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How Kazakhstan's Strategy 2050 Affects its Current International Environmental Obligations Under the Kyoto Protocol

Anna Kate Cleveland

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COMMENT

How Kazakhstan’s Strategy 2050 Affects its Current International Environmental Obligations Under the Kyoto Protocol

*Anna Kate Cleveland**

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I. INTRODUCTION

During his October 10th, 1997 National Address, the President of the Republic of Kazakhstan, Nursultan Nazarbayev stated: “Kazakhstan of 2030 must be a clean and green country with clear air and pure waters. Industrial waste and radiation [will] no longer enter its homes and gardens. Our children and children of our children [will] live a full value life in healthy conditions.”¹ This address set the stage for Kazakhstan’s transition from the Union of Soviet Socialist Republic’s (U.S.S.R.) literal dumping ground for waste to a first world country.

* Candidate for J.D., University of Wyoming College of Law, 2016, B.S. from the University of Washington. The author gratefully acknowledges the assistance of Sam Williams, Jim Peters, and David Maris, members of the Wyoming Law Review editorial board. A special thanks to Professor Robison for his guidance and many helpful comments on my initial draft. Also, eternal gratitude to my family.

¹ *State of the Nation Address*, OFFICIAL SITE OF THE PRESIDENT OF THE REPUBLIC OF KAZAKHSTAN (Oct. 16, 1997), http://www.akorda.kz/en/addresses/addresses_of_president/page_address-of-the-president-of-the-republic-of-kazakhstan-nursultan-nazarbayev-to-the-people-of-kazakhstan-october-10-1997_1343986436.

In a subsequent address, introducing Kazakhstan's Strategy 2050 Plan (Strategy 2050), President Nazarbayev explained:

Kazakhstan owns a territory so vast it would tire the wings of a bird to fly over it. Thus, this plan requires huge funds and hard work. There is a saying: "If you want to know a nation's prosperity look at its paths." Road connections are of high importance, not only for travel, but also for the transportation of goods. In ancient times our big cities were located along the Great Silk Road.²

This address was intended to reintroduce a sense of greatness by tapping into the nation's historical prominence as a portal from the Far East to the West, similar to how the nation is currently tapping into its land for natural resources.³ In a separate address, President Nazarbayev acknowledged the large costs for developmental projects.⁴ Kazakhstan's developmental projects are funded by foreign investment through the European Bank for Reconstruction and Development (EBRD) and the United States Agency for International Development (USAID).⁵ Funding is conditional and often dictates specific projects, commitment levels, and compliance capabilities; however, it may have adverse long-term consequences as well.⁶

Although Kazakhstan is a relatively new and developing country, it has an emerging economy and aspirations for a sustainable development.⁷ Historical tribal diversity and previous rule by the U.S.S.R. shape the culture, politics,

² *State of the Nation Address*, OFFICIAL SITE OF THE PRESIDENT OF THE REPUBLIC OF KAZAKHSTAN (Nov. 11, 2011), http://www.akorda.kz/en/page/page_218343 [hereinafter *State of the Nation Address*]; see also *State-of-the-Nation Address by President of Kazakhstan Nursultan Nazarbayev*, KAZAKHSTAN 2050 (Jan. 17, 2014), <http://strategy2050.kz/en/news/5142/>; *Address by the President of the Republic of Kazakhstan, Leader of the Nation, N.Nazarbayev "Strategy Kazakhstan-2050": New Political Course of the Established State"* (Dec. 12, 2012), http://strategy2050.kz/en/page/message_text/ [hereinafter *Strategy 2050*].

³ See generally *State of the Nation Address*, *supra* note 2.

⁴ See *Strategy 2050*, *supra* note 2.

⁵ See *infra* notes 33–91, 168–71 and accompanying text.

⁶ See *infra* notes 33–91, 168–71 and accompanying text.

⁷ "Sustainable development" will be referenced throughout this comment and is defined as the "development which meets the needs of the present without compromising the ability of future generations to meet their own needs." This definition is widely accepted by the international community and first appeared in *Our Common Future* (the "Brundtland Report"), which was a report published by the World Commission on Environment and Development in 1987. See, e.g., John Drexhage & Deborah Murphy, *Sustainable Development: From Brundtland to Rio 2012*, INT'L INST. FOR SUSTAINABLE DEV. 2 (Sept. 19, 2010), http://www.un.org/wcm/webdav/site/climatechange/shared/gsp/docs/GSP1-6_Background%20on%20Sustainable%20Dev.pdf [hereinafter *From Brundtland to Rio*].

technology, and economy of the country.⁸ Therefore, this comment provides a general overview of Kazakhstan's unique history and abundance of natural resources. It also uses Kazakhstan's Strategy 2050 to determine if Kazakhstan will be able to meet its goal of becoming a "developed" nation by the year 2050 without compromising its international environmental obligations, in particular its commitments under the Kyoto Protocol. An analysis of the pertinent provisions of Kazakhstan's Strategy 2050 illustrates that although Kazakhstan is currently on track to meet its modest international commitments, particularly with regard to the Kyoto Protocol, its commitments are meager in comparison to many European Nations that are trying to lead the fight against climate change.⁹ As a result, this comment discusses a prospective analysis for the upcoming 2015 United Nations Climate Change Conference and Kazakhstan's post-2020 climate change commitments.

Part II discusses a brief history of Kazakhstan, its environment, the relevant sections of Strategy 2050, and its current international environmental obligations, with particular focus on the Kyoto Protocol and related instruments.¹⁰ Part III then shows how Strategy 2050 is in compliance with Kazakhstan's treaty obligations and concludes with the upcoming 2015 United Nations Climate Change Conference in Paris (Paris Conference) and post-2020 projections.¹¹

II. BACKGROUND

A. *Kazakhstan's History and Environment*

Although Kazakhstan is an old nation dating back to the Kazakh Khanate of 1458, it was dramatically transformed while it was a part of the Russian Empire and when it was part of the U.S.S.R.¹² Since its independence in 1991, Kazakhstan forged its own policy in virtually all sectors, including politics and infrastructure.¹³ Geographically, Kazakhstan is a very large country; however, lack of water, arable land, and infrastructural shortcomings create obstacles for sustaining a large population.¹⁴ Thus, Kazakhstan's population is small compared to the territory it encompasses.¹⁵ Because much of the country is not well supplied with water or

⁸ See generally DIDAR KASSYMOVA ET AL., HISTORICAL DICTIONARY OF KAZAKHSTAN (Jon Woronoff ed., Scarecrow Press 2012).

⁹ See *infra* note 152 and accompanying text.

¹⁰ See *infra* notes 12–97 and accompanying text.

¹¹ See *infra* notes 101–71 and accompanying text.

¹² KASSYMOVA, *supra* note 8, at 1.

¹³ KASSYMOVA, *supra* note 8, at 1.

¹⁴ KASSYMOVA, *supra* note 8, at 1.

¹⁵ *Id.*; see also *Kazakhstan Population 2015*, WORLD POPULATION REVIEW <http://world-populationreview.com/countries/kazakhstan-population/> (last visited Oct. 27, 2015) ("Kazakhstan as a whole has a density of six people per square kilometer (15/square mile), which ranks 227th in the world.").

arable land, it is difficult for the government to provide services to its population.¹⁶ However Kazakhstan is well endowed with minerals and energy resources that provide the state with considerable and reliable export revenues.¹⁷ The landlocked country also contains diverse topography “ranging from mountains to deserts” with “[a]rable lands mak[ing] up only [eight] percent of the territory.”¹⁸ This diversity and size has led to significant allocation and management issues.¹⁹

Even though Kazakhstan has an abundance of exportable natural resources, it faces many domestic problems, including inadequate infrastructure inherited from the Soviet era.²⁰ Aside from solving a multitude of social and economic problems, Kazakhstan also created a functioning state—between progressive European countries and the conservative Asian continent—which caused political pressures.²¹ Kazakhstan also struggles with water scarcity issues.²²

Water scarcity is a natural and human-induced dilemma.²³ Although “there is enough freshwater on the planet for seven billion people,” it is unevenly distributed, wasted, polluted, and unsustainably managed.²⁴ According to the United Nations, “[w]ith the existing climate change scenario, almost half the world’s population will be living in areas of high water stress by 2030.”²⁵ Studies from 1996, 1997, and 2001 regarding climate change predictions stated that “available water resources of the main basins within Kazakhstan will decline by at least 20–22%, the occurrence of droughts will sharply increase, and the grain crop productivity will decrease by 20–23%.”²⁶ Water issues are relevant because they are addressed in Strategy 2050 and will likely continue to be exacerbated by climate change.²⁷

¹⁶ KASSYMOVA, *supra* note 8, at 1.

¹⁷ KASSYMOVA, *supra* note 8, at 1.

¹⁸ KASSYMOVA, *supra* note 8, at 2.

¹⁹ KASSYMOVA, *supra* note 8, at 2; *see infra* notes 162–65 and accompanying text.

²⁰ KASSYMOVA, *supra* note 8, at 2.

²¹ KASSYMOVA, *supra* note 8, at 2; *see infra* notes 33–73, 168–71 and accompanying text.

²² *See Strategy 2050*, *supra* note 2.

²³ *Water for Life Decade: Water Scarcity*, UNITED NATIONS DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS (Nov. 24, 2014), <http://www.un.org/waterforlifedecade/scarcity.shtml> [hereinafter *Water Scarcity*].

²⁴ *Water Scarcity*, *supra* note 23.

²⁵ *Water Scarcity*, *supra* note 23 (“Hydrologists typically assess scarcity by looking at the population-water equation. An area is experiencing water stress when annual water supplies drop below 1,700 [m³] per person Water scarcity is defined as the point at which the aggregate impact of all users impinges on the supply or quality of water under prevailing institutional arrangements to the extent that the demand by all sectors, including the environment, cannot be satisfied fully.”).

²⁶ *Assessment of Snow, Glacier and Water Resources in Asia*, IHP/PWRP-BERICHT 100 (2009), http://www.indiaenvironmentportal.org.in/files/Glacier%20in%20Asia_lowres.pdf [hereinafter *Assessment*].

²⁷ *Strategy 2050*, *supra* note 2.

At the beginning of the twenty-first century, only sixty percent of Kazakhstan's rural population had fresh water for indoor plumbing.²⁸ Many areas relied on water from other sources, such as wells, rivers, and springs.²⁹ For example, the Aral Sea and Lake Balkhash, both located in the Western region of Kazakhstan, together serve as internal-drainage reservoirs for "[a]bout 40% of the territories of the five [Commonwealth of Independent States], Kazakhstan, Uzbekistan, Kyrgyzstan, Turkmenistan and Tajikistan."³⁰ This implicates transboundary disputes in "regions sustain[ing] 80% of the population and represent the overwhelming part of the irrigated land within these countries."³¹ Additionally, the Aral Sea continues to diminish due to the excessive water consumption from the cotton-centered economy of the Soviet era.³² Since 1960 seventy percent of its water was lost.³³

Water allocation and conservation are pressing contemporary issues.³⁴ Despite its large number of rivers and lakes, Kazakhstan is considered one of the most water-deficient countries in the world.³⁵ Because its rivers and lakes cross boundaries with other nations, Kazakhstan has been compelled to form disadvantageous transboundary agreements with neighbors.³⁶ Disadvantageous transboundary agreements, inadequate infrastructure for irrigation, distribution, transportation, and contamination treatment make Kazakhstan's water shortage a significant threat to environmentally sustainable development.³⁷ The Caspian Sea Region typifies many of the water resource issues in Kazakhstan. It contains the largest enclosed water reservoir in Kazakhstan and serves as an asset to the country because of its oil and gas deposits, unique flora and fauna, and its role in balancing the climate and environment.³⁸ However, poor maintenance, monitoring, and ongoing property disputes between nations leaves the Caspian Sea's future uncertain and the surrounding countries treading water until a settlement can be reached.³⁹

²⁸ KASSYMOVA, *supra* note 8, at 3.

²⁹ KASSYMOVA, *supra* note 8, at 281.

³⁰ *Assessment*, *supra* note 26, at 161.

³¹ *Assessment*, *supra* note 26, at 161.

³² *Assessment*, *supra* note 26, at 3.

³³ *Assessment*, *supra* note 26, at 3.

³⁴ *Strategy 2050*, *supra* note 2, at 2–3.

³⁵ *Strategy 2050*, *supra* note 2, at 2–3.

³⁶ KASSYMOVA, *supra* note 8, at 2–3; see Joshua Kucera, *After Summit, Caspian Sea Questions Linger*, THE DIPLOMAT (Oct. 2, 2014), <http://thediplomat.com/2014/10/after-summit-caspian-sea-questions-linger/> (explaining that although the five countries bordering the Caspian Sea came together to formalize a convention, issues remain unsolved; Russian President, Vladimir Putin stated that: "it seems that some big compromises are going to have to be made quickly.").

³⁷ KASSYMOVA, *supra* note 8, at 2.

³⁸ KASSYMOVA, *supra* note 8, at 3.

³⁹ KASSYMOVA, *supra* note 8, at 3.

The water issues described above are only one aspect of the larger challenges Kazakhstan faces regarding environmental issues. Currently, Kazakhstan is struggling to strike a balance between recovering from the environmental damage inflicted from the Soviet Era by embracing green technology and achieving rapid economic growth, often resulting in long-term environmental damage.⁴⁰ This tension is reflected in Kazakhstan's climate change goals and status in its international obligations.⁴¹

B. *International Environmental Obligations Regarding Climate Change*

Climate change is one of the most imminent and important issues the world faces as an international community.⁴² This section first discusses the United Nations Framework Convention on Climate Change (Convention or UNFCCC) and the Kyoto Protocol to the United Nations Framework Convention on Climate Change (Protocol). It then describes the UNFCCC's imperfect categorization scheme, and discusses how Kazakhstan's commitments are affected by its unique status.⁴³

1. *The Convention and the Kyoto Protocol*

The Convention is an international environmental treaty that was produced at the United Nations Conference on Environment and Development in Rio de Janeiro in June 1992.⁴⁴ The Convention's objective was "to achieve . . . stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system."⁴⁵ There have

⁴⁰ See *Asia and the Pacific: A Story of Transformation and Resurgence*, UNITED NATIONS ECONOMIC AND SOCIAL COMMISSION FOR ASIA AND THE PACIFIC (Aug. 2014), <http://www.unescap.org/sites/default/files/Asia%20and%20the%20Pacific-A%20Story%20of%20Transformation%20and%20Resurgence.pdf> ("[a]chieving economic, social and environmental objectives for a country requires coordination between many agents, namely, government, producers, consumers and domestic and foreign investors; policies, namely, sectoral, fiscal and monetary, and trade policies; and institutions, including regulatory agencies and the judiciary This could only be done through national long-term plans for achieving sustainable development Economies in transition refer to those which were previously part of the USSR and have been undergoing market-oriented reforms since its break-up in 1991.").

⁴¹ See *infra* notes 53–82 and accompanying text.

⁴² *The Global Climate Change Regime*, COUNCIL ON FOREIGN RELATIONS (June 19, 2013), <http://www.cfr.org/climate-change/global-climate-change-regime/p21831>.

⁴³ See *infra* notes 44–74 and accompanying text.

⁴⁴ *United Nations Framework Convention on Climate Change* (1992), <http://unfccc.int/resource/docs/convkp/conveng.pdf> [hereinafter *UNFCCC*]; see also *First Steps to a Safer Future: Introducing the United Nations Framework Convention on Climate Change*, UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE, http://unfccc.int/essential_background/convention/items/6036.php (last visited Oct. 27, 2015) [hereinafter *First Steps*].

⁴⁵ *UNFCCC*, *supra* note 44.

been several subsequent climate change conferences which have had varying degrees of success.⁴⁶ Because of the large scale of involvement, the framework of the Convention is important.⁴⁷

In order to achieve these goals the Convention is organized into observers and parties.⁴⁸ Observer organizations are composed of representatives from United Nations agencies, intergovernmental organizations, and non-governmental organizations among others.⁴⁹ Parties are divided into three categories: Annex I, Non-annex I, and Annex II; there are also forty-nine nations designated as *least developed countries*.⁵⁰ Annex I Parties are comprised of industrialized countries and transitioning economies.⁵¹ Non-annex I Parties are comprised of developing countries and those “especially vulnerable to the adverse impacts of climate change.”⁵² Least developed countries, a sub-category of Non-annex I Parties, have limited capacity to respond to climate change and are considered when funding and technology decisions are discussed.⁵³ Party categories are determined by looking at many factors, including per capita emissions, the country’s financial and institutional capacity to address climate change, and the “common but differentiated responsibilities” embodied in Article 3.1 of the Convention.⁵⁴

⁴⁶ *United Nations Framework Convention on Climate Change: Handbook*, CLIMATE CHANGE SECRETARIAT 17–20 (2006), <http://unfccc.int/resource/docs/publications/handbook.pdf> [hereinafter *Handbook*] (giving background information on the history and development of the Convention: The first world climate conference was in 1979, and a proposal by Malta on 1988 prompted the adoption of the United Nations GAOR Resolution 43/53, which “recognized that ‘climate change is a common concern of mankind, since climate is an essential condition which sustains life on earth’ and that ‘necessary and timely action should be taken to deal with climate change within a global framework.’” Since the proposal’s adoption, annual conferences are held.)

⁴⁷ See *Handbook*, *supra* note 46.

⁴⁸ *Parties & Observers*, UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE, http://unfccc.int/parties_and_observers/items/2704.php (last visited Oct. 27, 2015) [hereinafter *Parties & Observers*].

⁴⁹ *Parties & Observers*, *supra* note 48 (“Over 1880 NGOs and 100 IGOs are admitted observers.” The NGOs are from diverse fields and represent many interests, including “business and industry, environmental groups, farming and agriculture, indigenous populations, local governments and municipal authorities, research and academic institutes, labour unions, women and gender and youth groups.”)

⁵⁰ *Parties & Observers*, *supra* note 48.

⁵¹ *Parties & Observers*, *supra* note 48. For the list of all Annex I Parties to the Convention visit http://unfccc.int/parties_and_observers/parties/annex_i/items/2774.php.

⁵² *Parties & Observers*, *supra* note 48. For the list of all Non-annex I Parties to the Convention visit http://unfccc.int/parties_and_observers/parties/non_annex_i/items/2833.php.

⁵³ See *Parties & Observers*, *supra* note 48.

⁵⁴ *Handbook*, *supra* note 46, at 46; see also *The Principle of Common but Differentiated Responsibilities: Origins and Scope*, CENTRE FOR INTERNATIONAL SUSTAINABLE DEVELOPMENT LAW (2002), http://cisdl.org/public/docs/news/brief_common.pdf (“The principle of common but differentiated responsibility includes two fundamental elements. The first concerns the common responsibility of States for the protection of the environment, or parts of it, at the national, regional

During the 1997 Convention in Kyoto, Japan, the objective was to “build[] upon and enhances many of the commitments already in place under the Convention.”⁵⁵ The Kyoto Protocol was finally ratified on February 16, 2005.⁵⁶ “The core commitment under the Kyoto Protocol . . . requires each Annex I Party to ensure . . . its total emissions from GHG sources listed in Annex A to the Kyoto Protocol over the commitment period do not exceed its allowable level of emissions.”⁵⁷ The Protocol initially bound Annex I Parties and “major industrialized countries—with the exception of the United States, which has not ratified the agreement—to a greenhouse gas (GHG) emission control system from 2008 to 2012.”⁵⁸ The gases enumerated in Annex A of the Protocol are limited to carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.⁵⁹

Two criticisms of the Protocol are its categorization scheme adapted from the Convention and its failure to account for developing or fast-growing countries under its emission control system including China, India, and Brazil.⁶⁰ Without the participation from developing countries, it is impossible to protect the climate system.⁶¹ “Nearly [eighty] percent of the world’s population lives in developing countries, which account for almost [fifty] percent of the world’s GHG emissions.”⁶² Because such a large percentage of GHG emissions remain unregulated, the Convention’s goals will never be met.⁶³ The traditional categorization scheme has left out many developing nations, namely Kazakhstan, because it was seen as new,

and global levels. The second concerns the need to take into account the different circumstances, particularly each State’s contribution to the evolution of a particular problem and its ability to prevent, reduce and control the threat.”).

⁵⁵ *Kyoto Protocol Reference Manual on Accounting of Emissions and Assigned Amount*, UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE 12 (2008), http://unfccc.int/resource/docs/publications/08_unfccc_kp_ref_manual.pdf [hereinafter *Reference Manual*].

⁵⁶ Kevin A. Baumert, *Participation of Developing Countries in the International Climate Change Regime: Lessons for the Future*, 38 GEO. WASH. INT’L L. REV. 365, 365–66 (2006).

⁵⁷ *Reference Manual*, *supra* note 55, at 13; *see also* *Kyoto Protocol to the United Nations Framework Convention on Climate Change* (1998), <http://unfccc.int/resource/docs/convkp/kpeng.pdf> [hereinafter *Protocol*].

⁵⁸ Baumert, *supra* note 56, at 365–66. Currently, there are 192 Parties to the Kyoto Protocol to the UNFCCC: The only nations that have not signed are Afghanistan, Sudan, and the U.S.A. *See* Baumert, *supra* note 56, at 366.

⁵⁹ *Reference Manual*, *supra* 55, at 106 (Annex A lists Greenhouse gases as well as sectors/source categories).

⁶⁰ Baumert, *supra* note 56, at 366.

⁶¹ Baumert, *supra* note 56, at 366–67.

⁶² Baumert, *supra* note 56, at 366; *see also* Kevin Baumert & Jonathan Pershing, *Climate Data: Insights and Observations*, PEW CENTER ON GLOBAL CLIMATE CHANGE 37 (2004), http://www.qualenergia.it/UserFiles/Files/Cl_St_01_Climate_data%20pew_2004.pdf.

⁶³ *See generally* *Kazakhstan*, CLIMATE ACTION TRACKER, <http://climateactiontracker.org/countries/kazakhstan.html> (last visited Nov. 25, 2015).

underdeveloped, and insignificant when the Convention was formed.⁶⁴ To add or remove Annex I Parties, the Convention employs a formal treaty amendment procedure.⁶⁵ A nation seeking to join Annex I must submit a proposal to the Conference of the State Parties (COP) six months in advance.⁶⁶ The Protocol also requires at least three-fourths of Parties' approval to adopt an amendment.⁶⁷ The overwhelming majority of nations have accepted and abided by their status since designation, but that does not mean re-categorization cannot be made to account for changed circumstances.

2. *Kazakhstan's Status Under the Protocol*

Initially, Kazakhstan was categorized as a Non-annex I country. After only eight years into nationhood, Kazakhstan formally submitted a request to add its name to Annex I in 1999.⁶⁸ In the proposal, the Permanent Mission of the Republic of Kazakhstan stated the following rationale:

Taking into account great importance of global ecological problems facing humanity in whole and Kazakhstan in particular, the Government of the Republic of Kazakhstan has concluded appropriate procedures and took decision to request the [COP] to the UNFCCC to consider the possibility of joining of the Republic of Kazakhstan to the list of countries contained in Annex I to the UNFCCC The Permanent Mission of the Republic of Kazakhstan to the United Nations avails itself of this opportunity to renew to the secretariat of the United Nations Framework Convention on Climate Change the assurances of its highest consideration.⁶⁹

Kazakhstan's initial proposal failed to garner consensus because some developing countries, that vehemently opposed binding commitments, were concerned about the precedent of expanding the exclusive family of Annex I Parties.⁷⁰ Thereafter, Kazakhstan used the notification procedure in Article 4.2(g) of the Protocol to

⁶⁴ *Reference Manual*, *supra* note 55, at 13.

⁶⁵ Baumert, *supra* note 56, at 390.

⁶⁶ Baumert, *supra* note 56, at 390; *see also Amendment to Annex I to the Convention*, UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE 1 (1999), <http://unfccc.int/resource/docs/cop5/02.pdf> [hereinafter *Amendment to Annex I*]; *see also Handbook*, *supra* note 46, at 78 ("According to Article 4.2(g), any Party not included in Annex I may at any time notify the Secretary-General of the United Nations, as the Depositary of the Convention, that it intends to be bound by Article 4.2(a) and 4.2(b).").

⁶⁷ *See Protocol*, *supra* note 57, at art. 20, ¶ 4, art. 21, ¶ 7.

⁶⁸ *Amendment to Annex I*, *supra* note 66, at 1.

⁶⁹ *Amendment to Annex I*, *supra* note 66, at 2.

⁷⁰ Baumert, *supra* note 56, at 393.

bind itself to the Article 4.2 obligations of Annex I Parties.⁷¹ Though bound by Article 4.2, Kazakhstan remains a Non-annex I Party under the Convention.⁷² However, for the purposes of the Protocol, Kazakhstan has Annex I Party status because the Protocol gives Annex I status to any Party that avails itself of the Article 4.2(g) notification procedure.⁷³ As a result Kazakhstan is stuck in “no man’s land.”⁷⁴

One implication of having Annex I status for the Protocol and Non-annex I status for the Convention is the inability to host Clean Development Mechanism (CDM) projects.⁷⁵ As stated in the Protocol:

The purpose of the clean development mechanism shall be to assist Parties not included in Annex I in achieving sustainable development and in contributing to the ultimate objective of the Convention, and to assist Parties included in Annex I in achieving compliance with their quantified emission limitation and reduction commitments under Article 3.⁷⁶

Because Kazakhstan has no legally binding emissions obligations under the Protocol and because it remains outside Annex B, it cannot participate in international emissions trading either.⁷⁷ CDM projects are important under

⁷¹ *Protocol*, *supra* note 57, at art. 1, ¶ 7 (stating a “Party included in Annex I” means a Party included in Annex I to the Convention, as may be amended, or a Party which has made a notification under Article 4, paragraph 2 (g), of the Convention.”); *see also Protocol*, *supra* note 57, at art. 4, ¶ 2 (stating “[t]he Parties to any such agreement shall notify the secretariat of the terms of the agreement on the date of deposit of their instruments of ratification, acceptance or approval of this Protocol, or accession thereto. The secretariat shall in turn inform the Parties and signatories to the Convention of the terms of the agreement.”); *UNFCCC*, *supra* note 44, at art. 4, ¶ 2 (concerning Annex I Parties’ commitment to return 2000 emissions to 1990 levels); Baumert, *supra* note 56, at 390.

⁷² Baumert, *supra* note 56, at 392–93.

⁷³ Baumert, *supra* note 56, at 393.

⁷⁴ Baumert, *supra* note 56, at 393.

⁷⁵ Baumert, *supra* note 56, at 393 (stating CDM projects may only be hosted in Non-annex I countries). Additionally, Non-annex I Parties will “benefit from project activities.” *Protocol*, *supra* note 57, at art. 12, ¶ 3(a)–(b). Whereas Annex I Parties may “use the certified emission reductions accruing from such project activities to contribute to [their] compliance.” Brendan P. McGivern, *Introductory Note to Conference of the Parties to the Framework Convention on Climate Change: Kyoto Protocol*, 37 I.L.M. 22, 27 (1998).

⁷⁶ *Protocol*, *supra* note 57, at art. 12, ¶ 2.

⁷⁷ *Option Review for Kazakhstan to Participate in the International Carbon Market*, CLIMATE FOCUS (Jan. 6, 2010), <http://www.ebrd.com/downloads/sector/eccc/kaz.pdf> [hereinafter CLIMATE FOCUS]; *see also Report of the Conference of the Parties on its Fourteenth Session*, UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE 14, 18 (Mar. 19, 2009), <http://unfccc.int/resource/docs/2008/cop14/eng/07.pdf> [hereinafter *Report of the Conference*] (noting Kazakhstan’s emission

the Protocol's regime because the projects enable Annex I countries to be in compliance with the emissions commitments.⁷⁸ The CDM projects do this by awarding credits—from allowing developed nations to benefit from project activities—resulting in certified emissions reductions.⁷⁹ CDMs also contribute to “[r]eal, measurable, and long-term benefits related to the mitigation of climate change.”⁸⁰

Trading of CDM projects and emissions could serve as a substitute to foreign loans and could foster mutual trade and technology transfers in Kazakhstan. However, because Kazakhstan is excluded from both CDMs and emissions trading, reliance on EBRD and USAID is perpetuated.⁸¹ Kazakhstan's decision to change its categorization scheme excluded itself from participating in CDM projects, and has caused other lasting consequences.⁸² Therefore, it is important for Kazakhstan to become an Annex I Party to build its image as a developed nation.

3. *Kazakhstan's New Categorization Obligations*

In a November 2009 letter, Kazakhstan's Prime Minister informed the Secretariat of the decision to reduce GHG emissions from its 1992 levels: fifteen percent by 2020 and twenty-five percent by 2050.⁸³ The decision to reduce GHG emissions followed Kazakhstan's proposal for an amendment to Annex B of the Kyoto Protocol to include a voluntary quantitative commitment for maintaining the anthropogenic GHG emissions of Kazakhstan for 2008 to 2012 at one hundred percent of their 1992 levels.⁸⁴ At the Doha 2012 climate negotiations,

reduction commitments as voluntary and listing Kazakhstan as an Annex I Party); *Kazakhstan's Submission to the Conference of the Parties Serving as the Meeting of the Parties to the Kyoto Protocol (CMP) and the Subsidiary Body for Scientific and Technological Advice (SBSTA) on Clarification of the Doha Amendment to the Kyoto Protocol*, UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE (2009), https://unfccc.int/files/meetings/warsaw_nov_2013/application/pdf/for_sbsta_from_kz.pdf (noting that Annex B lists each Party, and their respective quantified emission limitation or reduction commitment (percentage of base year or period)).

⁷⁸ *Clean Development Mechanism (CDM)*, UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE, http://unfccc.int/kyoto_protocol/mechanisms/clean_development_mechanism/items/2718.php (last visited Nov. 25, 2015) [hereinafter *CDM*].

⁷⁹ See *CDM*, *supra* note 78.

⁸⁰ *Protocol*, *supra* note 57, at art. 12, ¶ 5(b).

⁸¹ See *Protocol*, *supra* note 57, at art. 12. This could work in Kazakhstan's favor if it implemented an emission-reduction project in a developing country because it would earn certified emission reduction (CER) credits, which are counted towards Kyoto targets which helps Kazakhstan reach its goals.

⁸² See *Protocol*, *supra* note 57, at art. 12.

⁸³ See generally *Protocol*, *supra* note 57, at art. 12.

⁸⁴ *Report of the Conference*, *supra* note 77, at 14.

Kazakhstan agreed to adopt a GHG emissions reduction target for the period between 2013 and 2020.⁸⁵

As part of the Protocol framework, Kazakhstan implemented a mandatory emissions trading scheme in 2013 for industrial and power sectors.⁸⁶ The penalty for noncompliance is approximately one hundred dollars per metric ton of carbon dioxide (CO₂).⁸⁷ This penalty will help promote sustainable energy.⁸⁸ Kazakhstan has also provided information for its quantified, economy-wide, emission targets and underlying conditions.⁸⁹ This is consistent with the information Kazakhstan has previously provided on pledges.⁹⁰ While Kazakhstan should be commended for setting and reaching goals, given the highly extractive and damaging industries that thrive within the country, Kazakhstan has only pledged baseline goals.⁹¹

C. Strategy 2050

The New Economic Policy, “Nyrly Zhol” is Kazakhstan’s global step to becoming one of the thirty most developed countries in world by 2050.⁹² Nyrly Zhol has three goals: (1) To define new markets where Kazakhstan can form productive partnerships and create new sources of economic growth, (2) to create a favorable investment climate, and (3) to develop an effective private sector and public-private partnerships.⁹³ In 2014, President Nazarbayev outlined the two stages of Strategy 2050.⁹⁴

The first stage of Strategy 2050 encompasses the period until 2030 when Kazakhstan will make modernization leaps that continue to grow its traditional

⁸⁵ *Strategy for Kazakhstan*, EUROPEAN BANK FOR RECONSTRUCTION AND DEVELOPMENT 17 (Dec. 17, 2013), <http://www.ebrd.com/downloads/country/strategy/kazakhstan-strategy-2013.pdf> [hereinafter *Strategy for Kazakhstan*] (agreements also included the European Union (EU), Australia, Belarus and Ukraine); see *Doha Amendment to the Kyoto Protocol*, KYOTO PROTOCOL TO THE UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE (Dec. 8, 2012), <https://treaties.un.org/doc/Publication/CN/2012/CN.718.2012-Eng.pdf> (not entered into force).

⁸⁶ *Strategy for Kazakhstan*, *supra* note 85, at 17.

⁸⁷ *Strategy for Kazakhstan*, *supra* note 85, at 17.

⁸⁸ *Strategy for Kazakhstan*, *supra* note 85, at 17.

⁸⁹ *Quantified Economy-Wide Emission Reduction Targets by Developed Country Parties to the Convention: Assumptions, Conditions, Commonalities and Differences in Approaches and Comparison of the Level of Emission Reduction Efforts*, UNFCCC (Oct. 18, 2013), <http://unfccc.int/resource/docs/2013/tp/07.pdf>.

⁹⁰ *Appendix I—Quantified Economy-Wide Emissions Targets for 2020*, UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE (2014), <http://unfccc.int/home/items/5264.php> [hereinafter *Qualified Economy-Wide Emissions Targets*].

⁹¹ *Qualified Economy-Wide Emissions Targets*, *supra* note 89.

⁹² *Strategy 2050*, *supra* note 2.

⁹³ *Strategy 2050*, *supra* note 2.

⁹⁴ *Strategy 2050*, *supra* note 2.

industries and create a processing industrial sector; similar to South Korea and Singapore.⁹⁵ The second stage covers the period from 2030 to 2050 and seeks to ensure sustainable development by emphasizing improvement of new and existing laws on venture financing, protection of intellectual property, and support for research and innovations.⁹⁶ Kazakhstan is also working on commercialization of scientific developments in the Nazarbayev University Intellectual and Innovational Cluster in Astana and the Alatau IT Park in Almaty.⁹⁷ Although Kazakhstan is within its modernization leap stage, until 2030 climate change serves as an imminent threat to natural resources and ecosystems; large-scale sustainable development projects should not wait until 2030. However, Strategy 2050 is not silent on the issue of climate change.⁹⁸ The Strategy affects Kazakhstan's GHG emission goals and environmental preservation by requiring compliance with its international commitments, namely the Protocol.⁹⁹

III. ANALYSIS

Many developing nations must face the same difficult decision as Kazakhstan of whether to prioritize economic growth, which often boosts social welfare by allowing better education and infrastructure, or join much of the developed world and prioritize combating climate change, at the expense of economic growth from reliance on existing natural resource wealth.¹⁰⁰ The purpose of this section is to analyze and critique the aspects of Strategy 2050 that implicate Kazakhstan's current and future climate change commitments. The analysis will show that Kazakhstan's goals deserve scrutiny. It will also question whether energy-dependent countries and those that heavily rely on proceeds from extractive industries should be required to abide by more stringent emissions commitments. The relevant sections of Strategy 2050 are the provisions addressing global energy security, the exhaustion of natural resources, and water shortages.¹⁰¹ At this time, Kazakhstan appears to be meeting its current obligations. However, the period beyond 2020 will be determinative: Kazakhstan will choose to align itself with nations tackling climate change at the expense of economic growth, or it will continue to focus on becoming a developed nation by 2050.

⁹⁵ *Strategy 2050*, *supra* note 2.

⁹⁶ *Strategy 2050*, *supra* note 2.

⁹⁷ *Strategy 2050*, *supra* note 2.

⁹⁸ *Strategy 2050*, *supra* note 2.

⁹⁹ *Protocol*, *supra* note 57, at art. 2, ¶ 1(a).

¹⁰⁰ See *infra* notes 1–11 and accompanying text.

¹⁰¹ *Strategy 2050*, *supra* note 2.

A. *Global Energy Security*

Strategy 2050 recognizes the trend developed countries follow of investing in alternative and green energy technology.¹⁰² However, Kazakhstan maintains that its oil and gas reserves are vital and seeks to make large profits internationally in the energy sector because of its reliable strategic partnerships, particularly with the EU.¹⁰³ The energy industry is a prominent source of income for Kazakhstan.¹⁰⁴ Kazakhstan is the third-largest supplier of energy to the EU outside the Organization of the Petroleum Exporting Countries (OPEC).¹⁰⁵ Therefore, cooperation in the energy sector between the EU and Kazakhstan is crucial and will increase in the future as European companies participate in the exploration of the Kashagan oil field.¹⁰⁶ Despite signing a Memorandum of Understanding (MOU) Kazakhstan has restricted itself by its Annex I Party status for the Protocol, and its exclusion from any beneficial CDM projects.¹⁰⁷ The MOU focuses on building a relationship between the EU and Kazakhstan for transporting hydrocarbon resources from Central Asia to the EU markets. The MOU only mentions its intentions for the future are to develop and introduce alternative energy sources, and ecologically clean and energy saving technologies.¹⁰⁸

Since Kazakhstan signed the MOU, in compliance with Strategy 2050 and the Protocol, it has implemented a mandatory emissions trading scheme in 2013 for industrial and power sectors.¹⁰⁹ The increased carbon price in the MOU is intended to promote the development of sustainable energy and decrease reliance

¹⁰² *Strategy 2050*, *supra* note 2.

¹⁰³ *Strategy 2050*, *supra* note 2.

¹⁰⁴ *The World Fact Book: Kazakhstan*, CENTRAL INTELLIGENCE AGENCY, <https://www.cia.gov/library/publications/the-world-factbook/geos/kz.html> (last visited Nov. 25, 2015) [hereinafter *World Fact Book*] (Kazakhstan was ranked thirty-eighth in the world for refined petroleum products exports in 2011 with 149,800 bbl/day, and ranked seventeenth for natural gas exports in 2012); see also *Kazakhstan: Making the Most of Its Oil Wealth*, INTERNATIONAL MONETARY FUND (Aug. 16, 2011), <http://www.imf.org/external/pubs/ft/survey/so/2011/int081611a.htm> (“In 2010, the oil sector accounted for more than [eleven] percent of GDP, and oil exports represented nearly [fifty-seven] percent of total exports of goods and services.”).

¹⁰⁵ *Memorandum of Understanding on Co-operation in the Field of Energy between the European Union and the Republic of Kazakhstan*, EUROPEAN UNION EXTERNAL ACTION SERVICE (2006), http://eeas.europa.eu/delegations/kazakhstan/documents/eu_kazakhstan/memorandum_field_energy_en.pdf [hereinafter *MOU*] (behind Russia and Norway).

¹⁰⁶ *MOU*, *supra* note 105; see also Nursultan Nazarbayev, *The Next Chapter in Kazakhstan-EU Relations*, *The Wall Street Journal* (Oct. 7, 2014), <http://www.wsj.com/articles/the-next-chapter-in-kazakhstan-eu-relations-1412703767> (“Cooperation in this field will increase in the future, as European companies participate in the exploration of the Kashagan oil field, the largest in the Caspian Sea.”).

¹⁰⁷ *MOU*, *supra* note 105; see *supra* notes 68–81 and accompanying text.

¹⁰⁸ See *MOU*, *supra* note 105.

¹⁰⁹ *MOU*, *supra* note 105; see also *Strategy for Kazakhstan*, *supra* note 85, at 17.

on carbon.¹¹⁰ The MOU also serves to attract EU companies interested in becoming involved in the Kazakh energy sector by developing and introducing alternative energy sources that are ecologically clean.¹¹¹

According to the MOU “sustainable energy” is “[e]ffectively, the provision of energy such that it meets the needs of the future without compromising the ability of future generations to meet their own needs . . . [with] two key components[:] renewable energy and energy efficiency.”¹¹² Further, renewable energy is defined as “[t]he use of energy from a source that does not result in the depletion of the earth’s resources whether this is from a central or local source.”¹¹³ Because energy security is a concern for many nations, the exhaustion of natural resources is an important topic to discuss.

B. The Exhaustion of Natural Resources

Strategy 2050 references unprecedented population and consumption growth in conjunction with finite levels of natural resources on a global scale.¹¹⁴ Kazakhstan relies on the notion that other countries will undoubtedly profit from their reliance on Kazakhstan’s resources because of its current abundance.¹¹⁵ Accordingly, Kazakhstan strives to learn how to properly manage its “natural wealth,” save export revenues, and transform its “natural resources into sustainable economic growth that delivers maximum efficiency.”¹¹⁶

Kazakhstan enjoys a windfall of mineral wealth. It possesses ninety-one chemical elements, including many elements that are extremely rare and command a high market price.¹¹⁷ Mineral resources are often located close to earth’s surface which enables cheap extraction of surface mines.¹¹⁸ Since 1991, oil and gas deposits in Kazakhstan have become major extraction sites and have attracted foreign investment.¹¹⁹ To illustrate, Kazakhstan holds the richest coal reserves in

¹¹⁰ MOU, *supra* note 105; see also *Strategy for Kazakhstan*, *supra* note 85, at 17.

¹¹¹ MOU, *supra* note 105.

¹¹² Xavier Lemaire, *Glossary of Terms in Sustainable Energy Regulation*, RENEWABLE ENERGY & ENERGY EFFICIENCY PARTNERSHIP, SUSTAINABLE ENERGY REGULATION NETWORK 10 (2010), <http://www.reeep.org/sites/default/files/Glossary%20of%20Terms%20in%20Sustainable%20Energy%20Regulation.pdf> [hereinafter *Glossary of Terms*].

¹¹³ *Glossary of Terms*, *supra* note 112, at 8.

¹¹⁴ *Strategy 2050*, *supra* note 2.

¹¹⁵ *Strategy 2050*, *supra* note 2.

¹¹⁶ *Strategy 2050*, *supra* note 2.

¹¹⁷ KASSYMOVA, *supra* note 8, at 4 (including major deposits of petroleum, natural gas, coal, iron ore, manganese, chrome ore, nickel, cobalt, copper, molybdenum, lead, zinc, bauxite, gold, and uranium).

¹¹⁸ KASSYMOVA, *supra* note 8, at 4.

¹¹⁹ KASSYMOVA, *supra* note 8, at 4.

the region and is the ninth largest producer and the tenth largest exporter of coal in the world.¹²⁰ Thus, the country's economy is heavily dependent on mineral production—over seventy-four percent of its industrial production comes from mining operations.¹²¹ Kazakhstan is also a leading supplier of mineral resources in the world market, and foreign investment has enabled the mining sector to export large quantities.¹²² Kazakhstan's ability to supply natural resources has prompted the creation of agreements intended to facilitate trade and increase Gross Domestic Product (GDP).

In 2002 Kazakhstan became the first country of the former Soviet Union to receive an investment-grade credit rating.¹²³ Extractive industries have and continue to be the engine of Kazakhstan's growth. However, Kazakhstan is aggressively pursuing diversification strategies because of Strategy 2050 and climate change pressures.¹²⁴ Because Kazakhstan is landlocked and has restricted access to the high seas it relies on neighbors to export products, especially oil and grain.¹²⁵ Although Kazakhstan's Caspian Sea ports, pipelines, and rail-lines carrying oil have been upgraded, civil aviation and roadways still need investment.¹²⁶

At the end of 2007, global financial markets froze and the loss of capital inflows to Kazakhstani banks caused a financial crisis.¹²⁷ The subsequent and sharp fall of oil and commodity prices in 2008 aggravated the economic situation further, and Kazakhstan plunged into recession. Like many other countries, while the global financial crisis took a significant toll on Kazakhstan's economy, it has since rebounded.¹²⁸ Rising commodity prices helped Kazakhstan's economy recover, and allowed the Government to realize that an overreliance on oil and extractive industries is harmful.¹²⁹ In response, Kazakhstan embarked on an

¹²⁰ KASSYMOVA, *supra* note 8, at 4.

¹²¹ KASSYMOVA, *supra* note 8, at 4.

¹²² KASSYMOVA, *supra* note 8, at 4.

¹²³ KASSYMOVA, *supra* note 8, at 4; see Phalguni Soni, *Comparing Investment-Grade Loans and Treasuries: Credit Ratings*, MARKET REALIST (Feb. 14, 2014, 2:56 PM), <http://marketrealist.com/2014/02/comparing-investment-grade-loans-treasuries-credit-ratings/> (“Investment-grade credit rating” is defined as: “Credit ratings are a measure of the creditworthiness of a borrower . . . [and are] assigned by credit rating agencies like Standard & Poor's or Moody's. Credit ratings assigned to debt issues provide information regarding the credit quality of the issuer and the risk of loan default. The higher the rating, the higher the borrower's creditworthiness and the lower the risk of default . . . A loan, to be considered investment-grade, must be rated BBB- or above. Below the credit rating of BBB-, debt is considered to have low credit quality and classified as non-investment-grade, known as ‘high yield’ or ‘junk’ for bonds and ‘leveraged’ for loans.”).

¹²⁴ KASSYMOVA, *supra* note 8, at 4.

¹²⁵ KASSYMOVA, *supra* note 8, at 4.

¹²⁶ *The World Fact Book*, *supra* note 104.

¹²⁷ *The World Fact Book*, *supra* note 104.

¹²⁸ *The World Fact Book*, *supra* note 104.

¹²⁹ *The World Fact Book*, *supra* note 104.

ambitious diversification program aimed at developing targeted sectors including transportation, pharmaceuticals, telecommunications, petrochemicals, and food processing.¹³⁰ For example, in 2010 Kazakhstan joined the Belarus-Kazakhstan-Russia Customs Union in an effort to further “boost foreign investment and improve trade relationships.”¹³¹

Investment potential in the sustainable energy sector of Kazakhstan is limited due to low energy prices that are driven by readily available low-price fossil fuels, a lack of guiding legislation, and a lack of reliable regulations.¹³² Nevertheless, Kazakhstan has been active in the area of green economic development, organizing initiatives such as Green Bridge Astana, applying for membership to the International Renewable Energy Agency (IRENA), and developing key elements of sustainable energy legislation.¹³³ All of these initiatives are in the preliminary stages and long-term results—either commendable or condemnable—are unknown at this time.

Kazakhstan is working towards a more diverse economy by adopting new green policies.¹³⁴ Strategy 2050’s goal of producing fifty percent of its energy from renewable resources by 2050 is ambitious when compared to the one percent change in 2014.¹³⁵ To attract and explore the best solutions for the renewable resources sector, Kazakhstan is hosting EXPO 2017.¹³⁶ In doing so, Kazakhstan hopes to draw European technology, support, and financial investments to facilitate its “green goals.”¹³⁷ Strategy 2050 also seeks to accelerate Kazakhstan’s

¹³⁰ *The World Fact Book*, *supra* note 104; *see generally* MOU, *supra* note 105.

¹³¹ *The World Fact Book*, *supra* note 104; *see generally* MOU, *supra* note 105.

¹³² *See Strategy for Kazakhstan*, *supra* note 85, at 16.

¹³³ *Strategy for Kazakhstan*, *supra* note 35, at 16; *see Green Bridge Astana*, UNITED NATIONS DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS, <https://sustainabledevelopment.un.org/index.php?page=view&type=99&nr=55&menu=1449> (last visited Nov. 25, 2015) (“The overarching goal of the Astana Initiative, adopted in 2010, is the development of regional, interregional and intersectorial cooperation, and the creation of the environment for introduction of ‘green’ economy principles in Europe and Asia and the Pacific.”); *see also* INTERNATIONAL RENEWABLE ENERGY AGENCY (2015), <http://www.irena.org/menu/index.aspx?mnu=cat&PriMenuID=13&CatID=30> (IRENA is “an international agency dedicated towards renewable energy.” It works towards the increasing “demand for further international cooperation on renewable energy policies, financing, and technologies.”).

¹³⁴ *Strategy 2050*, *supra* note 2 (however, while green policies are mentioned in numerous places, no concrete policies have been drafted, published, or enacted).

¹³⁵ *Strategy 2050*, *supra* note 2.

¹³⁶ *See EXPO 2017 Future Energy*, ASTANA, <https://expo2017astana.com/en/energy/klyuchevyie-ponyatiya> (last visited Oct. 28, 2015) (“The key concepts of Astana EXPO 2017—socio-economic and environmental—derive from the contemplation of energy use in a context linked with sustainable development . . . Astana EXPO 2017 will help . . . look at energy from a common, global viewpoint that takes into account the challenges and concerns facing humanity, safeguarding our health and the environment while boosting economic and social development.”).

¹³⁷ *Strategy 2050*, *supra* note 2.