



A RAIA profile on: **President of Kenya**

William Samoei Ruto

First part of a five series on climate leaders ahead of the 2023 United Nations Climate Change Conference

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Introduction

H.E. Dr William Samoei Ruto is Kenya's 5th President, whose commitment to climate change advocacy permeates the political sphere, developing initiatives that use climate policy as a development tool aimed at improving the lives of Kenyan citizens and catalysing sustainable development. Ruto previously served as Deputy President of Kenya from 2013 to 2022 under former President Uhuru Kenyatta, and is currently the party leader of the United Democratic Alliance.¹ Ruto established himself as an outsider politically– during the most recent election, Ruto declared that he was no longer involved with the Kenyatta-Odinga political establishment.² The Kenyatta and Odinga dynasties are historical political rivals that have held considerable power in Kenyan politics. However, in 2018, Kenya's then current President Uhuru Kenyatta and the leader of the main opposition, Raila Odinga, formed a political pact to work together, joining forces against Ruto. Facing two dynasties and cut off from political influence, Ruto blamed the economic hardships the country previously faced on Kenyatta's incumbent government. This 'break from the past' approach served as a populist method to appeal to voters.³

Kenya became one of the first countries in Africa to enact an exhaustive policy to guide national climate action when it developed the 2016 Climate Change Act and the National Climate Change Action Plan (NCCAP).⁴ More recently, the 2022 United Nations Climate Change Conference (COP27) –where climate loss and damage negotiations were on the COP agenda for the first time– marked a decisive moment in Kenya's journey as both a global and regional climate leader. Over the past year, Ruto has embarked on a series of policies and initiatives aimed at curbing climate change and mitigating its effects on a national scale as well as incorporating world leaders for collaboration.

President Ruto has been actively involved in the fight against climate change and the reduction of Kenya's carbon footprint, and can therefore be considered a climate change leader. For example, he formalised Kenya's membership in the African Carbon Markets Initiative (Nov.2022)⁵ and coordinated the Committee of

¹ CIDOB, "William Ruto," CIDOB, 2022,

https://www.cidob.org/en/biografias_lideres_politicos_only_in_spanish/africa/kenya/william_ruto.

² Nation Africa, "William Ruto: From 'Outsider' to Kenya's Fifth President," Monitor, August 15, 2022, <https://www.monitor.co.ug/uganda/news/william-ruto-from-outsider-to-kenya-s-fifth-president-3915498>.

³ *Ibid.*

⁴ U.S. Agency for International Development, "Kenya Climate Change Country Profile," U.S. Agency for International Development, March 17, 2023,

<https://www.usaid.gov/climate/country-profiles/kenya>.

⁵ Leon Lidigu and Pauline Ongaji, "Kenya Set to Reap from New Carbon Market Initiative," Nation, November 13, 2022,

<https://nation.africa/kenya/news/kenya-set-to-reap-from-new-carbon-market-initiative-4014892>.



African Heads of State and Government on Climate Change (CAHOSCC)⁶. Ruto also participated in a Strategic Dialogue at the African Climate Action Summit in the Global Center on Adaptation (GCA) in Rotterdam, Netherlands⁷ in May 2022 where he was involved in the mobilisation of financial commitments for adaptation and climate action. Further, Ruto participated in the 2022 27th Conference of Parties (COP27) in Egypt, where he expressed his concern for Africa's climate future. At the conference, Ruto was vocal about the fact that Africa contributes less than 3% of pollution responsible for climate change, and is paradoxically the most vulnerable continent in the world from its effects.⁸ Additionally, Ruto created a State Department for Environment and Climate Change under the Ministry of Environment aimed at protecting Kenya from the effects of climate change and global warming through reforestry; planting 15 billion trees by 2030.⁹

Ruto's interest in climate change policies began with his educational background. He holds an undergraduate degree in Botany and Zoology, and a Master of Science and PHD in Plant Ecology.

Ruto first became involved in politics when he helped fund 'Youth for KANU' in 1992, a group which supported the presidential candidacy of Daniel Arap Moi from the Kenya African National Union (KANU) Party. He then rose to the position of Secretary General of the KANU party in 2005, and later became Deputy President between 2013 to 2022. During the 2022 elections, Ruto adopted his "hustler" narrative¹⁰, a relatable political slogan which secured the Mt. Kenya region ('central' on Figure 1) with an estimated 63% of his total votes.¹¹ This is significant because Kenya's central region holds the largest ethnic group of which are sizable in the country's political landscape.

⁶ William Ruto, "Opening Statement by H.E. Hon. William Ruto, PhD, President of the Republic of Kenya and Coordinator of the Committee of African Heads of State and Government on Climate Change (CAHOSCC)" (Meeting of the Committee of Heads of State and Government on Climate Change, February 18, 2023).

⁷ Global Center on Adaptation, "President of Kenya Visits GCA Headquarters to Mobilize Action ahead of Africa Climate Action Summit," Global Center on Adaptation, May 7, 2023, <https://gca.org/news/president-of-kenya-visits-gca-headquarters-to-mobilize-action-ahead-of-africa-climate-action-summit/>.

⁸ United Nations Environment Programme, "Responding to Climate Change," United Nations Environment Programme, October 23, 2017, <https://www.unep.org/regions/africa/regional-initiatives/responding-climate-change#:~:text=While%20Africa%20has%20contributed%20one%20negligibly>.

⁹ Organization of the Government of Kenya, "President Ruto Creates Climate Change Department," The Official Website of the President of the Republic of Kenya, 2023, <https://www.president.go.ke/executive-order-no-1-of-2023-organization-of-the-government-of-kenya/>.

¹⁰ Dauti Kahura and Akoko Akech, "The Real Story behind the Hustler Narrative," The Elephant, October 30, 2020, <https://www.theelephant.info/features/2020/10/30/the-real-story-behind-the-hustler-narrative/>.

¹¹ Nation Africa, "How Ruto Won State House Race," The East African, August 16, 2022, <https://www.theeastafrican.co.ke/tea/news/east-africa/how-ruto-won-state-house-race-3915884>.

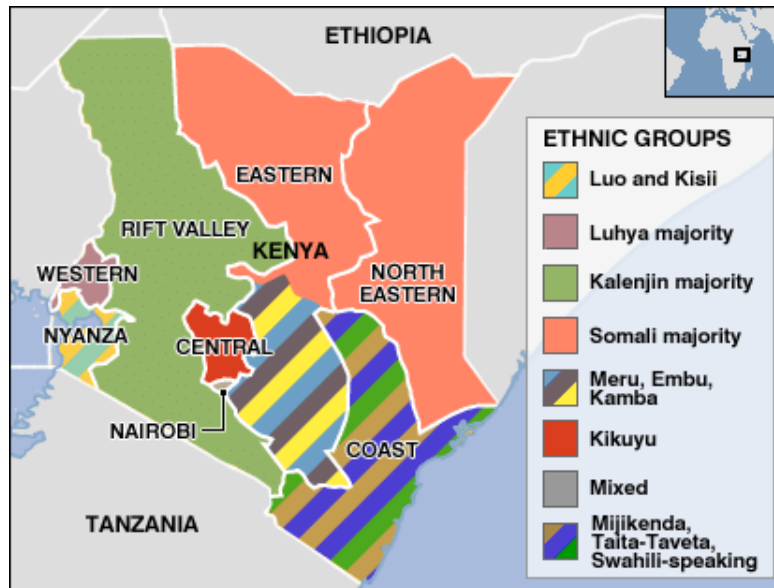


Figure 1: Map of Prominent Ethnic Groups in Kenya¹²

Ruto has been involved in various controversies with both national and international courts which have affected his public image. A survey conducted in 2018 by Ipsos concluded that 33% of Kenyans perceive Ruto as Kenya's most corrupt public official.¹³ In 2011, while serving as Higher Education Minister, Ruto was accused by the International Criminal Court (ICC) of orchestrating violence that followed the 2007 election, where an estimated 1,300 people died.¹⁴ Although he was charged with crimes against humanity and subsequently removed from office, the case against him collapsed in 2016 when crucial witnesses withdrew, prompting the ICC to conclude that extensive witness interference had occurred.¹⁵ Ruto was not acquitted, but rather the case was dropped for lack of evidence. This damaged Kenya's relationship with the West, given that the government had not cooperated with the ICC and instead referred to it as a tool of 'neocolonial prosecution'.¹⁶ Further, in 2019, Ruto was accused of illegally purchasing 900 acres of land, causing a human rights lobby to demand

¹² Nathern S. A. Okilwa, "Educational Marginalization: Examining Challenges and Possibilities for Improving Educational Outcomes in Northeastern Kenya," *Global Education Review* 2, no. 4 (January 2015): 5–18.

¹³ David Herbling, "Kenyan Deputy President Seen as Most Corrupt Leader in Survey," *Bloomberg.com*, August 22, 2018, <https://www.bloomberg.com/news/articles/2018-08-22/kenyan-deputy-president-seen-as-most-corrupt-leader-in-survey>.

¹⁴ "William Ruto, Accused by ICC, Sacked as Kenyan Minister," *BBC News*, August 24, 2011, sec. Africa, <https://www.bbc.com/news/world-africa-14655429>.

¹⁵ Nation Africa, "William Ruto," *Nation Africa*, May 18, 2023, <https://nation.africa/kenya/people/william-ruto-3809570>.

¹⁶ "Obstruction of Justice," *The Economist*, April 9, 2016, <https://www.economist.com/middle-east-and-africa/2016/04/09/obstruction-of-justice>.



an investigation.¹⁷ That same year, the National Land Commission declared that Ruto's 'Weston Hotel' was built on public land belonging to the Kenya Civil Aviation Authority (KCAA).

Ruto has proven to be a constraint challenger where, during the June 2023 Bonn UN Climate Change Conference, he went against the Africa Group of Negotiators (AGN) and the agreements of 2022's United Nation Climate Change Conference meeting (COP27) by arguing that the losses and damages of climate change were increasingly less important on Kenya's climate policy. He argued that Africa can not go around with a 'begging bowl' asking countries for favours, but that they should instead be looking for international investment to overcome the risks of loss and damage.¹⁸ President Ruto also holds the argument that the upcoming COP28 should be the last global climate change conference, arguing that years of on-going climate change negotiations have yielded minimal results. Making COP28 the last of its kind would, according to Ruto, pressure delegations into making concessions to agree with each other and avert the climate crisis once and for all.¹⁹

The first section of this profile will analyse Ruto's stake and his motives for pursuing climate policies. This section will focus on the President's motivation to address the environmental challenges in Kenya, including desertification, pollution, flooding, and overpopulation. The second section of this profile will establish the 2022 United Nations Climate Change Conference (COP27) as Ruto's *defining moment* and underline how Ruto's participation established him as a climate leader. The third section will discuss Ruto's solutions, which include both climate mitigation and climate change policies. These include his membership in the African Carbon Markets Initiative, a climate plan to phase out fossil fuels for electricity by 2030, a tree planting policy, and a fertiliser subsidy programme. Lastly, the fourth section will consider the aforementioned policies' impact on both Kenya and President Ruto as a leader, ultimately answering the question on whether or not Ruto can be considered a climate change leader.

¹⁷ George Sayagie, "Ruto Sucked into Controversy over Purchase of 900 Acres," Nation Africa, June 28, 2020,

<https://nation.africa/kenya/news/ruto-sucked-into-controversy-over-purchase-of-900-acres-209586>.

¹⁸ Leon Lidigu and Zeynab Wandati, "President Ruto Climate About-Turn Leaves Officials in Doubt," Nation, June 6, 2023,

<https://nation.africa/kenya/news/president-ruto-climate-about-turn-leaves-officials-in-doubt-4259474>.

¹⁹ Leon Lidigu, "President Ruto Wants COP28 to Be Last World's Biggest Climate Meet," Nation Africa, June 5, 2023,

<https://nation.africa/kenya/news/president-ruto-wants-cop28-to-be-last-world-s-biggest-climate-meet-4259060>.



William Ruto's Stake

Kenya faces environmental issues such as desertification, pollution, flooding, and overpopulation.²⁰ These difficulties have led to a rise in Internally Displaced Persons (IDPs) and contributed to the increased hardships for the Kenyan agricultural economy. President Ruto believes that both Kenya and the African continent are being treated unfairly - like "beggars" during climate talks.²¹ Although African countries produce negligible greenhouse gas emissions, they are left to fund their own climate development and mitigation initiatives themselves. Ruto believes that the unfair nature of climate diplomacy stems from the fact that emitters of greenhouse gases and pollution get better rates of development than Kenya, making the case that "those who have caused the least pollution are being punished".²² Thus, President Ruto calls for a system that holds polluters accountable for the damages they are causing internationally.

Ruto's interest in the environment and climate change is also seen through his previously mentioned academic experience. Apart from his undergraduate degree, MSc., and Ph.D., he has also written several academic papers on Kenya's environment, such as his Ph.D. thesis titled 'Influence of anthropogenic activities on land use/cover changes and environmental quality of Saiwa wetland watershed, in Western Kenya'.²³

President Ruto uses climate policies as both development and recognition tools. From a developmental perspective, by introducing new climate policies that require funding, Ruto aims to increase international investment in Kenya to improve the lives of Kenyans who have been affected by climate change. A key component of increasing foreign direct investment in Kenya is through voluntary carbon markets. Ruto also uses climate policies as recognition tools to gain popularity ahead of the next elections. As a populist leader, Ruto's election campaign focused on appeasing the general will of the Kenyan people- his promises of fertiliser subsidies serving as a prime example. One could contend that Ruto employs climate policies with the aim of transforming Kenya into a renewable energy powerhouse, leveraging them as a means to assure the Kenyan populace of prospective prosperity.

²⁰ U.S. Agency for International Development, "Kenya Climate Change Country Profile," U.S. Agency for International Development, March 17, 2023, <https://www.usaid.gov/climate/country-profiles/kenya>.

²¹ "Kenya's Ruto Urges Accountability for World Polluters," France 24, February 19, 2023, <https://www.france24.com/en/live-news/20230219-kenya-s-ruto-urges-accountability-for-world-polluters>.

²² *Ibid.*

²³ University of Nairobi, "The 5th President of Kenya: Dr. William Samoei Ruto, a UoN Alumnus," University of Nairobi, September 22, 2022, <https://www.uonbi.ac.ke/news/5th-president-kenya-dr-william-samoei-ruto-uon-alumnus>.



Environmental Challenge #1: Desertification

Desertification is the degradation of arid and semiarid land (ASAL)– areas that are characterised by low rainfall, shallow soils with low water-holding capacity, and low soil fertility.²⁴ In Kenya, the ASAL constitute about 84% of the total land mass and are inhabited by about 34% of the country's population.²⁵ The ASAL are vulnerable to droughts and food insecurity, undermining the long-term viability of initiatives in this region. This creates a challenging living environment for residents, and contributes to the reality that 60% of ASAL inhabitants live below the poverty line.²⁶ Such severe droughts negatively impact local communities, causing water shortages, increasing temperatures, and reducing vegetation and its nutritive qualities. The droughts can also trigger local conflicts over scarce resources and cause food insecurity by stunting the growth of crops and increasing the amount of livestock lost.²⁷ Such issues were particularly prominent in 2022, as the loss of pasture and watering points for livestock in the ASAL region led to the death of over 1,500,000 million cattle, which are an abundant source of nutrition for pastoral communities.²⁸

Since 2010, Kenya has suffered from over four major droughts, affecting food insecure people and causing widespread economic damage.²⁹ Between 2019 and 2023, more than 2 million people have been displaced due to drought in the Horn of Africa, 408,000 of those Internally Displaced Persons (IDPs) in Kenya.³⁰

Desertification in Kenya has also increased the amount of food insecure people. From March to June 2023, an estimated 5.4 million people (32% of the ASAL population) are projected to face IPC AFI Phase 3 or above. Such levels of food insecurity are primarily driven by the successive below average rainy seasons Kenya suffers from, which lead to below average crop production, near crop failure, and poor livestock production.³¹ Localised resource-based conflicts and the high food prices as a result of the war in Ukraine and low in-country production has caused an increase in food insecurity in Kenya.³²

²⁴ Joseph Hitimana et al., "Combating Desertification through Enhancement of Woody Floral Diversity in the Drylands of Kenya: Analysis, Milestones, and Strategies," *Deserts and Desertification*, February 16, 2022, <https://doi.org/10.5772/intechopen.100399>.

²⁵ *Ibid.*

²⁶ United Nations Development Programme, "Combating Desertification in Kenya: Emerging Lessons from Empowering Local Communities" (Nairobi, 2013).

²⁷ *Ibid.*

²⁸ Danish Refugee Council, "Drought-Affected Populations in Northern Kenya" (Danish Refugee Council, October 2022).

²⁹ Republic of Kenya, "Submissions on the General Comment on Children's Rights and the Environment with a Special Focus on Climate Change," December 2021.

³⁰ International Organization for Migration, "East and Horn of Africa Regional Drought Response 2023 | Global Crisis Response Platform," International Organization for Migration Global Crisis Response Platform, n.d., <https://crisisresponse.iom.int/response/east-and-horn-africa-regional-drought-response-2023>.

³¹ *Ibid.*

³² *Ibid.*

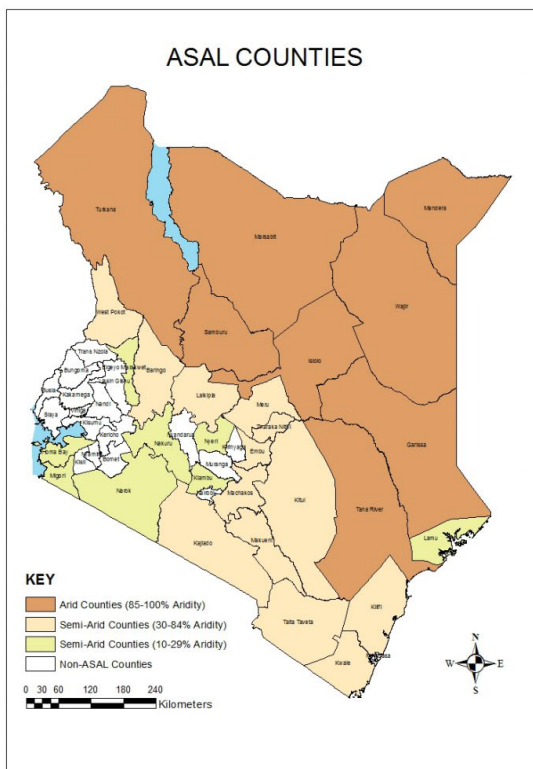


Figure 2: Map of Kenya's ASAL Districts³³

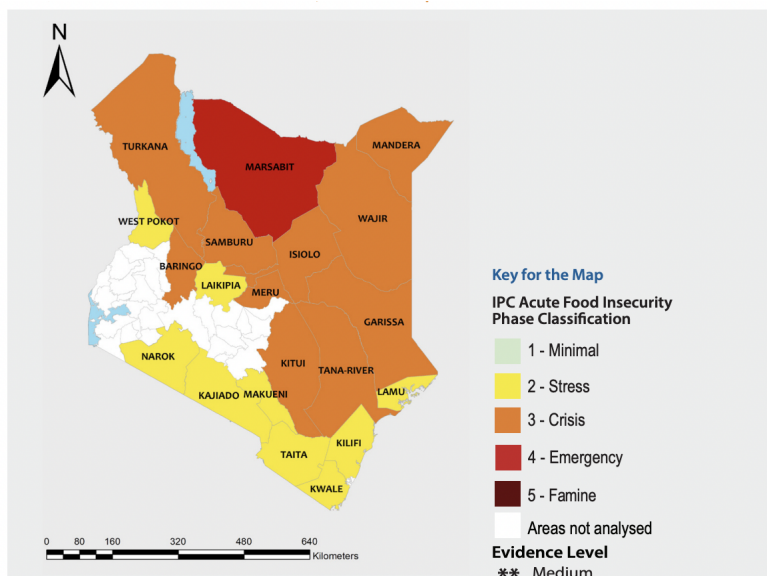


Figure 3: Projected Acute Food Insecurity in Kenya from March - June 2022³⁴

³³ State Department for the ASALs and Regional Development, "Background," 2022, <https://www.asals.go.ke/background/>.

³⁴ United Nations Office for the Coordination of Humanitarian Affairs Relief Web, "Kenya: IPC Food Security & Nutrition Snapshot - Acute Food Insecurity: February - June 2022; Acute Malnutrition: February - May 2022 - Kenya," ReliefWeb, March 31, 2022, <https://reliefweb.int/report/kenya/kenya-ipc-food-security-nutrition-snapshot-acute-food-insecurity-february-june-2022>.



Environmental Challenge #2: Floods

A rise in the world's temperatures has not only led to an increased rate of water evaporation that in turn causes droughts, but it has also increased the amount of water vapour the atmosphere is capable of holding, decreasing the rate at which the atmosphere is able to saturate water– this has led to increased flooding.³⁵ As such, drought and flooding occur in a vicious cycle where drought-prone regions (such as the ASAL) are not able to properly retain water, meaning that when a rainstorm does occur, so do floods and erosion.

Flooding was reported in more than three quarters of Kenya's counties in 2020.³⁶ During that same year, approximately 300 lives were lost due to flooding and over 800,000 people affected across the country throughout the short rains season, a period that lasted from November to December.³⁷ In 1997 and 1998, Kenya suffered from the El Niño floods, which caused US\$151.4 million in public and private property damage and led to a loss of life, destruction of infrastructure, and land degradation.³⁸ Flooding is also unsurprisingly detrimental to Kenya's agricultural sector– destroying farmlands and infrastructure,³⁹ and causes an increased incidence of diseases such as cholera or typhoid.⁴⁰ Between October 2022 and March 2023, Kenya reported a total of 7,350 cases of cholera and 116 cases of death.⁴¹ Sea level rise is expected to impact 86,000 people a year and lead to an annual loss of about KES 6 billion by 2030.⁴²

Flooding also leads to internal displacement and climate migration throughout Kenya. Nairobi is particularly prone to flash flooding due to poor drainage, lack of infrastructure, and inefficient garbage collection. Residents in Kenya's capital suffer from displacements, while rural to urban migrants arrive every day, driven by climate catastrophes.⁴³ Another example is the indigenous communities (Enderios and El Molo) in Bogoria and Turkana, who are progressively displaced

³⁵ Neel Dhanesha, "How Are Floods and Droughts Happening at the Same Time?," Vox, August 9, 2022, <https://www.vox.com/science-and-health/23297362/kentucky-flood-lake-mead-california-arizona-drought>.

³⁶ Kenya Meteorological Department, "State of the Climate in Kenya 2020," 2021.

³⁷ *Ibid.*

³⁸ Alfred Opere, "Floods in Kenya," *Developments in Earth Surface Processes* 16 (2013): 315–30, <https://doi.org/10.1016/b978-0-444-59559-1.00021-9>.

³⁹ Cynthia Brenda Awuor, Victor Ayo Orindi, and Andrew Ochieng Adwera, "Climate Change and Coastal Cities: The Case of Mombasa, Kenya," *Environment and Urbanization* 20, no. 1 (April 2008): 231–42, <https://doi.org/10.1177/0956247808089158>.

⁴⁰ *Ibid.*

⁴¹ World Health Organisation Weekly Regional Cholera Bulletin, "Cholera in the WHO African Region" (World Health Organisation, March 21, 2023).

⁴² Republic of Kenya, "Submissions on the General Comment on Children's Rights and the Environment with a Special Focus on Climate Change," December 2021.

⁴³ "Submission to the UN Special Rapporteur on the Promotion and Protection of Human Rights in the Context of Climate Change" (Climate Refugees, November 8, 2022).



due to rising water levels.⁴⁴ As an indigenous fishing community, the rising levels of Lake Turkana have caused hundreds of El Molo households to be submerged, increasing cases of waterborne diseases and malnutrition, with about 2,500 residents reporting food insecurity.⁴⁵ As such, many have left their community in search for higher plains and grazing land. However, internal migration to neighbouring counties has been met with resistance from raiders who object to the shared use of land, leading to increased conflict.⁴⁶

The consequences of flooding make this environmental challenge a crucial concern for Ruto – as such, during his presidency he has executed initiatives to both combat and mitigate its effects. On the 15th of October, 2022, Ruto inaugurated the Thiba Dam, which is not only capable of holding 15 million metres cubed of water, but is equipped with a spillway that prevents flooding during the rainy season.⁴⁷ He also launched the National Tree Planting Initiative, which aims to plant 15 billion trees by 2032.⁴⁸

Environmental Challenge #3: Pollution

With regards to the environmental challenge of pollution, this section will analyse the effect of domestic/industrial pollution and water/air pollution on the Kenyan population.

Household Air Pollution (HAP) results in severe health risks such as pneumonia, strokes, heart disease and death.⁴⁹ Acute Respiratory Infections (ARI) are majorly linked with exposure to pollutants from domestic biomass fuels in less developed countries⁵⁰ and account for more than 6% of worldwide disease and mortality rates. As of 2021, Kenya had 4.3 million vehicles which significantly contributed to the high levels of air pollution in Kenya.⁵¹ Vehicular exhaust is the main source of

⁴⁴ *Ibid.*

⁴⁵ *Ibid.*

⁴⁶ *Ibid.*

⁴⁷ Inès Magoum, "Kenya: William Ruto Inaugurates Thiba Irrigation Dam for 5,000 Households," Afrik 21, October 19, 2022,

<https://www.afrik21.africa/en/kenya-william-ruto-inaugurates-thiba-irrigation-dam-for-5000-households/>.

⁴⁸ David Malingha, "Years of Failed Rains Prompt Ruto's 15-Billion-Tree Plan in Kenya," Bloomberg.com, October 20, 2022,

<https://www.bloomberg.com/news/articles/2022-10-20/years-of-failed-rains-prompt-ruto-s-15-billion-tree-plan-in-kenya#xj4y7vzkg>.

⁴⁹ Zablon W. Shilenje, Scholastica Maloba, and Victor Ongoma, "A Review on Household Air Pollution and Biomass Use over Kenya," *Frontiers in Environmental Science* 10 (November 8, 2022), <https://doi.org/10.3389/fenvs.2022.996038>.

⁵⁰ Majid Ezzati and Daniel M. Kammen, "Indoor Air Pollution from Biomass Combustion and Acute Respiratory Infections in Kenya: An Exposure-Response Study," *The Lancet* 358, no. 9282 (August 2001): 619–24, [https://doi.org/10.1016/S0140-6736\(01\)05777-4](https://doi.org/10.1016/S0140-6736(01)05777-4).

⁵¹ Kenya National Bureau of Statistics, "Kenya Road Transport: Number of Motor Vehicles: Registered | Economic Indicators | CEIC," CEIC, n.d.,

<https://www.ceicdata.com/en/kenya/road-transport-number-of-motor-vehicles-registered/road-transport-no-of-motor-vehicles-registered#:~:text=Kenya%20Road%20Transport%3A%20Number%20of%20Motor%20Vehicles%3A%20Registered%20data%20was>.



fine particles existing within the inhalable range and the total suspended particles in Nairobi are higher than the WHO recommended level indicating a need for a regular air quality management system. Ruto's government contribution has been aimed at training health workers on how to educate the population on the effects of air pollution and to provide policy support to drive the transition to clean fuels in household and institutions.⁵² For example, in February 2023, the Taifa Gas Company was introduced to provide gas at a cheaper price and to substitute household stoves and firewood with Liquefied Petroleum Gas (LPG) at the household level.⁵³

With reference to industrial waste disposal, lack of proper air quality management systems explains the fact that 90% of toxic emissions (chlorine, sulphur dioxides, hydrogen sulphides, carbon dioxide, carbon monoxide and nitrous oxides) enter the atmosphere and 10% into the water with high probabilities of industrial accidents occurring.⁵⁴ As the capital of Kenya, Nairobi leads in the number of industrial parks in Kenya. Ruto and Johnson Sakaja (Nairobi's Governor), have expressed keen interest in "bringing back the glory of the city of Nairobi by dealing with refuse" in plans to clean up the city and use waste to generate electricity.⁵⁵ A great market exists for the creation of affordable energy and electricity given the estimated 2,400 tons of solid waste in Nairobi with 20% being plastic⁵⁶ – an appropriate material for pyro-cycling. Moreover, waste from bordering countries Uganda and Tanzania goes through the largest lake in Africa, Lake Victoria. The lake suffers from chemical waste and micro plastics which negatively affects the fishing industry.⁵⁷ February 2023 marked Ruto's launch of the Nairobi River Commission to help tackle water pollution in the country's capital. The policy targets more than 500,000 people, injecting 12

⁵² "130,000 Kenyans to Be Trained as Rachel Ruto's Office Signs Agreement on Tackling Air Pollution," Citizen Digital, April 5, 2023, <https://www.citizen.digital/news/130000-kenyans-to-be-trained-as-rachel-rutos-office-signs-agreement-on-tackling-air-pollution-n317500>.

⁵³ "President Ruto: Taifa Gas Launch Historic Milestone to Our Clean, Green Energy Journey," The Official Website of the President of the Republic of Kenya, 2023, <https://www.president.go.ke/5734-2/>.

⁵⁴ Eunice Omanga et al., "Industrial Air Pollution in Rural Kenya: Community Awareness, Risk Perception and Associations between Risk Variables," BMC Public Health 14, no. 1 (April 17, 2014), <https://doi.org/10.1186/1471-2458-14-377>.

⁵⁵ Irene Mwangi, "Govt to Recycle Nairobi Waste to Generate Electricity, President Ruto Says» Capital News," Capital News, April 23, 2023, <https://www.capitalfm.co.ke/news/2023/04/govt-to-recycle-nairobi-waste-to-generate-electricity-president-ruto-says/>.

⁵⁶ Janet Ruto, "Influence of Innovative Plastic Waste Management Practices on the Sustainability of Fast-Moving Consumer Goods Companies in Kenya" (2022).

⁵⁷ Omboki Minayo, "Pollution: Plastics Are Crushing Fishing in Lake Victoria, Experts Warn," Talk Africa, August 18, 2022, <https://www.talkafrica.co.ke/pollution-plastics-are-crushing-fishing-in-lake-victoria-experts-warn/>.



million litres of daily water supply to households.⁵⁸ Ultimately, air and water pollution are the most salient forms of pollution greatly affecting the Kenyan population.

Environmental Challenge #4: Overpopulation

Kenya has a current population of 57.3million⁵⁹, most of which resides in the urban areas of Embakasi and Kasarani in Nairobi County.⁶⁰ The challenges of overpopulation puts stress on the environmental vulnerabilities that Kenya faces, such as in health and sustainable consumption. Nairobi's largest slum, the Kibera slum, holds more than 250,000 people in an area of 2.5 km and has an annual growth rate of 17%.⁶¹ The effects on the environment and on the country's natural resources are dire, with water, arable land, and forests being under intense pressure to sustain the growing population and their needs. Further, the increased demand for water has consequently led to water scarcity predominately in urban areas, resulting in inadequate access to clean and safe drinking water.⁶² For context, 59% of Kenyans have access to clean and safe drinking water and 29% have access to improved sanitation facilities.⁶³

A particular strain has been on agricultural land where issues like deforestation have threatened food supply.⁶⁴ Poverty and inequality have thus resulted, which has led to a scarcity of job opportunities, poor access to education, low socioeconomic development and a lack of proper healthcare services.

⁵⁸ The Official Website of the President of the Republic of Kenya, "President Ruto: We Will Provide Clean Water to All Kenyans," The Official Website of the President of the Republic of Kenya, 2023, <https://www.president.go.ke/president-ruto-we-will-provide-clean-water-to-all-kenyans/>.

⁵⁹ WorldOMeter, "Kenya Population (2019) - Worldometers," Worldometers.info, 2019, <https://www.worldometers.info/world-population/kenya-population/>.

⁶⁰ Sylvania Ambani, "Embakasi Most Populous Nairobi Sub-County with 1m People – Census," Nairobi News, November 5, 2019, <https://nairobinews.nation.africa/embakasi-most-populous-nairobi-sub-county-with-1m-people-census/>.

⁶¹ We Are Water Foundation, "Kibera, the Slum as a Symptom," We Are Water Foundation, May 25, 2021, https://www.wearewater.org/en/kibera-the-slum-as-a-symptom_340571#:~:text=No%20one%20knows%20how%20many.

⁶² Cody Peluso, "Overpopulation: The Global Challenge and Its Far-Reaching Impacts," Population Media Center, June 22, 2023, <https://www.populationmedia.org/the-latest/overpopulation-the-global-challenge-and-its-far-reaching-impacts>.

⁶³ United Nations International Children's Emergency Fund, "Water, Sanitation and Hygiene: Improving Children's Access to Water, Sanitation and Hygiene," www.unicef.org, n.d., <https://www.unicef.org/kenya/water-sanitation-and-hygiene#:~:text=59%25%20of%20people%20in%20Kenya>.

⁶⁴ Sarah Kaplan, "Climate Change Caused Catastrophic East Africa Drought, Scientists Say," Washington Post, April 27, 2023, <https://www.washingtonpost.com/climate-environment/2023/04/27/climate-change-drought-east-africa/>.



Ruto's Defining Moment

Every leader experiences a pivotal moment that charts their new agenda, goals, and aspirations. For Kenyan President Ruto, his moment was his speeches at the 2022 United Nations Climate Change Conference (COP27). Held in November 2022, COP27 put Ruto in the international spotlight. The conference focused on six central themes, all of which are central to Ruto's climate change policies: the development of clean technologies, water and agriculture, biodiversity loss, energy transition, decarbonisation, and finance.⁶⁵ Ruto presented two key speeches– one to the United Nations Framework Convention on Climate Change (UNFCCC) on behalf of both Kenya and the African group (the largest regional group that represents 54 UN Member States from the African Continent)⁶⁶, and the other at the launch of the African Carbon Markets Initiative (ACMI).⁶⁷ At COP27, President Ruto stepped up and represented the African continent as a whole, headlining himself as a key climate change conscious leader.

The backdrop in which Ruto presented his speech to the UNFCCC was contextually significant. Following the Russian invasion of Ukraine, European nations and fossil fuel firms began a 'dash for gas' across Africa, looking for oil and gas projects to invest in.⁶⁸ This provided Ruto with a clear opportunity to hold a firm stance against what he saw as the unethical actions European nations and fossil fuel firms – stating that “we [Kenya] have taken a position that as a country we are going green and we are well on course”.⁶⁹ Ruto chose to invest in renewable energy rather than accepting and locking into fossil fuel projects fueled by the 'dash for gas', which would have turned Kenya into a high-carbon, high-cost, and high-pollution energy system.

There is, however, another side to the story. Around 80% of Kenya's 2.85 billion barrels of oil reservoir remains inaccessible for commercial exploitation because

⁶⁵ COP27, “COP27 - Home,” cop27.eg, 2022, <https://cop27.eg/#/>.

⁶⁶ William Ruto, “Remarks by His Excellency Hon. William Samoei Auto, PhD., C.G.H, President of the Republic of Kenya, and Commander-In-Chief of the Defence Forces, on Behalf of the African Group and Kenya at the 27th Conference of Parties (COP 27) to the United Nations Framework Convention on Climate Change (UNFCCC)” (Conference of Parties (COP 27), November 7, 2022).

⁶⁷ Climate Champions, “Africa Carbon Markets Initiative Announces 13 Action Programs,” Climate Champions, January 16, 2023, <https://climatechampions.unfccc.int/africa-carbon-markets-initiative-announces-13-action-programs/>.

⁶⁸ Rapid Transition Alliance, “Doing Development Differently: How Kenya Is Rapidly Emerging as Africa's Renewable Energy Superpower,” Resilience, November 29, 2022, <https://www.resilience.org/stories/2022-11-29/doing-development-differently-how-kenya-is-rapidly-emerging-as-africas-renewable-energy-superpower/>.

⁶⁹ William Ruto, “Remarks by His Excellency Hon. William Samoei Auto, PhD., C.G.H, President of the Republic of Kenya, and Commander-In-Chief of the Defence Forces, on Behalf of the African Group and Kenya at the 27th Conference of Parties (COP 27) to the United Nations Framework Convention on Climate Change (UNFCCC)” (Conference of Parties (COP 27), November 7, 2022).



of limitations in extraction technology.⁷⁰ As such, Ruto publicly framed Kenya's decision to reject European nations and fossil fuel firms' investment opportunities as his climate change friendly policy, but behind the scenes the decision was likely taken because of Kenya's inaccessible oil reserves.

That same speech permitted Ruto to publicly oppose, in the international spotlight, against what he perceives as the 'injustices' faced by Kenya and the entire continent. He brought to light the issues Africa is facing from climate change-induced disasters, stating that "high water stress is estimated to affect about 250 million people in Africa and is expected to displace up to 700 million people by 2030".⁷¹ President Ruto also referenced the consequences of such disasters on Kenya's budget allocation decisions and the trade-offs the government it forced to make, stating that "two days ago, we went to distribute food relief to 4.3 million affected Kenyans in an emergency programme that has forced us to re-allocate funds budgeted for education and health."⁷² From this, he commented on the fact that the consequences of environmental disasters are primarily caused by nations outside of the African continent, emphasising the inequality that exists between developed and developing nations.

President Ruto also positioned himself as a straight-forward and frank climate leader by criticising the inefficiency of COP summits and their lengthy discussions, stalling, and delaying tactics, which he described as "cruel and unjust".⁷³ He called for leaders, delegations, and nations to stop "skirting around" time-sensitive issues, arguing that doing so will make us spectators to the horrors of climate change.⁷⁴

Ruto's speech at the launch of the ACMI during COP27 was also significant in shaping him as a climate leader. His speech reaffirmed Kenya's support for the African Carbon Markets Initiative, which falls in line with Ruto's goal to use international investment for development to increase his popularity as a leader. The ACMI aims to support the growth of carbon credit production and create jobs in Africa, contributing to its economic prosperity, livelihoods, and environmental preservation.⁷⁵ The ACMI aims to reach 300 million credits retired annually by 2030, which could help Kenya supplement its domestic revenues for climate

⁷⁰ Brian Ngugi, "80pc of Kenya's Crude Oil in Turkana Cannot Be Tapped, Tullow Says," *The East African*, September 17, 2021,

<https://www.theeastafrican.co.ke/tea/business/80pc-of-kenya-crude-oil-cannot-be-tapped-3553356>.

⁷¹ *Ibid.*

⁷² *Ibid.*

⁷³ *Ibid.*

⁷⁴ *Ibid.*

⁷⁵ Climate Champions, "Africa Carbon Markets Initiative Announces 13 Action Programs," *Climate Champions*, January 16, 2023,

<https://climatechampions.unfccc.int/africa-carbon-markets-initiative-announces-13-action-programs/>.



policy, develop its climate change mitigation market, and implement nationally determined contributions. During the COP27 conference, over \$200 million was secured in advanced market commitments from global corporations and seven African nations signed up to develop country carbon activation plans, including Kenya.⁷⁶

Ruto's advocacy and commitment to the ACMI gave him the platform to advocate for Africa's potential as an investment and the opportunities it could provide to other countries with regards to green energy, sustainability, and climate change mitigation progress. In his speech, he called for developed countries to "decarbonise their production by directing industrial investments to Africa and making use of clean energy to manufacture for the world".⁷⁷ He further stated that his goal was to promote the opportunities Africa could provide with regards to green energy, decarbonised manufacturing, smart agriculture, and green building technologies.⁷⁸ Kenya through Ruto is a significant contributor and driving force behind the ACMI where nearly a quarter of Africa's carbon credits come from Kenya- the most of any African country, with about two thirds of the credits being land based and being as a result of clean cookstove projects. Kenya is also predicted to generate the most carbon credit annually- 20 to 25 million credits and 500 million dollars in revenue by 2030.⁷⁹

Ultimately, Ruto argues that, as the chair of the Committee of African Heads of State and Government on Climate Change (CAHOSCC), he bears responsibility for creating plans to counter the severe climate change crisis that would be in form of a continental summit to involve all climate change leaders to support this change.⁸⁰ The African Union Assembly of Heads of State established the CAHOSCC⁸¹, thereby defining its chairship. Prior to this, the committee had seen a succession of African leaders from countries such as South Africa, Gabon, and Egypt at its helm, with Uhuru Kenyatta serving as the immediate past chair⁸².

⁷⁶ *Ibid.*

⁷⁷ William Ruto, "Remarks by His Excellency Hon. William Samoei Auto, PhD., C.G.H, President of the Republic of Kenya, and Commander-In-Chief of the Defence Forces, on Behalf of the African Group and Kenya at the 27th Conference of Parties (COP 27) to the United Nations Framework Convention on Climate Change (UNFCCC) " (Conference of Parties (COP 27), November 7, 2022).

⁷⁸ *Ibid.*

⁷⁹ Farand, Chloe. "Kenya Banks on Carbon Credits - but at What Cost to Communities?" Reuters, March 30, 2023, sec. Oil Report.

<https://www.reuters.com/article/kenya-climate-carbonoffset-idUKL8N35N4EJ>.

⁸⁰ <https://www.standardmedia.co.ke/health/national/article/2001456156/ruto-to-chair-african-heads-of-state-climate-crisis-conference-in-new-york>

⁸¹ African Union Development Agency, "Committee of African Heads of State and Government on Climate Change (CAHOSCC) Meeting | AUDA-NEPAD," www.nepad.org, December 28, 2015, <https://www.nepad.org/news/committee-of-african-heads-of-state-and-government-climate-change-cahoscc-meeting>.

⁸² African Union Development Agency, "Committee of African Heads of State and Government on Climate Change (CAHOSCC) Meeting | AUDA-NEPAD," www.nepad.org, December 28, 2015, <https://www.nepad.org/news/committee-of-african-heads-of-state-and-government-climate-change-cahoscc-meeting>.



Since 2013, the chairmanship of the CAHOSCC has been characterised by a rotational system, with each term lasting two years, with the country chairing the African Ministerial Conference on the Environment (AMCEN) body also chairing the CAHOSCC⁸³

William Ruto's Solutions

Launch of the African Carbon Markets Initiative

As part of President Ruto's strive to form solutions to the current environmental issues Kenya faces, he was a member of a group of sponsors that launched the African Carbon Markets Initiative in November 2022. According to the United Nations Framework Convention on Climate Change (UNFCCC), Africa currently produces only a small percentage of its carbon credit potential⁸⁴, showing the great opportunity to explore the area under the shared climate change agenda. The policy aims to create employment in Africa and help sustain a carbon credit market with a particular focus on Voluntary Carbon Markets (VCMs), which are crucial for African economic development and in reducing greenhouse gas emissions. The Road Map report shows the opportunity created by the use of VCMs to speed up Africa's energy transition to clean energy and proper commercialization of its natural assets.⁸⁵

The ACMI focuses its goals: producing 300 million carbon credits annually by 2030, creating 1.5 billion credits annually by 2050,⁸⁶ unlocking US\$6 billion in revenue by 2030 and over 120 billion by 2050⁸⁷ and to support 30 million jobs by 2030 and over 110 million jobs by 2050⁸⁸ on the overall contribution to actions against climate change. The ACMI is a collaboration between African leaders, climate change experts, the Global Energy Alliance for People and Planet (GEAPP), Sustainable Energy for All (SEforAll) and the UN Economic Commission for Africa.⁸⁹ Ruto aims at using climate change as one of his key development tools to help achieve his goal of improving the lives of Kenyans. Collectively, Kenya, Gabon, Malawi, Mozambique, Togo, Nigeria and Burundi agreed to develop a

⁸³ African Group of Negotiators, "About the AGN," African Group of Negotiators, March 20, 2018, <https://africangroupofnegotiators.org/about-the-agn/>.

⁸⁴ Climate Champions, "Africa Carbon Markets Initiative Launched to Dramatically Expand Africa's Participation in Voluntary Carbon Market," Climate Champions, November 8, 2022, <https://climatechampions.unfccc.int/africa-carbon-markets-initiative/>.

⁸⁵ "Africa Carbon Markets Initiative: Roadmap Report," Sustainable Energy for All | SEforALL, November 8, 2022,

<https://www.seforall.org/publications/africa-carbon-markets-initiative-roadmap-report>.

⁸⁶ Climate Champions, "Africa Carbon Markets Initiative Launched to Dramatically Expand Africa's Participation in Voluntary Carbon Market," Climate Champions, November 8, 2022,

<https://climatechampions.unfccc.int/africa-carbon-markets-initiative/>.

⁸⁷ *Ibid.*

⁸⁸ *Ibid.*

⁸⁹ *Ibid.*



country-carbon activation⁹⁰, where at COP27, \$200 million was secured in advanced market commitments from global corporates.⁹¹

Kenya's participation in the ACMI allows it to access additional funding for internal climate change projects and although Kenya produces only a fraction of its total maximum annual potential, it is already a market leader, responsible for 23% of the value of carbon credit issuances in Africa.⁹² Kenya is also set to reap significant benefits of which a 350 million dollar communal fund to help tackle climate change, with support from the Nature, People and Climate (NPC) Investment Program to encourage sustainable forestry and water protection in Mt Elgon and Cherangany- Kitale- Trans-Nzoia county.⁹³

This Africa Carbon Market Initiative is a tool Ruto uses for development and improvements to make on the Kenyan economy to essentially improve the lives of Kenyans where international investment can be received and integrated into the Kenyan economy. This is in line with his governance goals of intentionally strengthening relations with countries offering mutual economic development and success. This strategic shift moves away from the traditional foreign policy focused on prestige and politics, instead emphasising a strong commitment to fostering economic growth.⁹⁴ Ruto's speech at the launch of the ACMI at COP 27 holds great significance where efforts of Kenya being a green thinker and a climate change conscious country were seen internationally. This simultaneously helped Ruto publicise Kenya's efforts to replace carbon with clean energy. Ruto further explains that the only way to actualize the vision of climate change through adopting clean green energy, appropriate carbon markets must exist to work for Kenyan and African communities⁹⁵ for the prevention and mitigation of

⁹⁰ Climate Champions, "Africa Carbon Markets Initiative Announces 13 Action Programs," Climate Champions, January 16, 2023, <https://climatechampions.unfccc.int/africa-carbon-markets-initiative-announces-13-action-programs/>.

⁹¹ Carbon credits are certificates representing quantities of greenhouse gases that have been kept out of the air or removed from it. VCMs allow companies to use carbon credits to offset emissions they can't get rid of by other means. Voluntary carbon credits direct private financing to climate-action projects that would not otherwise get off the ground.

⁹² Anzette Were, "Creating an Enabling Environment for a Voluntary Carbon Market in Kenya" (Financial Sector Deepening Kenya, April 2023).

⁹³ Leon Lidigu and Pauline Ongaji, "Kenya Set to Reap from New Carbon Market Initiative," Nation, November 13, 2022, <https://nation.africa/kenya/news/kenya-set-to-reap-from-new-carbon-market-initiative-4014892>.

⁹⁴ Nation Africa, "Top 10 Foreign Policy Priorities for Kenya's New President William Ruto," The East African, September 14, 2022, <https://www.theeastafrican.co.ke/tea/news/east-africa/top-10-foreign-policies-for-kenya-new-president-william-ruto-3948384>.

⁹⁵ The Saturday Standard, "Full Speech: President William Ruto Launches African Carbon Markets Initiative at COP27," The Saturday Standard, 2022, <https://www.standardmedia.co.ke/national/article/2001460114/full-speech-ruto-launches-african-carbon-markets-initiative-at-cop27>.



emissions, the protection of crucial ecosystems and the restoration of precious carbon sinks.⁹⁶

Ruto's stake in pursuing climate change policies as a development tool to improve the lives of Kenyans by collecting investment internationally and integrating it into the economy is precisely backed by the country's support of the ACMI. Kenya has already sold 2.2 million carbon credits to Saudi Arabian companies.⁹⁷ The proceeds generated through the auction is to help fund Ruto's major climate projects such as increasing the supply of clean cooking stoves to the community and his tree planting initiative.⁹⁸ This is in line with his personal goals of enhancing Kenya's bargaining power and negotiation skills for more favourable deals which would strategically position Kenya for greater economic benefits and cooperation on the global stage.⁹⁹

Climate Plan to 'ramp up clean energy and phase out fossil fuels for electricity by 2030'

As well as the ACMI, Ruto developed a climate plan to ramp up renewable energy production, phasing out fossil fuels by 2030.¹⁰⁰ This project aims at the production of electricity entirely generated by solar, wind and geothermal energy by 2030. Although the policy is currently solely national, Ruto has called for other African states to join, stating that "Africa can lead the world"¹⁰¹ and eventually become the green factory of the world.¹⁰² The policy's foundations lay in Ruto's belief that Kenya has great potential for renewable energy, and that reducing the cost of such technologies would make it the most viable energy source. However, controversies have arisen from the conflict between Ruto's aim for hydropower energy while Kenya is currently battling the severe drought in East Africa. Kenya's

⁹⁶ *Ibid.*

⁹⁷ Jackson Okoth, "Kenya Sells Record 2.2 M Tonnes of Credit to Saudi Firms," The Kenyan Wall Street, June 17, 2023, <https://kenyanwallstreet.com/kenya-sells-carbon-credits-to-saudi-firms/>.

⁹⁸ Joy Kwama, "Saudi Billionaires Battle at Auction to Invest in Ruto's Project - Kenyans.co.ke," www.kenyans.co.ke, June 14, 2023,

<https://www.kenyans.co.ke/news/90389-saudi-billionaires-battle-auction-boost-rutos-project>.

⁹⁹ Nation Africa, "Top 10 Foreign Policy Priorities for Kenya's New President William Ruto," The East African, September 14, 2022,

<https://www.theeastafrican.co.ke/tea/news/east-africa/top-10-foreign-policies-for-kenya-new-president-william-ruto-3948384>.

¹⁰⁰ Energy is best explained as power derived from the use of resources, of which electricity is a type of energy

¹⁰¹ William Ruto, "We Are at a Crossroads in History: Africa Can and Must Be a Leader in Clean Energy | William Ruto," The Guardian, October 4, 2022,

<https://www.theguardian.com/global-development/2022/oct/04/we-are-at-a-crossroads-in-his-tory-africa-can-and-must-be-a-leader-in-clean-energy>.

¹⁰² "Ruto Asks African Leaders to Position Continent as Green Industrial Hub," www.pd.co.ke, May 17, 2023,

<https://www.pd.co.ke/news/ruto-asks-african-leaders-to-position-as-green-industrial-hub-181146/>.



former Meteorological Department head, Evans Mukolwe, emphasises that geothermal and solar power may be the answer to this presidential goal.¹⁰³

Ruto's role as the Chair of a committee of African Heads of State on Climate Change meeting- the highest decision making body in Africa on climate issues, has enabled a collaboration structure of which he appointed Joseph Ng'ang'a -the CEO of the Global Energy Alliance for People and Planet as CEO of the Africa Climate Summit that will take place in the country's capital from 4th to 6th September 2023.¹⁰⁴ Ruto also hopes to attend the COP28 in Dubai in November 2023 to help bring world leaders, policy makers, experts and the private sector together in the climate change battle with the help of the Global Energy Alliance for People and Planet (GEAPP) to accelerate the creation of clean energy for all. In sum, President Ruto and Dr. Ahmed Al Jaber, Minister of Industry and Advanced Technology of the UAE, agree that the Africa Climate Action Summit and the upcoming COP28 will indeed be important milestones.

Taking a closer look at how this climate policy would impact Kenya, Ruto asserts that the country is firmly advancing towards a greener future with a strong commitment to clean energy. This transformative shift would not only encourage employment opportunities but also foster the growth of local economies and pave the way for sustainable industrialization.¹⁰⁵ The focal point lies in promoting innovation and modern techniques, thereby offering the youth in Kenya ample opportunities to acquire valuable skills and expertise in this new found sector. This is without doubt that the creation of clean green energy comes with a substantial cost, but Kenya possesses great potential in this field. It is notable that Kenya's geothermal energy potential alone holds the capacity to achieve a noteworthy GHG emission of up to 14 MtCO₂e (metric tonnes of CO₂ equivalent)¹⁰⁶ by the year 2030. Furthermore, wind and solar energy sources exhibit promising prospects, with the potential to contribute approximately 1.4 MtCO₂e and 1.0 MtCO₂e, respectively, in emissions reduction during the same period.¹⁰⁷

¹⁰³ Wanjohi Kabukuru, "Kenya's New President Makes Ambitious Pledge for Climate Plan," PBS NewsHour, September 14, 2022,

<https://www.pbs.org/newshour/world/kenyas-new-president-makes-ambitious-pledge-for-climate-plan>.

¹⁰⁴ Global Energy Alliance for People and Planet, "Press Release: Kenya's President Ruto Appoints Joseph Ng'ang'a of the Global Energy Alliance for People and Planet as CEO of the Africa Climate Summit," Global Energy Alliance for People and Planet (GEAPP), June 9, 2023,

<https://www.energyalliance.org/news-insights/geapp-joseph-nganga-ceo-africa-climate-summit/>.

¹⁰⁵ Wanjohi Kabukuru, "Kenya's New President Makes Ambitious Pledge for Climate Plan," PBS NewsHour, September 14, 2022,

<https://www.pbs.org/newshour/world/kenyas-new-president-makes-ambitious-pledge-for-climate-plan>.

¹⁰⁶ United States Environmental Protection Agency, "Pollution Prevention Greenhouse Gas (GHG) Calculator Guidance " (United States Environmental Protection Agency, October 2014).

¹⁰⁷ Francesco Dalla Longa and Bob Van Der Zwaan, "Do Kenya's Climate Change Mitigation Ambitions Necessitate Large-Scale Renewable Energy Deployment and Dedicated Low-Carbon



This climate plan would help Ruto achieve his climate goal of scaling up clean cooking technologies and use of clean energy. Through forestation, the creation of renewable resources such as biomass and bioenergy from organic material like wood would be a better substitute for fossil fuels previously used. Simultaneously through his tree planting initiative to be later explained, the absorption of carbon dioxide in the trees contributes to the store as biomass.

With a strong inclination to climate policy from his early career as Minister of Agriculture and an emphasis of climate change as a key component of the government agenda, Ruto expressed his need for collaboration with African leaders. With a goal of creating a green hub continent to promote infrastructural development, economic improvement and higher standards of living with low food prices, his emphasis lies in cultivating sustainable industries to plant 15 million trees within 3 years. Furthermore, his endeavour to 'green Kenya' and achieve a 30% forest cover by 2032 plays a pivotal role in carbon sequestration efforts and the promotion of renewable energy initiatives. By strategically restoring and expanding forested areas, Kenya can harness the natural potential of its ecosystems to reinforce its renewable energy capacity, ranging from bioenergy sources from sustainably managed forests to solar power generation enhanced by improved energy storage solutions.

National Tree Planting Initiative

On the 22nd of December, 2022, Ruto launched the National Tree Planting Initiative (NTPI), which aims to plant 15 billion trees by 2032¹⁰⁸ and restore 5.1 million hectares of deforested and degraded landscapes.¹⁰⁹ In order to do so, the Kenyan government plans to recruit an additional 2,700 forest rangers and 600 forest officers - bolstering the protection of Kenya's forests.¹¹⁰ The initiative was launched in response to the cycle of recurring droughts the country experienced in recent years. Ruto stated that the ultimate goal toward socio-economic transformation and the achievement of the SDGs was greening Kenya to more than 30% of tree cover by 2032, a task which the NTPI aims to realise.¹¹¹

Energy Policy?," Renewable Energy 113 (December 2017): 1559–68,
<https://doi.org/10.1016/j.renene.2017.06.026>.

¹⁰⁸ David Malingha, "Years of Failed Rains Prompt Ruto's 15-Billion-Tree Plan in Kenya," Bloomberg.com, October 20, 2022,
<https://www.bloomberg.com/news/articles/2022-10-20/years-of-failed-rains-prompt-ruto-s-15-billion-tree-plan-in-kenya#xj4y7vzkg>.

¹⁰⁹ Brian Murimi, "President Ruto Launches Tree Restoration Program to Combat Climate Change," NTV Kenya, December 22, 2022,
<https://ntvkenya.co.ke/climate-change/president-ruto-launches-tree-restoration-program-to-combat-climate-change/>.

¹¹⁰ David Malingha, "Years of Failed Rains Prompt Ruto's 15-Billion-Tree Plan in Kenya," Bloomberg.com, October 20, 2022,
<https://www.bloomberg.com/news/articles/2022-10-20/years-of-failed-rains-prompt-ruto-s-15-billion-tree-plan-in-kenya#xj4y7vzkg>.

¹¹¹ *Ibid.*



The NTPI is not the first large-scale landscape restoration project conducted in Africa—both the Green Legacy Initiative (GLI) and the Green Wall Initiative (GWI) are previous initiatives that achieved questionable degrees of success and however, served as inspirational cases for the NTPI. In 2019, Ethiopia launched the GLI, which aimed to re-green the country by planting 20 billion trees by 2022.¹¹² However, the initiative's success rate is unclear because trees were unknowingly planted in land inappropriate to sustain them, leading to below par survival rates.¹¹³ The 2007 African Union GWI is another example of the restoration of degraded landscapes that helps contextualise the prospects of the NTPI. The GWI aims to restore 100 million hectares of degraded land by 2030.¹¹⁴ As of 2020, only 20 million hectares had been restored and 350,000 of the promised 10 million jobs created.¹¹⁵

From 2001 to 2022, Kenya's tree cover decreased by 375kha, meaning that the country's tree cover decreased by 11% since the year 2000.¹¹⁶ The NTPI is a policy aimed to counter the deforestation Kenya suffers from and mitigate its effects all the while increasing the amount of carbon dioxide Kenya's forests capture.

The NTPI helps solidify Ruto's position as a leader that takes initiative against the negative impacts of climate change, which has caused droughts, floods, and an onslaught of diseases in Kenya. At the time the initiative was launched (one month after COP27), it also aided his public perception. Kenya was already in the international spotlight following Ruto's attendance and speeches at COP27, and the launch of this initiative one month after the conference led to wide international appraisal, scrutiny, and admiration.

Ruto's beliefs and position as a climate conscious leader are seen through the NTPI. Ruto advocates for climate change mitigation policies on behalf of the people of Kenya, arguing that although Kenya is a minimal emitter of greenhouse gas and is not a significant contributor to global warming, it faces critical environmental consequences. With this initiative, Ruto has the opportunity to, as he stated, "lead the world and show that [Kenya] does not need to destroy the climate to prosper".¹¹⁷

¹¹² Daniel Fikreyesus et al., "Mass Tree Planting: Prospects for a Green Legacy in Ethiopia" (International Institute for Environment and Development, June 2022).

¹¹³ *Ibid.*

¹¹⁴ "Is Africa's Great Green Wall Project Withering?," *Nature* 616, no. 7957 (April 18, 2023): 412–12, <https://doi.org/10.1038/d41586-023-01293-6>.

¹¹⁵ *Ibid.*

¹¹⁶ Global Forest Watch, "Kenya Deforestation Rates & Statistics," www.globalforestwatch.org, n.d., <https://www.globalforestwatch.org/dashboards/country/KEN>.

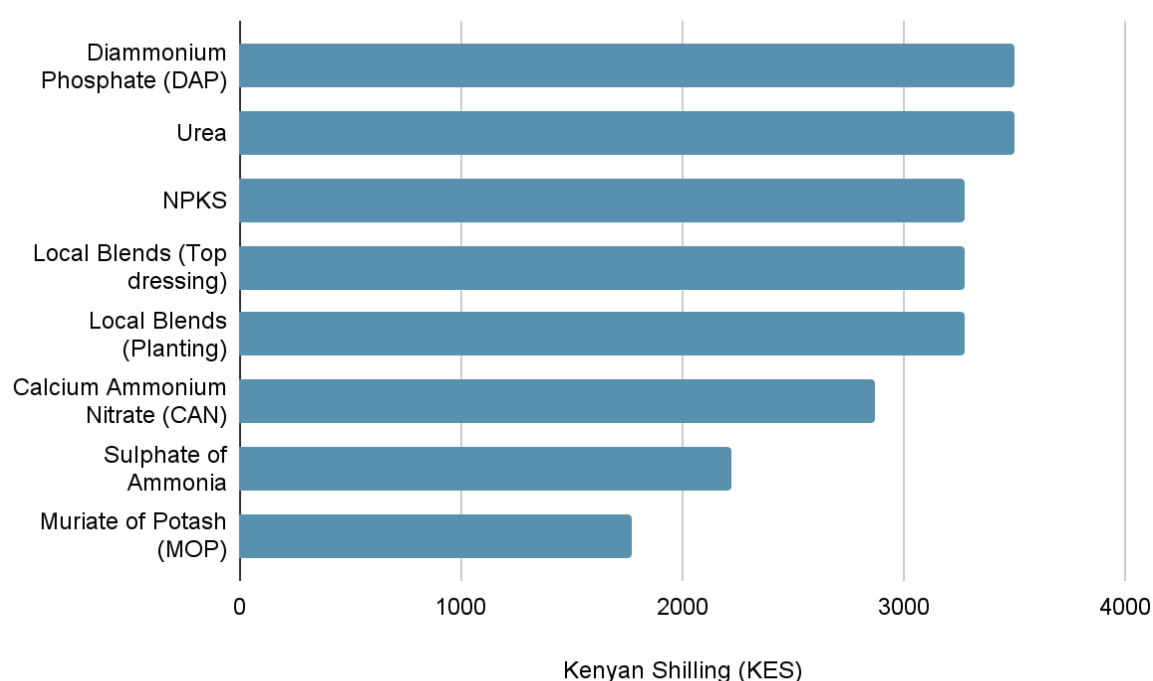
¹¹⁷ William Ruto, "We Are at a Crossroads in History: Africa Can and Must Be a Leader in Clean Energy | William Ruto," *The Guardian*, October 4, 2022, <https://www.theguardian.com/global-development/2022/oct/04/we-are-at-a-crossroads-in-his-tory-africa-can-and-must-be-a-leader-in-clean-energy>.



Agricultural policy → Fertiliser Subsidy Programme (FSP)

On the 20th of September, 2022, Ruto launched the Fertiliser Subsidy Programme (FSP), whose main objective is to lower the price of a 50kg bag of fertiliser from the then current market price of Ksh 6,500 to Ksh 3,500.¹¹⁸ This would be done by importing 1.5 million 50kg bags and distributing them at the lower cost of Ksh 3,500, with the government paying the difference of Ksh 3,000 per 50kg bag.¹¹⁹ The policy introduced by Ruto relies on the Ksh 3.55 billion subsidy provided by the Ministry of Agriculture, Livestock, Fisheries and Cooperatives that applies to 71,000 metric tonnes of fertiliser, which would support 1.4 million acres of land.¹²⁰ Respectively, each registered FSP farmer is entitled to a maximum of 100 bags of fertiliser per season depending on the registered acreage of land they own.

Figure 4: Approved Fertiliser Selling Prices Per 50kg Bag¹²¹



The Agricultural sector plays a significant role in the livelihood of Kenyans. About 80% of Kenya's population lives in rural areas and is both directly and indirectly

¹¹⁸ Wainaina Ndungu, "William Ruto's Plan to Transform Agriculture, Earn Foreign Exchange," The Saturday Standard, October 21, 2022, <https://www.standardmedia.co.ke/business/business/article/2001458636/william-rutos-plan-to-transform-agriculture-earn-foreign-exchange>.

¹¹⁹ *Ibid.*

¹²⁰ Fiona Okadia, "The Pros and Cons of the Ksh 3500 Fertilizer Subsidy," Institute of Economic Affairs Kenya, September 23, 2022, <https://ieakenya.or.ke/blog/the-pros-and-cons-of-the-ksh-3500-fertilizer-subsidy/>.

¹²¹ National Cereals and Produce Board, "Government Subsidised Fertilizer Subsidy Program Frequently Asked Questions" (National Cereals and Produce Board, October 2022).



affected by the agricultural sector.¹²² The sector employs around 40% of the total population and around 70% of the rural population.¹²³

Food security in Kenya has worsened as a result of climate change induced environmental disasters, with the number of undernourished Kenyan people increasing from 10.2 million in 2004-2006 to 14.6 million in 2016-2018.¹²⁴ The FSB would help mitigate the negative effects on livelihoods and decrease the national level of food insecurity and shortages by making fertiliser more widely available to counties that plant in the short rain season. Moreover, Ruto argues that the cost of living challenges Kenya faces are related to production- while Kenya requires 52 million bags of maize annually, current production stands at 40 million bags. This forces the country to import 12 million bags to cover the deficit, which is expensive for most families.¹²⁵ Reducing the domestic price of fertiliser would boost its use and contribute to an increase in food supply - increasing food security. In the long term, Ruto's goal is to eliminate the need for fertiliser subsidies and decrease Kenyan dependency on imported fertilisers.¹²⁶ To do so, he plans on creating a joint East African manufacturing operation.¹²⁷

The Fertiliser Subsidy Programme is a vital policy in Ruto's domestic agenda as it focuses on improving the lives of Kenyans who are suffering from food insecurity as a result of climate change induced environmental disasters. The programme has also been prioritised by the current government because of its prospects of increasing productivity and printing down the cost of living in Kenya, all the while making the nation food secure.¹²⁸

Ruto is one of Kenya's largest maize farmers; as such, he represents the position of farmers across the country and personally relates to the fertiliser shortage issues many are facing. During his presidential campaign, farmers and local vegetable market sellers supported Ruto as he "is the only one who understands

¹²² Ministry of Agriculture, Livestock, Fisheries and Cooperatives, "Agricultural Policy – 2021" (Ministry of Agriculture, Livestock, Fisheries and Cooperatives, 2021).

¹²³ United States Agency for International Development, "Agriculture, Food and Water Security | Kenya," United States Agency for International Development, February 13, 2023, <https://www.usaid.gov/kenya/agriculture-food-and-water-security>.

¹²⁴ Pierre Boulanger et al., "Effectiveness of Fertilizer Policy Reforms to Enhance Food Security in Kenya: A Macro-Microsimulation Analysis," *Applied Economics*, September 2, 2020, 1–21, <https://doi.org/10.1080/00036846.2020.1808180>.

¹²⁵ "Govt to Distribute Subsidized Fertilizer," *Capital News*, January 20, 2023, <https://www.capitalfm.co.ke/news/2023/01/govt-to-distribute-subsidized-fertilizer/>.

¹²⁶ Pierre Boulanger et al., "Effectiveness of Fertilizer Policy Reforms to Enhance Food Security in Kenya: A Macro-Microsimulation Analysis," *Applied Economics*, September 2, 2020, 1–21, <https://doi.org/10.1080/00036846.2020.1808180>.

¹²⁷ Wainaina Ndungu, "William Ruto's Plan to Transform Agriculture, Earn Foreign Exchange," *The Saturday Standard*, October 21, 2022, <https://www.standardmedia.co.ke/business/business/article/2001458636/william-rutos-plan-to-transform-agriculture-earn-foreign-exchange>.

¹²⁸ "Govt to Distribute Subsidized Fertilizer," *Capital News*, January 20, 2023, <https://www.capitalfm.co.ke/news/2023/01/govt-to-distribute-subsidized-fertilizer/>.



the issues of (us) farmers"¹²⁹, stating that "we are hopeful that Mr Ruto will take the presidency and reinstate our position in the country".¹³⁰ His social position as a prominent farmer justifies his ambition to push for not only the FSP, but for the reduction in fertiliser imports, which would improve the livelihoods of farmers.

William Ruto's Impact

Launch of the African Carbon Markets Initiative (Nov 8th 2022)

Although the ACMI has only been functioning since November 2022, its impact can already be seen in Kenya. In June 2023, Aramco and Saudi Electricity company, among other firms, are said to have paid 23.50 Saudi riyals (US\$6.27) per metric tonne of carbon credits.¹³¹ With a continental goal of reaching 300 million credits offered annually by 2030, the supply level would unlock US\$6 billion in income and support 30 million jobs.¹³² By 2050, the ACMI aims at targeting more than 1.5 billion credits annually in Africa and to create and support job creation in the region.¹³³ Ruto in his address revealed that Kenya's next significant export will be carbon credits¹³⁴. Companies have invested in Kenya's VCM because it allows them to meet environmental goals by investing in projects going against climate-warming emissions that they are unable to cut from their own national operations.¹³⁵

As an extension of the ACMI, Kenya and the UK government introduced green investment projects to spur up climate finance and largely improve the sustainability in operation of the Kenyan economy. Projects such as the creation of a 35 MW geothermal plant in Menengai, a 40MW solar plant in Malindi and a dam on the Tana River among other projects have been incorporated into Kenya's

¹²⁹ Evelyne Musambi, "Kenya Elections: Why Farmers like William Ruto's Big Ambitions," BBC News, July 29, 2022, sec. Africa, <https://www.bbc.com/news/world-africa-62244844>.

¹³⁰ *Ibid.*

¹³¹ Duncan Miriri, "Saudi Companies Buy 2.2 Million Tonnes of Carbon Credits in Kenya Auction," Reuters, June 14, 2023, sec. Sustainability, <https://www.reuters.com/sustainability/saudi-firms-bid-2-mln-tonnes-carbon-credits-kenya-auction-2023-06-14/>.

¹³² Mactilda Mbenywe, "COP27: Kenya to Benefits from Africa Carbon Markets," The Standard, November 9, 2022, <https://www.standardmedia.co.ke/testbed/sports/health-science/article/2001460221/cop27-kenya-to-benefits-from-africa-carbon-markets>.

¹³³ "Net-Zero and Carbon Market Development at COP27," Dentons, accessed August 2, 2023, <https://www.dentons.com/en/services-and-solutions/environmental-social-and-governance/cop27/net-zero-and-carbon-market-development-at-cop27>.

¹³⁴ "Could Carbon Credits Be Kenya's next Leading Export Product?," Business Daily, February 8, 2023, <https://www.businessdailyafrica.com/bd/opinion-analysis/columnists/could-carbon-credits-be-kenya-s-next-leading-export-product--4115202>.

¹³⁵ Duncan Miriri, "Saudi Companies Buy 2.2 Million Tonnes of Carbon Credits in Kenya Auction," Reuters, June 14, 2023, sec. Sustainability, <https://www.reuters.com/sustainability/saudi-firms-bid-2-mln-tonnes-carbon-credits-kenya-auction-2023-06-14/>.



green agenda.¹³⁶ A launch of the Kenya Carbon Emission Reduction Tool by 2050 was introduced to also contribute to Dr Ruto's vision for Kenya and to enforce a control system to carbon trade¹³⁷ and ultimately control the 80% value of some carbon credits being captured by intermediaries.¹³⁸

Ruto has so far emerged as a climate conscious leader with a firm focus on policies to limit climate change's effects. It is through the African Carbon Market Initiative that Kenya would generate more than 30 million tonnes of carbon credits every year advocating for employment and job creation for youth as well as the adoption of more forest cover restoration and tackle the negative effects of climate change.

With proper assessments of the ACMI, like any other carbon market faces would most importantly be the lack of transparency that may exist due to the complexity of the field and the accountability of each leader to properly trade carbon credits. The ACMI addresses global warming's impact on people migration and its challenges, fostering collaboration among African leaders and climate change experts¹³⁹, though alone does not address global warming entirely.¹⁴⁰ It could be contended that the ACMI is more inclined on yielding profits than directly addressing global warming, where environmentalists argue that phasing out fossil fuel use is more important to the environment.¹⁴¹ Where the Climate Mobility Initiative aims at tackling human movement as a result of the climate crisis¹⁴². The ACMI seeks to gear African resources to counteract global warming to avoid further displacement and create symbiotic grounds for economic development through agriculture and industry. Ruto has been a part of

¹³⁶ Christina Nduba-Banja et al., "Kenya: What the Carbon - Series 1: A Snapshot of the Recent Developments in Kenya's Carbon Space," Bowmans, March 29, 2023, <https://bowmanslaw.com/insights/impact-investment/kenya-what-the-carbon-series-1-a-snaps-hot-of-the-recent-developments-in-kenyas-carbon-space/>.

¹³⁷ Jessica Mutemi et al., "Kenya: The Road to COP27 - Actions towards a Greener Future for Kenya," Bowmans, November 7, 2022, <https://bowmanslaw.com/insights/mergers-and-acquisitions/kenya-the-road-to-cop27-actions-towards-a-greener-future-for-kenya/>.

¹³⁸ The Official Website of the President of the Republic of Kenya, "Communities Fighting Climate Change Should Benefit from Carbon Credits," The Official Website of the President of the Republic of Kenya, 2022, <https://www.president.go.ke/communities-fighting-climate-change-should-benefit-from-carbon-credits/>.

¹³⁹ "The African Climate Mobility Initiative High-Level Launch Event Theme: 'Shaping the Future of Mobility in Africa. Addressing Climate-Forced Displacement & Migration,'" African Union, September 28, 2021, <https://au.int/en/newsevents/20210928/african-climate-mobility-initiative-high-level-launch-event-theme-shaping-future>.

¹⁴⁰ Bob Koigi, "The Promise and Scepticism behind Africa's Carbon Markets Initiative," FairPlanet, May 25, 2023, <https://www.fairplanet.org/story/carbon-capture-initiative-africa-climate-change/>.

¹⁴¹ *Ibid.*

¹⁴² Africa Climate Mobility Initiative, "About," Africa Climate Mobility Initiative, n.d., <https://africa.climatemobility.org/about>.



this initiative for 9 months- a period in which does not provide a comprehensive assessment of the initiative's outcomes particularly in Kenya just yet.

Climate Plan to 'ramp up clean energy and phase out fossil fuels for electricity by 2030'

Kenya holds the commitment to a 100% clean electricity network by 2030, and 92% of the country's power already comes from clean sources.¹⁴³ Moreover, in the COP27 Climate Summit in Egypt, Ruto highlighted that Kenya currently gets more than 90% of its electricity and 74% of its overall energy from renewable sources.¹⁴⁴

Woodfuel, for example, poses serious environmental threats from a domestic perspective- households in Kenya, on average, destroy about one hectare of forests for firewood. This has initiated Kenya's opting for environmentally friendly and renewable energy sources. The President of the African Development Bank, Akinwumi Adesina, explains the significance of the alliance of African countries to strive for clean energy methods which will "mobilise \$100 million in grants for project preparation, \$400 million in blended financing through grants, concessional resources, and commercial investments for project development"¹⁴⁵ of which would significantly contribute to the economic development of Kenya in a cleaner approach.

From the shown political support from African leaders from the subsequent shared issues, Ruto advocates for the articulation of a Pan African principle to encourage the development of green sustainability within the Kenyan economy.¹⁴⁶ Ruto explains that nearly 600 million Africans lack access to electricity, while 150 million have unreliable access, and 900 million more have no access to clean cooking energy.

Ruto aims at boosting clean energy and eliminating fossil fuels for electricity by 2030, a crucial step for climate policy. The EU- Africa partnership is a critical path in achieving results from climate policy with a focus on the support from clean energy infrastructure investment.¹⁴⁷ Battling the current East African drought, reliability of renewable energy sources may be difficult, particularly in times of

¹⁴³ William Ruto, "President William Ruto: Walking the Talk on Climate," NTV Kenya, March 19, 2023, <https://ntvkenya.co.ke/commentary/president-william-ruto-walking-the-talk-on-climate/>.

¹⁴⁴ *Ibid.*

¹⁴⁵ African Development Bank Group, "African Governments, Partners Express Support for Alliance for Green Infrastructure in Africa toward Target of Mobilizing \$500 Million," African Development Bank Group, June 23, 2023, <https://www.afdb.org/en/news-and-events/press-releases/african-governments-partners-express-support-alliance-green-infrastructure-africa-toward-target-mobilizing-500-million-62361>.

¹⁴⁶ *Ibid.*

¹⁴⁷ Benjamin Fox, "Kenya's President Ruto Urges EU to Ramp up Green Energy Investment," www.euractiv.com, March 31, 2023, <https://www.euractiv.com/section/africa/news/kenyas-president-ruto-urges-eu-to-ramp-up-green-energy-investment/>.



inconsistent weather patterns where wind and solar power can vary. Different policies must then be simultaneously implemented to fully address global warming with high impact levels to satisfy challenges caused by climate change. With Africa's renewable energy potential being more than 50 times the world's cumulative demand by 2030,¹⁴⁸ adopting clean energy is indeed attainable given confidence from environmentalists arguing that phasing out fossil fuels is a more comprehensive environmental policy.¹⁴⁹ While Ruto's emphasis on renewable energy is notable, it is important to recognize the magnitude of the issue of climate change which demands measures like energy efficiency improvements, sustainable land use practices, appropriate carbon pricing and international collaboration to see change from a larger perspective.

National Tree Planting Initiative

Since the National Tree Planting Initiative was launched, the Interior Ministry has reported a total of 6,719,754 trees have been planted across eight regions in Kenya.¹⁵⁰ However, there are doubts about the success of the NTPI. Ruto stated that every citizen must plant 100 trees "in [their] farm or in any other place".¹⁵¹ Such a statement disregards the environments in which specific seedlings need to be planted and the conditions they must be maintained in to grow. Increasing doubt about the NTPI's success is also fueled by remarks made by Ruto during his visit to Israel in May 2023, where he stated that Kenya's tree planting success "has been mixed" because people have not been praying for the trees to grow adequately.¹⁵²

The National Tree Planting Initiative was devised by Ruto as a climate change policy to bring communities together. Ruto made repeated reference in his speeches to the fact that every Kenyan citizen was directly involved in this policy, that they are facing the challenge of climate change "as a country".¹⁵³ With

¹⁴⁸ Oliver Musembi, "Africa Is a Rich Source of Untapped Renewable Energy, Says Ruto," People Daily, May 18, 2023, <https://www.pd.co.ke/news/africa-is-a-rich-source-of-untapped-renewable-energy-says-ruto-181213/>.

¹⁴⁹ Bob Koigi, "The Promise and Scepticism behind Africa's Carbon Markets Initiative," FairPlanet, May 25, 2023, <https://www.fairplanet.org/story/carbon-capture-initiative-africa-climate-change/>.

¹⁵⁰ David Njaaga, "Over 6.7 Million Trees Planted in Five Months, Interior Ministry Says," The Saturday Standard, June 5, 2023, <https://www.standardmedia.co.ke/business/environment-climate/article/2001474502/over-67-million-trees-planted-in-five-months-interior-ministry-says>.

¹⁵¹ Sharon Resian Nakola, "Kenya: Ruto's 5bn-Tree Plan - Kenyans, Children Included, Required to Grow 100 Trees," Capital FM, October 16, 2022, sec. News, <https://allafrica.com/stories/202210160152.html>.

¹⁵² Sharon Wang, "Inside Ruto's Quest to Plant 10billion Trees That Need Prayers," The Saturday Standard, 2023, <https://www.standardmedia.co.ke/politics/article/2001472719/inside-rutos-quest-to-plant-10billi-on-trees-that-need-prayers>.

¹⁵³ Sharon Resian Nakola, "Kenya: Ruto's 5bn-Tree Plan - Kenyans, Children Included, Required to Grow 100 Trees," Capital FM, October 16, 2022, sec. News, <https://allafrica.com/stories/202210160152.html>.



regards to Ruto as a leader, the NTPI has opened the door for the Kenyan leader to solidify Kenya's diplomatic alliance with Israel. In May 2023, Ruto went on a state visit to Israel, where the main topic of talks was the restoration of the ecosystem. Ruto then proceeded to plant an olive tree in Jerusalem, symbolising the deep-rooted bond between both nations founded on a "joint concern for nature and the environment".¹⁵⁴

On a wider scale, Kenya's tree planting initiative addresses a fraction of climate change in the sense that it is not an immediate solution for climate change, but rather a long-term solution of which the impact will be seen in decades.¹⁵⁵ In 2018, the Intergovernmental Panel on Climate Change suggested that 950 million hectares of new forests could aid in limiting the increase in global average temperature to 1.5 degrees Celsius above pre-industrial levels by 2050.¹⁵⁶ Systematically, trees break down carbon dioxide (CO₂) from the atmosphere through photosynthesis, release oxygen (O₂) into the atmosphere, and store carbon as wood, with each ton of carbon stored as wood meaning that 3.67 tons of CO₂ have been removed from the atmosphere.¹⁵⁷ However, tree planting initiatives are not entirely positive for the environment and climate change mitigation; as forests mature, the carbon stored in wood from dead trees combines with O₂ by decomposing to reform CO₂ that is then released back into the atmosphere, creating a full circle effect.¹⁵⁸ Moreover, CO₂ storage rates slow down to the point where trees can release more CO₂ than they are removing, a phenomenon which is heightened when fires occur.¹⁵⁹

Agricultural policy: Fertiliser Subsidy Programme (FSP)

For the most part, the Fertiliser subsidy programme has been largely successful. The National Treasury successfully released Sh3.6 billion (around USD 25.5

¹⁵⁴ Sharon Mwendu, "Ruto, First Lady Rachel Plant Symbolic Tree in Jerusalem," *The Star*, May 9, 2023, <https://www.the-star.co.ke/news/2023-05-09-ruto-first-lady-rachel-plant-symbolic-tree-in-jerusalem/>.

¹⁵⁵ Alan Buis, "Examining the Viability of Planting Trees to Help Mitigate Climate Change – Climate Change: Vital Signs of the Planet," *Climate Change: Vital Signs of the Planet* (NASA, November 11, 2019), <https://climate.nasa.gov/news/2927/examining-the-viability-of-planting-trees-to-help-mitigate-climate-change/>.

¹⁵⁶ Alan Buis, "Examining the Viability of Planting Trees to Help Mitigate Climate Change – Climate Change: Vital Signs of the Planet," *Climate Change: Vital Signs of the Planet* (NASA, November 11, 2019), <https://climate.nasa.gov/news/2927/examining-the-viability-of-planting-trees-to-help-mitigate-climate-change/>.

¹⁵⁷ Bruce Lippke et al., "The Plant a Trillion Trees Campaign to Reduce Global Warming – Fleshing out the Concept," *Journal of Sustainable Forestry* 40, no. 1 (January 2, 2021): 1–31, <https://doi.org/10.1080/10549811.2021.1894951>.

¹⁵⁸ *Ibid.*

¹⁵⁹ *Ibid.*



million) for the implementation of the policy¹⁶⁰, Ruto's government has begun negotiations with Morocco for the reduction in prices of imported fertiliser, and, as of June 2023, Ruto stated that 5 million farmers registered for subsidised fertiliser.¹⁶¹

As a result of the subsidies, Kenyan farmers have been able to plant 200,000 additional acres of food this year and used an additional 2 million kilograms of seed.¹⁶² The policy has also led to a change in budget allocations for the State Department of Crop Development and Agricultural Research, with the department receiving an additional Sh25.1 billion.¹⁶³

However, farmers have reported that they have been forced to reduce the amount of bags they order as a result of unexpected increases in the prices of subsidised fertilisers. Farmers in Trans Nzoia stated that fertilisers increased by at least Sh500 a bag, meaning that a 50kg bag now costs around Sh4,050.¹⁶⁴ Moreover, there have been issues with the transaction fees of subsidised fertilisers, with farmers stating that obtaining these fertilisers was overall more expensive than obtaining the same fertilisers from private retailers.¹⁶⁵ Other farmers from the Naisambu area reported that the only available variety at the National Cereals and Produce Board (NCPB) depots where the subsidised fertilisers are being sold were Yara Power and Kaino, while the government had promised all varieties would be available.¹⁶⁶ As such, these issues have put farmers at crossroads with the government and Ruto.

The Fertiliser Subsidy Programme itself doesn't address global warming, given that polluting chemical fertilisers fuel the climate crisis. Fertilisers provide plants with nitrogen, but the plants only take up around half of the nitrogen provided by fertilisers. As such, much of the fertiliser runs off into waterways or gets broken down by microbes in the soil, therefore releasing greenhouse gas into the

¹⁶⁰ Peter Theuri, "Farmers Ask: Where's Ruto's Subsidised Fertiliser?," The Saturday Standard, February 6, 2023,

<https://www.standardmedia.co.ke/business/business/article/2001466619/where-is-the-subsidised-fertiliser>.

¹⁶¹ Muraya Kamunde, "5M Farmers Registered for Subsidized Fertilizer, Ruto Says," KBC, June 1, 2023, <https://www.kbc.co.ke/5m-farmers-registered-for-subsidized-fertilizer-ruto-says/>.

¹⁶² *Ibid.*

¹⁶³ Kamau Macharia, "Subsidy Debts, Cheap Fertiliser Take Lion's Share of Ruto's Mini Budget," The Saturday Standard, February 9, 2023,

<https://www.standardmedia.co.ke/business/business/article/2001466763/subsidy-debts-cheap-fertiliser-take-lions-share-of-rutos-mini-budget>.

¹⁶⁴ Martin Ndiema, "Subsidised Fertiliser Is Too Costly, Trans Nzoia Farmers Tell State," The Saturday Standard, 2023,

<https://www.standardmedia.co.ke/rift-valley/article/2001468876/subsidised-fertiliser-is-too-costly-trans-nzoia-farmers-tell-state>.

¹⁶⁵ *Ibid.*

¹⁶⁶ *Ibid.*



atmosphere.¹⁶⁷ However, the FSP is a policy that seeks to combat the food shortages and subsequent food insecurity and unaffordable inputs in Kenya caused by climate change– as such, it can be labelled as a climate mitigation policy.

Conclusion

This paper analysed Ruto's advancements as a climate leader in Kenya from four distinct outlooks: Ruto's individual rationale in relation to the four largest environmental challenges Kenya is facing, an overview on how the 2022 United Nations Climate Change Conference (COP27) defined Ruto as a climate leader, the solutions Ruto has put into place, and the level of success and impact of the aforementioned solutions on both Kenya and Ruto.

This paper is relevant to the climate field because it has indicated how Ruto's environmental agenda has put Kenya on the international spotlight and attracted widespread international investment into its climate change initiatives, indirectly improving the livelihoods of Kenyans. As such, this analysis has demonstrated that in the case of Kenya, pushing a vigorous environmental agenda leads to positive development– an aim and purpose that other regional leaders could consider following. However, the paper did not make a comparison between Ruto and other African leaders and nations that are taking a climate change focused policy approach. Moreover, it has to be recognised that Ruto has only been president since September 2022; as such, the policies enacted by Ruto are nascent and their impact is introductory. It is therefore difficult to analyse the long-term impact and overall success rate of Ruto's initiatives.

This paper has determined three key motivations behind Ruto's push for climate policies in Kenya. Firstly, he aims to fight for the 'injustices' Kenya faces as a country that emits minimal greenhouse gas emissions but suffers from severe climate change induced environmental issues. His academic background also explains his interest in climate change. Lastly –and arguably most importantly– Ruto uses climate policies to increase international investment in Kenya, aiming at improving the livelihoods of Kenyan citizens. This, in turn, aids Ruto in his goal to gain popularity ahead of the next elections.

Ruto is undoubtedly a climate leader as he has spearheaded Kenya's rise as a global climate leader. He has been an influential African leader on the global stage, fighting for both Kenya and Africa's positions as global leaders with regards to climate change mitigation and adaptation. Ruto makes repeated mention to the fact that although Kenya contributes minimally to global greenhouse gas emissions, they still face a brunt of the devastating environmental impacts of

¹⁶⁷ Karthish Manthiram and Elizabeth Gribkoff, "Fertilizer and Climate Change," MIT Climate Portal (Massachusetts Institute of Technology, July 15, 2021), <https://climate.mit.edu/explainers/fertilizer-and-climate-change>.



climate change– as such, he believes that climate-change related talks are inherently unfair as both Kenya and Africa as a whole are treated as 'beggars'. He is a climate leader that wants to shape the current narrative that countries who cause the least pollution are the ones that face the most catastrophic consequences. COP27 allowed Ruto to address these issues on the global stage, defining him as a climate leader that stepped up and represented the African continent as a whole, rather than solely Kenya. His speech to the UNFCCC further solidified his role as a game changer, as he reaffirmed Kenya's green policy, going against European nations' 'dash for gas' and refusing to lock into fossil fuel projects that would have turned Kenya into a high-carbon and high-pollution energy system.

Ruto has also been the driving force behind several climate change adaptation and mitigation initiatives in Kenya. Decisively, he signed Kenya on as a member of the African Carbon Markets Initiative, allowing for the expansion of the voluntary carbon market in Kenya. Although Kenya has been a member for less than a year, Ruto has already hosted a carbon credits auction, receiving more than 2.2 million tonnes of carbon credits. This is an example of how President Ruto's climate change policies have led to an increase in international investment in Kenya, one of his primary motivations. Ruto's climate plan to ramp up clean energy and phase out fossil fuels for electricity by 2030 also impacts Kenya's position as a climate change leader in the long-term. 92% of power in Kenya is already from clean sources; should Kenya successfully complete a full transition from past unsustainable fuel production and usage to the production of electricity entirely generated by solar, wind and geothermal energy by 2030, this would place both Ruto and Kenya as global renewable energy and climate change conscious leaders.

Ruto has also enforced his position as a domestic climate leader by fighting for climate mitigation policies, seeing as Kenya suffers from climate change induced desertification and flooding. One of Ruto's most influential climate mitigation policies is the Fertiliser Subsidy Programme, which aims to decrease the level of food insecurity in Kenya by making fertiliser more widely available on a national scale. President Ruto's National Tree Planting Initiative is another climate mitigation policy that aims to stop the cycle of recurring drought the country has experienced in recent years by planting 15 billion trees and greening Kenya to more than 30% of tree cover by 2032.

Ultimately, he has established himself as both a domestic and international climate leader since his inauguration as president in September 2022. His avant-garde climate policies have influenced Kenya's position as a climate leader and conclusively led to an increase in international investment in the country.



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