmonize environmental responsibility to a central body.¹⁶³ The MEPPPC is the executive agency at the government level responsible for environmental protection.¹⁶⁴ Croatia was able to improve institutional efficiency by integrating all segments of environmental protection and putting them under MEPPPC's authority.¹⁶⁵ MEPPPC was forced to deal with a

161. See *supra* note 108 and accompanying text (detailing cost calculations for Croatia to implement *Acquis*).

162. See TASK 1 FOR CROATIA, *supra* note 93, at 48-50 (giving sources of funding). Sources include the state budget, external funds, and international funds. *Id.* Examples of external funds include public institutions like the Environmental Protection and Energy Efficiency Fund, and Croatian Waters. *Id.* International finance sources include the CARDS program (Community Assistance for Reconstruction, Development, and Stabilization), LIFE (the financial instrument for the environment), and the World Bank. *Id.* at 50.

163. See Kordej-De Villa, *supra* note 61, at 149 (listing institutional adjustments needed for approximating *Acquis*). In Croatia, the environmental authorities are divided hierarchically between government, region, and local bodies. *Id.* The separation of authorities, however, caused splintering of environmental protection and a lack of integral approach. *Id.*

164. See IPA 2010 Croatia Project Fiche, *supra* note 93, at 17 (defining MEPPPC's responsibilities); TASK 1 FOR CROATIA, *supra* note 93, at I (stating MEPPPC has prime responsibility for environment). The MEPPPC was established in 2000. TASK 1 FOR CROATIA, *supra*. Within the MEPPPC, the Directorate for Environmental Protection (DEP) is the key agency responsible for environmental issues. *Id.* Some of DEP's administrative tasks include creating policies for sustainable development, protecting air, water, soil, and plants and animals. *Id.* Croatia also has an Environment Agency (EA), which operates independently of MEPPPC under the Government. *Id.* at 15. The EA's job is to collect environmental data for reporting to the Government, the MEPPPC, and the Ministry of Culture. *Id.* at 15-16.

165. See Kordej-De Villa, *supra* note 61, at 150 (recommending ministry responsible for environment extend authority to all environmental segments). Integrating all segments and putting them in the jurisdiction of the ministry responsible for the environment, the MEPPPC, will lead to a more efficient approach to environmental protection and approximation. *Id.* Part of the approximation process will require MEPPPC to take on new roles and jobs such as proposing legislation, planning the transposition procedure, and making connections with E.U. funding to facilitate the approximation process. *Id.* See also IPA 2010 CROATIA PROJECT FICHE, *supra* note 93, at 17 (noting capacities dedicated to MEPPPC). The MEPPPC is responsible for the strategic environmental assessment tasks at the national level. *Id.* See also TASK 1 FOR CROATIA, *supra* note 93, at 31 (outlining legislative responsibilities of MEPPPC). The Ministry is responsible for developing environmental legislation and implementing them. *Id.*

lack of coordination and communication between ministries.¹⁶⁶ The capabilities of the Ministry suffered inefficiencies while approximating the Environmental *Acquis* and in the overall accession process because of a lack of communication.¹⁶⁷ Staffing in the Ministry was also an issue but by staffing the ministry with capable individuals, MEPPPC was able to increase efficiency and effectiveness performance.¹⁶⁸

1. *Cost of Approximation*

Finding a reliable estimate of the investment cost of approximation has proven extremely difficult because of a lack of information.¹⁶⁹ One approach is to take the costs for ten present candidate countries and scale it down to the size of Croatia's population.¹⁷⁰ This calculates out to around EUR4 billion total

166. See TASK 1 FOR CROATIA, *supra* note 93, at 53 (stating broad role of MEPPPC with respect to institutional challenges). Environmental issues are often spread over several departments, thus the MEPPPC's key function is to coordinate them all. *Id.* Without strong central coordination, the groups do not function optimally. *Id.* It is expected that the accession process will inspire cooperation, but if it fails then Croatia's ability to close Chapter 27 could be seriously delayed, impacting its ability to accede in the long run. *Id.*

167. See *id.* at 93 (highlighting necessity of communication for executing accession strategy). A particular example is between MEPPPC and Croatian Waters Agency. *Id.* The Agency's less-than-cooperative behavior stems from being a mostly autonomous body now having to coordinate with a newer Ministry. *Id.* Unfortunately, accession will be delayed or denied if full implementation cannot be completed on account of old and new institutions refusing to work together. *Id.* at 100. See also Kordej-De Villa, *supra* note 61, at 163 (stating lack of cooperation between ministries diminishes efficiency).

168. See TASK 1 FOR CROATIA, *supra* note 93, at 50-51 (noting challenge result of inadequate staff). At time this report was written, there were not enough staff members with long-term experience. *Id.* at 50. To ensure success, training and capacity building was needed to implement *Acquis*. *Id.*

169. See Bošnjaković, *supra* note 5, at 23 (stating no existing reliable estimates of total investment costs of implementing Environmental *Acquis* in Croatia); see also Kordej-De Villa, *supra* note 61, at 158 (reiterating difficulty in estimating environmental protection investment in Croatia without complete information). National statistics only monitor investment in capital assets, environmental protection infrastructure, and expenses according to the National Classification of Activities (NKD). *Id.* In 2000, environmental investment amounted to EUR47 million. *Id.*

170. See TASK 1 FOR CROATIA, *supra* note 93, at 21 (listing population statistics in 1991 and 2001). Croatia's population in 2001 was 4.4 million. *Id.* See also Bošnjaković, *supra* note 5, at 24 (indicating other candidate countries during Croatia's applicant status). Candidate countries were Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, and Slovenia. *Id.* See also Vlašić & Feketija, *supra* note 6, at 329 (noting countries with smaller populations incur higher cost for compliance).

for environmental infrastructure.¹⁷¹ The National Environmental Action Plan estimates investment will amount to EUR1500-2000 per capita or EUR6.6-8.8 billion total.¹⁷² Another estimate, done by the Country Economic Memorandum, showed Capital expenditures over twenty years were EUR6-12 billion total, or EUR1,400-2,700 per capita.¹⁷³ This estimate is considered reliable because it follows the model that Poland used while it worked toward E.U. membership.¹⁷⁴

2. *Benefits of Approximation*

The cost Croatia paid to harmonize with the *Acquis* reaped great benefits.¹⁷⁵ Overall, the country profited from improvements in health, natural resources, ecosystems, society, and economy.¹⁷⁶ Wider economic benefits, or knock-on benefits, are

171. See Bošnjaković, *supra* note 5, at 23 (calculating cost of investment at EUR4 billion).

172. See Kordej-De Villa, *supra* note 61, at 154 (stating estimate according to Croatia National Environmental Action Plan (NEAP)).

173. See *id.* at 155 (describing research estimating cost of implementation funded by World Bank). The researchers noted this estimate is “stretched.” *Id.* This is a rather high estimation for capital funds per capita, but its estimate is based on uncertainty of unit costs. *Id.* The uncertainty of unit costs is counterbalanced by a choice among investment strategies and three reform development methods. *Id.*

174. See *id.* (observing assumptions used for estimate). Assumptions used include water and waste expenditures are based on expert assessments collected for the study, air expenditure data was taken from the National Environmental Action Plan averages and spending per capita in candidate countries, and data on industrial pollution was taken from estimates for ten accession countries. *Id.* This method assumes that the estimated required investment is dependent on the time needed to develop reform. *Id.* at 156. It also assumes that quicker reform yields smaller required investment. *Id.* at 155. In this model there are three reform scenarios: first model is the “basic” scenario, which represents slow reform, the second is the “moderate” scenario, which represents medium reform, and the third is the “strong” scenario, which represents quick reform. *Id.* This model also assumed Croatia, like Poland, would choose the moderate scenario. *Id.* at 157. As a result, in this model the low EUR6 billion figure is based on a scenario of strong or quick reform and the high EUR12 billion figure is based on a scenario of slow or basic reform of legislation. *Id.*

175. See TASK 2 FOR CROATIA, *supra* note 102, at II (listing several benefits as result of implementing high E.U. environmental standards).

176. See *id.* at III (listing main qualitative benefits explored in report). Some of the main benefits Croatia experienced included reduced pollution yielding better public health, less damage to forests, property, and natural resources, improved protection of ecosystems, increased tourism as result of cleaner environment, cleaner water which results in reduced risk of water related illnesses, reduced production and maintenance costs through availability of clean water, reduced water treatment needs, to name a few. *Id.* at II. These qualitative benefits translate to economic benefits for Croatia by improving work product when citizens are healthier and live longer, as

also to be gained including increased environmental development, which yields increased employment and investments, developing new and existing industries or sectors, and benefits from natural resources, i.e., more tourism and eco-tourism based on clean places to visit, like beaches.¹⁷⁷

The monetized benefits Croatia will receive range from EUR74.6 million to EUR428.6 million per year between 1995 and 2025.¹⁷⁸ This amounts to EUR16.9 million to EUR96.6 million per capita.¹⁷⁹ These numbers, however, only reflect a fraction of the benefits Croatia could gain as a result of complying with the *Acquis*' requirements.¹⁸⁰ Nonetheless, they operate as a tool to illustrate the scale of benefits Croatia could gain and to inspire people to appreciate the returns despite the exorbitant expenses.¹⁸¹

C. Accession: Serbia

Inside the legislative challenge, two basic issues present themselves: organizing the transposition process and ensuring

well as reduced costs of damage to agriculture and property caused by pollution, such as acid rain. *Id.*

177. *See id.* at III (listing details of knock-on benefits).

178. *See id.* at XIX (summarizing annual economic benefits inside Croatia from full implementation of *Acquis*). This calculation was discounted to reflect 1999 Euros and assumes full implementation achieved by 2015. *Id.* at XX. A range of calculations was used to show the possible high and low benefits. *Id.* at XIX. The vast difference between EUR74.6 million and EUR428.6 million illustrates the uncertainty of the value. *Id.* Benefits of approximation were also estimated in areas including the benefits to foreign tourists and the benefits outside Croatia, such as those which neighboring countries gain as a result of less air pollution drifting over from Croatia. *Id.* at XXI. The overall benefits inside and outside Croatia as a result of compliance ranges between EUR3 billion and EUR24 billion. *Id.* at XX.

179. *Id.* at XIX (illustrating calculated benefits per capita of total population). This calculation was done in 1999 Euros. *Id.*

180. *Id.* at XX (noting calculation of monetized benefit not fully representative of all benefits incurred). Of the vast variety of benefits, it is impossible to estimate all benefits in monetized form, such as those in the waste and nature sectors. *Id.* This does not mean there are no benefits in these sectors, rather, readers should take note that monetized benefits do not encompass all benefits as a result of approximating the *Acquis*. *Id.* Despite this inability, this does not mean there are not benefits. *Id.* It is extremely important to analyze the qualitative and quantitative benefits separately, and then analyze the monetized benefits even more distinctly. *Id.*

181. *See TASK 2 FOR CROATIA, supra* note 102, at XXIII (stating despite incompleteness, monetary analysis serves major purpose). The analysis was tailored to a certain audience capable of harvesting a deep appreciation for of the benefits. *Id.* Compliance is an extensive task, so it is important that everyone involved understands the positive results the country can gain in the future. *Id.*

that the *Acquis* is satisfied.¹⁸² Complicating these basic issues is the fact that Serbia suffers from a history of environmental degradation relative to remaining E.U. Member States.¹⁸³ To overcome these issues, Serbia's environmental strategy is to change its procedure so that policymaking and drafting legal texts are distinct activities.¹⁸⁴ The procedure should consider more of the needs of stakeholders and civil society, and it should aim for a clear and understandable policy that meets the needs of the *Acquis*.¹⁸⁵ To achieve this, the work will be "significant."¹⁸⁶ In addition, E.U. environmental policy is a "moving target" as it is constantly changing and all changes must be *Acquis*-compliant throughout the approximation process.¹⁸⁷

The economic challenge to accession is incurred because the amount of changes Serbia must make in order to comply with the *Acquis* will cost more than the country can afford.¹⁸⁸ Based on Serbia's current infrastructure and the costs of accession for new Member States, Serbia's estimated cost is around EUR10.6 billion, about EUR1,400 per capita.¹⁸⁹ Financing

182. See NEAS, *supra* note 44, at 41 (illustrating subsequently addressed issues).

183. See NEAS, *supra* note 44, at 9 (stating Serbia still suffers from legacy of environmental degradation). On average in the European Union, 90% of urban wastewater is treated before releasing it and "nearly 100% of municipal solid waste is collected." *Id.* In Serbia, however, only 10% of wastewater is treated before release "and only 60% of municipal solid waste is collected." *Id.* In addition, 40% of municipal solid waste is recycled on average in the European Union, whereas Serbia only recycles 4%. *Id.*

184. See *id.* at 10 (explaining strategy for legal approximation). Separating these tasks can improve clarity and certainty in the legislative process when these jobs are distinct from each other. *Id.* at 41.

185. See *id.* at 10 (describing changes needed in legislative practice). The practice needs more inclusion of civil society and other stakeholders. *Id.* It also needs to encompass all the requirements of the *Acquis*, which is extensive, without being unclear, ambiguous, and overly detailed. *Id.*

186. See *id.* (stating legislative challenge of transposing Environmental *Acquis* as "significant"). See also Vlašić & Feketija, *supra* note 6, at 328 (describing environmental chapter as one of most complex chapters in *Acquis Communautaire*).

187. See NEAS, *supra* note 44, at 10 (characterizing *Acquis* as moving target). The *Acquis* will adopt new directives up to the time Serbia gains membership and these will also need to be imposed. *Id.* See Bošnjaković, *supra* note 5, at 13 (calling character of *Acquis* "moving target"). For the *Acquis*, adding to the policy and making changes are in order every day. *Id.*

188. See generally NEAS, *supra* note 44 (describing economic challenge and forms of financing).

189. See *supra* Part IV.B.1 (detailing estimated cost of approximating Environmental *Acquis*); see also NEAS, *supra* note 44, at 10 (stating estimated cost of meeting

therefore, will have to come from a variety of sources including international, private, and public.¹⁹⁰

Institutionally, the challenge of aligning national legislation with *Acquis* is an absolute priority.¹⁹¹ The executive agency in charge of environmental policies, MEMSP, is to run this objective with the help of a sub-working group.¹⁹² Using this strategy will require coordination and cooperation inside the Ministry as well as between Ministries.¹⁹³ As a result, MEMSP will have the ability to strengthen legislation and establish policies leading to effective harmonization and approximation.¹⁹⁴

1. *Costs of Approximation*

The cost of approximation is extremely high and is more than the country can afford on its own.¹⁹⁵ The estimated total for Serbia to accede is nearly EUR10.6 billion between 2010 and 2030, or EUR1,400 per capita.¹⁹⁶ This cost per capita is higher

E.U. environmental standards around EUR10.6 billion). Per capita cost is an estimated EUR1,400. NEAS, *supra*, at 25.

190. See NEAS, *supra* note 44, at 10 (describing sources of financing). Once Serbia accedes to the European Union, membership status is expected to grant Serbia more access to E.U. financial support. *Id.* at 27. Membership status is also expected to strengthen investment efforts. *Id.*

191. See *id.* at 10 (highlighting priority to approximate and implement *Acquis*).

192. See *id.* (stating implementation should delegate to executive agency). The optimal situation to harmonize *Acquis* with national legislation is to have one agency responsible for the task. *Id.* In Serbia, environmental policy is in the jurisdiction of the Ministry of Environment, Mining, and Spatial Planning (MEMSP). *Id.* MEMSP will also employ a Chapter 27 sub-working group to carry out the requirements. *Id.* at 51-52. The State Secretary of MEMSP will chair this group. *Id.* at 10. This was the strategy used by the Czech Republic during its accession. *Id.* The structure of the group was effective enabling to coordination plans for approximation, implementation, and support negotiations. *Id.*

193. See *id.* at 52 (explaining need for improved cooperation and coordination); ENV.NET:SERBIA, *supra* note 99 (pointing out need for inter- and intra-Ministerial cooperation and coordination).

194. See NEAS, *supra* note 44, at 10 (stating predicted result when task given to one executive agency).

195. See *id.* at 23 (defining cost of approximation as cost to Serbia of adopting *Acquis*). This cost is different from total cost of environmental expenditures. *Id.* Environmental expenditures include additional components incurred by the national policies. *Id.* Approximation will not happen overnight, Serbia will need huge investments in infrastructure over a lengthy period of time. *Id.*

196. See *id.* at 24 (declaring calculated cost of accession is EUR10.6 billion). This number, calculated in 2010 Euros, is the grand total of Capital Expenditures, Operating Expenditures, and Administrative Costs. *Id.* The Capital Expenditures component includes those that are required; Operating Expenditures includes "replacement and maintenance of [Capital Expenditures];" and Administrative Costs include those

than the average estimated for previous accession countries.¹⁹⁷ This higher cost per capita is a reflection of the lower standard of infrastructure that currently exists in the water sector, particularly Urban Waste Water.¹⁹⁸ This low level of infrastructure will need significant investment in order to meet the high standards required by the European Union.¹⁹⁹

“Heavy Investment Directives” largely influence the cost calculations.²⁰⁰ In total, these Directives make up about 83% of the total cost of approximation, around EUR8.7 billion.²⁰¹

associated with staffing and salaries, anything related to overhead, training, technical studies, in addition to other related costs such as office space and equipment laboratories associated with increased staff size. *Id.* The infrastructure-type costs are placed in the Administrative Cost section (as opposed to the Capital Expenditures component) to show they are associated with legislation implementation as opposed to compliance. *Id.* at 24 n.13. In total, Capital Expenditures amount to EUR5.49 billion; Operating Expenditures amount to EUR4.56 billion; and Administrative Costs amount to EUR536 million. *Id.* at 24. Between 2010 and 2030, the highest annual costs will happen between 2019 and 2023 and will peak at between EUR1.1 billion and EUR1.4 billion. *Id.* at 27. 2019 is the expected accession date. *Id.* The cost per capita amounts to EUR1,400. *Id.* at 25. The calculations for approximation cost used data collected from various sources, including international data and Serbian specific data. *Id.* at 23. After the data was collected, it was placed into a Cost/Finance Model using “sensitivity analysis” to incorporate changes in prospective date for full implementation. *Id.* The calculated costs were then discounted by a rate of 5% to reflect the cost in 2010 Euros. *Id.* at 24. *See also* ENV.NET:SERBIA, *supra* note 99 (describing NEAS estimates full implementation of most of *Acquis* completed by 2014). It also estimates that full implementation of all environmental regulations will be completed by 2030. *Id.*

197. *See* NEAS, *supra* note 44, at 25 (stating cost per capita somewhat higher than prior acceding countries). The estimated per capita average for preceding countries was EUR1,150. *Id.*

198. *See id.* at 25 (stating high cost per capita caused by low level of existing infrastructure). Only 62% of urban wastewater is collected in Serbia, whereas the E.U. average is 93%. *Id.* at 24. The E.U. average wastewater treated is around 87%, compared to Serbia where only 10% of urban wastewater is treated. *Id.*

199. *See id.* at 25 (noting considerable investment needed to comply with E.U. environmental regulations).

200. *See id.* at 24 (stating cost calculations largely focused on “Heavy Investment Directives”). These Directives tend to be those that require the most investments. *Id.* They include: “1. Urban Waste Water (UWW); 2. Drinking Water (DW); 3. Nitrates; 4. Municipal Solid Waste (MSW), which [encompasses] Landfill, Packaging, Waste Electrical and Electronic Equipment (WEEE), and Batteries Directives; 5. Large Combustion Plants (LCPs), which includes both Thermal Power Plants (TPPs) and Heating Plants.” *Id.* at 25.

201. *See id.* (calculating cost of implementing “Heavy Investment Directives”). The first three belong to the Water Sector, the fourth belongs to Waste Sector, and the fifth belongs to Industrial Pollution and Noise Sector. *Id.* at 28. *See also* Kordej-De Villa, *supra* note 61, at 154 (stating water Directives also air quality tend to require 50% more investment than other waste-related Directives).

These Directives have an impact on more than one sector, and therefore, it is standard practice to calculate costs based on Heavy Investment Directives rather than focusing on the individual sectors first, “and to calculate what is ‘left over’ for the specific sectors.”²⁰² Serbia’s goal is for efficient and effective use of funds because of the extremely high costs incurred in the accession process.²⁰³ Thus, the opportunity cost for failing to be efficient can be as high because of the overall high costs.²⁰⁴ To ensure efficient and effective use of funding, the Ministry will need to be staffed with individuals with strong economic backgrounds.²⁰⁵

2. *Benefits of Approximation*

Though the cost of approximating the Environmental *Acquis* is incredibly high, the benefits Serbia stands to gain are even greater.²⁰⁶ Indirect economic benefits of approximation include: reduced mortality; reduced morbidity; reduced damage to agricultural production and property; and a stronger ecosystem.²⁰⁷ Direct economic benefits can amount between EUR11.2 million to EUR41.7 million per year between 2011 and 2030.²⁰⁸ In a cost-benefit analysis, the direct economic benefit outweighs

202. See NEAS, *supra* note 44, at 25 (detailing standard method to calculate cross-sector Directives first). As for the distribution of costs per sector, Water Sector has the highest cost at about EUR5.6 billion (accounting for 53% of the budget); Waste Sector is second amounting to EUR2.8 billion (26% of the budget); and Industrial Pollution and Noise Sector ranks third with EUR1.3 billion (15% of the budget). *Id.* The remainder goes to Air quality & Climate Change at 4%; Nature Protection at 1%; and Chemicals & GMOs at 1%. *Id.*

203. See *id.* at 9 (explaining because approximation costly, optimizing use of funding essential). This is the surest way to maximize the value of the funds. *Id.*

204. See *id.* (cautioning high opportunity costs caused by inefficiencies).

205. See *id.* at 23 (illustrating need for capable staff within Ministry). Having a knowledgeable and capable staff will give the Ministry a sound financial and economic analysis, as well as a strong planning capacity. *Id.*

206. See *id.* at 27 (explaining vastness of benefits). Fewer deaths, longer life expectancy, and healthier individuals means more people are working longer, which helps the economy run stronger. *Id.*

207. See *id.* (listing main benefits of approximating Environmental *Acquis*).

208. See NEAS, *supra* note 44, at 28 (summarizing monetized benefits for sectors). These are the monetized benefits for the Investment Heavy Sectors. *Id.* Total annual benefit, between water, waste, and air & industrial, spans from EUR973 million to EUR3.6 million. *Id.* To avoid inaccuracy, the analysis lists a range of high, medium, and low figures. *Id.*

the cost 2.4 times.²⁰⁹ It should be cautioned that this breakdown is only indicative of the types of economic benefits that can be quantified.²¹⁰

Overall, it is not always possible to clearly or accurately evaluate the benefits of E.U. Directives, but analysts do it anyway because it gives an idea of the implications of implementing the *Acquis* or delaying implementation may cause.²¹¹ As demonstrated, aligning national legislation with the European Union's is not easy or cheap, and it will not happen instantly.²¹² Nonetheless, it is an imperative step to achieving a healthier environment and higher quality of living for all Serbian citizens.²¹³

V. CONCLUSION

The accession process for Member States to join the European Union is extensive.²¹⁴ It takes several years of negotiations, reforms, and patience to meet all the requirements of the *Acquis*.²¹⁵ Meeting E.U. environmental standards of the *Acquis*, one of the most complicated chapters of the *Acquis*, while attempting to build or rebuild a nation's economy has been characterized as "a challenging process, if not close to impossible."²¹⁶

209. See *id.* (analyzing benefit over cost factor). In the cost-benefit analysis, the figures are broken down into sectors and compared to each other. *Id.* The analysis uses the medium range figure from the benefit calculations against the EAS Project Cost Assessment. *Id.* With the total medium range benefit at EUR25.33 million and the cost at EUR10.58 million, Serbia receives a factor of 2.4 benefits over costs. *Id.*

210. See *id.* at 27 (cautioning how nonmonetary benefits exist). At best, these costs and benefits for sectors are broadly indicative. *Id.* It is nearly impossible to calculate the exact costs and benefits for individual sectors. *Id.* Any attempt to use breakdown to determine policy actions or timetables is flawed. *Id.* Additionally developments in scientific knowledge and economic methodology cause the connection between economic benefit and environmental sector to be inexact. *Id.* at 28.

211. See TASK 2 FOR CROATIA, *supra* note 102, at I (noting despite uncertainties, assessing benefits helps forecast implications of implementing or delaying E.U. Directives).

212. See NEAS, *supra* note 44, at 11 (describing compliance with legislation as extensive, costly, and time consuming). It is more important, however, that it is done correctly rather than quickly. *Id.*

213. See *id.* at 10-11 (summarizing importance of complying with Environmental *Acquis*).

214. See *supra* Part III.B and accompanying text (highlighting complexity of complying with Environmental *Acquis*).

215. See *supra* Part IV (describing legislative, economic, and institutional challenges).

216. Vlašić & Feketija, *supra* note 6, at 328 (stating near impossibility of successful harmonization with Environmental *Acquis*); see *supra* note 146 and accompanying

The estimated monetary expense that Serbia will have to pay in order to harmonize its national legislation on the environment with the European Union's legislation costs billions of Euros, and Serbia will need to finance this exorbitant cost from several sources, including international investments.²¹⁷

Nonetheless, the benefits Serbia will gain extend beyond the costs.²¹⁸ Monetarily, Serbia will benefit 2.4 times what it spends.²¹⁹ In addition to monetary profits, Serbia will reap extensive benefits because of improved quality of life and state of health.²²⁰ Transposing, enforcing, and complying with the Environmental *Acquis* is not a requirement simply for making the accession process more difficult; rather, it is an imperative step toward making the environment a healthier place for all members of the world.²²¹

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text (highlighting Environmental *Acquis* perhaps most complicated chapter in *Acquis Communautaire*).

217. *See supra* Part IV.C.1 (detailing costs of approximating Environmental *Acquis*).

218. *See supra* Part IV.C.2 (describing benefits Serbia will gain).

219. *See supra* Part IV.C.2 (explaining Serbia's benefits exceed costs).

220. *See supra* notes 206-207 and accompanying text (elaborating on qualitative benefits of approximation).

221. *See supra* note 212 and accompanying text (stating importance of complying with strict environmental standards of European Union).