



NATIONAL COUNCIL ON THE ADMINISTRATION OF JUSTICE

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## GREENING THE JUSTICE SYSTEM: FRAMEWORKS, THEORIES, ELEMENTS AND PRACTICE IMPERATIVES

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## MANDATE

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The National Council on the Administration of Justice (NCAJ) is established as a high-level policymaking, implementation and oversight body comprising state and non-state justice actors. The Council is mandated to ensure a coordinated, efficient and consultative approach in the administration of justice, and reforming the Kenyan justice system



## VISION

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A coordinated and cohesive justice sector serving the people in Kenya.



## MISSION

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To ensure a coordinated and consultative approach in the administration of justice by bringing together key actors to collectively develop and pursue reform priorities and strategies.



## VALUES

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|---|--|
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| <input type="checkbox"/> Consultation   | <input type="checkbox"/> Interdependence   |
| <input type="checkbox"/> Public Service | <input type="checkbox"/> Innovation        |

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## ABBREVIATIONS AND ACRONYMS

<b>CBD</b>	-	Convention on Biological Diversity
<b>COP</b>	-	Conference of Parties
<b>CRC</b>	-	Committee on the Rights of a Child
<b>EBA</b>	-	Ecosystem-Based Adaptation
<b>EGB</b>	-	Employee Green Behaviour
<b>EIA</b>	-	Environment Impact Assessment
<b>EU</b>	-	European Union
<b>FAO</b>	-	Food and Agriculture Organization of the UN
<b>GBF</b>	-	Global Biodiversity Framework
<b>GHG</b>	-	Greenhouse Gases
<b>HRC</b>	-	Human Rights Committee
<b>HRM</b>	-	Human Resource Management
<b>IACHR</b>	-	Inter-American Court of Human Rights
<b>ICJ</b>	-	International Commission of Justice
<b>ICT</b>	-	Information and Communications Technology
<b>IPCC</b>	-	Intergovernmental Panel on Climate Change
<b>MEA</b>	-	Multilateral Environmental Agreements
<b>NCAJ</b>	-	National Council on the Administration of Justice
<b>NGO</b>	-	National Government Organisation
<b>PLEAD</b>	-	Programme for Legal Empowerment and Aid Delivery
<b>SDGs</b>	-	Sustainable Development Goals
<b>SPP</b>	-	Sustainability in Prisons Project
<b>UN</b>	-	United Nations
<b>UNEA</b>	-	United Nations Environment Assembly
<b>UNEP</b>	-	United Nations Environment Programme
<b>UNFCCC</b>	-	United Nations Framework Convention on Climate Change
<b>UNODC</b>	-	United Nations Office on Drugs and Crime

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## OPERATIONAL DEFINITION OF TERMS AND CONCEPTS

**Climate Change:** Long-term shifts in temperatures and weather patterns.

**Community Engagement Greening:** Deepening society's comprehension of its role and that of the institutions in environmental protection and sustainable development.

**Employee Green Behaviour:** Actions and behaviours of employees linked with and which contribute to or detract from environmental sustainability.

**Functional Greening:** Integrating environmental sustainability goals and practices in the undertaking of core mandates of agencies.

**Green Criminology:** A branch of criminology that focuses on the study of harms and crimes against the environment and the legal and regulatory responses to these harms and crimes.

**Greenhouse Gas Emissions:** The release of greenhouse gases into the atmosphere, leading to global warming and climate change.

**Greening the Justice System:** Integrating environmental considerations into the justice system's functioning, operational processes and practices.

**Human Resource Greening:** Using Human Resources Management practices to reinforce sustainable practices and increase employee commitment to environmental protection.

**Justice System:** A group of institutions or agencies, state and non-state, with a mandate of resolving conflicts and handling one or several aspects of the administration of justice. It is also referred to as the justice sector from an economic planning point of view.

**Legislative Greening:** Developing or reviewing laws while ensuring compliance with emerging regulations on greening and environmental protection.

**Physical Greening:** Encompassing green practices in constructing and renovating buildings to enhance biodiversity and mitigate climate change's adverse impacts.

**Policy Greening:** Developing or revising policies to promote sustainable practices and effective response to emerging environmental threats.

**Procedural Greening:** Revolutionising institutional operational processes and procedures to minimise GHG emissions and mitigate against the adverse effects of climate change.

**Rights-based Greening:** Addressing environmental challenges by embracing and embedding inherent rights, humans and non-humans, on environmental protection.

**Sustainable Development:** Development that meets the needs of the present without compromising the future generations' ability to meet their own needs.

**Technology Adoption Greening:** Integrating technology to protect the environment, minimise the carbon footprint and promote sustainability.

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## ABSTRACT

The justice system has a crucial role in society as it enforces the rule of law and ensures effective administration and access to justice. One important aspect of its role is recognising the importance of protecting the environment and mitigating the effects of climate change. This study was carried out to explore avenues of strengthening the protection of the environment by the justice system as it executes its mandate. Specifically, the study delved into “greening” the justice system phenomenon, exploring the existing regional and global legal and normative frameworks, theories, elements, and practical implementation. Owing to the multidisciplinary nature of the greening phenomenon, systems theory broadly provided the context for analysis, synthesis and inferences. These instruments bolster the regulations and norms for cooperation on environmental protection, serving as binding commitments between organisations and sovereign states. Drawing from the theories and the legal and normative frameworks, a conceptual framework with the essential elements of greening was developed. The elements are functional, physical, legislative, policy, procedural, technology adoption, rights-based, human resources and community engagement. This study has found evidence across different jurisdictions on practical measures to reduce greenhouse gas emissions, such as green policing, prosecution, adjudication, correction services, and legal practice. Furthermore, the justice system institutions are adopting proper waste management, reducing paper consumption, storing information electronically, reducing fuel consumption and mobility, using energy-efficient appliances, enhancing community partnerships, tree planting and adopting virtual service delivery. Moreover, practical imperatives on legal, policy, procedural, human resource and rights-based greening are evident. However, these interventions are limited in their depth of application, especially in an all-inclusive approach covering all the greening elements. For posterity and to ensure the continued success of environmental protection, justice institutions need to prioritise these practices in their contexts. At the onset, it is vital to identify vital strategies, programs and indicators to ensure practical and seamless greening going forward. This should be supported by a coordinated approach and the development of an institutional guide or action plan for enhancing accountability, monitoring and reporting of “greening” efforts.

*Key Words: Greening, Justice System, Environment*

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# 1. BACKGROUND

## 1.1. Introduction

The justice system plays a crucial role in resolving disputes arising over alleged violations or different interpretations of laws governing a society. It is mandated to administer or enforce laws, primarily organised around civil and criminal justice (Legal Information Institute, 2020). By performing this mandate, it maintains social order, protects individual rights and resolves violations of laws through a systematic and regulated approach. To achieve this, the justice system strives to ensure fairness, equity and accountability.

The justice system comprises many interdependent institutions. Fundamentally, these institutions have distinct mandates, processes and procedures, which subsequently interlink during service delivery, influencing the overall trajectory of the administration and access to justice. These institutions predominantly include the police and other investigative agencies, the prosecution institutions, the trial institutions, mainly the courts and tribunals, correctional institutions like prisons and probation departments, and civil justice institutions. Additionally, non-state actors such as law firms, private sector and civil society organisations play a crucial role in the justice system. The uniqueness of the justice system is that the outputs of one institution form the inputs of another downstream, thus impacting the overall delivery of justice across the chain.

Regarding the broad arena of environmental sustainability, the justice system institutions have a crucial role to maintain environmental and social order, protect individual and collective environmental rights, and provide mechanisms for addressing conflicts and violations of the environment. The justice system actors appreciate the overarching urgency of strengthening environmental protection to mitigate the adverse effects of climate change. Drawing from Sustainable Development Goal 16, building effective, accountable, and inclusive institutions is crucial to sustainable development and societal peace. Strong institutions are pedestals for addressing global challenges, especially promoting and enforcing non-discriminatory policies and laws for sustainable development.

When justice system institutions carry out their functions, a spectrum of ecological issues comes into play. First, the justice sector institutions are primarily responsible for enforcing compliance with environmental dictates in the law. Secondly, they are also duty bearers, required to carry out their mandate in an environmentally compliant manner since they cannot be enforcers on the one hand and violators on the other. As the negative impacts of climate change persist across the globe, the recognition of the crucial role of the justice system in mitigating these adversities has significantly grown. However, knowledge and practice gaps exist. In the quest to fill these gaps, this study has explored the nexus between the justice system's functioning and greening. It aims to build from the existing frameworks, theories and practical initiatives on greening to provide a guiding platform for practitioners in the justice system.

## 1.2. Concept of Greening the Justice System

As defined by Llorente et al. (2021), greening is a term used to describe the process of transforming spaces, institutions, or activities into more environmentally friendly versions. This transformation involves the adoption of climate sustainability practices by government and non-government institutions, practitioners and communities. It entails learning and adopting eco-conscious practices and behaviours to make better choices for the planet. Green behaviours refer to actions related to the conservation of the environment in the course of achieving individual or collective fulfilment (Verdugo, 2001).

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The concept of greening has been adopted in many systems, including the justice system. However, greening the justice system is a reasonably new concept without a firmed-up definition, with scholars and practitioners providing a broad description of the phenomena. In the justice sector, greening entails integrating environmental considerations into the justice system's functioning, operational processes and practices. It involves the process through which institutions, practitioners, communities and governments adopt sustainable and ethical methods while rendering justice to mitigate the adverse effects of climate change. The concept seeks to guide and refocus the justice system institutions to integrate environmental sustainability into executing their mandate and decision-making. It creates a paradigm shift that transcends the traditional role of the justice sector to a broader realm heralding environmental protection stewardship.

The purpose of greening the justice system is to ensure that it operates in an environmentally sustainable and responsible manner while effectively addressing environmental issues. It connotes that the justice system should remain at the forefront in expeditiously addressing environmental crimes and harms to ensure the principles of ecological justice and sustainability are well embedded in communities. Scholars and policymakers have supported this notion by increasingly scrutinising the incidence of harm to the environment under the auspices of green criminology (Brisman, 2014; Long & Lynch, 2013; Lynch et al., 2021; Reiman & Leighton, 2015; Ruggiero & South, 2013; Sollund, 2021; South & Brisman, 2013; Tauranga, 2022; White & Heckenberg, 2014). For instance, South (2014) agrees that the traditional view of criminology reflects the utilitarian and anthropocentric view of nature and the environment, hence focusing on the immediate interests of human beings, ignoring other species.

According to White and Graham (2015), greening the justice system examines criminal and social justice interfaces with protecting and conserving the environment as a fundamental goal. This involves the entrenching practices, policies and legislative frameworks that mitigate the adverse climate change effects. It encompasses the sustainable transformation of the justice system to meet its operational needs while protecting finite environmental resources (White & Graham, 2015). Moreover, greening the justice system seeks to support climate change mitigation and reduce the emission of greenhouse gases (Aleknėvičienė & Bendoraitytė, 2022).

Therefore, and in relation to this study, greening the justice system has been conceptualised as having multiple facets or elements. These are functional, physical, legislative, policy, procedural, rights-based, community engagement, technology adoption and human resource greening.

### **1.3. Rationale for Greening the Justice System**

Greening the justice system has myriad benefits that address environmental violations of diverse nature. To realise these benefits, environmental protection has remained a global priority. In the wake of this realisation, justice sector institutions have been rejuvenating their efforts towards a green culture. For instance, environmental protection awareness campaigns for greening the justice system have captured the professional and public interest, with attention turning the spotlight on green initiatives (White & Graham, 2015). The attention has arisen from the growing need to address climate change challenges. A green justice system would promote environmental safety and promote ecological justice (Ugwuoke et al., 2017).

As globalisation and urbanisation continue to rise, the concern for mitigating the adverse effects of climate change remains at the forefront for governments, policymakers, researchers and world

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communities. Hence, for sustainable development goals to be realised, one ingredient is putting in measures for environmental sustainability, greening being one of them. Greening the justice system aligns with the SDGs and contributes towards achieving a just and sustainable society. Over the years, the need for environmental sustainability and addressing the impacts of climate change have significantly increased, with various sectors of the economy and society taking significant steps to mitigate adverse effects. According to Aleknevičienė and Bendoraitytė (2022) and Chen et al. (2019), the green economy would reduce environmental risks. Further, Loiseau et al. (2016) associate greening with sustainable development, implying the interconnectedness of environmental risks and socio-economic well-being.

World over, environmental harms exist. By greening the justice system, environmental harms are reduced. South (2014) states that the harms are felt both in the short term and long term, may be direct or indirect, and their causes may arise in many different ways, while their effects may be individual or cumulative, local or global. When people commit crimes that harm the environment, it affects an entire society in the short-run, medium-term and long run.

Beyond harms, myriad environmental crimes exist that require justice sector agencies to control. Greening the justice system aids in reducing environmental crimes, which, according to South (2014), are acts that negatively influence the environment, people's health, natural resources, and biodiversity. Skinnider (2013) pointed out that the effect of environmental crime cuts across the societal spectrum with potentially detrimental consequences on the economies and security of a country. Engaging criminal offenders in environmental conservation initiatives promotes the overall well-being of society. These greening efforts contribute to crime prevention, enhance public safety, de-carceration and reduce re-offending rates.

Greening the justice system helps reduce vulnerability, as most environmental issues disproportionately affect vulnerable populations. While climate change affects everyone, its effects are not felt equally by all. Climate change affects the vulnerable more due to gender, ethnicity, low income, and other social and economic inequalities (UNFCCC, 2023). For instance, women often face higher risks and burdens from environmental impacts owing to their existing roles, responsibilities, and cultural norms (UNFCCC, 2023).

As a vital pillar of society, the justice system significantly influences public behaviour and perceptions. Therefore, adopting green practices entrenches tenets of equity and justice and representation on climate-related issues, setting a precedent for other sectors of society to follow. Additionally, greening creates a secure, healthy, and positive impact on the community, fostering environmental ethics and awareness among practitioners, offenders, policymakers and the wider community. White & Graham (2015) assert that greening justice has fiscal, architectural, geographical, legal, political, environmental, educational, instrumental, physical, psychological, criminological, moral, ideological, and cultural advantages.

Moreover, incorporating environmental concerns within the legal framework creates a fundamental shift in the perception of the law. The justice system should transcend its conventional emphasis on human interests and embrace nature as a novel ingredient of justice (Insani & Karimullah, 2023). This would entrench a more sustainable legal system where environmental protection transcends rhetoric to tangible actions (Insani & Karimullah, 2023).

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## 1.4. Statement of the Problem

Multiple environmental challenges threaten the economic and social well-being of the world's inhabitants. The effects have been felt by public and private institutions, individuals and even non-human species. For instance, continued depletion of natural resources and loss of biodiversity increasingly threaten the survival of humans and animals. In executing individual and collective mandates, justice sector institutions are expected to play a crucial role in mitigating these threats. Further, appropriate practice methodologies for justice system institutions remain limited to addressing ecological injustices and challenges.

Despite the crucial role that the justice sector institutions can play in enhancing environmental protection, their approach to executing interventions has only been partially conscious of the required environmental sustainability thresholds. The justice system institutions, mandated to spearhead the observance of the rule of law and environmental rights, have experienced challenges in timely and ideal responses. Moreover, the justice system has been struggling to deal with environmental harms in a swift way that averts their commission, omission and adversities.

To avert environmental challenges and provide restitution and compensation for environmental damages, the justice system should remain steadfast in enforcing the rule of law in various ways, including investigation, prosecution, adjudication, and enhancing civil law mechanisms. The drawback is how well the justice system institutions are versed and equipped to take this role effectively. Although the existing literature provides valuable insights on integrating greening initiatives into institutional operations, the uptake is inadequate. The weak uptake of practice imperatives has resulted in low impacts.

There has been limited rigorous research and exploration of the greening of the justice system phenomenon. Although evidence points to progress in this arena, greening the justice system remains less explored. Further, despite the existence of environmental sustainability programmes within some justice sector agencies, the adoption of diverse practices is low.

Evidently, therefore, much more needs to be explored and implemented to green the justice system. Specifically, it is essential to clarify the various types and forms of greening. For instance, some institutions have misconstrued tree planting as the only aspect of greening, neglecting other important areas. The narrow conceptualisation of the phenomenon has created a misleading impression of the role that justice system institutions play in greening.

Since environmental issues are diverse, this study has focused on bridging the knowledge and practice gap in greening the justice system. The study has analysed the context and content of global and regional greening initiatives and literature, exploring the depth of the justice system's role in environmental protection and optimal strategies for ensuring sustainability.

## 1.5. Objectives and Justification of the Study

The study's overall objective is to explore the phenomenon of greening the justice system, focusing on frameworks, theories, elements and practice imperatives. Specifically, the study set out to:

- i. Investigate legal and normative frameworks on greening the justice system
- ii. Review theoretical approaches to greening the justice system
- iii. Develop a conceptual framework for greening the justice system

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- iv. Explore practice perspectives on greening the justice system
  - v. Guide on the implementation imperatives for greening the justice system

By addressing these objectives, diverse recommendations on policy, legal and practice reforms for greening the justice system have been provided. Given the interdisciplinary and intertwined nature of justice and environmental phenomena, this study has provided holistic multi-disciplinary investigations and recommendations. The study has strived to identify the appropriate avenues for greening the justice system as part of the broader environmental sustainability efforts, especially the minimisation of environmental harms and the inculcating of a green culture.

Entrenching a green culture within justice sector institutions' mandates will be pivotal in linking justice and nature and influencing sustainability initiatives. Since one of the foundational and transformative philosophies of the justice system is to protect the public by reorienting deviant behaviour into acceptable norms, the study is crucial for societal protection. On institutional support to environmental conservation, the study has guided justice system actors on greening, providing the ideal actions and work methods. It has also provided a systematic approach to greening the justice system, amalgamating practice priorities anchored on extensive exploration and insights from global and regional benchmarks.

### **1.6. Methodology for the Study**

The broad theoretical underpinning that informed the study's methodology is the systems approach to greening. The approach is grounded on the analysis of interconnected functions of institutions rather than an isolated analysis of a single institution. The rationale is that the justice system is interlinked but retains institutional-specific mandates and distinctiveness, exhibiting nonlinearity in service delivery, with outputs of one institution being inputs of the other. Further, systems thinking was deemed perfect since examining the greening concept through discrete cause-and-effect events is challenging. Drawing from Jabareen (2009) and Tourangea (2022), it is evident that a multidisciplinary approach is essential to investigate and understand such complex phenomena. Hence, other aspects of diverse theories also underpinned the study methodology. For instance, green criminology and other social, environmental and economic theories fused into the systems' approach.

The study combined exploratory and investigative research designs to realise its objectives, employing a systematic analytical approach. Drawing from Aleknevičienė and Bendoraitytė (2022), Arnold and Wade (2015), Jabareen (2009) and Loiseau et al. (2016), a systematic exploration of the multidisciplinary literature on greening the justice system was undertaken. According to Haddaway et al. (2020), traditional approaches to reviews are susceptible to bias, yielding incorrect decisions, especially when investigating applied and policy-relevant questions such as human impact on the environment.

The process entailed a rigorous synthesis of evidence from global and regional legislations, treaties and policies on greening, a review of theoretical and empirical perspectives, and an investigation of the practice imperatives on greening the justice system. Moreover, the process entailed formulating question protocols, searching and screening articles, extracting information, and critical synthesis. Multiple sources were used to search publications focusing on several keywords, notably justice, greening, climate change and environment. Once indicative articles were found, they were analysed to determine their relevance.

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A conceptual framework with vital elements of greening was consequently developed, arising from the synthesised multidisciplinary review of normative frameworks and theories. To build the relationships, the scope of constructs was identified, connections between constructs were developed, and reasons for choosing the vital elements of greening the justice system were elucidated. Finally, recommendations and practice imperatives have been provided under each greening element.

### **1.7. Scope of the Study**

Since greening is broad, vital elements of greening the justice system were conceptualised and contextualised. These are functional, physical, legislative, policy, procedural, rights-based, technology adoption, community engagement and human resource greening. The analysis has covered the upstream to downstream of the justice system service delivery, covering investigation, arrests, prosecution, trial and correctional functions, and civil justice functions. Hence, the institutional scope covers the police, prosecution offices, courts, prisons, probation services agencies, civil justice agencies, legal firms, justice sector development partners, and civil society organisations. The geographical scope of the study is global, with a deliberate attempt to explore and analyse the greening phenomena from diverse regions.

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## 2. LEGAL AND NORMATIVE FRAMEWORKS ON GREENING THE JUSTICE SYSTEM

### 2.1. Introduction

The climate change agenda is subject to international negotiations and actions since it is not confined to national boundaries. As climate change persists as a global concern, the impetus for initiating and sustaining restorative actions has increased. For instance, global and regional legal and normative frameworks have emerged to support actions geared towards environmental conservation. Also, certain norms and general principles of international environmental law have emerged, demanding universal action to protect the environment. The legal instruments are essential since they are designed to establish norms and frameworks for cooperation on various issues of mutual concern, such as environmental protection, and serve as binding commitments between two or more international organisations and sovereign states.

These legal and normative instruments are essential for reinforcing global development and stability. When applied in the context of greening the justice system, they can guide nations to suppress climate change impacts. For instance, environmental protection treaties outline each state's duty towards ecological sustainability. Environmental protection treaties, for example, outline each state's duty towards ecological sustainability. For these treaties to be legally enforceable, they require adherence and consent from the participating states. In contrast, declarations are formal statements by international or state bodies to express their intentions, principles, or positions on a specific issue, such as environmental sustainability. While declarations are not legally binding like treaties, they can carry substantial political weight and can influence the development of international policies and laws on environmental protection.

States often agree on principles through which they commit to specific actions or abstentions to achieve certain ends, in addition to treaties and declarations. The commitment is often in the form of formal agreements. Notably, international obligations on states and other actors primarily arise from the agreements entered into. In most cases, agreements on environmental conservation are multilateral, reflecting the transboundary nature of environmental impacts. The non-binding agreements contain political or moral commitments but are not intended to create legal rights and obligations among the states. However, over time, many non-binding agreements concretise into binding obligations through consistent practice by states. This chapter, therefore, provides an analysis of the declarations, treaties, and agreements that have the potentiality to significantly affect greening of the justice system.

### 2.2. Global Legal and Normative Frameworks on Greening the Justice System

#### 2.2.1. Sustainable Development Goals

The United Nations (UN) embraced the Sustainable Development Goals (SDGs) in 2015 as part of the Agenda for Sustainable Development 2030. The goals are interconnected and cover 17 areas and 169 targets on critical social, economic and environmental issues. The primary aim of SDGs is to create a sustainable, prosperous and inclusive global society. Given the increasing challenges related to climate change, SDGs offer strategic interventions that can guide the greening of the justice system. Some highlights of the intersectionality between the SDGs and greening the justice system are explained below.

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*SDG 7 on Affordable and Clean Energy:* The goal aims at ensuring access to affordable, reliable, sustainable and modern energy for all. It targets increasing the use of renewable energy sources, such as wind, solar and hydropower, and improving energy efficiency. Since the justice system institutions use energy especially in transportation and electric power, the proposal to conserve and use renewable energy applies to it. For example, justice sector agencies can use green fleet to minimise carbon emissions by vehicles. Additionally, the justice sector could upscale the use of solar energy to decrease its reliance on fossil fuels and mitigate greenhouse gas (GHG) emissions.

*SDG 11 on Inclusive, Safe, Resilient and Sustainable Cities:* Promoting sustainable transportation options and having sustainable cities and communities can reduce the carbon footprint. Since the justice system buildings are located in cities and other urban areas, implementing measures to reduce commuting by staff and clients to these institutional buildings would reduce carbon footprint emissions. By encouraging public transportation, carpooling, cycling and walking, the justice sector can improve air quality and reduce congestion in urban areas, aligning with SDG 11's vision of creating inclusive, safe, resilient and sustainable cities.

*SDG 12 on Responsible Consumption and Production:* The goal aims to promote sustainable consumption and production patterns, including reducing waste generation and promoting resource efficiency. The justice system institutions generate waste and would, therefore, require proper waste management at their internal operational level. By implementing comprehensive waste management systems and promoting recycling programs, the justice sector institutions can minimise its environmental footprint and contribute to climate resilience. Additionally, the system enforces laws on waste management, including investigating and prosecuting violators.

*SDG 13 on Climate Action:* The goal focuses on combating climate change and its impacts, covering, among others, reducing greenhouse gas emissions, promoting climate resilience, and enhancing climate-related education and awareness. The hallmark of the justice system is to timeously investigate and resolve disputes that may arise, including timely punishment of offenders who fail to reduce or comply with GHG emissions requirements domiciled in various laws and policies. Moreover, by increasing the use of digital documentation and electronic filing systems, resilience and adaptation to climate-related hazards can be increased in the justice system.

*SDG 16 on Peace, Justice and Strong Institutions:* The goal emphasises having practical and accountable institutions that promote justice, inclusiveness and access to information. By reorienting justice sector institutions to enhanced internal accountability, the institutions would optimally promote climate justice and environmental protection. The justice system is expected to ensure adherence to the rule of law on all matters, including those on greening. Since the SDG recognises that vulnerable and marginalised groups are disproportionately impacted by climate change, the justice system can strengthen mechanisms to protect these groups.

### **2.2.2. The Paris Agreement**

Adopted in 2015, the Paris Agreement builds on the United Nations Framework Convention on Climate Change (UNFCCC), setting ambitious goals for reducing GHG emissions. It calls for limiting global warming to below 2 degrees Celsius and pursuing efforts to limit warming to 1.5 degrees. The Agreement is supported by an extensive framework of transparency and accountability, which involves commitments from all the parties. It requires countries to submit a national inventory report of anthropogenic emissions by sources biannually for them to be evaluated, except for less developed countries and small island states, which may submit this information voluntarily (Santos,

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2017). Further, the Paris Agreement encourages signatory countries to establish legal frameworks instrumental in realising climate justice.

To ensure the Paris Agreement is realised, there is a need to develop robust policies on enhancing energy efficiency and addressing carbon emissions from construction materials (UNEP, 2024). Also, improving policies to reduce carbon emissions through sustainable practices is necessary (UNEP, 2024). The justice sector can enforce policies and laws, influence its constructions by including climate actions and strengthen the accountability envisaged in Article 13 of the Paris Agreement. Moreover, the Agreement provides an impetus for the justice sector agencies to support the implementation of the regulatory frameworks developed.

### **2.2.3. The Kunming-Montreal Global Biodiversity Framework**

The Kunming-Montreal Global Biodiversity Framework (GBF) is an agreement that was adopted during the Conference of Parties (COP) 15. It supports the achievement of Agenda 2030 by halting and reversing the loss of biodiversity. It builds upon the successes, lessons learned and gaps of the Strategic Plan for Biodiversity 2011-2020 and the achievements of other relevant multilateral environmental agreements (UNEP, 2023). The agreement contains four long-term global goals and 23 targets. The goals, in summary, aim at protecting and restoring biodiversity, prospering human beings with nature, ensuring fair sharing of benefits of resources and investing and collaborating on adequate implementation tools (CBD, 2022). The global goals are envisaged to be attained by 2050, while the targets are to be achieved by 2030 (CBD, 2022).

The realisation of the goals is to be tracked by implementing a monitoring framework covering capacity development, technical and scientific cooperation. There are targets in the framework that have direct, indirect or combined implications for the justice sector, especially when the enforcement of supporting laws and investigations and resolutions of disputes may arise during the implementation. The justice sector institutions have investigation, prosecution, and enforcement mandates and can directly contribute towards reversing biodiversity loss through greening. For instance, ensuring sustainable, safe and legal trade of wild species and reducing pollution to non-harmful levels would require the involvement of the justice system institutions.

### **2.2.4. United Nations Environment Assembly 2024**

The United Nations Environment Assembly (UNEA) was established in 2012 at the United Nations Conference on Sustainable Development (UNCSD) through the adoption of the outcome document *'The Future We Want'* (UNEP, 2012). It is the governing council for the United Nations Environment Programme (UNEP), comprising 193 Member States. It is mandated to develop global environmental agenda, provide overarching policy guidance, and define policy responses to address environmental challenges. It also sets the strategic direction of UNEP and fosters partnerships for achieving environmental goals and resource mobilisation.

Towards achieving this mandate, UNEA held its Sixth Session from 26th February to 1st March 2024 at UNEP's headquarters in Nairobi, Kenya. The Assembly provides governments, civil society groups, the scientific community and the private sector with an opportunity to shape the global environmental policy. It focuses on how multilateralism can help tackle the triple planetary crisis of climate change, nature and biodiversity loss, and pollution and waste. During the Sixth Session of UNEA, 15 resolutions were adopted for implementation by member states and UNEP (UNEP, 2024). A vital resolution was promoting synergies, collaboration for the national implementation of Multilateral Environmental Agreements (MEAs) and other relevant environmental instruments.

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Though UNEA does not significantly involve diverse justice sector actors in its deliberations, heightened involvement of such actors would guarantee the practical understanding of crucial resolutions involving the application of the rule of law. The justice sector plays an essential role in resolving disputes related to legally binding actions and supports effective responses to the loss of biological diversity, depletion of the ozone layer, hazardous waste, organic pollutants, marine pollution, trade in endangered species, and destruction of wetlands. Moreover, the justice sector has a role in enforcing laws and regulations and resolving disputes for realising UNEA's resolutions on combating land degradation and desertification, sound management of chemicals and waste, and controlling loss of marine biodiversity and pollution.

### **2.2.5. Stockholm Convention on Waste Management**

The Stockholm Convention on Waste Management is a global treaty that was adopted by the United Nations in 2004. The treaty aims to promote effective strategies and practices for managing waste and preventing the release of Persistent Organic Pollutants (POPs) into the environment. The Convention aims to protect human health and the environment from hazardous, long-lasting chemicals by restricting and eliminating their production, use, trade, release and storage (Fiedler, Kallenborn, Boer & Sydnes, 2019). It was created to address the growing concerns regarding waste disposal's environmental impacts and encourage countries to adopt sustainable practices. The declaration emphasizes the importance of reducing waste generation, promoting recycling and reuse, and implementing environmentally sound methods for waste disposal. The Convention has implications for the justice system due to its role in the apprehension and prosecution of violators where supporting laws have been enacted.

### **2.2.6. The Rio Declaration and Agreements**

The Rio Declaration on Environment and Development was made during the United Nations Conference on Environment and Development held in 1992 in Rio de Janeiro, Brazil. The Declaration reaffirmed the commitments made during the Stockholm Conference on the Human Environment held in 1972. It made environmental protection an integral part of the development process to equitably meet the environmental needs of present and future generations. Principle 26 provides that states shall resolve all their environmental disputes and conflicts peacefully and appropriately per the UN Charter.

The Rio Declaration also adopted Principle 10 on the Access Initiative, encompassing the right to information, access to justice and sound environmental governance. Principle 10 specifies that states shall provide adequate access to judicial and administrative proceedings, including redress and remedy, in environmental matters. Greening the justice system will require enforcing all three access rights established under Principle 10. Justice agencies should support access to information and better governance by applying progressive laws and policies. Moreover, the proposed peaceful and consensual mode of dispute resolution has implications for the justice sector, which extensively advocates and entrenches alternative methods of resolving conflicts.

#### ***A. The United Nations Framework Convention on Climate Change***

The United Nations Framework Convention on Climate Change (UNFCCC) was adopted during the 1992 UN Conference on Environment and Development in Rio de Janeiro. The UNFCCC sought to prevent dangerous human interference with the climate system by stabilising greenhouse gas concentrations in the atmosphere. Enhancing international cooperation and partnerships on climate justice endeavours were underscored in accordance with the UNFCCC principle of international

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cooperation. Further, green infrastructure and practices are prominently featured, echoing the principle of promoting sustainable development pathways. Therefore, by retrofitting the justice system buildings with energy-efficient technologies, renewable energy systems, and sustainable materials would reduce carbon footprints.

By training on environmental awareness, stakeholders in the justice system can align with the UNFCCC principle of education and public awareness. Hence, as a human interface of empowering judges, lawyers, police, prosecutors and correctional service staff would support efforts to minimise environmental interference. Also, establishing specialised environmental courts would align with the UNFCCC principle of adaptation since they would expedite handling disputes on climate change impacts. Moreover, community-based conflict resolution processes can promote local ownership and sustainability, amplifying the effectiveness of climate justice initiatives. By encouraging the utilisation of mediation and arbitration to resolve environmental disputes, justice actors can mitigate adversarial confrontations and foster collaborative problem-solving. This aligns with the UNFCCC principle of inclusivity and participatory approaches.

### ***B. The United Nations Convention on Biological Diversity***

Another outcome of the 1992 Rio Conference was the United Nations Convention on Biological Diversity (CBD). The Convention is a binding agreement that promotes the conservation and sustainable use of the earth's biodiversity. It calls for fair and equitable sharing of benefits from using genetic resources. The outcome points to commitments to upholding the rule of law in climate change matters, especially investigating and resolving disputes on sharing benefits. Justice sector agencies can introduce continuous professional development courses on environmental protection. Further, by fostering partnerships amongst institutions, it would be easier to leverage collective expertise and resources to effectively tackle environmental issues.

#### **2.2.7. World Charter for Nature**

The World Charter for Nature was adopted in 1982 by the UN General Assembly. Article 23 of the Charter provides that all persons, by their national legislation, shall have the opportunity to participate, individually or with others, in formulating decisions of direct concern to their environment, and shall have access to means of redress when their environment has suffered damage or degradation. Hence, the justice system institutions can provide such redress mechanisms and enforce laws to safeguard nature. They can also upscale community involvement and participation in decision-making.

#### **2.2.8. The Stockholm Declaration**

The Stockholm Declaration of 1972 is a non-binding instrument with 26 principles that emphasise international environmental issues and the existing linkages between economic development, pollution and the general welfare of the people. The principles are categorised based on their relevance and enforceability. Some are on human-centredness (principles 1 and 15), sustainable development (principles 2, 3, 4, 5, 13, and 14), preventive measures (principles 6, 7, 8, and 18), compensation for victims (principle 22) and cooperation (principles 24 and 25). Further, the Stockholm Declaration continually inspires the creation of policies, laws and guidelines to tackle environmental challenges. The justice system could focus on developing or reviewing laws to strengthen litigation of climate-change disputes.

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Additionally, Principle 2 of the Declaration emphasises the finite nature of natural resources and highlights the collective obligation to safeguard them. Regarding this principle, the justice system institutions could play a vital role in safeguarding natural resources. Since principle 3 establishes a responsibility to uphold the quality of renewable resources through preservation efforts, the justice sector would support by strengthening criminal deterrence measures. Principle 4 stresses humanity's role as stewards of nature, with justice sector agencies like policing authorities, prosecution and courts playing an essential role in protection and enforcement. Moreover, Principle 5 enhances the need to protect non-renewable resources. The justice sector players can support this need through the investigation, arrest, prosecution and trial of perpetrators destroying renewable resources.

### **2.3. Regional Legal and Normative Frameworks on Greening the Justice System**

#### **2.3.1. European Climate Law**

The European Climate Law was adopted in 2021 to guide Europe into becoming a climate-neutral society by 2050. It aims to ensure that all European Union (EU) policies contribute towards achieving climate neutrality and that all sectors of the economy and society play a role in promoting environmental sustainability (European Commission, 2023). The Law targets having a net zero GHG emissions in Europe by 2050 and reducing GHG emissions by 55 per cent by 2030 (European Commission, 2023). Further, the Law aims to provide investors and other economic actors with predictability and ensure that the transition to climate neutrality is irreversible.

The member states are also required to take measures at the national and EU levels to ensure the set targets are met (European Commission, 2023). The Law also highlights various measures that member states can use to keep track of their progress and adjust their actions based on their existing systems of governance. The progress made is reviewed every five years in accordance with the global stocktake exercise, as highlighted in the Paris Agreement (European Commission, 2023). The justice system has a role in enhancing the rule of law and in reducing internal GHG emissions.

#### **2.3.2. African Union Agenda 2063**

The African Union Agenda 2063, adopted in 2015 at the 24th Ordinary Assembly of the Heads of State and Governments of the African Union in Addis Ababa, serves as the blueprint for transforming Africa into a future global powerhouse. It helps the African Union Member States to address the global challenge of climate change by leveraging skills and diverse disciplines. The aim is to maintain the international goal of increasing the temperature to well below 2 degrees Celsius above pre-industrial levels. Under the Agenda, justice sector institutions, including the courts, are expected to hold governments, corporate bodies, and individuals accountable for their environmental actions.

#### **2.3.3. Nairobi, Maputo and Johannesburg Declarations**

The Judiciaries in Africa have continued to share experiences and identify opportunities to promote climate change-related adjudication through symposiums held in different African cities. The first regional symposium on greening the African Judiciaries was held in Johannesburg, followed by the second in Maputo and the third in Nairobi.

The Johannesburg Declaration, made in 2017, focusses on supporting countries in mainstreaming and integrating environmental law in judicial training institutions as part of a sustainable curriculum. The symposium aimed to promote a sustainable integration of environmental law into African judicial curricula, review regional trainers' guide for judicial education on environmental law, identify

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emerging ecological issues, and exchange best practices. Moreover, the symposium aimed to evaluate progress made and the challenges faced in advancing judicial education and review and validate outcomes. The declaration arose from the need to enhance the capacities of the judiciaries in Africa to adjudicate ecological issues and contribute to sustainable development.

The Maputo Declaration was made during a symposium on Greening Judiciaries in Africa held in August 2018 in Maputo. The declaration covered the sustainable integration of environmental law into African judicial curricula to strengthen judges' awareness of environmental challenges, ecological justice, and the growing jurisprudence in environmental law. Further, there was a review of the trainers' guide and framework for ecological law, creating a platform for African countries to identify emerging environmental issues, exchange best practices, evaluate progress made and identify challenges faced in advancing judicial education. It was noted that the Judges and Judicial Officers are critical in ensuring timely and fair adjudication of environmental matters to mitigate ecological injustices.

The third regional symposium was held in Nairobi between 3rd and 5th April 2023 with a primary objective of strengthening the role of courts in addressing climate change in Africa. The symposium also aimed at identifying opportunities and measures for promoting climate change-related adjudication and evaluating progress made in integrating environmental matters into judicial education. The symposium also aimed at strengthening the role of courts in combating climate change in Africa, identifying opportunities for promoting climate change-related adjudication and sharing experiences, innovations and prospects (Judiciary of Kenya, 2023).

#### **2.3.4. Association of Southeast Asian Nations Declaration**

The Association of Southeast Asian Nations (ASEAN) Declaration on Environmental Sustainability was made in Singapore in 2007 during the 13th summit of the Association. The Association includes partnerships with heads of state from various Asian countries such as Cambodia, Malaysia, Indonesia, Singapore, Thailand, Vietnam, Philippines, Brunei Darussalam, Myanmar and Lao's Democratic Republic. The declaration acknowledges the increasing global concerns over climate change and the obligations of ASEAN countries to their people regarding achieving the SDGs.

The Association also made various declarations to intensify international and regional cooperation in sharing, promoting and implementing environmentally sustainable practices. For instance, there is a need to adopt a holistic approach, foster regional cooperation on environmental concerns, and enhance the participation of all relevant stakeholders. The Association also aims to implement measures and policies to combat transboundary environmental pollution, such as haze pollution. Additionally, it helps build capacity, raise public awareness, strengthen law enforcement, and combat illegal logging and other environmental crimes. An implication of this declaration to the justice sector is strengthening law enforcement in combating transboundary environmental pollution and illegal logging.

#### **2.4. Adequacy and Implications of Legal and Normative Frameworks**

A wide range of global and regional legislations, treaties, declarations and policies have the potential to impact the greening of justice systems. As expounded in Sections 3.2 and 3.3, significant efforts have been made to mitigate climate change, conserve biodiversity, and ensure sustainable development through legislation, treaties, agreements and declarations. The legal and normative frameworks provide much impetus and diverse areas of adoption and implementation. However, their comprehensive application to the entire spectrum of the justice system is minimal and requires

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significant interpretation. While the implications of each piece of legislation, treaty, agreement and declaration, have been suggested, the achievements in greening in the justice system are not well-documented. Further, the adequacy of regional legislation, treaties and policies on greening justice systems varies depending on the aim and objectives of the gathering where they are declared.

Nonetheless, the role of the justice sector is crucial to ensure that the aspirations of these legal and normative frameworks are realised through adequate implementation. The justice sector has a role in facilitating the reduction of GHG emissions through various mechanisms and initiatives to address the impacts of climate change. For instance, integrating environmental considerations into the respective justice sector agencies' internal operations, policies and practices is essential. Moreover, strengthening legal aid mechanisms, alternative methods for resolving environmental disputes and community empowerment initiatives to enhance access to environmental justice is critical to greening the justice system.

Though specific areas related to greening the justice sector are inferred, future instruments should be more articulate on the extensive role of all justice system institutions. There is a rare mention, for instance, on the role of policing and prosecution. Only the Maputo, Johannesburg and Nairobi declarations focused on the judiciary and, limitedly so, on judicial education. Training police, prosecutors, judges, magistrates, legal practitioners and correctional services officers on environmental violations' investigations, prosecution and law is vital. Implementation of comprehensive training programs designed for these employees should be a priority. These programs could focus on enhancing understanding of environmental violations, crimes and harms, environmental laws, sustainable development, and climate change mitigation strategies.

The justice sector can be innovative, particularly in the investigations, prosecution, and trial of environmental violations, and enhance the enforcement of the rule of law. The justice sector is also crucial in enforcing policies and regulations, and in protecting vulnerable and marginalised communities affected by climate change. To ensure sustainable management of resources, the justice sector should increase the use of technology to reduce waste and improve service delivery efficiency. This will require capacity building of employees and improved stakeholder coordination. There is also the urgency for continuous legislative reforms and the harmonisation of regional instruments given the transnational nature of climate change. Moreover, establishing specialised environmental units within each justice system institution is desirable.

While these instruments have ambitious goals and targets, precise mechanisms for effective coordination and holding countries accountable could be more assertive. For instance, firming up coordination and enforcement mechanisms between different international agreements and frameworks that have been agreed on would be beneficial. Hence, interagency collaboration is necessary to green the justice system and build networks for effective environmental governance. Additionally, partnerships with diverse stakeholders, such as academic institutions, civil society organisations and international agencies, would be beneficial.

The continuous policy and legal reforms should ensure that access to justice is accelerated and greened for all segments of society, especially the vulnerable and those disproportionately affected by environmental harms. Adopting ecosystem-based adaptation (EbA) is essential to reducing vulnerability. The EbA is an approach to climate change adaptation that utilises nature-based solutions and ecosystem services to help communities reduce vulnerability and build resilience to climate change (UNEP, 2021). These adaptation strategies are intersectional as they address ecosystems and livelihoods (Nalau, Becken & Mackey, 2018).

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### 3. THEORETICAL PERSPECTIVES AND CONCEPTUAL FRAMEWORK ON GREENING THE JUSTICE SYSTEM

#### 3.1. Introduction

The imperatives to address the environmental challenges permeate all spheres of society, including the justice system. As ecological awareness and the utility of protecting the environment grows, justice sector institutions worldwide are increasingly embracing protection and sustainability initiatives due to the envisaged positive benefits. This Chapter examines the various theories and approaches that underpin the concept of greening of the justice system. It also conceptualises the critical elements of greening the justice system. The analysis and synthesis aim to create a strong foundation for entrenching ideal greening practices in the justice system to enhance environmental stewardship. Drawing from the theoretical underpinning and conceptual analysis, recommendations to green the justice system have been suggested in later chapters.

#### 3.2. Theoretical Approaches on Greening the Justice System

Greening of the justice system is a complex and dynamic process that requires valuable insights from various theoretical approaches and perspectives. Fortunately, numerous theoretical frameworks from fields such as environmental studies, sociology, criminology, law and political science provide valuable insights. However, no single theory provides a comprehensive and holistic framework to address the multifaceted nature of greening the justice system. Therefore, this section provides a review of some of the most critical environmental, social and economic theories with a significant bearing on greening the justice system.

##### 3.2.1. Environmental Theories

###### *A. Human Rights Theory of Environmental Protection*

The concept of rights-based greening is a novel approach to addressing environmental challenges, with the justice system playing a pedestal role. The urgency of tackling environmental crises necessitates innovative solutions that transcend traditional legal paradigms to encompass a renewed focus on the observance of environmental rights. For instance, promoting equal access to justice for all, including marginalised communities affected by environmental issues, is a rights issue. Rights-based greening represents a shift towards recognising nature as a rights-bearing entity and posits that ecosystems, species and natural entities possess inherent rights.

An integrated account of human rights has been offered as a basis for environmental conservation underpinning the greening process in all sectors of society, including the justice system. These rights extend beyond anthropocentric interests and emphasise ecological integrity. The human rights system offers a complex legal paradigm necessary to tackle the severe impact of human activities on the environment (Manzoni & Domenico, 2019). By granting legal personhood to nature, we acknowledge its intrinsic interconnectedness with human well-being. Therefore, aligning ecological rights with human rights would create a more just and equitable society.

Leib (2011) notes that the field of human rights has unique mechanisms and methods empowering states, peoples and individuals to defend the interests of both human rights and ecosystems. Further, environmental rights equip human rights activists, environmentalists and victims of environmental degradation with a powerful tool with which to overcome the sovereignty wall that is often raised

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as a barrier to any form of state liability (Leib, 2011). Moreover, Chalabi (2018) notes that despite national, regional and international recognition of the international human rights, such as the right to clean environment, these rights are under-theorised. He developed a model covering the nature, scope and content of this right, illustrating that the right exists on individual, collective and global levels, and further explored the logical relationships between this right and already recognised human rights. This model, as Chalabi (2018) argues, allows for guiding practice for a range of governmental and non-governmental actors.

### ***B. Eco-justice Theory***

Martinez Alier pioneered the eco-justice theory in his 2002 seminal work on the environmentalism of the poor. According to Anguelovski and Alier (2014), the eco-justice theory links environmental sustainability and social justice by emphasising the environmental consequences of legal processes and policies. The theory advocates for a balanced approach, aligning environmental concerns with social justice imperatives. It recognises that environmental harm and degradation disproportionately affect vulnerable populations and marginalised communities (Anguelovski & Alier, 2014). It also highlights that addressing environmental issues is imperative to reduce social inequalities and injustices and that individuals have a right to a healthy and clean environment. The theory emphasises that environmental harms such as unregulated waste disposal or pollution often affect low-income communities (Anguelovski & Alier, 2014).

The eco-justice theory suggests a framework for incorporating environmental issues into the justice system. It highlights the importance of promoting environmental sustainability while addressing social injustices and inequalities within the society. The justice sector has a role in promoting access to justice for low-income communities and marginalised and vulnerable persons. The theory encourages policymakers to identify effective ways to promote environmental sustainability and reduce social injustices and mitigate environmental harms. Moreover, the theory views the justice system agencies as being pivotal in handling cases of social injustice arising from environmental crimes.

### ***C. Environmental Justice Theory***

The environmental justice theory focuses on environmental inequalities among different social groups (Ali & Kamraju, 2023 & Lehtinen, 2009). It stresses the disproportionate impact of environmental risks and hazards on marginalized communities, often caused by industrial activities, policies, laws and regulations (Lehtinen, 2009). It advocates the cessation of producing toxins, hazardous waste and radioactive materials to protect communities (Byrne, Martinez & Glover, 2002). Environmental justice also advocates for workers' right to a safe and healthy work environment without choosing between an unsafe livelihood and unemployment. The theory opposes the destructive operations of corporations and examines the structural and procedural elements of the justice system and their impact on human and environmental rights. Moreover, the theory advocates for ecological unity recognising the interdependence of the human-nature relationship.

## **3.2.2. Social Theories and Approaches**

### ***A. Gaia Theory***

The Gaia theory is a scientific approach to human, economic and socio-cultural practices affecting the environment. It suggests that the earth functions as a self-regulating system similar to any living organism, with its various components interacting to maintain balance and stability. The theory

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was first proposed in the 1970s by James Lovelock and later developed by Dr. Lynn Margulis. It considers living organisms and the non-living components such as land, oceans and the atmosphere to be intricately interconnected, forming a unified and self-regulating system that sustains the conditions necessary for planet life (Reiche, 2020). For example, the earth's atmosphere helps regulate composition and temperature to support life, while biodiversity and ecosystems ensure nutrient cycling to maintain ecological equilibrium (Lovelock, 2009).

By applying this theory to the justice system, practitioners and policymakers would broaden their views on harms. This is because the theory advocates for green growth and integrated co-evolutionary development of humans and nature, encouraging sustainable practices and policies that protect and preserve the environment (Reiche, 2020). Also, the theory suggests that human activities, including those carried out within the justice system, have far-reaching impacts on the ecosystems of the earth. Inferences from the theory suggest that human activities can be influenced by actions or inactions of the justice system, such as waste generation, resource consumption and pollution. The theory points to the role of the justice system in safeguarding the environment through diverse interventions.

### ***B. Restorative Justice Theory***

Restorative justice aims to repair harm, restore relationships and promote healing of parties. Hence, the theory focuses on repairing the harm caused by criminal behaviour or conflict through inclusive processes that involve affected individuals, communities and other stakeholders. Unlike traditional punitive approaches, which prioritise punishment and retribution, restorative justice seeks to restore relationships, and promote healing and reconciliation. According to Pain et al. (2016), applying restorative justice to address environmental crime would require adjustments on its application.

Setiyawan et al. (2024), while exploring the role of green restorative justice as an additional approach to resolving environmental issues in Indonesia, conclude that it is time and money-saving and beneficial to society. Additionally, entrenching restorative justice engagements would allow offenders to fully appreciate the impact of the harm on the natural environment to communities. Further, restorative justice would reduce the chances of recidivism through the offender's education and improved environmental protection awareness.

### ***C. Green Criminology Theory***

It is widely appreciated that some behaviours that cause significant harm to society are not labelled as crimes in the orthodox approach to criminology, where crimes are defined based on the existing legal instruments. The green criminology approach deviates from this view and examines how environmental harms intersect with the law. It is a holistic approach that ties the legality and uncertainty of harms with the human and non-humans life and the environment (Tourangea, 2022).

The initial discussion of green criminology appeared in 1990 (Lynch et al., 2021), with green criminology being proposed as a unique speciality within the broader discipline of criminology. After that, other criminologists explored the burgeoning green criminological theory, which transcends the acts adjudged as criminal to cover other societal harms (Brisman, 2014). While some criminologists prefer legal procedural approaches, green criminologists emphasise the environmental harms regardless of legality (Brisman & South, 2018 & Tourangeau, 2022) concentrating on exposing criminal environmental omissions (Stretesky & Lynch, 2014).

Ruggiero and South (2013) consider green criminology as a framework of intellectual, empirical and political orientations toward primary and secondary harms, offences and crimes that damage the

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natural environment, human and non-human species and the planet. According to Brisman, (2014) green criminology covers environmental crimes and harms affecting human and non-human life. It further covers environmental harms and environmental laws, as applied in the criminal justice system, covering enforcement measures and court proceedings, prosecution and sentencing, and environmental regulation (White 2008, 2011).

Green criminology has a strong nexus with law and politics (Gacek & Jochelson, 2021; Lynch et al., 2013; Mol, 2017; Stretesky et al., 2013). Sollund (2021) argues that an interdisciplinary, non-speciesist green criminology is vital to confronting environmental crimes and harms in a world characterised by a nature and extinction crisis. In so doing, however, players have to be sensitive to Halsey's (2004) warning that criminalising a behaviour is an inferior way of reducing its occurrence (Brisman, 2014). Tourangea (2022) also argues that green criminology is best understood as a perspective and not a totalising theory, as it can adopt various positions. Also, introducing such a framework into criminology does not set out any one particular theory but introduces a perspective to inform theoretical and empirical work (Ruggiero & South, 2013).

Hence, green criminology has been proposed as a unique speciality within criminology, helpful in constructing a political, economic and class analysis of crime, law and justice related to environmental destruction (Lynch, 1990; Lynch & Michalowski, 2006). The theory provides a political-economic explanation of the causes and injustices associated with social control of green crimes or ecological harms (Lynch et al., 2021). Moreover, it offers valuable insights into addressing environmental harms within the justice system.

#### ***D. Other Social Theories***

Social theories focus on groups' and individuals' interaction with the physical and social environments. They examine how people's beliefs, attitudes and behaviours are influenced by their surroundings, such as the social contexts and the natural environment. For instance, Rivera-Camino (2012) posit that individuals act rationally according to subjective norms, attitudes and perceived behavioural control as highlighted under the theory of planned behaviour.

On the other hand, Giddens' structuration theory postulates an overarching dualism of the interdependence between agencies and their structures. It, therefore, emphasises the creation and reproduction of social systems. For its part, the norm-activation theory explores the influence of moral behaviour on environmental issues (Zhang et al., 2013). The theory assumes that behaviour is driven by moral values, with feelings impacting people's reactions to environmental issues, while the value-belief-norm theory suggests that personal values affect environmental beliefs, influencing how people behave in environmentally friendly ways (Stern, 2000; Stern et al., 1999). The theory proposes that personal values predict environmental beliefs and, in turn, pro-environmental personal norms and behaviour (Stern, 2000; Stern et al., 1999).

Another relevant theory is the social identity approach that explores how group identification and shared beliefs predict environmental actions (Fritsche et al., 2018). The theory suggests that environmental actions among people in an organisation are predicted by factors such as in-group identification, in-group norms and goals, and collective efficacy beliefs (Fritsche et al., 2018). Closely related to the social identity approach is the social exchange theory, which suggests that when organisations support employees, a positive connection and a sense of reciprocity is created (Paille & MeijaMorelos, 2019). Hence, people perceive an obligation to reciprocate when receiving rewards or bearing costs.

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### 3.2.3. A Systems Approach

As nations become increasingly interconnected due to globalisation, complex social systems emerged that strongly influence diverse facets of existence. According to Arnold and Wade (2015), a system comprises groups or combinations of interrelated, interdependent, or interacting elements forming collective entities. Hence, a systems approach views numerous scenarios as interconnected rather than as being isolated and is, therefore, essential in understanding the complexity of underlying issues. Systems thinking consists of elements, interconnections and a function, pointing to synergistic analytic skills for understanding systems and predicting their behaviours (Arnold & Wade, 2015). According to Tourangeau (2022), the hallmark of systems thinking is the numerous concepts to respond to problems within complex systems and engage diverging viewpoints, incomplete knowledge and many relationships. Since the justice system institutions are highly interconnected, with actions of one institution having implications for other institutions, a systems approach was deemed ideal for the analysis of greening.

The approach recognises the importance of dynamic interactions and feedback loops between the different components of the justice system and the environment. Tourangeau (2022) supports this notion by arguing that looking at environmental issues within the justice system from a systems-based approach is more common. For example, the justice system comprises numerous institutions that collaborate for the effective execution of their mandate, producing a more significant effect than the sum of the individual elements (Arnold & Wade, 2015). Similarly, White (2018) and Ramage and Shipp (2020) contribute to systems thinking by combining ecological, justice and international studies emphasising the well-being of the environment and incidences of harm.

### 3.3. Conceptual Framework for Greening the Justice System

Several greening principles have underpinned the study's conceptual framework, aiding in the identification of the fundamental elements of greening and ensuing recommendations. Notably, these are the principles of efficacy, legality, social and ecological dominance, and coherence. The principle of efficacy in greening actions underscores the implementation of well-designed and evidence-based strategies to promote a healthy, safe and sustainable environment. Further, this principle provides that the strategies need to be continuously measured and adaptive to ensure a timely response by the justice system to climate change risks. One of the implementation imperatives proposed by this study is having a robust monitoring and evaluation framework.

The principle of legality provides that a state should not interfere with fundamental common law rights, freedoms and immunities (Chen, 2015). Under the auspices of this principle, legislative greening and rights-based greening have been identified as essential elements of greening the justice system as they would aid in safeguarding access to environmental rights. Uenal et al. (2021) posited that the principle of social and ecological dominance provides a new frontier for measuring climate change risk. The principle attests to the fact that species have an influence on their environment and that climate change is a consequence of humans' dominance, which has negatively impacted the environment (Diaz et al., 2019). The role of the justice system is to mitigate, as articulated in the functional greening, to ensure that human economic activities do not adversely impact the environment.

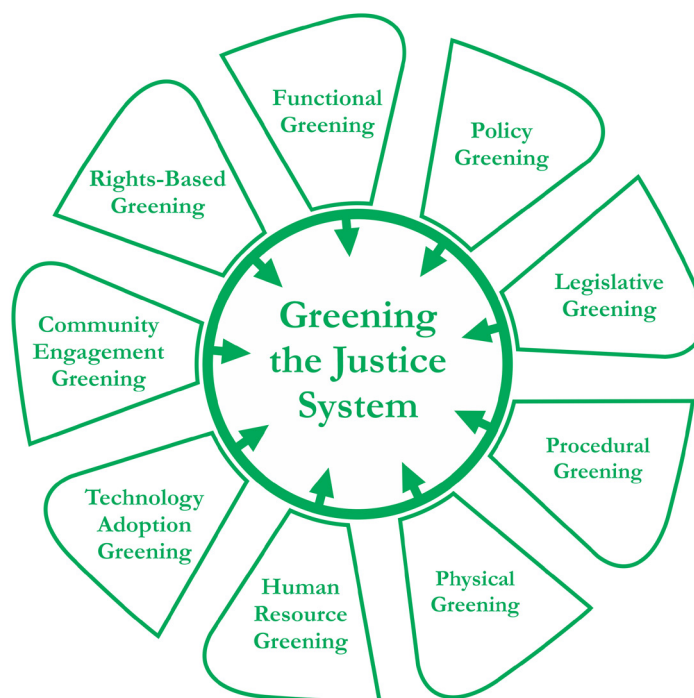
Another essential principle is coherence, which refers to the consistent linkages between the interconnected greening elements. This principle echoes the systems approach methodology and would ensure that all the potential elements work towards greening the entire justice system.

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Therefore, the crucial elements of greening the justice system can be analytically advanced to create a wholesome understanding of what constitutes greening. The conceptualisation may be provided primarily through the lenses of a systems approach to create an all-encompassing justice sector model that supports environmental protection.

Therefore, several elements or facets of greening are evident from the diverse theories and principles, and from the legal and normative frameworks explained in the previous chapter. Broadly, these can be categorised as functional, policy, legislative, procedural, physical, human resource management, technological, and community engagement. Consequently, the following conceptual framework illustrates these elements.



**Functional Greening:** Functional greening refers to the integration of environmental sustainability goals and practices into institutional roles and functions as part of service delivery. Hence, carrying out institutional functions while integrating environmental protection requirements is part of greening. For example, the police are expected to investigate environmental crimes, apprehend offenders, and enforce court decisions as part of their legal function. In the midstream of the justice system, litigation of environmental cases in courts takes centre stage. Hence, prosecution and litigation of environmental cases in courts form functional greening. During litigation, legal representation and the participation of civil justice departments and environmental lobby groups suffice. Downstream, correction services provided by prisons and probation authorities when rehabilitating offenders constitute functional greening.

**Policy Greening:** Policy greening involves revising, adapting, or developing policies to ensure they support environmental conservation and mitigate adverse climate change impacts. These policies aim to ensure a sustainable justice system that promotes environmentally friendly practices that mitigate the adverse effects of climate change. They also support the proper functioning of the justice system, especially in upholding the rule of law on environmental protection. Proper policies are also essential in helping to protect the rights of both humans and the natural environment. Moreover, policies aid the implementation of existing environmental laws, treaties or agreements.

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**Legislative Greening:** Integrating greening into legal frameworks is pivotal. Hence, legislative greening entails developing new laws or reviewing existing ones while ensuring their compliance with emerging dictates of greening and environmental protection. An emerging field of legislative greening is environmental constitutionalism that looks at the roles of the state, society and the private sector within the constitutional framework as a key to solving environmental problems (Muhtar et al., 2024). As noted by Osofsky (2014), one existing challenge is the significant variation in environmental legislation across jurisdictions which impacts the shared global sustainability goals. Therefore, legal reforms for environmental protection and sustainability is ideal for ease of investigation, prosecution and trial by justice sector agencies.

**Procedural Greening:** Procedural greening entails ensuring that the ideal greening practices are embedded in most or recurrent procedures in a given institution. Many procedures exist in the daily and strategic operations of justice system agencies. They are diverse and cover the execution of mandates, procurement, financial management, human resource management, and waste management, among others. There is a need to ensure that the operational procedures of the justice system, crosscutting or institutional, have a greening element. Hence, entrenching ethical and sustainable greening procedures in the justice system is essential. For instance, the justice system should entrench green public procurement practices such as the purchase of eco-friendly and energy efficient supplies and appliances. Implementation of these practices would ensure that the justice system reduce the environmental risks caused by its operational processes.

**Physical Greening:** Physical greening refers to initiatives aimed at making physical structures, amenities and spaces more environmentally friendly and compliant with environmental protection standards. There are long-term benefits to having environmentally friendly and sustainable buildings, other physical amenities, and office equipment. According to White and Graham (2015), most efforts to green the justice system focus on physical amenities. Physical greening comprises many elements, including construction, post-construction installations, waste management, mobility ventures such as motor vehicles, and the provision of diverse office equipment and machines. Using sustainable materials, technology and energy in buildings and ensuring energy-saving and waste-water management efficiency is also part of physical greening. Moreover, adopting energy-saving transport solutions across the justice sector, such as using a green fleet to minimize carbon emissions, is physical greening.

**Human Resource Greening:** Human resource greening entails using Human Resources Management (HRM) practices to reinforce and increase employee commitment to environmental protection. It involves cultivating Employee Green Behaviour (EGB), which entails enhancing employees' green knowledge and comprises measurable actions that would contribute to environmental sustainability. Greening human resources also covers sustainable employment practices on recruitment, selection, training, performance management and compensation. Angstadt (2019) notes that expertise in environmental sustainability is crucial in deciding environmental cases. Moreover, fostering a culture of environmental responsibility by employees within the justice system is vital.

**Technology Adoption Greening:** Adopting modern technology in the existing institutional processes and procedures is essential for reducing greenhouse emissions and carbon footprint. Technology has many facets, notably operational, enhancement of internet connectivity, a stable power supply, provision of modern and reliable hardware items like computers, and integration of ICT systems. In the justice system, all these technological-based elements come into play. Therefore, the use of technology to reduce mobility, wastage and paper use, and to enhance virtual engagements in the

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justice system constitute an essential element of greening.

**Community Engagement Greening:** Increasing public awareness of environmental protection is essential (Haeri & Rezaei, 2019). This involves changing the mindset of the community towards embracing habits and practices that promote environmental awareness and protection (Lin and Wei, 2023). Hence, community engagement greening focuses on raising awareness in the community by mobilising and engaging stakeholders, as well as advocating for environmentally friendly interventions. It involves leadership and institutional teams taking a proactive advocacy role in championing green initiatives and mobilising community support for environmentally sustainable practices. Since the justice system exists within and serves the community, strengthening interlinkage with society in greening is essential. Justice sector professionals can promote green initiatives within and beyond their respective institutions for environmental sustainability.

**Rights-Based Greening:** The impacts of climate change are not uniform and may amplify existing inequalities, a rights concern. The inequalities covering economic status, gender, age, geographic location and nationality shape an individual's or a community's vulnerability to environmental changes. Hence, the concept of rights-based greening intertwines the observance of inherent rights with the quest for ecological balance, requiring a nuanced understanding of the diverse strengths and vulnerabilities that exist within societies. World over, the justice system is a crucial player in safeguarding human rights. By adopting ecological human rights as a foundational principle for environmental protection, it is possible to foster a deeper connection between human rights and the rights of the natural world. Moreover, promoting environmental constitutionalism is vital. It recognises that a healthy environment is a fundamental right that is closely linked to the well-being of generations and can address the environmental problems felt most acutely by those often underserved by existing legal structures (May & Daly, 2019).

### **3.4. Summary of Conceptual Framework and Theoretical Perspectives**

This chapter aimed to develop a conceptual framework for greening the justice system. Drawing from the existing theories and principles of greening as well as the normative frameworks, various elements of greening have been identified as part of the conceptual model. These are functional, policy, legislative, procedural, physical, human resources, technology, rights-based and community engagement. Building on the conceptual framework, a systems approach is crucial to interlink the different aspects of greening and provide a holistic understanding of the framework for the justice sector. Principally, diverse theories should be utilised to support systems thinking and conceptualise the role of each justice sector actor.

The theories have provided a comprehensive framework for all key justice sector players to reconsider their role in ensuring environmental sustainability. For instance, an integrated human rights approach to the environment can be a powerful tool to frame environmental conservation as a human rights entitlement and guide the greening of the justice system. From the eco-justice perspective, justice actors can identify environmental harms disproportionately affecting vulnerable populations to initiate specific interventions. The environmental justice theory, which focuses on addressing environmental inequalities and promoting equitable access to a healthy environment, provides a solid foundation for justice system players to intervene by greening.

Social theories that focus on groups' and individuals' interaction with the physical and social environments also offer critical insights into the greening process for the justice system. For example, the Gaia theory suggests that the earth is self-regulating, just like a living organism, with its various

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components interacting to maintain balance and stability. On the other hand, the restorative justice theory looks at environmental conservation mechanisms aiming to repair harm, restore relationships, and promote the healing of parties. For its part, green criminology explores how human activities that harm the environment can be considered green crimes. The theory is also grounded on the reality of harm vis-à-vis the lives of non-humans and the environment.

The conceptual and theoretical underpinning has shown that the intersection of the justice system and environmental sustainability has yet to be explored in-depth by practitioners, scholars, and policymakers. The review of the diverse environmental and social theories on greening the justice sector leads to the conclusion that a design that balances operations and environmental protection necessitates a systems approach. As noted by White and Graham (2015), the current literature on greening the justice system is primarily descriptive, non-systematic, sporadic, and narrowly focused on individual initiatives or institutions. Therefore, the framework proposed in this chapter can help policymakers, scholars and practitioners navigate the complexities of greening.

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## 4. PRACTICAL PERSPECTIVES ON GREENING THE JUSTICE SYSTEM

### 4.1. Introduction

The justice sector institutions are primarily responsible for enforcing the rule of law, particularly in matters related to environmental protection. Therefore, they must operate in an environmentally compliant manner, as it is contradictory to enforce the law while violating environmental regulations. In light of this, this chapter emphasises the practical role of the justice sector players in promoting environmental sustainability. It analyses the current and emerging best practices and provides comprehensive information to guide the implementation of green practices.

The presentation is structured sequentially, covering activities from the initial investigation and arrests to prosecution and trial in court and finally to correctional services. Additionally, justice sector institutions are required to incorporate environmental protection and sustainable development into their core functions by adopting a rights-based approach to greening. This topic will, therefore, be separately addressed in Section 4.4. The institutions should also incorporate physical, policy, legislative, procedural, human resource, and technological greening, which will be discussed in Section 4.5 due to their crosscutting nature in the entire justice sector.

### 4.2. Green Policing, Prosecution and Court Work

There is a growing global commitment to achieving environmental justice, emphasising the importance of law enforcement, prosecution and adjudication agencies in resolving environmental disputes, whether criminal or civil. In criminal cases, the police, prosecution authorities, and judiciaries play a crucial role in environmental justice by conducting investigations, making arrests, prosecuting offenders, and resolving environmental-related criminal disputes within the broader criminal justice system. On the other hand, civil disputes are filed directly in court by the involved parties. These may involve statutory bodies such as the Environmental Authorities, activists from Civil Society Organisations or the affected individuals.

#### 4.2.1. Green Policing

Several institutions, police authorities being the predominant ones, perform policing functions in most countries. These functions range from investigations, arrests, crime prevention and surveillance of protected and crime-prone areas. The function is critical in ensuring security and upholding the rule of law. Therefore, with the intensifying impact of climate change, it has become essential to raise awareness among law enforcement officers about addressing environmental offences (Interpol, 2022). Given the rise of ecological crimes, police require new knowledge and adaptive work methods. Increasingly, the police are being called upon to address environmental-related issues. As Spapens (2012) noted, environmental crimes, like ecosystem destruction, are rising, a concern also recognised by the College of Policing in the UK (APCC, 2022).

Moreover, Matczak and Bergh (2023) emphasise that police officers handle various crises, including civil unrest and floods, while enforcing climate change-related laws, while White (2017) notes that social contexts, such as food shortages from drought, do influence collective behaviour at a societal level, leading to police intervention. Sida (2018), for its part, highlights that climate-related changes tend to cause or worsen conflicts within communities. It is against this backdrop that Ranson (2014) predicted an increase in serious crimes such as murder, rape, aggravated assaults, and robberies in the USA due to climate change.

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Furthermore, the police, like other justice sector institutions, also contribute significantly to greenhouse gas emissions. As a response, many police departments worldwide have initiated useful programs aimed at environmental protection. Some of these initiatives include using alternative energy sources such as solar, greening existing police buildings, and using electric vehicles, bicycles, or foot patrols to reduce fuel consumption and carbon emissions (White & Graham, 2015). In the United Kingdom, for example, the Police and Crime Commissioners (PCC) support the decarbonisation agenda by developing sustainable social programmes and practices (Association of PCC, 2022). The argument is that if the police are not at the forefront of greening, they will eventually have to deal with emerging organised crime targeting resources and increased protests and civil emergencies (Association of PCC, 2022).

In Hong Kong, the police force has taken an active role to raise environmental awareness. Their efforts include organising eco-friendly fundraisers, and participating in charity events to educate the public about pressing environmental concerns (Hong Kong Police Force, 2014). The force has prioritised instilling environmental consciousness amongst its staff through comprehensive training programs. They have embraced electronic platforms such as e-Green Corners and transitioned to paperless conferences while implementing electronic data storage. Additionally, the Hong Kong police force has made strides in reducing wastage by installing water-saving showers, greening existing building spaces, and implementing extensive recycling programs for industrial waste, glass bottles, paper, and used cartridges. Additionally, the force has implemented energy-efficient lighting and solar water heating systems. It also advocates for the prudent use of air conditioning and recycles wastepaper. To ensure accountability and transparency, the force prepares and releases annual environmental reports that track energy, petrol and gas consumption trends. It also tracks and reports on the usage of paper (Hong Kong Police Force, 2014).

In Canada, the Vancouver Police Department developed a Sustainability Strategy (2012-2016) to enhance sustainability and better management of resources. The Department periodically sets waste reduction targets as a greening strategy. It deploys electric vehicles equipped with anti-idling technology and generally promotes a green culture within its operations (Konyk, 2018). Elsewhere in Canada, the Calgary Police Service introduced green fleet, reduced paper use, carpooling, bicycle patrols and transit to enhance resilience to climate change.

In the USA, the Los Angeles Police Department initiated sustainability programs by introducing a Green Team that uses bicycles and hybrid vehicles (Konyk, 2018). Further, the Department limits water use and electricity consumption to promote environmental stewardship. In Seattle, the City of Seattle Green Fleet Action Plan (2014) was set to reduce carbon footprints and greenhouse gas emissions by shifting to clean alternative energy use, prioritising electric vehicles, and zero waste while becoming energy neutral.

The practices in other jurisdictions are also notable. In Turkey, the police have a unit that provides justice services to areas inaccessible by cars using bikes to respond to various issues and reduce carbon footprint (Sabah, 2014). In Nigeria, the National Strategy to Combat Wildlife and Forest Crime 2022–2026 provides a broad array of interventions by the Police Force to protect the environment (Republic of Nigeria, 2024). In Kenya, the Directorate of Criminal Investigations (DCI) has a specialised unit to handle environmental and wildlife-related crimes. This unit focuses on the investigation and prevention of offences that harm the environment, endanger wildlife or concern natural resources (Republic of Kenya, 2024). The DCI also has a land fraud investigations unit, given the centrality of protecting land as an essential resource (Republic of Kenya, 2024).

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#### 4.2.2. Green Prosecution

Prosecution is crucial to any criminal justice system as it bridges the gap between law enforcement agencies and the courts during trials. The prosecution office also plays a strategic role in supporting broader environmental sustainability goals by addressing environmental crimes, thereby contributing to the enforcement of the rule of law. Despite its significance, Lehrer (2022) highlights that climate justice movements seldom discuss prosecuting environmental crimes. While criminologists consider criminality as any act prohibited by criminal law (legal definition of criminality), social legalists consider that some acts do not violate criminal law despite being so harmful like crime (sociological definition of criminality) (Situ & Emmons, 2000). In this sense, not all acts that are harmful to the environment are prosecuted by law (White, 2009).

Nonetheless, a focus on prosecuting environmental wrongs is essential to environmental protection and response to climate change. Unfortunately, in many jurisdictions, environmental wrongs are not addressed through prosecution. For instance, in some jurisdictions, neither the police nor the prosecution department have the mandate to address environmental offences, which are left to be handled by environmental regulators who are responsible for securing compliance with environmental regulations. The implication is that there is a preference for using non-criminal penalties and adopting civil sanctions on environmental offences (South, 2014).

However, the streamlining of prosecution role plays a crucial role in environmental protection and conservation. For instance, before the 1970s, the US Department of Justice only selectively prosecuted environmental crimes in the US. It was not until the formation of the Environmental Crimes Unit that the process was formally institutionalized (Lazarus, 1994). It is important to note that industries in the US are now heavily regulated, especially in pollution control (Bellamy, 2002). When monetary fines for violations of pollution control laws are viewed as just a part of doing business, criminal sanctions are imposed on the executives as part of the regulatory scheme.

The *People vs Southern California Gas Co.* case illustrates a creative approach to litigation of environmental crime with the possibility of financial settlement. In this case, the Los Angeles County District Attorney (being the prosecutor) and Southern California Gas Company agreed on a criminal settlement in a case stemming from a 2015 gas leak. In this settlement, the Company pleaded no contest to a misdemeanour violation of failing to report the leak in a timely manner and agreed to pay approximately \$550,000 in costs. The Company committed to installing and maintaining an infrared methane leak detection system and hiring and maintaining six full-time employees for at least three years to operate and maintain the system.

In South Africa, the court applied and enforced criminal sanctions against environmental crimes in the case of Blue Platinum Ventures. The case concerned severe soil erosion caused by a newly formed company called Blue Platinum Ventures, which dug clay to mould bricks. The prosecution charged both the company and the owner.

Environmental crimes may be prosecuted privately. In 2012, in Navarre, Spain, for example, there was a mass poisoning of at least 138 specimens of several endangered raptors. *Ecologistas en Acción*, a non-governmental organisation, successfully undertook private prosecution in the case. A heavy fine was imposed on appeal, even though *Ecologistas en Acción* found this insufficient as it sought prison sentences for the responsible individuals (Orueta et al., 2023).

In the European Union, a report on prosecution and judicial practice in EU environmental law recommends that prosecutors be trained to enhance their knowledge and understanding of

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environmental crimes and harms (Billiet et al., 2016). It has also been recommended that gravity factors for each environmental crime be considered in the sentencing guidelines to enhance prosecution (Billiet et al., 2016).

Elsewhere, the Office of the Prosecutor of the International Criminal Court (ICC), in a 2016 policy paper, recognised the importance of prosecuting international crimes involving environmental damage, illegal natural resource exploitation and land grabbing (Office of the Prosecutor, 2016). The policy paper provides guidelines on exercising prosecutorial discretion in selecting and prioritising cases for investigation, prosecution and preliminary examinations. However, the paper does not clarify the scope of the ICC's jurisdiction on ecocide (Pereira, 2020). One recommendation is the expansion of the ICC's jurisdiction to cover ecocide since the Rome Statute only recognises the court's jurisdiction for specific environmental damages in an armed conflict under the definition of war crimes (Hulme, 2004).

### **4.2.3. Greening Litigation and Growth of Jurisprudence**

In the climate litigation process, courts play a crucial role as clients seek judicial remedies or compensation for damages through climate change litigation. Markell and Ruhl (2012) define climate change litigation as any administrative or judicial litigation in which the parties' arguments or court decisions directly and explicitly address a factual or legal matter relating to the causes and impacts of climate change. The litigation covers a wide range of disputes, especially those related to greenhouse gas emissions, adaptation and resilience, environmental regulations, and the protection of natural resources. During litigation, several important court decisions of jurisprudential value often emerge. This section highlights some cases of environmental litigation that offer insights into the possible approach to greening through litigation.

While researching the impact of constitutional jurisprudence on climate justice, May and Daly (2019) highlighted the significant role of courts in interpreting environmental constitutionalism. Preston (2019), for his part, studied regulatory approaches to promoting cleaner energy in a related study on climate change litigation trends. He examined legal cases to understand the justice system's role in addressing environmental challenges. The study revealed that climate change litigation has become prominent and recommended legal avenues to address climate change issues. Unfortunately, in most cases, the effectiveness of environmental law penalties and sustainable development principles in addressing environmental crimes are only partially achieved due to the inability of executive powers to enforce the law (Amirante, 2012).

#### ***Highlights of Broad Focus Areas of Climate Litigation***

The Global Climate Litigation Report (UNEP & Sabin Center for Climate Change Law at Columbia University, 2023) explored global climate litigation, classifying it into six categories. Some of these cases are related to the observance of human rights and the representation of vulnerable communities affected by the adverse impacts of climate change (which are addressed in Section 4.4). Other cases concern challenges related to domestic non-enforcement of climate-related laws and policies. These cases focus on the legal actions that hold governments accountable when they fail to enforce existing climate policies and laws. In these cases, the plaintiffs argue that despite regulations and legislation meant to address climate change, those in authority often neglect implementing and enforcing the legislation (UNEP, 2023). Most of such cases seek court injunctions or orders to compel the government to take climate action, push for stricter climate change mitigation measures and have a more solid implementation of climate policy.

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The Global Climate Litigation Report notes that litigants also often seek orders to deny permission to exploit fossil fuels. In these cases, communities, environmental groups, or indigenous people would be seeking to restrict or halt the extraction, production, and use of fossil fuels through the courts. The plaintiffs would argue that approvals of such practices would lead to public health concerns, environmental degradation, and adverse climate change impacts (UNEP, 2023). Therefore, by advocating for fossil fuels to remain on the ground, the litigants encourage using renewable energy sources to reduce greenhouse gas emissions.

The other litigation strand identified by the Global Climate Litigation Report covers cases of corporations that mislead the public about the climate-related impacts and risks that stem from the work they do. The plaintiffs allege that these corporations downplay the risks posed by climate change or misrepresent their commitment to environmental sustainability (UNEP, 2023). Such cases seek accountability, transparency and accuracy when reporting climate-related information to ensure consumers, investors and the public can make informed decisions.

Additionally, there are claims addressing corporate liability and responsibility for climate harm. In these cases, the plaintiffs allege that corporations knowingly extract fossil fuels, contributing to greenhouse gas emissions, and fail to adequately mitigate the resulting negative impacts (UNEP, 2023). Such lawsuits seek compensation and injunctive relief.

### ***Highlights of Some Landmark Cases***

Globally, courts have been rendering landmark decisions of jurisprudential value regarding environmental protection. This paper provides two strands of litigation related to environmental protection. The first strand covers general cases at the national and regional levels. The other strand of cases (presented in Section 4.4.3) looks at the rights-based approach to greening since they relate to violations of rights, especially those of vulnerable and marginalised persons. This subsection gives highlights of the general cases at the national and international levels.

In the United States Supreme Court issued a landmark decision in the case of *Massachusetts v EPA*, 549 U.S. 497 (2007). In this case, petitioners sought the regulation of the emission of carbon dioxide and other greenhouse gases from motor vehicles by the Environmental Protection Agency (EPA). They advocated for the setting of limits on emissions, in line with limits established under the Kyoto Protocol to the United Nations Framework Convention on Climate Change (1997) and other international treaties. The State of Massachusetts argued that the emissions catalysed global warming, which, in turn, would result in the loss of coastal lands. In its decision, the court held that Massachusetts, as a sovereign state, had demonstrated a particular injury and sufficient failure to take action to regulate greenhouse gases.

Further, in 2021, in *Conservation Law Foundation v ExxonMobil Corp.* 51 ELR 20129, the United States federal trial court overturned a ruling to terminate a lawsuit challenging a Clean Water Air permit issued to an ExxonMobil terminal in Massachusetts for allegedly failing to consider the impact of climate and the hazards created by allegedly discharged pollutants. The court rejected Exxon's argument that the litigation should wait for the EPA to take action.

In Australia, restorative justice principles have been applied in sentencing environmental cases. In the 2007 *Garrett v Williams* (151 LGERA 92) case, mining operations had caused the destruction of numerous Aboriginal artefacts and desecrated a sacred site. Before the court's ruling, a conference was convened based on restorative justice principles and the involvement of Transformative Justice Australia (TGA). The conference resulted in a significant agreement between the Aboriginal community and the mining company, which complemented the penalties imposed by the court.

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In Germany, *Luciano Lliuya v RWE AG* (Case No. 2 O 285/15, 2015) addressed corporate liability and responsibility for climate harm. The plaintiff alleged that the German electric power company RWE AG's substantial greenhouse gas emissions contributed to the melting of a glacier, which increased the levels of the glacial Lake Palcacocha. Although a German District Court initially found the claim inadmissible, the High Court reversed that decision, finding that the plaintiff's claims were sufficiently well-founded to proceed. The High Court acknowledged that a private company is, in principle, responsible for its share of climate damages resulting from its emissions.

In South Africa, the court in *EarthLife Africa Johannesburg v Minister of Environmental Affairs and Others* (65662/16) [2017] ZAGPPHC 58 used human rights provisions to clarify unclear legislative requirements related to environmental impact assessments. This was in response to the climate change impacts of a proposed coal-fired power station project. The court stated that considerations regarding climate change were important, even if not explicitly provided for in domestic laws. The court also acknowledged South Africa's commitments under the Paris Agreement as a reason for considering climate change in the environmental review processes.

In India, a notable case of *MC Mehta v Union of India* (1988 AIR 1115, 1988 SCR 2) was based on the pollution of the river Ganga by tanneries and soap factories on the banks of the river at Kanpur. The tanneries and soap factories argued that they were discharging waste into municipal drains and that it was the Municipality's responsibility to prevent the drainage into the river. In addition, they argued that the equipment required for regulatory mechanisms was costly and would result in loss of business and jobs. The Supreme Court issued several directives to the Kanpur Municipal Corporation to establish effective drainage and sewage systems to prevent and control pollution of the River Ganga at Kanpur. It was the court's view that the need to protect the environment was a fundamental duty under the Constitution. Also, the right to public health was not comparable to unemployment and loss of revenue.

In Kenya, in *Save Lamu & 5 others v National Environmental Management Authority (NEMA) & another* (Tribunal Appeal No NET 196/2016), the National Environmental Tribunal set aside the issuance of a license by the National Environmental Management Authority (NEMA) to Amu Power Company to construct the Lamu Coal-fired Power Plant. The Tribunal ordered the Power Company to undertake a fresh Environment Impact Assessment (EIA) study that would include all approved and legible architectural and engineering plans for the plant. The plans also covered the company's ancillary facilities, such as the coal storage, handling facility and ash pit, and considered all the relevant environmental, natural resource and climate change laws. The Tribunal ordered NEMA to engage with the lead agencies and the public on the findings of the EIA and subsequently share widely its decision on the grant or refusal to issue an EIA licence. The Tribunal found that these extraordinary measures were necessary to ensure sufficient access to information by the public on the project.

At the international level, the International Court of Justice (ICJ) considered Hungary's non-compliance with a treaty it made with Czechoslovakia in 1977 regarding the construction of dams in the Danube River as part of the Gabčíkovo-Nagymaros project in the case of *Gabčíkovo-Nagymaros Project (Hungary v Slovakia)* [1997] ICJ Rep 88 (1997). Whereas Hungary claimed that it had the right to end the treaty based on international environmental protection laws, the Court noted that new environmental laws could be applied to the treaty and that both parties could include these laws with their agreement to make sure that water quality in the Danube was preserved and that nature was protected. In its judgement, the ICJ noted that historically, humanity, driven largely by economic

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motives, has frequently intervened in nature without considering the environmental consequences. The Court acknowledged that the protection of the environment would yield better quality of life, human health and living space for both present and future generations. It thus held that the Treaty was not static and incapable of adapting to emerging norms of international law and could be interpreted to align to relevant environmental imperatives.

Moreover, the International Court of Justice (ICJ) issued an advisory opinion on the legality of the use of nuclear weapons. When discussing international environmental law, the Court stated that States involved in armed conflict have a duty to take environmental factors into account when determining what is necessary and proportionate in the pursuit of legitimate military objectives.

#### **4.2.4. Greening through Institutionalising Specialised Environmental Courts**

The effective implementation of environmental laws is crucial for greening the justice system. According to Amirante (2012), environmental law is undoubtedly a pillar of environmental protection, but it still needs to be appropriately implemented in most parts of the world. The judiciary plays a crucial role in developing and implementing principles of environmental law, with many countries establishing specialised environmental courts (Percival, 2017; Robyn, 2017). These courts predominantly ensure the observance of the rule of law on environmental matters. Percival (2016) affirms that the heightened growth of specialised environmental courts and the application of environmental laws benefit the environment. Trousdale and Robyn (2017), who found that these courts made a positive contribution to resolving environmental disputes, support this line of thought.

Several countries have established special environmental courts in this regard. For instance, there is a nationwide green court in the Philippines to protect the environment and enhance access to environmental justice. In Kenya, 37 court stations were exclusively dealing with environmental and land issues as of the end of FY 2022/23 (Judiciary, 2023). As explained by Otieno (2014) and evidenced in the Kenyan Judiciary Annual Reports (Judiciary, 2023), these courts have been able to expeditiously dispense environmental justice.

### **4.3. Green Correctional Services**

The primary correctional facilities in the justice system are the prison and probation services. These institutions interact and handle clients from courts during and after the trial of criminal cases, with one of their roles being to correct the behaviour of those who violate various laws. In undertaking their mandates, correctional services institutions play a significant role in promoting environmental sustainability. Scholars and practitioners have proposed and implemented several practices for rendering correctional services greener and eco-friendly. Some of these practices are explained below.

#### **4.3.1. Green Prisons**

In their guide to greening corrections, Feldbaum et al. (2011) identified various ways correctional facilities can green their facilities and operations. Some of the initiatives proposed include constructing buildings with low energy consumption, educating and training inmates for re-entry, including environmental literacy on the green economy and opportunities offered by green-collar jobs. The guide also recommended that correctional facilities have buildings with low energy consumption and train offenders on green economy and environmental literacy (Feldbaum et al.,

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2011). It also recommended that correctional industries pioneer products such as biomass plants that produce sustainable electricity and reduce overdependence on fossil fuels. Further, greening through landscaping, energy efficiency retrofitting and sustainability awareness is crucial.

Moser (2023) also explored ways prisons and jails can contribute to greening by retrofitting the prison facilities to reduce the prisons' carbon footprint. According to Moser (2023), jails contribute to massive environmental degradation due to practices such as the massive discarding of plastic and papers that are not recycled and the massive use of electricity, which releases toxins into the atmosphere. Therefore, prisons should consider implementing solar energy to reduce overdependence on harmful fossil fuels, composting, agriculture, and water and waste recycling to minimise the carbon footprint and promote environmental sustainability (Moser, 2023). Furthermore, White and Graham (2015) affirm that community gardening, taking care of endangered animal species, beekeeping and greening prison gardens are essential initiatives. Feldbaum et al. (2011) also propose greening correctional industries through pioneering sustainable and ethical products like biomass plants to produce sustainable electricity.

In the USA, the Cedar Creek Corrections Centre in Washington has greenhouse gardens that provides healthy organic vegetables, uses low-tech food composting, including worm culture, to support on-site gardening and landscaping (White & Graham, 2015). It recycles paper, undertakes beekeeping, nurtures endangered species, and provides water catchment tanks and landscaping (White & Graham, 2015). Elsewhere in the USA, the AIA Academy of Architecture (2010) recommends improving the architectural design and size of prisons to minimise carbon footprint. The Academy argues that building smaller prisons is more beneficial to the environment due to the reduction in use of water, materials and energy, which impact the environment.

In the United Kingdom, there exist Offenders and Nature greening schemes which involve adult prisoners and probationers working alongside forestry employees or a probation supervisor on woodland sites, creating and maintaining footpaths, tree planting, small-scale felling, and opening up dense vegetation to create more diverse habitats (Carter & Pycroft, 2010). Some of the services offered include the construction of walkways, access ramps, channels, waterways, flood control walls, litter clearance, mapping of protected species, and managing habitats. Additionally, British ex-offenders undergo biodiversity training to protect honey bees.

The Kenya Prisons Service has been at the forefront of reorienting its functions to support green ecosystems and green reintegration. The Service has been planting trees, recycling water and waste, training staff and prisoners, and farming. By June 2024, the service had trained 7,000 out of 62,841 inmates on environmental protection, with 95 per cent of staff having been trained on green reintegration programmes. The Service partnered with Kenya's Ministry of Environment and Forestry to plant 12.5 million seedlings across 43 prisons in Kenya.

As part of greening, Australian prisoners save native birds as part of the rehabilitation process. Inmates are also engaged in outdoor activities such as tree planting, gardening, beekeeping, and rehabilitation of abused animals at Kaarakin Conservation Centre (Millman, 2014). In Rwanda, prisons use renewable energy and biogas technologies to conserve energy and improve hygiene (White Graham, 2015). In addition, Rwandan and Indian prisons are taking advantage of the cost-effectiveness of renewable energy and biogas technologies to improve the lives of the inmates (Landi et al., 2013). Moreover, the role of Estonian prisoners in promoting environmental sustainability by designing a fashion label that entirely uses organic clothing has been explored in a study by Davies (2011), while Wheeland (2010) has explained how New Zealand prisons have been recycling old shipping containers to be used as prisons.

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### 4.3.2. Greening through Reintegration Programs

Correctional facilities are mandated to provide offenders with programs for re-entry back to the community. The Academy of Architecture for Justice (2010) suggests that sustainable justice can be evaluated using a community-based approach. This approach aims to ensure that the justice system protects the public by helping to transform deviant individuals into law-abiding citizens. This approach prioritises improving offender outcomes over punishment and considers the health and physical needs of people interacting with the justice system. Hence, educating inmates on environmental literacy for re-entry is vital (Feldbaum et al., 2011).

In the USA, the Sustainability in Prisons Project (SPP) is used to engage prison inmates in guest lectures and workshops on environmental conservation. The project emphasises science and sustainability education, conservation and community contributions (White & Graham, 2015). The project creates an intellectually stimulating environment where incarcerated persons have guest lectures on advancing scientific knowledge (Ulrich & Nakadarni, 2009; SPP, 2013). The project also allows inmates to appreciate different ecological, nutritional and agricultural principles of the conservation of plant and animal species (Graham & White, 2015). These initiatives and activities have led prisoners to pursue professional and educational goals after their release, such as horticulture courses (White & Graham, 2015).

Furthermore, according to Brashear (2010) and McKay et al. (2013), green re-entry initiatives in the USA are achieving positive outcomes in the lives of young Indigenous people. For instance, the Brownsville Community Justice Center has a diversion scheme for young people on probation, assisting in restoring local areas and constructing community-teaching gardens (Center for Court Innovation, 2014). As noted in the previous section, other activities supporting re-entry include gardening, beekeeping, building greenhouses, installing solar panels and cultural education (McKay et al., 2013). The tribal juvenile detention and re-entry green demonstration programs assist detained Native Americans to reintegrate into the community through green technologies and participation in environmental sustainability activities (White & Graham, 2015).

Another example of greening correctional services is Norway's Bastøy and Halden prisons. At Bastøy, prisoners are engaged in animal husbandry, sustainable farming and food production, recycling, renewable energy use and carbon emission reductions. As of 2013, Bastøy prison registered a low reoffending rate of 16 per cent, compared to around 70 per cent for prisons across Europe and the United States (James, 2013). The Bastøy Prison uses human ecology in the prison environment by incorporating a human and socio-ecological approach to every facet of life on the island, focusing on minimising carbon emissions. The Halden prison, located in a forest with no bars on its windows, generates similar amounts of international interest in the conditions granted to high-risk offenders (White & Graham, 2015).

In the United Kingdom, the Skill Mill in Newcastle employs young people with offending histories to realise environmental aims by undertaking water and land-based flood management (The Skill Mill, 2014). A core focus of the initiative is increasing engagement, employability and educational levels of young people with offending histories to enable them to gain long-term sustainable employment and reduce reoffending (The Skill Mill, 2014).

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#### 4.4. A Rights-Based Approach to Greening the Justice System

The justice system plays a pivotal role in the observance of human rights. The system is also crucial for the enforcement of the rule of law from investigations and arrests to prosecution, trial and provision of correctional services. In all these processes, entrenching a rights-based approach is pivotal for posterity and the observance of the rule of law. Further, it is paramount that observance of human and other rights are embedded within all the other greening elements for posterity. This is particularly crucial since a rights approach to greening is fundamental in addressing existing vulnerabilities and marginalisation brought about by adverse effects of climate change. This subsection, therefore, explores a rights-based approach to greening the justice system.

##### 4.4.1. Entrenching Human Rights Approach in Greening

It has been rightly asserted that promoting the enjoyment of human rights helps to advance climate mitigation and adaptation. Knox and Morgera (2022) argue that there is a correlation between human rights and the environment. They particularly highlight the presence of an autonomous right to a healthy environment, which includes procedural access rights in environmental treaties and the application of the rights to life and health in human rights treaties. For its part, UNFPA (2023) advocates for integrating rights-based approaches into national climate commitments.

The rights related to the environment include those particularly vulnerable to environmental damage, such as the rights to life, personal integrity, health and property. Another category of rights that supports better environmental policy-making is procedural rights, such as freedom of expression and association, access to information, and participation in decision-making. Additionally, the human rights approach to the environment encompasses property rights. Securing land tenure rights is essential for creating a just world where human rights are protected

A potential path to greening the justice system has emerged under the transnational rights of nature (RoN) movement. The movement recognises the rights of nature as a response to environmental degradation and that nature has fundamental rights that depend not only on human needs (Gilbert et al., 2023) but should be protected by the law and, in some contexts, is itself granted legal standing in law. This differs from traditional approaches to environmental law that view the environment solely through human use and exploitation. Thus, it has been argued that nature should not only be protected but its rights should also be adequately balanced alongside human interests (Boyd, 2017).

IDLO (2021b) links human rights and development as a means of tackling pre-existing vulnerabilities and inequalities brought about by climate change. It has advocated for a people-centred justice approach to address climate insecurity. This requires developing capacities in both formal and informal justice systems to ensure that the land and natural resources rights of individuals and communities are protected (IDLO, 2022). According to Damasceno (2016), efficient land use is a tool against climate change as it can help prevent deforestation.

The justice system can also play a crucial role in shaping the land tenure rights by interpreting policies and legal provisions and supporting enforcement. The Guidelines on the Responsible Governance Tenure of Land, Fisheries, and Forests in the Context of National Food Security, adopted in 2012 by the Committee on World Food Security, provide principles, recommendations, and good practices for improving legitimate tenure rights. Further, alternative justice systems can support customary land tenure systems and resolve disputes.

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Myriad examples point to efforts to entrench human rights in international, regional and local greening. At the international level, the Framework Principles on Human Rights and the Environment provide obligations under international human rights law for states to guarantee a clean, healthy, safe and sustainable environment. These obligations are essential when developing and reviewing national legislation on managing renewable natural resources and agricultural development, gender equality, and climate change, as well as preventing conflicts arising from competition for natural resources (UNGA, 2018). The United Nations General Assembly (UNGA) underscored the intrinsic connection between human rights and climate protection. Through Resolution 76/300, UNGA acknowledges the vital role of sustainable development across social, economic and environmental domains, emphasising the need to safeguard human welfare and rights for present and future generations. Further, the UNGA recognised that environmental degradation, directly and indirectly, undermines the effective enjoyment of all human rights.

At the regional level, the African Charter on Human and Peoples' Rights recognises that "all peoples have the right to a general satisfactory environment favourable to their development" and imposes obligations on member states to protect it. In the Americas, the Inter-American Court of Human Rights (IACHR) issued an advisory opinion recognising the right to a healthy environment as a fundamental human right. The advisory opinion highlighted the responsibility of governments for significant environmental damage both within and beyond their borders. The Court emphasised that those potentially affected by transboundary harms must have access to justice regardless of nationality, residence, or the location of the environmental damage. Therefore, citizens of states that recognise the IACHR's jurisdiction can bring claims regarding environmental harms affecting their human rights to the Court. In such cases, the Court evaluates whether the respondent state has fulfilled the obligations to prevent environmental damages, cooperated with other countries, and enhanced access to information, public participation and justice.

In the Council of Europe, it has been acknowledged that there are interconnected challenges of climate change, biodiversity loss and pollution. The Council has recognised that this has adverse effects on vulnerable populations and has consequently adopted recommendations concerning climate change and human rights to be implemented by member states. Under these recommendations, member states are obligated to prioritise the prevention, precautionary and polluter pay principles to mitigate environmental harms and to hold those responsible accountable. Additionally, states are required to ensure that there is intergenerational equity in current actions, and not compromise the well-being of future generations (Council of Europe, 2022). The states must also ensure that corporate entities comply with human rights standards and environmental principles in their operations (European Network of National Human Rights Institutions, 2022).

At the national level, some national constitutions, local laws, and court rulings have recognised nature or natural entities as having legal rights or personhood, thus enabling them to enforce the enjoyment of human rights. These legal implications are evident in the constitutions of Ecuador and Bolivia, court decisions from Colombia, Bangladesh and India, and legislative provisions in Uganda, New Zealand, and Spain (Kauffman & Martin, 2017).

#### **4.4.2. Greening to Address Vulnerability**

A climate justice approach recognises that climate change is a social, economic and political crisis affecting people unevenly. Climate change affects individuals and communities differently depending on myriad factors and inequalities, notably economic endowment, gender, age, location,

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or nationality. The differences in climate vulnerability are rooted in discriminatory socioeconomic structures, which hinder access to resources and services (FAO, 2024). According to Newell (2022), climate change disproportionately affects vulnerable groups who suffer the most, and yet they contribute the least to it. McLeod, Barr and Rall (2019) assert that climate crises hamper the ability of vulnerable groups to build resilience and adapt to the impacts of climate change.

It has been argued that distinguishing the different social groups is necessary to give specific attention to those already marginalised (Sida, 2018). Recognising societal differences is necessary to address the gendered consequences of climate change (World Health Organization, 2014). For example, Ross and Solinger (2017) recommend a reproductive justice approach for historically marginalised and vulnerable women since climate crises cause major disruptions in access to healthcare for women.

A link between climate, racial and gender justice has also been made with the recognition that the climate crisis disproportionately impacts marginalised groups, especially where gender, race and ethnicities are concerned (UNFPA and Queen Mary University London, 2022; EPA, 2021). According to FAO (2023), it is usually the vulnerable groups that are adversely affected by climate change, which hampers their chances of taking advantage of the available agrifood systems to reduce poverty and hunger. It has also been noted that despite the existence of international legal and policy frameworks, there is evidence that women and girls are disproportionately affected by the impacts of climate change (IPCC, 2022a).

The physical effects of climate change yield vulnerability, especially whenever conflicts arise (IPCC, 2022b). It undermines efforts towards peace and security by aggravating land scarcity, urban-rural migrations, and increased patterns in pastoral mobility, as well as increasing the risk of violent conflict (Pörtner et al., 2022). Conflicts erode a community's resilience to the impacts of climate change. Vulnerable and marginalised communities are disproportionately harmed in the transition to a sustainable environment. The insecurity linked to climate change includes the impacts on food, water and energy supplies, loss of livelihoods, forced migration and displacement and increased competition over natural resources (UNEP & EU, 2022). Women, who constitute the majority of the world's poor, are more dependent on natural resources threatened by climate change (UN, 2009; Awiti, 2022). Women and girls are also at higher risk of sexual violence, sexual exploitation and abuse, trafficking and domestic violence during disasters (IFRC, 2007). Moreover, after a natural disaster, women are more likely to become victims of domestic and sexual violence (Davis et al., 2005; IFRC, 2007).

The realisation of equity and social justice requires recognising the vulnerability of women and men, an essential component to addressing the gendered consequences of climate change (World Health Organization, 2014). The participation and empowerment of women in addressing climate change have been enshrined under the United Nations Framework Convention on Climate Change (UNFCCC) and are therefore essential. The framework covers equality, human rights, inclusivity and intersectionality in addressing climate change. A report by IDLO of 2021 further provides nuances on climate justice for women and girls advocating for feminist climate action and the role of the rule of law approach to accelerate climate justice.

In Switzerland, plaintiffs instituted a case in the European Court of Human Rights based on the disproportionate impact of climate change on senior women, demanding federal authorities correct the course of Swiss climate policy (KlimaSeniorinnen, 2023). The focus on older women was to highlight the effects of climate change on vulnerable groups in society (KlimaSeniorinnen, 2023).

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There is a need to correct structural, socioeconomic, and intergenerational inequities, which unequally impact vulnerable and marginalised individuals and communities (UNDP, 2023). Climate justice requires consideration of vulnerable and marginalised individuals and communities at the core of decision-making and action on climate change. For example, there have been reports of abuse of indigenous rights in lithium mining projects in South America and the use of child labour in the cobalt mines in the Democratic Republic of Congo (Frankel, 2016a). The justice sector can protect vulnerable groups from harm by enacting and enforcing laws and regulations.

It is urgent to prioritise the most climate-vulnerable groups and to invest in people-centred laws and institutions to ensure fairness and inclusivity, enable ambitious climate action and build justice systems that can resolve climate-related disputes. Governments must, therefore, incorporate gender perspectives into sustainable development and climate change measures (UN, 2009).

The justice sector can act as an enabler of access to justice for the vulnerable persons. For instance, providing pro bono legal aid services in land, environment and climate change-related cases that require protection of vulnerable groups would be essential. Providing legal aid services to such groups and sensitisation on environmental rights would be phenomenal. According to Picard (2021), the justice sector can ensure that natural resources are fairly and equitably shared within communities. The justice sector can also minimise inequalities for women by having a multidimensional and gender-responsive action to enhance access to climate justice and rights.

#### **4.4.3. Jurisprudence on Rights-based Approach to Greening**

The UNEP & Sabin Center for Climate Change Law (2023) identified that most climate litigation cases rely on human rights enshrined in international law and national constitutions. In this category of cases, plaintiffs often invoke human rights principles embedded in domestic constitutions and international agreements, with corporations and governments being required to protect the rights of communities and individuals threatened by climate change (UNEP, 2023). By framing the call for climate action as a human rights issue, such cases seek to compel authorities into taking more aggressive measures to combat the impacts of climate change and protect vulnerable populations. The other category of cases arises where claimants seek to address failures by corporations and governments to adequately prepare for climate change (UNEP & Sabin Center for Climate Change Law, 2023). The plaintiffs in such litigations often represent vulnerable communities affected by climate-related hazards and argue that inadequate adaptation measures cause harm, displacement and loss, urging those in authority to be held accountable (UNEP, 2023). The lawsuits seek to compel those in authority to fund and implement adaptation strategies and protect the well-being of communities affected by climate change hazards (UNEP, 2023).

Several cases from various international and regional bodies are notable. From a global perspective, the United Nations Human Rights Committee (HRC) issued a landmark decision in *Daniel Billy and Others v Australia (Torres Strait Islanders Petition 2022)*. The plaintiffs, in this case, were a marginalised Indigenous community residing in Australia who argued that they were particularly vulnerable to the impacts of climate change. Citing a report from the Torres Strait Regional Authority, they highlighted that climate change poses significant risks to the islands, marine life and coastal ecosystems, ultimately threatening their rights to life and cultural practices. The complainants also decried the State's failure to address frequent flooding, soil erosion, ocean acidification, and coral bleaching. Additionally, they criticised the State's policies that permitted fossil fuel extraction and use, contributing to Australia being ranked second globally in carbon emissions. The UNHRC, in its findings, concluded that Australia had violated the rights of the indigenous residents of the Torres

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Strait Islands under the International Covenant on Civil and Political Rights by failing to protect them from the impacts of climate change.

For its part, the United Nations Committee on the Rights of a Child (CRC) in *Sacchi and Others v Argentina* (2021) assessed the implication of climate change on children's rights. In this case, sixteen children sent a communication to the CRC claiming that Brazil, Argentina, Turkey, France and Germany violated their rights to health and life by failing to adopt adequate measures to address the emission of GHG and failure to curb the emissions as prescribed by the Paris Agreement, 2015. Though the claim was rejected based on admissibility grounds, the Committee agreed with the claimant's assertions that states bear legal responsibility for the detrimental impacts of emissions originating within their borders on children beyond their borders. Additionally, the Committee concluded that young people are subject to foreseeable risks, jeopardising their rights to life and health.

The Human Rights Committee (HRC), which oversees the implementation of the International Covenant on Civil and Political Rights (ICCPR), has remained at the forefront of providing access to justice from an environmental perspective. The *HRC in Teitiota v New Zealand* (2015) acknowledged that climate change can be a ground for seeking refugee status from another country. Though the HRC dismissed the matter on merit, it stated that environmental degradation constitutes an adverse threat to the enjoyment of the right to life for all generations and that the effect of environmental degradation cannot be overstated. The Committee pointed out that the State party's failure to timely implement sufficient adaptation measures constitutes a violation of the obligation to protect the authors' minority culture.

From the African Region, in the case of *Social and Economic Rights Action Centre (SERAC) and the Centre for Economic and Social Rights (CESR) v Nigeria* (2002), it was alleged that the Nigerian National Petroleum Company, in partnership with Shell Petroleum Development Corporation, had been directly involved in oil production in Ogoni land, causing severe environmental degradation and health issues among the Ogoni People. The oil consortium disregarded international environmental standards, leading to the disposal of toxic waste into the environment and waterways and frequent spills near villages. Furthermore, the government was accused of condoning these violations by providing legal and military support to the oil companies. Despite the evident crisis, the government had also failed to monitor oil operations or implement safety measures, withholding crucial information from Ogoni communities. The African Commission outlined state obligations not to interfere with the activities of its citizens and to protect them from violation of their rights by third parties. The State of Nigeria had violated Article 24 of the African Charter in failing to prevent pollution and facilitating operations of oil corporations in Ogoni land.

From the Americas, in a 2017 advisory opinion concerning the interpretation of Articles 1(1), 4(1) and 5(1) of the American Convention on Human Rights (ACHR), the Inter-American Court of Human Rights (IACHR) recognised the right to a healthy environment as an independent right within the framework of the IACHR. By explicitly articulating the right to a healthy environment, the IACHR laid the foundation for a more comprehensive approach to address climate-related challenges within the Inter-American human rights system (Mardikian & Galani, 2023).

The IACHR in *Yakye Axa Indigenous Community v Paraguay* (2005) held that Paraguay had failed to adopt adequate measures to ensure its domestic law guaranteed the community's effective use and enjoyment of their traditional land, thus threatening the free development and transmission of its culture and traditional practices. The Court also concluded that Paraguay had violated the rights to

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property protection and the right to life since it had prevented the community from accessing its traditional means of livelihood. Furthermore, the Court cited the State's failure to adopt necessary positive measures to ensure the community lived under dignified conditions during the period they had to do without their land. While they stayed on the side of a road across from the land they claimed, the community lacked adequate access to food, health services and education. The Court concluded that the State was obligated to adopt positive measures towards a dignified life, particularly when high-risk, vulnerable groups were at stake. The Court ordered the State to demarcate the traditional land, to submit it to the community at no cost, and to provide basic goods and services necessary for the community to survive until they recovered their land.

In *Baraona Bray v Chile* (2022), the Inter-American Court of Human Rights (IACHR) found that Chile violated the complainant's right to freedom of expression. Domestic courts convicted the complainant for defamation after accusing a Chilean senator of having exercised political pressure on public authorities to allow the indiscriminate deforestation of the larch tree. For the IACHR, opinions on environmental issues and the role of public officials deserve special protection in a society because they are of public interest. On this basis, the Court held that the sanctions imposed inhibited the complainant from expressing opinions on matters of public interest and constituted an indirect means of restricting freedom of expression in its individual and social dimensions.

The IACHR declared in *Lhaka Honbat Association v. Argentina* (2020) that Argentina violated Indigenous groups' rights to communal property, a healthy environment, cultural identity, food, and water. For the first time in a contentious case, the Court analysed these rights autonomously based on Article 26 of the American Convention on Human Rights (ACHR) and ordered specific restitution measures, including actions to provide access to adequate food and water and the recovery of forest resources and Indigenous culture. The decision marked a milestone for protecting indigenous peoples' rights and expanding their autonomous rights to a healthy environment, water and food.

In a *Mayagna (Sumo) Awas Tingni City v Nicaragua* (2001) case, the Court was invited to protect the rights of indigenous groups, where a company exploited the resource through forest management concession without consultation with the community. This case was brought because the State did not demarcate the communal lands of the Awas Tingni Community, nor did the state adopt effective measures to ensure the community's property rights to its ancestral lands and natural resources. In addition, the State granted a concession on community lands without the concurrence of the community, and did not ensure an effective remedy in response to the community's protests regarding its property rights. The Court found that the State violated the American Convention on Human Rights. This case is of major significance since the Court issued a judgment in favour of the rights of indigenous people to their ancestral land and a key precedent for defending the rights of indigenous people.

Within the Council of Europe, in *Locascia and others v Italy* (Application no. 35648/10, 2023), the applicants, who were residents of the municipalities of Caserta and San Nicola La Strada in the Campania region of Italy, raised concerns about the refuse collection crisis and pollution from a nearby landfill site. They argued that the Italian authorities had failed to ensure proper waste management and clean-up of the landfill site, leading to environmental damage, health risks, and infringement of their right to a private life. The ECHR found a violation of Article 8 of the European Convention with respect to 11 of the applicants. The Court noted that the Italian authorities had not effectively managed refuse collection and disposal services, which breached the applicant's right to respect their homes and private lives.

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In *Cordella and Others v Italy* (Application no. 54414/13 and 54264/15, 2019), the ECHR found violations of Article 8 of the European Convention on the right to respect for private and family life and the right to an effective remedy of the Convention. It concluded that the persistent environmental pollution threatened the health of the applicants and the broader population in at-risk areas. Furthermore, it ruled that national authorities had failed to take necessary measures to protect the applicant's right to private life. Lastly, the Court determined that effective remedies were not available to address the applicants' concerns regarding the lack of measures for decontamination of affected areas.

In *Pavlov and Others v Russia* (Application No. 31612/09), the European Court of Human Rights (ECHR) found in 2022 that Russia had violated Article 8 of the European Convention on Human Rights, which guarantees the right to respect for private and family life. The case involved twenty-two applicants living in Lipetsk, an industrial city in Russia, exposed to excessive industrial air pollution for many years. The Court found that Russia had not taken adequate measures to reduce the harmful effects of industrial pollution, resulting in a breach of its positive obligation under Article 8. The Court noted delays and leniency in enforcing regulations regarding creating sanitary protection zones around industrial plants, contributing to the ongoing pollution. While acknowledging the economic importance of the industrial sector, the Court emphasised the need to balance economic interests with the protection of citizens' rights, and concluded that Russia had failed to strike a fair balance to protect the applicant's right to private life.

In *Dimitar Yordanov v Bulgaria* (Application No. 3401/09), the ECHR awarded the applicant compensation for the breach of his property rights as a result of the exposure of his property to environmental hazards following the installation and operation of a state coal mine near the applicant's home. The national courts had recognised the illegal operation of the mine. However, they did not find a causal link between the damage to the applicant's home and the infringement of the applicant's right to peaceful enjoyment of his property. The authorities had been responsible for the applicant's property remaining in the area of environmental hazard.

In the case of *O'Sullivan McCarthy Mussel Development Ltd v Ireland* (Application No. 44460/16), the applicant company claimed that the Irish Government's compliance with EU environmental legislation had caused financial losses in its mussel farming business by restricting mussel seed fishing and cultivation. However, recognising the legitimate objectives of protecting the environment, the ECHR found no violation of EU law. It held that as a commercial operator, the company ought to have anticipated the impact of EU regulations on its business. The Court also found that the company did not bear a disproportionate burden due to the government's actions and that Ireland had struck a fair balance between the Community's interests and individual rights.

The case of *Costel Popa v Romania* (App No. 47558/10, 2016) addressed the right to form an environmental association. The applicant, the founder of an environmental association, complained about the Romanian courts' refusal to register the association without allowing him to address any irregularities in the articles of association, as provided for by national law, which violated his right to association. The ECHR found that the reasons the Romanian authorities gave for refusing registration were not justified by any urgent social necessity and lacked sufficient justification. Refusing registration before the association began operating was deemed disproportionate to the stated objective.

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In *Rovshan Hajiyev v Azerbaijan* (Applications Nos. 19925/12 and 47532/13, 2021), the ECHR addressed environmental rights against the backdrop of the right to information. The applicant, a journalist, raised concerns about the authorities' refusal to grant him access to information regarding the environmental and health impact of a former Soviet military radar station. He argued that the court decisions regarding this matter lacked adequate reasoning. The Court found that the information requested by the applicant was indeed of public interest and readily available. Therefore, denying him access to this information hindered the applicant's ability, as a journalist, to fulfil his right to seek and disseminate information.

#### **4.5. Greening the Justice System through Cross-Cutting Elements**

As has already been noted, beyond their legal mandate, justice sector institutions must also undertake other forms of greening. These greening measures revolve around physical, policy, legislative, procedural and technological greening. The institutions are also required to undertake greening of their human resources. This part will therefore address these crosscutting issues that concern most, if not all, the justice sector institutions.

##### **4.5.1. Green Physical Infrastructure and Amenities**

All justice system institutions should endeavour to carry out physical greening as they perform their core functions. In the Global Status Report for Buildings and Construction, UNEP noted that the building and construction sector greatly contributes to global climate change. The justice system buildings are vital physical installations that require greening. Therefore, it is desirable that sustainable and non-toxic materials be used during the construction of justice system buildings. Further, existing buildings ought to be refurbished using environmentally friendly materials.

Sheldon and Atherton (2011) emphasise the significant financial savings that can accrue from lowering the usage of toxic products or the amount of toxicity in construction materials. Appropriate architectural designs in the justice system would shape the work atmosphere, incorporate elements of nature, maximise natural light, and create a less stressful environment for staff, victims, defendants, lawyers, police, and the public (White & Graham, 2015).

It has been suggested that one of the measures to lower pollution is the use of the GreenMark standards. These standards provide a holistic basis for measuring the sustainability and performance of buildings by prescribing categories, characteristics and a rating system (Green Africa Foundation, 2018). Another intervention is using a guide proposed by the American Institute of Architects (AIA) Academy of Architecture for Justice that proposes that the justice system buildings should maximise resource utilisation and reduce pollution to create a net positive impact on the environment (Academy of Architecture for Justice, 2010). According to White and Graham (2015), the guide provides justice systems with a systematic approach to greening that combines environmental and human concerns, offender rehabilitation, stakeholders needs, resource conservation, sustainable architectural design and efficient technologies.

Another important measure is green-rating the justice system buildings, as is done in the USA, where there is a Green Building Rating System, or in Europe, where there is a Green Building Programme (White & Graham, 2015). The rating should embed the impact of a design on the mind and the personal experiences of the staff and clients of the justice system. Having guidelines is also an essential measure. For instance, in the United States, the Securities and Exchange Commission proposed a new rule to enhance the disclosure of climate-related risks for publicly traded companies.

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In Europe, the adoption of non-binding guidelines in 2019 and the Corporate Sustainability Reporting Directive in 2021 were part of environmental regulatory reform. The introduction of these regulations set the stage for potential litigation on multiple fronts as stakeholders increasingly demanded transparency and accountability regarding corporations' environmental practices and their impact on climate change (UNEP, 2023).

Another element of physical greening is energy saving. Greening of justice sector facilities ought to involve structural and architectural considerations that employ low-energy costs through, for instance, having solar panels. Adopting solar energy would enable justice institutions to decrease their carbon footprint, reduce dependency on traditional energy sources, and mitigate vulnerability to power outages. Long-term investments in local energy production can save costs (Sheldon & Atherton, 2011). Using green electricity powered by alternative energy such as solar, wind, and geothermal energy is vital. Moreover, integrating energy-efficient equipment and machines and practices such as using compact fluorescent bulbs and smart power strips for computer workstations and other appliances is crucial. Justice system buildings should have enough natural light to help create a more conducive environment for all stakeholders (AIA Academy of Architecture for Justice, 2010). For instance, the Ministry of Justice in the Netherlands is implementing diverse physical initiatives to reduce the justice sector's environmental impact, using renewable energy sources in courthouses, using electric vehicles, and promoting sustainable procurement (White & Graham, 2015).

Physical greening also covers staff and clients' mobility. Thus, it is desirable to incorporate energy-saving transport solutions across the justice sector, such as using green fleets to minimise carbon emissions. For instance, integrating agencies in one building or close to each other will reduce travel expenses and carbon emissions by vehicles. It has been suggested that having courts built close to other justice institutions, such as prisons and police stations, would reduce travel distances, fuel consumption, and carbon emissions of the vehicles operating between these institutions (Architecture for Justice, 2010).

Proper waste management also forms part of physical greening. Sheldon and Atherton (2011) emphasise the need for cooling, ventilation and air conditioning as significant opportunities for waste reduction. The buildings should be operated to reduce wastage, allowing for optimal use of resources. Andrew Millie (2012) highlights that justice structures ought to employ sustainable and ecological approaches in the structural design to impact society and emphasise the importance of enhancing the relationship between nature and human survival.

#### **4.5.2. Green Legislations, Legal Practice and Legal Education**

Incorporating sustainability into laws, legal education, and practice is crucial to addressing the adverse impact of environmental degradation and climate change on society.

##### ***A. Green Legislations***

As Kurukulasuriya et al. (2013) posit, government decision-makers must be guided in designing or modifying legal frameworks to support green, low-emission, and climate-resilient development as a means of combating climate change, while Bullard (2018) advocates for the incorporation of equitable legal remedies in environmental justice cases.

Notably, regional bodies have developed binding legal principles on greening to that member states should adopt in their national legislation. For instance, the African Union (AU) has adopted the African Union Agenda 2063, which emphasises sustainable development and resilience to climate

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impacts. For its part, the European Union (EU) has developed a comprehensive legal framework for tackling climate change, including adopting initiatives like the European Green Deal and the European Climate Law. These measures set binding emission reduction targets and promote sustainable development practices. The Council of Europe has also adopted conventions on environmental protection, further contributing to the region's efforts to address climate change through legal mechanisms. In the Americas, the Organization of American States (OAS) and its member states have also engaged in various initiatives and agreements related to climate change mitigation and adaptation, demonstrating a regional commitment to addressing climate challenges.

Unfortunately, the effort to green legislation has not been uniform. Osofsky (2014) conducted a comparative analysis of environmental legislation across jurisdictions, focusing on international environmental legislation to evaluate its contribution to environmental sustainability goals. The study found significant variation in environmental legislation across jurisdictions, which impacted global sustainability goals. The study recommended international collaboration to align environmental legislation to achieve shared sustainability goals.

Kurukulasuriya et al. (2013) developed a Guidebook on the role of legal instruments in supporting green, low-emission, and climate-resilient development. These green, low-emission, and climate-resilient development strategies are cross-sectoral policy frameworks that seek to enable countries to integrate low-emission and climate-resilient policies into national economic and social priorities (Kurukulasuriya et al., 2013).

Furthermore, even in cases where robust legal instruments exist, the justice sector must assess compliance and enforcement of legal and regulatory frameworks relevant to greening. The assessment would identify gaps, challenges, risks, benefits and opportunities for greening since the sector is crucial in enforcing the rule of law.

### ***B. Green Legal Practice and Legal Education***

Legal practice is also becoming a frontier of greening the justice sector. The UN Global Compact, a voluntary pact initiated in 2000, has environmental sustainability as a critical pillar, urging businesses to embrace eco-friendly practices in their operations to reduce adverse environmental impacts. In an effort to green legal practice, the International Bar Association urged lawyers to take a climate-conscious approach in their legal practices, including advising clients on the potential risks that their activities would have on the environment and providing pro bono services to parties affected by climate change (Dernbach et al., 2021).

To advance greening in legal practice, Baker McKenzie, a global law firm, announced in 2019 that it had achieved carbon neutrality across its entire global operations, including all of its offices and travel (Baker McKenzie, 2023). The firm achieved this by reducing its energy consumption, purchasing renewable energy, and having verified carbon offset projects on emissions. Another global law firm, DLA Piper, announced in 2020 that it had achieved carbon neutrality across its operations (DLA Piper Africa, 2020). The firm achieved this by investing in renewable energy, implementing energy-efficient measures in its offices, and offsetting any remaining emissions through verified carbon offset projects. Skadden, Arps, Slate, Meagher & Flom, another global law firm, announced in 2020 that it was committing to carbon neutrality in its operations by 2025 by reducing its energy consumption, using renewable energy, and embracing verified carbon offset projects (Skadden, Arps, Slate, Meagher & Flom LLP, 2020).

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Efforts to reduce the environmental impacts of international arbitration also exist. Through Campaign for Greener Arbitrations, arbitrators reduce their carbon footprint in arbitral proceedings by adopting sustainable practices (Campaign for Greener Arbitrations, 2024).

Regarding environmental legal education, it is vital to offer courses on environmental law and sustainable practices. Educating lawyers on the importance of sustainability and how they can incorporate it into their legal practice is also desirable. In this regard, the Environmental Law Alliance Worldwide conducts seminars for all major stakeholders involved in dispensing environmental justice to create a conducive atmosphere for stakeholders promoting environmental justice (Environmental Law Alliance Worldwide, 2020). The Alliance conducted specialized training in Cameroon targeting more than 50 Cameroonian judges and partnered with Green Watch in Uganda to conduct judicial training. Moreover, courts handling environmental matters have been convening during the Africa Judicial Education Network on Environmental Law (AJENEL) as part of institutional and collaborative reforms. The forum aims to enhance awareness and capacity among judicial officers and judges regarding prevailing environmental issues and expand the body of environmental law jurisprudence.

#### **4.5.3. Green Policies and Procedures**

Beyond legislation, it is also critical to initiate policy reforms that impact greening. Policy efforts exist at the National Level. In the USA, an Executive Order was issued in 2013 to prepare the country for the impacts of climate change. Upon its signing, various Departments of State enacted the Strategic Sustainability Performance Plan to support access to critical resources, climate change readiness, reduction of waste and pollution, and development of sustainable management practices.

In Canada, the federal government committed to reducing greenhouse gas emissions from the justice sector by 30 per cent by 2025. The reduction was to be realised through measures such as energy-efficient building retrofits and the use of renewable energy sources in courthouses (White & Graham, 2015). Also, in Canada, the Green City Action Plan of Vancouver City has set a 50 per cent reduction in GHG from city operations (Konyk, 2018). The Renewable City Strategy of 2015 sought to review the amount of energy Vancouver uses to 100 per cent renewable sources by 2050 with a transition to renewable fuels. The strategy also aims to ensure that the city is powered by heat and energy from green electricity, biofuels or biomethane.

In the United Kingdom, the government launched the Greening Government Commitments, including reducing central government departments' carbon emissions by 40 per cent by 2020 and 80 per cent by 2050. The Ministry of Justice has since introduced recycling and composting facilities in courts and the use of sustainable procurement practices (White & Graham, 2015). In Kenya, the Green Economy Strategy provides a framework for sustainable development and safeguarding the principles entrenched in treaties and other international instruments (Republic of Kenya, 2016).

#### **4.5.4. Green Technology**

Diverse efforts have been put in place to minimise the emission of carbon footprints by upscaling the use of technology. For instance, the World Intellectual Property Organization (WIPO) developed the Green Technology Book 2023 to bridge the technology gap between suppliers of climate mitigation technologies and those who need such technologies. The Green Technology Book 2023 provides climate change mitigation solutions for state and non-state actors and the need to reduce the overall GHG emissions (WIPO, 2023).

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Further, having electronic meetings between clients and attorneys, video arraignment, and visits can help reduce travel expenses, unnecessary carbon emissions, and fossil fuel use. Reducing travel time and enhancing community access can also be realised by ensuring the proximity of justice sector offices like police stations, prosecution offices, courts, prisons, and probation offices. However, White and Graham (2015) criticise the propositions, noting that face-to-face interaction remains essential despite the socio-ecological benefits of limiting travel.

#### **4.5.5. Green Human Resource**

One crucial area of greening the justice system is influencing its human resources to influence the organisation's greening attitude. According to Rawash and Aloqaily (2022), green human resource management refers to using human resources in an organisation to promote sustainable and environmentally friendly resources. Since the justice system is labour-intensive, the behaviour of employees towards greening and environmental protection is crucial.

Greening of human resources has diverse facets commonly referred to as employee green behaviour. Ones and Dilchert (2012) explain employee green behaviour as scalable actions and behaviours that employees engage in that are linked with and contribute to or detract from environmental sustainability. Employee green behaviour is conceived as the core of organisational environmental sustainability since organisations can only accomplish their environmental sustainability goals with employees (Ones et al., 2018; Zacher et al., 2023).

Various factors must be considered to enhance human resource greening. These include greening through leadership, recruitment and career growth, performance management and through knowledge and skill development.

##### ***A. Greening Human Resources Through Leadership***

It has been noted that leadership support is crucial to entrench employee green behaviour. Leaders must devise a persuasive means to convince the employees of the benefits of greening and educate them on reducing counterproductive sustainability behaviours. Paillé et al. (2019a) argue that leaders should be on the frontline championing employee green behaviour. In his work, Rivera-Camino (2012) applied the theory of planned behaviour to examine attitudes, subjective norms, and perceived control as antecedents of managers' corporate environmental responsiveness.

Moreover, Unsworth et al. (2013) argue that leaders should use psychological influence techniques, such as providing performance feedback and comparative information, to increase employee green behaviour in their organisations. The psychological influence could also involve using information campaigns to increase environmental awareness and feedback at group and individual levels (Davis et al., 2020).

According to Paillé & Meija Morelos (2019), there is a positive association between organisational support and employee green behaviour. In their study, Carmeli et al. (2017) also found that an organisational ethic of care predicts employee green behaviour. Peng et al. (2020) used two laboratory experiments to demonstrate high employee green behaviour when an organisation's human resource management and environmental transformational leadership are supportive.

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## ***B. Green Recruitment and Career Growth***

The second important aspect of human resource greening is green recruitment and career growth. According to Pham and Paillé (2020), organisations must ensure sustainability in their recruitment, targeting job seekers with existing green knowledge and values. An organisation should encompass green recruitment strategies and personnel selection tools that aid in on-boarding employees interested in environmental protection. A study by Bohlman et al. (2018a) showed that job seekers with pro-environmental attitudes were more attracted to companies with high environmental performance.

An environmental sustainability strategy should ensure that justice system institutions recruit and retain employees with pro-environmental experience, expertise and values. The recruitment process should aim to attract individuals with a favourable pro-environmental attitude that is required in an institution.

After implementing green recruitment, organisations should also focus on personnel development practices that support environmental protection, including green training. Paillé et al. (2019a) explored the effectiveness of organisations with goal-oriented green human resources management interventions in increasing employee green behaviour. Such goal-oriented interventions can increase green behaviours among most employees.

Offering employees developmental career paths and work assignments related to environmental sustainability is also vital. Ones et al. (2018) argue that future employers must explain how employees can help green their organisations and work contexts. Thus, employee green behaviour should be adopted as part of performance appraisal and management (Paillé et al., 2019a).

## ***C. Green Through Performance Management***

Another critical element of human resources greening is green performance management. According to Tang et al. (2018), counterproductive behaviour can be reduced by incorporating environmental sustainability goals into the organisation's performance metrics and strategy. Based on an established understanding of work performance, employee performance assessment would entail measuring justice system employees' roles, behaviours and impacts on environmental protection. Young et al. (2015) support this notion by arguing that workplace employee green behaviour can be facilitated by setting green performance goals, appraising environment-positive behaviours, and reprimanding counterproductive behaviours. Such behaviours may include recycling materials, reducing energy consumption and using sustainable resources. Organisations should also have green reward and compensation structures to promote sustainability.

Providing employees with performance feedback on greening is also necessary. For instance, employees who received comparative feedback saved more energy than those who only received information about their unit's performance (Siero et al., 1996). A study by Unsworth and McNeill (2017) found that increasing self-concordance of sustainable energy use and commuting led to higher employee intentions for environmentally friendly practices. The study used a complex three-way interaction, which enabled employees with weak autonomous motivation to benefit more from high goal commitment and feedback regarding their employee green behaviour after participating in the interventions. The study found that the more feedback employees get concerning their behaviour, the more likely they are to improve their green behaviour. Moreover, Yuriev et al. (2020) investigated the predictors of employee intentions to use sustainable commute options and to voice suggestions regarding environmental sustainability at work.

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#### *D. Green Through Knowledge and Skills*

Lastly, human resource greening can be done through the development of knowledge and skills. To examine the role of human resources management practices in ensuring environmental sustainability, Boiral et al. (2019) used a series of semi-structured interviews with managers and other natural resource company experts to explore employee involvement's role in improving corporate biodiversity management practices. The study results suggested inadequate training, corporate commitment, the complexity of biodiversity issues, and externalisation of initiatives were the main obstacles to employee involvement in environmental sustainability.

In human resources management, employees' adequate knowledge and awareness drive their motivation to green their institutions, making them more likely to engage in pro-environmental behaviours. As Peng et al. (2020) expound, employees' skills, knowledge and motivation regarding environmental sustainability deserve recognition. According to Zhang et al. (2013), the awareness of consequences and acknowledgement of responsibility helps predict employee energy-saving behaviours. Thus, Scherbaum et al. (2008) employed the Value-Belief-Norm theory in a work context and found that personal norms mediated the association between environmental worldviews and employees' energy-conservation behaviours.

#### **4.5.6. Green Financial and Technical Support to the Justice System**

The fight against climate change and environmental degradation necessitates a collaborative effort from diverse organisations. Many donor and financial agencies operating at national and international levels, collectively referred to as development partners in this paper, have shown immense commitment to environmental protection and climate change action. Financial and technical support to the justice sector has been vital in assisting the entrenchment mechanisms that promote a transparent, accountable, fair, and equitable environment for a green economy transition. This section outlines some of the key initiatives taken by development partners that are essential for promoting environmental sustainability within the justice system, providing opportunities for the necessary interventions.

Numerous international and local organisations have made significant progress in promoting environmental sustainability. For example, UN entities are known for their commitment to climate sustainability efforts through collaborations with governments and other agencies. Additionally, international financial and development institutions, as well as civil society organizations (CSOs) at national and international levels, have also supported environmental practices and climate change action.

One of the notable critical institutions is the United Nations Environment Programme (UNEP). To achieve Agenda 2030, the UNEP has committed to providing technological solutions for mitigating climate change, heightening the implementation of multilateral environmental agreements and supporting states in promoting climate stability. UNEP and its partners launched the National Biodiversity Strategies and Action Plans Accelerator Partnership to improve governance and accountability for nature (UNEP, 2023). It also convened the Intergovernmental Negotiating Committee to develop a binding agreement on plastic pollution management (UNEA, 2022). UNEP has also committed to accelerating actions that mitigate the impacts of the planetary climate change crisis, pollution, and biodiversity loss, as detailed in its Annual Report 2023 (UNEP, 2023). However, the report does not specifically highlight progress from justice sector actors on climate change mitigation. Therefore, future reporting on the justice sector's role as an enforcer would be beneficial.

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For its part, the UNDP, in its Annual Report 2023, committed to supporting countries to build resilience to crises and climate change. The report indicates that if the climate crisis remained unchecked, it would lead 135 million people into poverty by 2030 (UNDP, 2023). The UNDP has also developed a Compendium of Legal Best Practices (2012) with a contextualised analysis of best practices of law and policy in different sectors and the context of green economy. The compendium aims to assist policymakers in appreciating the importance of national and international law and policy in transitioning to a green economy.

The International Development Law Organisation (IDLO) has also made notable interventions. It has prepared a policy brief on climate justice focusing on a rule of law approach for transformative climate action. The policy brief advocates for transformative climate action involving wide-ranging and coordinated political, economic, and social changes. The changes can be achieved through a human rights-based approach, multilateral cooperation, international solidarity and multi-stakeholder partnerships (IDLO, 2021b). To ensure that climate change mitigation strategies are successful, IDLO proposes that the formal justice system integrate with indigenous systems to protect biodiversity and promote sustainable use of natural resources (IDLO, 2021b). The IDLO has also developed a policy brief focusing on food systems transformation emphasising the rule of law as an enabler of SDG 16 on achieving zero hunger and, therefore, transforming food systems. It notes that enhancing access would play a role in conflict prevention and resolving land and natural resource disputes (IDLO, 2022). From the policy brief, it seeks to support the justice sector to ensure that the communities have adequate access to justice and to realise their rights such as the rights to food and nutrition.

Another organisation that has registered great strides is the Food and Agriculture Organisation (FAO). In its report on the future of food and agriculture, FAO has focused on the drivers and triggers for transformation between agrifood systems and climate change (FAO, 2022). The report notes that the agrifood systems contribute to greenhouse gas emissions, and in turn, climate change poses a risk to food chain systems, illustrating a nexus between climate change and food systems. According to FAO (2022), climate change affects food systems and, therefore, accelerates the rates of hunger and poverty. Poverty has long been associated with rising crime, with one of the causes of crime being inadequate food. Additionally, the Global Report on Food Crises has reaffirmed that climate change phenomena have major implications on the livelihoods of communities globally (FISN and GNAFC, 2023). These phenomena, such as extreme drought, have contributed to food insecurity and increased conflict over scarce natural resources like water and land for grazing vis-à-vis farming (FISN, 2022). Therefore, the justice system must mitigate crimes and control activities that lead to greenhouse emissions through timely investigation, prosecution and trial when conflicts occur or when individuals and corporate entities cause pollution.

In Kenya, the UNODC, supported by the European Union (EU) through the Programme for Legal Empowerment and Aid Delivery in Kenya (PLEAD), has provided support to enhance renewable, stable, and sustainable power for some court stations (UNODC, 2023). The support aims to help the courts transition to alternative energy by installing solar power green design systems for power supply while mitigating climate change. Additionally, to improve the capacity of justice actors in wildlife and environmental-related cases, the UNODC supported the National Council on the Administration of Justice in Kenya (NCAJ) in developing sentencing policy guidelines covering wildlife-environmental crimes. Moreover, UNODC and IDLO have supported e-filing, the digitalisation of court files and proceedings, and the automation of registries in Kenya.

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#### 4.6. Conclusions on the Practical Perspectives on Greening the Justice System

The review of practice imperatives provides valuable insights into how institutions can integrate environmental sustainability into their operations. Examining the existing approaches to greening the justice sector helps highlight the justice system's role in promoting environmental stewardship, addressing the impacts of climate change, and ensuring its operations are eco-friendly.

Therefore, this chapter explored some practical aspects of greening the justice system, from investigation, prosecution, and trial of criminal and civil cases in courts, to the provision of correctional services. It has also explored the existing practices from a cross-cutting perspective, such as in the general legal practice and through to physical greening, technological greening and greening human resource management, which apply to all justice sector institutions.

From the preceding, it is clear that justice sector institutions worldwide have tried to embed greening initiatives in their mandate or primary functions, including in policing, undertaking prosecution and litigation, correction services, and legal practice. Initiatives that have been implemented have aimed at enhancing waste management, reducing paper consumption, putting greater reliance on electronic information storage, improving water management, reducing fuel consumption, use of energy efficiency, and electric consumption management, among others. Also, some limited green human resources practices have been adopted within the justice system.

However, the concept of greening of the justice system has not been adequately accentuated, leaving practitioners and researchers to draw inferences on which elements to apply. A significant gap also still exists as greening initiatives in the justice sector has yet to become a strategic focus area for justice sector institutions.

Therefore, effective strategies for promoting environmental sustainability should be progressively developed and adopted as a core imperative for the justice sector to heighten greening practices. Justice system actors should collaborate to ensure that the sector remains environmentally conscious in its work and methods. Hence, the system should remain at the forefront in developing, customising and implementing environmental laws, policies and administrative guidelines on greening to promote environmental protection as highlighted in this chapter.

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## 5. IMPLEMENTATION IMPERATIVES AND RECOMMENDATIONS FOR GREENING THE JUSTICE SYSTEM

### 5.1. Introduction

This Chapter provides the implementation imperatives and recommendations for greening the justice system. The recommendations emanate from theoretical, empirical and practical considerations as well as global and regional legal and normative frameworks. They cover each greening element, namely functional, physical, legislative, policy, procedural, technological, rights-based, community engagement and human resource. While not all recommendations may apply to all justice sector institutions in all circumstances, their value should be considered and integrated appropriately into the institutional implementation guide for each agency. To enhance the coordination of greening, it would be crucial to establish a steward committee, identify stakeholders' roles, and mobilise resources required for successful greening.

### 5.2. Implementation Imperatives for Greening the Justice System

Though this research focused on the justice system, the implementation imperatives may apply to other sectors, albeit with some customisation. Just as climate change has no national borders, greening initiatives also transcend institutional boundaries. By nature of their mandate, some institutions must exercise a higher threshold on green practices for some of the elements.

#### 5.2.1. Development of an Implementation Guide

While this research has explored diverse practices to green the justice system, an Implementation Guide with specificities is essential to provide a nuanced, concrete and practical approach to greening. Further, the Guide should provide diverse specific greening practices for each element of an institution in line with the conceptual Framework. It is essential that greening practices should be customised to unique institutional situations and feed into the broad institutional strategic plans and overarching policies. While developing a guiding framework, the questions of *who*, *what*, *when*, *where*, *why*, and *how* should be regularly posed, and clear answers sought. The answers to these fundamental questions should help the justice system or its institution to remain on the right path towards greening.

In answering the *who* question, the justice system or its institution should identify the lead persons to coordinate greening. There should be clarity on *why* for all the employees. The *what* question should provide the activities or initiatives that constitute greening. To ensure seamless implementation, the justice agencies should have the definitive time of commencement to address the *when* question. The commencement time should entail determining *where* the initiatives are to be done, for instance, which units, departments and localities. Lastly, agencies must determine *how* the initiatives will be undertaken, including progress monitoring.

#### 5.2.2. Implementation of Greening Practices

Adequate planning is crucial for successful greening of the justice system. Further, a dedicated committee is essential to ensure a smooth transition to a greener institution. This committee would be responsible for planning, executing, and following up on greening. The committee would also continuously advise leadership on any emerging issues during the process. Implementing sustainable practices should involve several vital steps, including conceptualisation, planning, execution and mainstreaming sustainability.

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In each implementation step, it is vital to develop a checklist to ensure a systematic implementation. At the planning stage, justice sector agencies ought to choose critical indicators of greening and develop targets and accompanying strategies for implementation. The agencies should then analyse resource requirements to support greening initiatives and select champions. During the execution phase, the justice system or its agencies should constantly monitor targets against achievements and provide remedies for poor achievements.

### **5.2.3. Monitoring, Evaluation and Reporting**

To entrench a greening culture in the justice system, it is crucial to incorporate greening practices into operational processes and work methods. Hence, to seamlessly implement greening initiatives, it is necessary to regularly monitor progress. During the conceptualisation phase, it is essential to establish green objectives, analyse the extent of employee understanding of greening, and align the green objectives with the institution's overall vision and mission. Periodic evaluation of the impact of greening is also vital. For learning and continuous improvement, the justice sector institutions can benchmark amongst themselves or other institutions. Further, the justice system should prepare and disseminate environmental reports on greening efforts. To enhance reporting, it is vital to have a dedicated team to monitor, evaluate and report progress regularly.

## **5.3. Recommendations for Greening the Justice System**

### **5.3.1. Functional Greening**

#### ***A. Greening Investigations and Arrests***

Greening investigations and arrests entail proactive measures aimed at fortifying the defence of the environment upstream of the justice system. Greening investigations and arrests are multifaceted, covering prevention, surveillance, pre-emptive actions, arrests and processing offenders to midstream institutions. First, having a robust strategy, guidelines, or action plan for preventing environmental offences is paramount. Since prevention is the first defence to environmental destruction, timely investigation is required whenever threats of violations occur. Offenders should be identified and promptly apprehended to reduce the propensity of others to commit environmental crimes.

Second, surveillance of ecologically sensitive zones, such as forests, oceans and dumpsites, is vital. Beyond the natural realms, surveillance should entail scrutiny of the activities of persons with a history or potential inclination toward destroying the environment. Moreover, adequate police deployment to combat environmental crimes should be a priority. Due to the unpredictable nature of environmental crimes and harms, it is recommended that rapid response mechanisms or units be established. The units should swiftly enforce the rule of law in scenarios where sudden adverse environmental impacts occur. Enhancing arrests and the expeditious processing of procedural formalities should be pursued.

#### ***B. Greening Prosecution and Trial***

Legal actions against individuals and corporations responsible for significant environmental damages should be intensified. Hence, embracing green prosecution and trial is a prerequisite to realising environmental justice. This calls for upscaling prosecution efforts and interventions against various environmental crimes. In areas where environmental crimes are rampant, establishing specialised prosecution offices dedicated to environmental crimes is necessary to pave the way for a more focused and effective legal process. Additionally, the prosecution could divert some offenders to work in eco-friendly community projects as part of rehabilitation.

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Downstream, creating specialised courts and tribunals to handle environmental cases is essential. Such institutions lay the groundwork for a judicial system adept at swiftly resolving environmental crimes and other cases of civil nature. The imposition of specific timelines for prosecuting and resolving environment-related cases would inject a much-needed sense of urgency into the judicial process. This would ensure environmental cases do not languish in legal limbo, facilitating quicker justice. Moreover, continuous training of prosecutors, judges, magistrates and other staff is recommended.

Promoting jurisprudence that champions environmental sustainability is a cornerstone of greening courts during the trial process. Further, developing a compendium of environmental jurisprudence would catalyse greening, encouraging decisions prioritising the environmental protection. Supporting environmental law enforcement would further enhance the effectiveness of environmental courts. Additionally, expanding community justice centres and integrating alternative environmental dispute resolution systems would serve as innovative avenues for resolving environmental disputes, whether of criminal or civil nature.

### ***C. Greening Correctional Services***

Correctional facilities should transcend beyond detention places and become centres of learning, growth and environmental protection. A transformative approach that intertwines inmates' rehabilitation with greening is required to harmonise with the environment. First, the justice system should pursue the establishment of incarceration centres that are bastions of environmental sustainability beyond the structures of confinement. Realising this requires rehabilitation and ecological sustainability to go hand in hand. For instance, correctional facilities should adopt biomass plants to reduce their ecological footprint, and move away from reliance on fossil fuels. Embracing renewable energy sources, along with recycling water and waste can further mitigate their environmental impact.

Particular attention should be paid to those re-entering society to ensure they are adequately prepared to contribute positively to their communities on environmental protection upon release. Offender re-entry programs should equip offenders with skills for environmental protection activities post-release. The re-skilling can be combined with efforts to reintegrate them through programs that prioritise environmental sustainability, including community service greening initiatives and eco-friendly industries.

Moreover, there is a need to enhance education on environmental stewardship. Offenders should be introduced to the green economy and environmental literacy. These skills would inspire, and foster a connection between them and their environment. Practical skills such as landscaping and gardening, proper waste management, and tree planting are vital. Additionally, greening correctional services should also promote green exercise programs to champion the physical and mental well-being of the offenders through engagement with the environment.

### ***D. Greening Legal Practice***

Strengthening legal practice is paramount in an era when climate change increasingly threatens society's well-being. First, developing laws and policies tailored to public interest litigation is essential. Such laws or policies are to be the cornerstone of environmental stewardship, underpinned by guidelines that ensure compliance with the edicts of environmental conservation. Second, providing pro-bono legal services and public interest litigation to those adversely impacted by environmental degradation and climate change is necessary.

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Moreover, having robust measures to reinforce adherence to court orders and administrative decisions on environmental issues is essential. The continuous publication and dissemination of environmental laws to enlighten practitioners would expand knowledge for all stakeholders to make informed decisions about greening. It is also crucial for legal professionals to counsel their clients on the eco-centric ramifications of their actions to foster a culture of accountability.

### **5.3.2. Green Human Resources**

#### ***A. Greening Leadership and Management***

Transformative environmental leadership is essential in the justice system to cultivate a culture imbued with a profound sense of greening, where every leader is a proponent and an active participant in safeguarding the environment. Green values should be embedded within the leadership of justice system agencies to ensure they remain at the forefront in offering their organisations strategic direction on environmental protection and sustainability. Leaders should be pro-sustainability and remain innovative to foster continuous improvement.

Enhanced collaboration of leaders on environmental issues of mutual concern would create a vibrant ecosystem for exchanging environmental insights, commencing cutting-edge interventions on environmental protection, and pioneering sustainability initiatives. Specialised training programs tailored for leadership and management teams would be effective avenues for green governance.

#### ***B. Greening Employee Performance***

In an evolving justice landscape, entrenching environmental sustainability goals within employees' behaviour and performance is crucial to nurturing an eco-conscious workforce. The infusion would involve making employee green behaviour and actions integral to performance management. Supervisors should have the knowledge and tools to set green performance goals and evaluate employee adherence to eco-friendly practices. The knowledge should cover compliance with environmental management practices to conserve nature and ecosystems.

A greener justice environment would require enhancing employee feedback mechanisms. Providing performance feedback would illuminate the significance of each employee's contribution to environmental sustainability and provide a roadmap for continuous improvement. Such an approach would incentivise justice system employees to embrace eco-friendly practices. Moreover, having green reward and compensation schemes would be pivotal in promoting sustainability. Recognising and rewarding employees' discretionary environmental intervention and awareness efforts would support the organisation's commitment to environmental protection. There is also a palpable need to correct counterproductive employee behaviours that destroy the environment and detract from the realisation of sustainability goals.

#### ***C. Greening Recruitment and Career Progression***

Integrating green practices in recruitment and career progression is essential. A green-conscious justice system would attract potential employees who are passionate about environmental protection. The pursuit of sustainability should extend beyond the materials used in adverts to embody green virtues after recruitment. Upon the recruitment, green induction would aid in creating awareness of environmental sustainability.

Justice system institutions can create a work culture that resonates with pro-environmental justice. For instance, career paths and work assignments could be intertwined with greening clauses to

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nurture a skilled and competent justice system workforce connected with environmental issues. Moreover, there is a need to establish a culture where green human resources management practices are not just an option but a necessity for sustainability.

#### ***D. Greening through Employee Knowledge Enhancement***

The pursuit of scientific knowledge on environmental sustainability is encouraged. This can be realised by equipping the workforce with the knowledge to champion environmental protection and sustainability and fostering a more eco-conscious justice system. The ideal situation is where training and sensitisation on various environmental issues become a cornerstone of employee development programs. These educative sessions should be the norm, covering everything from the intricacies of reducing carbon footprint to expansive sustainability topics.

The study of environmental law should not just be an elective but a fundamental course unit that acts as a pillar in the legal education of future practitioners. Environmental studies should extend and cover those who enforce the law, notably police officers, prosecutors, judges, magistrates, and correctional officers, imbuing them with a deep appreciation and knowledge of environmental protection from the very outset of their careers. The curriculum could cover green deterrence, investigations, prosecution, adjudication, correctional services and legal representation.

### **5.3.3. Physical Greening**

#### ***A. Improvement of Justice Sector Physical Infrastructure***

The physical structures housing the justice system institutions should comply with environmental protection and sustainability standards. The construction or refurbishment of facilities should incorporate alternative energy, setting a benchmark for sustainability. The justice system's institutional offices should be designed for the future, featuring greenery that serves as part of environmental sustainability rather than being merely ornamental.

Putting emphasis on natural ventilation at construction would help reduce the reliance on artificial aeration. Smaller, more efficient office spaces reduce the consumption of water, materials and energy, thereby reducing pollution. Furthermore, the optimal use of space within these institutions, ensuring that offices serve multiple purposes, embodies a practical application of sustainability principles. Using non-toxic paints free from dangerous chemicals during construction or refurbishment would support environmental health.

The justice system can significantly benefit from the use of eco-friendly energy sources notably the wind, solar and geothermal energy. Installing solar panels in the justice institutions is paramount. Moreover, constructing multi-purpose or multi-institutional justice system buildings can play a pivotal role in greening. By reducing travel distances, these buildings would decrease fuel consumption and significantly lower emissions. The buildings should have offices outfitted with cutting-edge technology to facilitate virtual appearances and operations, thereby reducing the physical travel carbon footprint.

Physical greening also entails using environmentally-friendly equipment. For instance, recycling paper, water, metals, and plastics should be the norm. Among these efforts, sourcing machinery that uses fuels enriched with higher concentrations of ethanol and biodiesel is ideal for veering away from traditional fossil fuels, thus reducing the heavy carbon emissions of greenhouse gases. In line with this, procuring electronic equipment that champions energy efficiency is also desirable. Every purchase, from machinery to appliances, should be guided by energy efficiency principles.

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## ***B. Adopting Compliant Mobility Practices***

In pursuing a cleaner and more sustainable future, embracing fuels that boast higher proportions of ethanol and biodiesel alongside vehicles equipped with charging capabilities is essential. The fleet should be designed to reduce the use of petrol and diesel. The justice system actors should embrace alternative patrol methods, such as using electric vehicles and bikes, foot patrols, as a crucial strategy. Notably, using e-bikes & vehicles would offer enhanced mobility in densely populated areas while being both faster and more accessible.

An additional mobility strategy involves proper planning of the locations of justice institutions. By building these institutions close to one another, travel distances, fuel consumption, and, consequently, the carbon emissions of vehicles travelling between these sites can be significantly reduced. Beyond this, carpooling, public transportation, and encouraging remote work practices are recommended to reduce emissions.

## ***C. Effective Land Use and Utilisation***

Most justice sector institutions occupy physical space that requires greening. It is desirable to have the yards of justice sector institutions transformed through the infusion of plants and flowers that resonate with the protection of nature. For instance, planting trees in the landscape of the justice system's institutional land is crucial. The justice system agencies should plant trees on the land they occupy and in other areas as part of Corporate Social Responsibility (CSR). In many contexts, states strive to sustain a tree cover of at least an ideal percentage of the country's land area. Such initiatives improve the environment's aesthetics and create a thriving space for humans and nature.

Adopting greenhouses and gardens within correctional facilities would act as a sustainable model of providing food to the incarcerated, thus promoting cost-effectiveness and better nutrition and health. The adoption could benefit immensely from the labour provided by prisoners and individuals serving community service orders. The initiative could instil a sense of responsibility and impart valuable agricultural skills among the prisoners for their use post-confinement.

Additionally, incarcerated persons can be involved in beneficial agricultural ventures like animal husbandry and food production, which can have the dual benefits of ensuring the self-sustainability of facilities and providing valuable life skills to offenders. Employees' and offenders' active participation in environmental efforts, such as protecting animals and managing habitat vegetation, would support environmental stewardship.

Moreover, supporting urban greening and community gardening by the justice system actors is necessary as it contributes to environmental health. For instance, integrating convicted offenders into environmental clean-up and clearing waterways and drainage systems would support urban greening in the justice system actors. Furthermore, the participation of justice sector employees and community volunteers in environmental protection activities during emergencies, such as building sandbag barriers during floods, could help enhance community resilience against natural disasters.

## ***D. Improved Waste Management Methods***

As part of the greening framework, each justice sector agency should focus on reducing waste generation to minimize environmental impact. Transforming justice sector institutions to be more environmentally sustainable through waste recycling is necessary. Additionally, it is ideal that the justice sector agencies develop a deliberate framework in their procurement plans that prioritises purchasing cost-effective, biodegradable and reusable items.

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#### **5.3.4. Legislative Greening**

Enhancing the legal and regulatory environment on environmental protection is an essential greening tenet. Ensuring adherence to these laws through the actions of the justice system institutions is particularly desirable. Since environmental challenges transcend national borders, international environmental regulation is required to set a common ground for environmental protection and the shared goal of sustainability. There is utility in having equitable legal remedies in cases of environmental justice.

Re-examining the existing laws governing environmental protection and accompanying regulations is required at the national level to ensure adherence. Environmental constitutionalism should be re-looked to entrench human rights implications of environmental degradation and climate disruption. The proposal to amend the existing legal frameworks should address the legitimacy of specific behaviours that are not necessarily illegal but harmful. This is informed by the fact that certain environmental violations, although legally permissible, have a detrimental impact on the environment and are considered unjust.

#### **5.3.5. Policy Greening**

Creating and implementing cohesive, dynamic and strategic green policies is imperative in pursuing a more environmentally friendly justice system. The justice system policies should draw from global standards championing environmental sustainability. Another recommendation under the pillar of policy greening is the active support for the continued implementation and expansion of sustainability policies across the justice systems. The process should transcend drafting and cover the real-world application of green policies. For instance, a policy could entail adopting stricter vehicle emissions to decrease greenhouse gas emissions.

A commitment to research underpins continuity policy reform. Investigating the multifaceted relationship between the justice system and environmental protection is crucial. Ordinarily, research papers underpin policy recommendations and help address emerging challenges and unexplored areas. The continuous pursuit of knowledge would ensure that the latest findings and best practices always guide the journey towards a greener justice system. Moreover, strengthening greening through developing and implementing new policies is desirable.

#### **5.3.6. Procedural Greening**

The intersection of justice system procedures with environmental protection is a crucial frontier. Aligning the justice system's recurrent procedures to comply with green standards is desirable. For instance, justice agencies should develop or review existing procedures to address environmental offences, minimise greenhouse gas emissions, and promote sustainability. Another example is fostering partnerships with suppliers and service providers and having eco-friendly procurement procedures to support green supplies-chain practices.

Another procedural imperative is entrenching a robust monitoring framework, particularly for the carbon footprint emission of justice system agencies, to set a benchmark for eco-conscious policies and operational procedures. Such procedures should cover the entire justice chain including investigations, arrests, prosecutions, trials, incarceration and rehabilitation. Additionally, the procedures should cover diverse operational issues within institutional procedures.

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### **5.3.7. Technology Adoption Greening**

In the modern era, the fusion of technology with the justice system heralds a situation where physical boundaries and other operational inefficiencies should not constrain access to justice. The continuous embracing of videoconferencing to reduce physical presence in courts and other justice sector offices is vital. Adopting such technologies would yield fairer and less costly justice and trim greenhouse gas emissions. Justice sector agencies should, therefore, adopt paperless practices to reduce deforestation and enhance efficiency in dispute resolution. For instance, evidence, reports, and even payments across justice sector agencies can circulate digitally, eliminating the tangible weight of paper and markedly reducing wastage.

A critical component of these technological advancements is strengthening internet connectivity to ensure seamless online access. Adequate and stable internet would reduce the need for physical travel, whether to offices, courthouses, or meeting rooms, lowering the carbon footprint. Further, innovations like creating e-green corners for client interactions within the justice system would serve as essential knowledge-sharing platforms. Moreover, embracing electronic information storage would amplify environmental benefits, fostering a cleaner and less cluttered judicial environment.

Digitising case management systems and other operations systems in all justice system institutions would reduce paper usage and greenhouse gas emissions, combat deforestation, and enhance service delivery efficiency. Additionally, integrating technological advancements, such as e-filing, e-assessments, e-payments, and other e-services within the justice sector is desirable. Using and integrating digital document management systems will reduce the need for physical storage, saving paper, space and resources. The justice system institutions should also provide adequate ICT hardware, such as computers and video conference devices.

### **5.3.8. Rights-Based Greening**

Modern international laws and constitutional approaches recognise and address environmental concerns as human rights, granting every person the right to a clean and healthy environment. These rights encompass the right to safeguard the environment for present and future generations through legislative and other measures, as well as the obligation to fulfil duties related to the environment.

There is a need to establish systems for environmental impact assessment, audit and monitoring. These interventions would eliminate processes and activities that jeopardize the environment and persons rights. Moreover, every individual has a duty to cooperate with state organs and support the enjoyment of rights by other persons. They should safeguard and preserve the environment, ensuring optimal use of natural resources. As part of enforcing the right to a clean and healthy environment, the justice system should provide effective remedies for violations or threats of violations. Court orders are essential to prevent, stop, or discontinue harmful acts or omissions to the environment. Additionally, court orders should compensate victims of a violation to enforce environmental rights.

### **5.3.9. Community Engagement Greening**

Creating a more environmentally friendly justice system should involve connecting and engaging with the broader society by tapping into its collective consciousness to protect the environment. Since the justice sector serves the community, raising community awareness and rallying its support is desirable. For instance, enhancing service delivery would require involving the community in environmental protection and fostering a communal fight against ecological crimes and harm.

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Justice professionals can partner with community members through CSR and advocacy activities to significantly improve the community's quality of life. If financial constraints arise, community involvement in fundraisers for environmental protection can help alleviate the burden and foster a sense of responsibility among the community members.

The community should also advocate for environmental justice and participate in environmental activism. It can call for corporate transparency in climate-related disclosures that underpin greening. Furthermore, society can identify individuals at risk of engaging in criminal activities and divert them towards employment opportunities in green projects. Such eco-innovation practices by the justice sector agencies to disseminate environmental knowledge to communities related to observance and enforcement of the rule of law should be heightened. This can be realised by using diverse digital platforms like online posters, videos and newsletters.

#### **5.4. Conclusion**

From the preceding, it is clear that all justice sector players have a huge responsibility to ensure greening practices are adequately and effectively implemented. Strategic interventions are vital and should be fast-tracked such as the investigation, prosecution, rehabilitation functions and entrenching civil protections. Whereas some interventions fall within the internal responsibilities of institutions, others require multi-agency collaboration. For instance, while each agency must aim to green its human resource function and undertake physical greening, the sectoral approach would entail enacting legislation to bolster greening and adopting sector-wide policies incorporating environmental considerations to guide all sector players.

Justice sector institutions should customise the recommendations in this chapter to fit their unique circumstances and implement them in their operational units. Emphasising the need for a tailored approach, monitoring the progress of greening programs is crucial to ensure the effectiveness of the greening strategies and processes. This may necessitate the development of a customised action plan, complete with distinct short-term, mid-term, and long-term greening programmes and targets. It is also important to continually reflect on justice sector interventions to address existing and other emerging environmental issues.

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