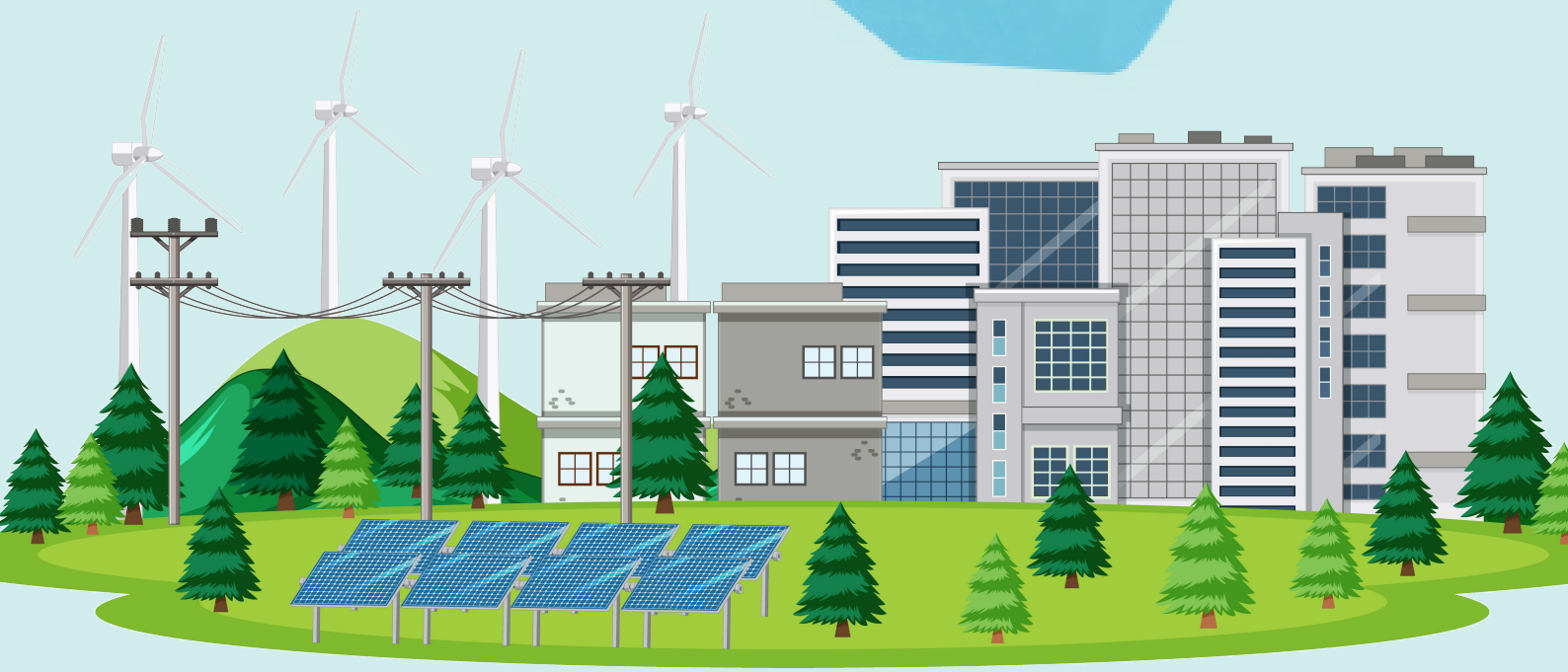




Green Growth Framework



Republic of Iraq
Ministry of Planning
Ministry of Environment

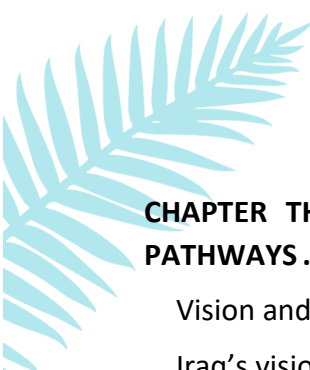
Green Growth Framework in Iraq

Baghdad 2025

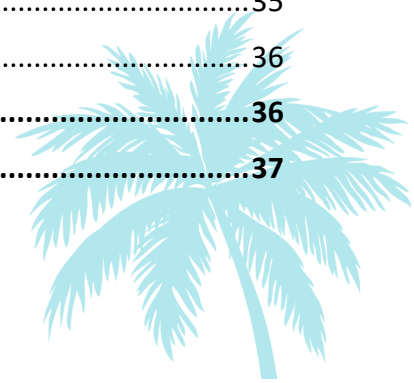


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Abbreviation and Acronyms

AF	Adaptation Fund
BRT	Bus Rapid Transit
CBI	Central Bank of Iraq
CH4	Methane
CIP	Climate Investment Plan
CO2	Carbon di-oxide
CCP	Combined Cycle Project
CSR	Corporate Social Responsibility
EAMS	Energy Audit and Management Systems
ESD	Education for Sustainable Development
GCF	Green Climate Fund
GDP	Gross Domestic Product
GEF	Global Environmental Fund
GEO	Global Environment Outlook
GHG	Green House Gas
GoI	Government of Iraq
GW	Giga Watt
HRES	Hybrid Renewable Energy System
IAEA	International Atomic Energy Agency
IDF	Iraqi Development Fund
IFI	International Financial Institutions
IRENA	International Renewable Energy Agency
KBA	Key Biodiversity Areas
KPI	Key Performance Indicators
KRG	Kurdistan Regional Government
LCCR	Low Carbon Climate Resilient
MoU	Memorandums of Understanding
NAMA	Nationally Appropriate Mitigation Actions
NAP	National Adaptation Plan
NBSAP	National Biodiversity Strategy & Action Plan
NDC	Nationally Determined Contribution
NES	National Environmental Strategy
GGF	Green Growth Framework
NGO	Non-Governmental Organization
NIC	National Investment Commission
OECD	Organization for Economic Cooperation and Development
PCB	Poly Chlorinated Biphenyls
POPs	Persistent Organic Pollutants
PPP	Public-Private Partnership
PV	Photo Voltaic
RE	Renewable Energy
SDGs	Sustainable Development Goals
SLR	Sea level Rise
SME	Small and Medium-sized Enterprise
UN	United Nations
UNDP	United Nations Development Programme
UNESCO	United Nations Educational Scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
USD	United States Dollar

Message

As we stand on the cusp of a new era of sustainable development, it is with great pride and anticipation that I introduce Green Growth Framework. In the pages that follow, you will embark on a journey through the vision, aspirations, and strategies that will shape the future of our beloved nation, Iraq. The challenges facing our world today are complex and interconnected, from climate change and environmental degradation to economic inequality and social justice. Recognizing the urgency of these challenges, the Government of Iraq has embarked on a transformative path towards green growth – a path that prioritizes sustainable development, environmental stewardship, and inclusive prosperity for all.

At the heart of our green growth journey lies the Green Growth Framework, a comprehensive roadmap that outlines our vision, goals, and action plans for building a resilient and sustainable future. Through this document, we seek to harness the potential of our youth, diversify our economy, and ensure access to essential services for all our citizens.

By 2050, Iraq is projected to undergo significant demographic changes, with an additional 40 million people expected to join our population, the majority of whom will be below the age of 40. This demographic shift presents both opportunities and challenges. It is incumbent upon us to harness the energy and potential of our youth by adopting a forward-thinking Green Growth Framework that ensures a prosperous and sustainable future for generations to come. This demographic dividend presents a unique opportunity that must be seized through forward-thinking policies and investments in green technologies and industries.

Furthermore, as we look towards the future, we recognize the imperative to reduce our over dependency on oil revenue and transition towards a more diversified and sustainable economy. Economic diversification, energy transition, and the development of green industries are essential components of our vision for a resilient and thriving Iraq. By embracing innovation and sustainable practices, we can unlock new avenues of growth and create green jobs that benefit our economy and environment alike. Through strategic investments in renewable energy, green infrastructure, and sustainable agriculture, we aim to create new opportunities for growth and innovation while safeguarding our natural resources for future generations.

In addition to economic considerations, we must also address the critical issue of ensuring access to essential services for our growing population. By 2050, we aim to provide water, food, energy, healthcare, housing, education, and transportation services to almost 80 million people. This ambitious goal requires integrated planning, investment in infrastructure, and a commitment to environmental stewardship.

To achieve these objectives, the government is committed to undertaking bold policy reforms, investing in human capital, and fostering partnerships with international organizations, private sector entities, and civil society. By working together, we can overcome the challenges that lie ahead and build a prosperous and sustainable future for Iraq.

This Green Growth document serves as a testament to our unwavering commitment to building a brighter, greener, and more prosperous Iraq. It is a testament to the dedication and hard work of all those who have contributed to the development of our Green Growth Framework – from policymakers and experts to civil society organizations and community leaders.



As we embark on this journey together, let us draw inspiration from the rich history and cultural heritage of our nation, and let us unite in our shared vision of a sustainable and thriving Iraq. I call upon all Iraqis and international partners to join hands in this endeavor, to contribute their ideas and efforts towards realizing our shared vision of a green and prosperous Iraq. Together, we can chart a path towards a brighter future for our nation and leave a legacy of sustainability for future generations to inherit.

May peace and prosperity prevail in our beloved Iraq.

Mohammed Shia' Al Sudani
Prime Minister of Iraq
Republic of Iraq





Foreword

It is with great pleasure and a sense of profound responsibility that I introduce the Green Growth Framework of Iraq. This comprehensive document represents a significant milestone in our nation's journey towards sustainable development and prosperity for all.

As the Minister of Planning, I have witnessed firsthand the dedication and hard work that has gone into the development of this document. From the initial conceptualization to the meticulous planning and stakeholder consultations, it is evident that the Green Growth Framework is a product of collaboration, innovation, and shared vision.

At its core, this document reflects our commitment to building a resilient and sustainable future for Iraq. In the face of mounting environmental challenges and socio-economic pressures, it offers a roadmap for navigating the complexities of the 21st century with foresight and determination.

By embracing the principles of green growth, we seek to unlock new opportunities for economic diversification, job creation, and social inclusion. Through strategic investments in renewable energy, sustainable agriculture, green infrastructure, and environmental conservation, we aim to build a thriving economy that is in harmony with nature.

Moreover, this document embodies our unwavering commitment to addressing the urgent challenges of climate change, resource depletion, and environmental degradation. By mainstreaming sustainability into our policies, plans, and practices, we strive to safeguard our natural heritage for future generations and ensure that all Iraqis have access to clean air, water, and land.

As we embark on this journey towards a greener and more prosperous Iraq, I call upon all stakeholders – government agencies, civil society organizations, private sector partners, and individual citizens – to join hands in implementing the Green Growth Framework. Together, we have the opportunity to shape a future that is sustainable, inclusive, and equitable for all.

I extend my heartfelt appreciation to all those who have contributed to the development of this document, and I look forward to working together to turn our shared vision into reality.



Dr. Muhammad Ali Tamim
Minister of Planning
Republic of Iraq





Preface

It is with great pride and enthusiasm that I introduce the Green Growth Framework of Iraq, a visionary blueprint that underscores our nation's unwavering commitment to sustainable development and environmental preservation. As the Minister of Environment, I am deeply honored to be part of this historic milestone in Iraq's journey towards a greener and more prosperous future.

At the Ministry of Environment, we have long recognized the critical importance of integrating environmental considerations into our nation's development agenda. Our Nationally Determined Contribution (NDC), Environmental Strategy, Nationally Appropriate Mitigation Actions (NAMA), National Adaptation Plan (NAP), Pollution Control Strategy, and National Biodiversity Action Plan stand as testament to our commitment to safeguarding Iraq's natural resources and fostering environmental sustainability.

Now, with the launch of the Green Growth Framework, we are taking bold steps to place environmental sustainability at the forefront of Iraq's growth trajectory. This document represents a holistic approach to development, one that recognizes the interconnectedness of economic prosperity, social equity, and environmental well-being. By embracing green growth principles, we aim not only to achieve our Sustainable Development Goals (SDGs) but also to advance our climate and environment plans, promote economic diversification, and harness the potential of our youthful population.

I am particularly grateful for the invaluable support provided by the United Nations Development Programme (UNDP) in guiding Iraq's climate change and environmental policies and strategies. Their technical expertise and partnership have been instrumental in shaping our journey towards sustainability, and I commend their continued commitment to supporting Iraq in this endeavor.

As we embark on this transformative journey, I call upon all stakeholders – government agencies, civil society organizations, private sector partners, and citizens – to join hands in implementing the Green Growth Framework. Together, let us build a future that is prosperous, inclusive, and environmentally sustainable for all Iraqis.



Dr. Hallo AlAskeri
Minister of Environment
Republic of Iraq



Acknowledgements

I am deeply honored to acknowledge the invaluable contributions of numerous individuals and organizations in the development of the Green Growth Framework of Iraq. Their dedication and expertise have been instrumental in shaping this pivotal initiative.

First and foremost, I extend my sincere gratitude to the Prime Minister of Iraq for his visionary leadership and guidance, particularly in providing strategic direction following the Basra Climate Conference in 2023. His steadfast commitment to sustainability has set the foundation for our collective efforts towards green growth.

I would like to recognize the exemplary leadership of the Minister of Planning and the Minister of Environment, whose unwavering support and direction have been integral to the development of the document. Their guidance has been instrumental in navigating the complexities of this undertaking.

I would also like to express my special thanks to the members of the team I chaired, comprised of the Undersecretaries and Directors General from the Ministries of Environment, Water Resources, Agriculture, Oil, Electricity, Finance, and Higher Education and Scientific Research. Their expertise and collaboration enriched our discussions and contributed to shaping the overall methodology of the document. They actively participated in the various consultations and contributed their valuable experience and insights to its preparation. I am also grateful for the valuable contributions of the Prime Minister's advisors and the Special Envoy for Climate Action for Iraq, whose strategic thinking added depth to our discussions and helped guide our decisions.

I am grateful for the invaluable contributions of Advisers to the Prime Minister and Iraq's Special Envoy for Climate Change, whose strategic insights have enriched our discussions and informed our decisions.

I would like to extend special thanks to the Climate Change Center at the Ministry of Environment and the Permanent Committee for Monitoring Climate Change at the Ministry of Planning, who supported the team with their information and observations, and for their excellent coordination and joint support to the Secretariat in preparing the Green Growth Framework. Their commitment to excellence has been commendable throughout the process.

I am also grateful for the technical support provided by the United Nations Development Programme, as their expertise and assistance added great value to the process of drafting the document's framework and objectives.

Lastly, I would like to acknowledge the participation of UN agencies, Development Partners, Private Sector, and NGOs in the various discussions and consultations. Their collaboration and input have been essential in ensuring the inclusivity and effectiveness of the document.

In conclusion, I am truly grateful to each individual and organization mentioned above for their unwavering commitment and contributions to the development of Iraq's Green Growth Framework. Together, we are poised to embark on a transformative journey towards a sustainable and prosperous future for our nation.

With sincere appreciation,



Dr. Maher Hammad Johan
Deputy Minister of Planning for
Technical Affairs
Republic of Iraq





Executive Summary: Iraq's Green Growth Strategy

Context and Rationale

Iraq stands at a critical crossroads in its development journey. While it faces formidable challenges—from chronic water scarcity, land degradation, and energy insecurity to a rapidly growing population and a high dependency on fossil fuels; at the same time, it is endowed with immense potential with vast solar energy resources, fertile lands for sustainable agriculture, critical mineral reserves, and a young, dynamic population. These assets present a transformative opportunity for Iraq to reimagine its growth model through a green development pathway.

Green Growth Framework seeks to seize this moment to pivot toward a sustainable, inclusive, and low-carbon future. The Green Growth Framework aligns with Iraq's Vision 2030, National Development Plan 2024-2028, Updated NDC, and National Environmental Strategy, and supports its international obligations under the Paris Agreement, the SDGs, and regional environmental frameworks. It provides a comprehensive framework for environmental, economic, social, and institutional transformation.


A prosperous, climate-resilient, and inclusive Iraq where green growth powers sustainable development, protects the environment, ensures equitable opportunities for all citizens, and transforms Iraq into a leading example of low-carbon, climate resilient, resource-efficient, and innovation-driven development by 2050.

This vision emphasizes a just transition that benefits all Iraqis, particularly vulnerable populations such as youth, women, farmers, and conflict-affected communities. It promotes circular economy principles, local innovation, and nature-based solutions while enhancing Iraq's regional leadership in climate adaptation and green transition.

Strategic Pillars of Iraq's Green Growth Plan

The Green Growth Framework rests on eight priority actions within four transformative pillars. The four transformative pillars include:

1. **Enabling Environment & Policy Reform:** Establishing a conducive legal and fiscal framework by revisiting fossil fuel subsidies, adopting green taxation, and finalizing climate-relevant laws including the Renewable Energy and Energy Efficiency Law.
2. **Integrated Governance & Multi-Stakeholder Platforms:** Operationalizing inter-ministerial coordination mechanisms, led by the Higher Committee for Sustainable Development, and supported by a Green Growth Council that includes public and private stakeholders.
3. **Green Investment & Climate Finance Mobilization:** Developing Iraq's Climate Investment Plan (CIP), launching national green funds, promoting green bonds, and leveraging international finance (e.g., GCF, GEF, bilateral donors) for renewable energy, sustainable cities, and low-emission transport.
4. **Capacity Building & Green Innovation:** Strengthening the technical and institutional capacities of ministries, banks, and local governments; embedding green skills in education; and promoting green entrepreneurship and digital innovation across sectors.



These pillars are supported by strategic interventions in priority sectors such as water, agriculture, energy, transport, infrastructure, education, and health. Natural capital accounting, eco-system valuation, and circular economy principles underpin policy coherence, while emphasis on public awareness and inclusion ensures that vulnerable groups, youth, and women are at the forefront of Iraq’s green transformation. The eight priority actions to foster the green growth includes:

1. **Strengthening Green Governance:** Establish a robust governance framework led by a National Green Growth Council and guided by cross-sectoral coordination.
2. **Aligning Fiscal and Regulatory Frameworks:** Reform subsidies, introduce green incentives, and develop supportive policies for clean technologies and investments.
3. **Decarbonizing Energy and Enhancing Resilience:** Scale renewable energy, increase energy efficiency, and phase down fossil fuel reliance.
4. **Promoting Sustainable Cities and Infrastructure:** Invest in climate-smart housing, water systems, public transport, and low-carbon urban planning.
5. **Transforming Agriculture and Natural Resource Use:** Promote sustainable land and water use, climate-smart agriculture, and food security.
6. **Fostering Green Jobs and Human Capital:** Create green employment opportunities, invest in education, vocational training, and youth entrepreneurship.
7. **Mobilizing Climate and Green Finance:** Establish national green funds, leverage international climate finance, and promote private sector investment.
8. **Accelerating Technological Innovation and the 4IR:** Embrace AI, IoT, blockchain, and cleantech for improved efficiency and data-driven policy.

Implementation Mechanism

The Green Growth Framework will be steered by the Higher Committee for Sustainable Development, supported by a newly proposed Green Growth Council comprising government, private sector, academia, and civil society stakeholders. The Council will oversee policy coordination, implementation guidance, stakeholder engagement, and progress monitoring. Sectoral task forces and governorate-level units will ensure localized delivery.

Public and Private Sector Integration

Green growth requires a paradigm shift across Iraq’s public administration and business models. The government will embed green principles into budgeting, procurement, taxation, and planning. Simultaneously, it will incentivize private investment through fiscal and regulatory reforms, public-private partnerships, and green procurement standards.

Financing the Transition

To enable this transformation, Iraq will develop a Climate Investment Plan to mobilize financial flows towards priority areas such as renewable energy, water security, agriculture, urban development, and ecosystem restoration. National Green Funds will be established to leverage domestic and international financing sources, including GCF, GEF, the World Bank, and bilateral donors. Green bonds, blended finance, and climate risk insurance will also be promoted.





Human Capital and Innovation

A green future depends on people. Iraq will prioritize human capital development through green curricula, technical training, and entrepreneurship programs. Innovation hubs and partnerships with universities and research centers will nurture local solutions, foster clean technology startups, and scale sustainable business models.

Expected Outcomes by 2030

- At least 33% of electricity generated from renewable energy.
- 5 million green jobs created, particularly for youth and women.
- Significant reduction in fossil fuel subsidies and carbon emissions.
- Universal access to clean water, sanitation, and electricity.
- Restoration of degraded lands and improved food security.
- Enhanced air quality, biodiversity protection, and urban resilience.

Conclusion

The Green Growth Framework for Iraq represents a bold, forward-looking, and essential response to the country's pressing environmental and development challenges. It provides a coherent and actionable roadmap for transitioning toward a more resilient, inclusive, and sustainable economy—anchored in the principles of climate justice, natural resource stewardship, and economic diversification. By aligning its economic ambitions with environmental imperatives, Iraq has a unique opportunity to chart a transformative pathway that delivers growth without compromising the health of its ecosystems or the well-being of its people.

This strategy envisions a future where Iraq's prosperity is decoupled from environmental degradation—a future where renewable energy, sustainable agriculture, green industries, and innovation serve as engines of inclusive growth. It outlines strategic shifts in governance, financing, technology adoption, capacity building, and institutional coordination that will enable Iraq to harness its abundant natural assets and youthful population to drive a green economy.

By 2050, the Framework envisions an Iraq that is economically dynamic, socially just, and environmentally secure—where economic prosperity coexists with ecological integrity, where institutions are effective and accountable, and where all Iraqis, including the most vulnerable, enjoy the benefits of sustainable development. This transition will not be easy—it demands long-term political will, whole-of-government and whole-of-society collaboration, active private sector engagement, and sustained investment in innovation and human capital.





CHAPTER ONE: GREEN GROWTH REALITY IN IRAQ

The Green Growth Framework is not only a vision—it is a call to action. A call to rethink how Iraq produces, consumes, invests, governs, and grows. The decisions taken today will shape the lives of future generations. The time to act is not tomorrow. The time to act is now.

Iraq Vision 2030¹, highlighted its benefit of integrating environmental aspects into the government's development plans and policies to improve people's life quality, ensure the sustainability of production and consumption patterns and reduce the implications of environmental pollution and climate change.

According to this document, the Government of Iraq aspires to build a diversified economy independent of oil, in which the state plays an active developmental role, and the private sector leads the development process, becoming an active partner, contributing to economic growth and productivity, and providing job opportunities generating fair income for all.

From an environmental perspective, Iraq has been recognised as one of the countries most affected by the harmful effects of climate change. In response, the Government of Iraq ratified the Paris Agreement on 1st November 2021, which entered into force on 1st December 2021, aiming to limit the implications of climate change by adapting the local economy or mitigating emissions.

Ratification of the Paris Agreement reaffirmed a firm determination of the Iraqi government to shift its heavy reliance on oil towards more renewable energy sources and strengthen its efforts to reduce GHG emissions. In October 2021, the Government of Iraq submitted its first Nationally Determined Contribution (NDC)² to the UNFCCC.

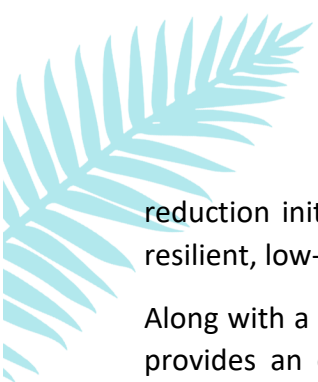
In NDC, Iraq has offered to reduce its greenhouse gas emissions from 2021 to 2030 by 1% - 2% through the national effort. By leveraging international support, Iraq aims to reduce its greenhouse gas emissions by 15 % in 2030. This also includes the reduction of methane emissions from its oil and gas, agriculture, and waste sectors.

The NDC has also recognised the potential for broader deployment of renewable energies and aims to increase its renewable energy share by 20% by 2030 based on installed capacity. MoEI support the need to develop the regulatory framework for the deployment of renewable energy and the improvement of energy efficiency. Further reforms are planned to include electricity tariff to reflect the cost per unit of electricity, while taking into the account of the affordability of low-income groups. The reform also intends to enhance the use of the energy transition framework, including increasing the renewable energy production and strengthen energy efficiency measures.

Iraq is underscoring its commitment to the Paris Agreement and green growth while contributing a small share of global emissions. Beyond reaffirming this context, Iraq's actions demonstrate tangible progress: in 2023, a single associated-gas utilization project, the project's outcome is serving to fulfil the unconditional NDC commitment of 2%, signalling a pivot from pledges to implementation. Building on this momentum, Iraq continues to expand associated-gas capture and other emissions-

¹ Please find the link of the document <https://mop.gov.iq/en/static/uploads/8/pdf/1568714423e99cb9efb0b0a786344a1294683d4931--%D8%B1%D8%A4%D9%8A%D8%A9%202030%20e.pdf>

² Please find the Iraq's NDC submitted to UNFCC https://unfccc.int/sites/default/files/resource/316947520_Iraq-NC1-2-INC-Iraq.pdf



reduction initiatives that strengthen energy security, cut pollution, and lay the foundations for a resilient, low-carbon, and inclusive economy.

Along with a framework to pledge national emission reduction commitments, the Paris Agreement provides an overarching framework for cooperation among countries to achieve their pledged reductions of GHG emissions jointly. Cooperation approaches are becoming an essential part of international climate policy, building on experiences from flexible instruments of the Kyoto era and reflecting the global challenge to adopt more ambitious mitigation actions.

There has also been increasing interest among the national stakeholders to explore the opportunities from cooperative approaches. Some more advanced countries, including Singapore, South Korea, Japan, and China, have already introduced abatement policies, emission trading schemes, and experimented with pilot activities under Article 6. Similarly, Government intends to implement NDC's mitigation scenarios in the Nationally Appropriate Mitigation Measures (NAMA).

The Government also took the initiative to address the methane emissions. Methane is a more potent greenhouse gas in terms of radiative forcing than CO₂.

According to the estimates of the International Energy Agency and Iraq's NDC, the leaks of methane in Iraq could be reduced by more than 80% using existing technology. The market value of the wasted gas has been estimated at around 1.5 billion USD. Reduction of methane leaks would reduce not only that loss but also deliver additional economic benefits the gas can generate through its productive use and improved human health conditions by improving air quality at the local level.


Iraq demonstrated its commitment to reducing methane (CH₄) emissions by signing the Global Methane Pledge, a global effort to reduce methane emissions by at least 30 percent from 2020 levels by 2030.

Climate change impact in Iraq

The impacts of climate change on various sectors in Iraq have become widely recognized and are casting a long shadow over life in the country. This is particularly concerning given Iraq's fragile conditions and deteriorating infrastructure.

Economically, climatic shifts have had far-reaching consequences. According to NDC, projections based on national climate models indicate a steady increase in temperatures, with a rise of approximately 0.9°C since 2007. It is predicted that this temperature increase could reach as high as 3.5°C by the year 2100. These projections only compound the challenging situation in a country where temperatures have soared above 50°C on several summer days.

NDC also highlighted a noticeable decrease in annual precipitation rates, which are expected to continue diminishing. By 2100, it is anticipated that these rates could decrease by more than 30% compared to the period from 1938 to 1978, according to forecasts from the Iraqi General Authority for Meteorology and Seismic Monitoring. These trends underscore the unmistakable impact of climate change.



These changes in climate patterns have also led to an increase in extreme weather events, such as heat waves, droughts, and heavy rainfall. For instance, there have been substantial droughts, resulting in an expansion of desertification. This, in turn, has contributed to a rise in dust and dust storms, which have intensified in frequency and duration. As a result, there has been a notable uptick in the number of asthma cases, particularly among children and the elderly, as well as a significant increase in the prevalence of diseases and cancer in recent years.

Furthermore, in addition to the transboundary water dams and withdrawal of water by upper riparian countries, climate change also has exacerbated the issue of water scarcity in the Tigris and Euphrates rivers and their tributaries³. Estimates from the UNDP and Geneva Water Hub in 2024 revealed a significant projection of shortfall in water sources for Iraq compared to its actual needs. The projected (RCP 8.5) changes (reduction) in rainfall may reach 17% between 2020-2039, 42% between 2040-2059, 58% between 2060-2079, and a staggering 73% between 2080 and 2099. This serious declining change has severe repercussions on the agricultural sector, leading to a marked decline in agricultural production. This, in turn, will impact Iraq's economy, natural ecosystems, biodiversity, vegetation cover, and posed a threat to coastal areas along the Arabian Gulf.

Iraq's oil sector, as the backbone of the country's economic wealth, is now under increasing pressure to meet the growing demands of the national economy. However, as the world transitions to a global green economy, this heavy reliance on oil presents significant challenges to Iraq's long-term economic stability. Economic diversification is, therefore, a key strategic priority outlined in Iraq's National Development Plan (2024-2028), and the green economy offers an opportunity for this diversification. Consequently, there is an urgent need for swift interventions and nature-based solutions to safeguard our natural ecosystems, which have historically played a pivotal role in stabilizing Iraq's climate—and by extension, the global climate—for thousands of years.


Iraq's Major Development Challenges in Next 10 Years

Economic Transformation and Diversification

Iraq has the opportunity to diversify its rentier economy by strengthening non-oil sectors and fostering a vibrant private sector. By supporting job creation in varied industries, improving the investment climate, and enhancing local production, Iraq can reduce its dependency on imports and create a resilient economic structure. Iraq has substantial potential for growth across its non-oil sectors, including agriculture, industry, and services, which offer important avenues for economic diversification. Increasing investment, modernizing infrastructure, and streamlining regulations could significantly accelerate the development of these sectors. The economy, currently public-sector-driven, holds promising opportunities for expanding private sector involvement. By addressing entry barriers, reducing bureaucratic complexities, and enhancing the business environment, Iraq can foster private investment and support entrepreneurship. Improvements in transportation, energy, and telecommunications infrastructure would also help these sectors grow, enhancing productivity and competitiveness. Although challenges from political uncertainties and security concerns have impacted investment, Iraq is well-positioned to attract foreign investment with a

³ Within Iraq, no major tributary feeds the Euphrates River.





stabilized environment. Green growth offers a pathway for sustainable economic diversification, promoting resilience through innovation, green entrepreneurship, and sustainable development. By encouraging investment in green industries, Iraq can strengthen its economy against external shocks, build sustainable industries, and attract international green investment.

Human Development Challenges

Iraq's development plan presents a promising pathway to sustainable social growth by addressing several barriers that, once removed, can unlock economic, institutional, and social potential.

Financing Iraq's Green Growth: Challenges as Catalysts for Action

Iraq is well-positioned to strengthen the financing foundations for a just transition to green growth. Domestic public finance can be made more resilient to global oil price volatility by gradually diversifying revenues and safeguarding green capital spending. While the budget remains highly reliant on oil, targeted reform of fossil-fuel subsidies—currently estimated at nearly 8% of GDP—can preserve social protection while unlocking fiscal space for renewable energy, energy efficiency, and climate-resilient infrastructure. Equally, improving budget execution—through streamlined procedures and stronger implementation capacity in ministries—will help translate approved allocations into timely disbursements for green initiatives.

Access to international climate finance can also be scaled. Developing a unified national strategy for mobilizing, managing, and monitoring resources from mechanisms such as the GCF, GEF, AF, and CIF, alongside readiness support and national accreditation, would enable Iraq to move from fragmented, project-based support to larger, programmatic finance aligned with the Green Growth Framework.

The domestic financial sector can become a powerful enabler. Introducing green finance instruments—green bonds, sustainability-linked loans, and concessional credit lines—together with efforts to deepen financial inclusion, will widen private investment. Establishing risk-sharing and de-risking tools can address banks' prudent risk perceptions about longer payback periods and new technologies, while initiatives to strengthen governance and transparency can rebuild public trust.


Finally, mainstreaming climate into public investment systems will sharpen targeting and accountability. Introducing green budget tagging and systematically factoring environmental externalities into appraisal and cost-benefit analyses will guide capital toward high-impact, climate-smart projects.

In sum, the current constraints highlight clear, actionable pathways: bolster fiscal efficiency, institutionalize climate-finance access, catalyze green financial markets, and embed climate criteria in public investment—turning today's challenges into the architecture of tomorrow's green growth.

Private Sector–Led Green Growth in Iraq: Turning Constraints into Building Blocks

1) Market & Policy Environment—clarify, coordinate, catalyze

Iraq can attract significantly more private green investment by making the policy landscape clearer and more cohesive. Accelerating the Renewable Energy Law and codifying predictable incentives—such as feed-in tariffs, net metering, and carbon pricing—would strengthen investor confidence. Equally, aligning mandates across electricity, oil, water, planning, environment, and industry can



reduce contradictions and give businesses a single, reliable rulebook. Establishing robust regulations for renewable energy, sustainable agriculture, waste management, and eco-construction will convert today's uncertainty into a stable pipeline of bankable opportunities.

2) Access to Finance—unlock capital and entrepreneurship

SMEs can become engines of green growth with better access to affordable finance and a stronger startup ecosystem. Dedicated credit lines, guarantee schemes, and tailored working-capital products would help under-capitalized solar and clean-tech providers scale. Incubators, accelerators, and venture financing for circular economy, clean energy, and agri-tech can nurture deal flow. Streamlined tariffs and faster customs for clean technologies will lower entry costs and speed deployment—turning current bottlenecks into competitive advantages.

3) Skills & Capacity—build capabilities and customer trust

Targeted training for technicians, engineers, and project developers in renewable energy, green construction, and climate-smart agriculture can close skills gaps and raise quality. Investment-readiness support will help entrepreneurs navigate markets and standards. Encouraging after-sales service models—maintenance contracts, warranties, and performance monitoring—can boost consumer confidence and accelerate adoption, addressing today's service gaps while creating durable jobs.


4) Enabling Ecosystem—make projects investable and standards credible

A PPP framework tailored to green infrastructure, coupled with a transparent project pipeline and standardized contracts, can translate ambition into financeable deals. National quality standards and certification for solar systems, energy audits, and other green services will protect consumers and reward high performers. Establishing a formal public–private dialogue on incentives and regulatory reforms will ensure policies reflect market realities and stay implementation-ready.

Demographic Dividend: Risks and gains

The demographic situation in the country presents a unique opportunity for growth and development. Currently, 60.2% of the population is of working age (15 to 64 years of age) representing a powerful demographic layer. These youth and capable persons, if effectively mobilized and integrated into the workforce, can become a major driver of economic growth and social progress. To fully harness this potential, it is essential to create employment opportunities that match their skills and aspirations. With the population standing at 46.11million and growing at a rate of 2.3%, Iraq is projected to reach nearly 80 million people by 2050. This growth presents an opportunity for a dynamic, expanding workforce that could significantly boost the economy if provided with the right conditions. It also highlights the importance of scaling up efforts to provide essential services, develop infrastructure, and ensure a sustainable future for this growing population.

To achieve this, it is crucial to diversify the economy, advance energy transition efforts, foster sustainable green growth, and cultivate a thriving private sector. Strengthening public policies that focus on inclusive growth and employment generation will be key in transforming Iraq's youthful



population into a source of resilience and prosperity, thereby contributing to long-term security and stability in the country.

Institutional Modernization:

Modernizing Iraq's institutions and embracing digital technologies can drive efficient governance and public sector reform. Improving transparency and addressing corruption will strengthen legal compliance and governance, while streamlining administrative functions can enhance public service delivery and accountability.

Social Development, Integration and Community Cohesion

Investing in human capital and expanding social support systems for vulnerable groups can lead to rapid improvements in health, education, and overall social well-being. Removing barriers to equitable access and opportunities will support inclusive growth, ensuring that all citizens benefit from development progress.

Enhanced Regional Development and International Collaboration

Iraq can improve regional equity by prioritizing rural and marginalized areas and incorporating demographic factors into policy-making. Strengthening partnerships with international stakeholders can further bolster development efforts, enabling Iraq to leverage global expertise and resources for long-term progress.

Without a diversified economy, modern and functional institutions, human development for 21st century energy transition, sustainable green growth, a thriving private sector, and improved public policies, the spectre of unemployment of the larger youthful population looms large, presenting a critical security risk for Iraq.


Environmental Challenges:

Iraq's environmental challenges are well articulated in NDC, Environmental Strategy, Pollution Control Strategy, Water Management Plans, National Biodiversity Plan, NAMA and NAP. Addressing climate challenges and ensuring sustainable water use is crucial for Iraq's development. Climate adaptation strategies, better water management, and actions to improve environmental quality can bolster food security and promote resilience to climate-related impacts, protecting natural resources for future generations. The following are the key environmental challenges that we account in developing the Green Growth Framework.

Water-Marshlands-Biodiversity

The water-marsh ecosystem and biodiversity are under severe stress. Iraq is already grappling with a significant water crisis, evident in the current (2022) per capita water consumption of 600³m (600,000 litre) per person per year, falling below the international standard of 1700³m (1,700,000per person per year). Climate change has made water resources an existential threat, leading to reduced transboundary flow and increased pollution. Several projections indicate a troubling trajectory for





the future, with estimates for 2050 ranging from an optimistic scenario of around 600³m per person per year to a pessimistic scenario as low as 400³m per person per year. This looming shortage is poised to have a massive impact on drought, salinity, and desertification. The repercussions will be far-reaching, affecting crucial sectors like food production, forestry, marshland ecosystems, and employment in the agricultural sector. The anticipated decline in these areas is likely to culminate in increased internal and external displacement and migration.

Moreover, there is inefficient use of scarce water resources, with 87.8% being used for irrigation⁴, which further exacerbates the water crisis. The marsh ecosystem, recognized as a UNESCO heritage site, and the rich biodiversity in the region face their highest risk yet, putting the livelihoods of 20,000 Marsh Arabs⁵ in jeopardy, including the risk of displacement.

Energy and Access to Energy

Iraq faces significant challenges in energy access, with approximately 50% of the population lacking sufficient access to energy. Consequently, diesel generators have become an essential yet inadequate solution for urban residents. These generators are costly, environmentally high-emitting, and ultimately unsustainable.

The energy mix is another cause for concern, as it relies heavily on non-renewable sources, with less than 5% coming from renewables. This dependence on non-renewable energy sources, particularly when 85% of national revenues are derived from oil, poses a significant risk of stranded assets post-2035, given the global shift towards cleaner energy alternatives.

The global shift towards more affordable renewable energy sources by 2035 will pose a dual threat to Iraq. This shift could jeopardize both the nation's income security and its ability to provide uninterrupted power supply crucial for citizen prosperity and economic growth. The persisting energy insecurity is poised to exacerbate the already precarious security situation in Iraq, where all knows the energy and security are very basic precondition to attract international investment.


Urbanization and Pollutions

Urbanization has led to unplanned and rapid growth, which has resulted in challenges such as insufficient public transport infrastructure, widespread use of diesel generators, heavy reliance on air conditioning, limited green spaces, and inadequate sewerage and water supply systems. This rapid urbanization has also contributed to increased pollution risks, including waste, plastic, dust, and chemicals. With over 70% of the population now living in urban areas and an annual urban growth rate of 2.6%, there is an urgent need to address these urban development challenges. The failure to address climate risks will exert increased pressure on cities to absorb the displaced population from rural areas, resulting in unplanned urbanization. Displaced individuals, seeking livelihoods, will gravitate towards cities, leading to the development of poor-quality settlements and straining urban

⁴ water.fanack.com/iraq/water-use-in-iraq/

⁵ The Marsh Arabs, who numbered about half a million in the 1950s, have dwindled to as few as 20,000 in Iraq, according to the United Nations. The population shrank from half a million in the 1950s to about 20,000 following the draining of the marshes in the 1980s and 1990s by the previous regime, who tried to drive the marsh Arabs out of their homes. After 2003, some of the Marsh Arabs returned to their homeland and destroyed the dams and dikes the dictator built to block the rivers.





services. This influx will intensify pollution, potentially giving rise to more slums characterized by substandard living conditions. Additionally, the heightened road traffic within cities is expected to fuel social tensions, compromising the social contract between citizens and the state.

Climate Security

All climate scenario shows that Iraq is going to face severe climate change impact if global climate crisis (failed to keep global temperature rise below 1.5⁰C, and enter into irreversible tipping points) are not tackled by the NDCs and both high emitting developed and developing countries. Iraq faces severe climate security risks, where rising sea levels, increasing temperatures, and declining precipitation drive intensified droughts, saltwater intrusion, and frequent sandstorms. These changes reduce freshwater availability, degrade cultivable lands, and weaken agricultural productivity, threatening food security and public health. Intensifying heatwaves, freshwater scarcity, and the associated health issues heighten mortality risks for both humans and livestock. These environmental stresses prompt internal and external migration, disrupting urbanization and straining GDP, governance, and social stability. As water scarcity escalates, the convergence of these factors increases conflict risks, amplifying societal unrest and deepening inequality, underscoring the urgent need for climate adaptation and resilience measures.

In summary, Iraq faces multifaceted challenges, including demographic shifts, energy issues, water crises, unplanned urbanization, climate security, lack of economic diversification, and environmental concerns. Addressing these issues is essential for ensuring the well-being of the population, promoting sustainable development, and safeguarding the natural heritage and cultural diversity of the area. It requires a comprehensive approach that takes into account climate change, economic development, and social equity, and it aligns with national interests in climate change, economics, and culture.


Why Iraq must pursue green growth.

What is this green growth framework about?

The government seen the green growth framework as a fundamental pillar in Iraq's developmental transformation. It encompasses several crucial elements aimed at guiding the nation towards a prosperous and sustainable future.

First and foremost, it is a high-level policy option document that outlines a well-thought-out pathway. This framework serves as an illuminating beacon, shedding light on the direction Iraq intends to take in shaping its growth. It goes beyond mere intentions and offers a concrete roadmap for both public and private sector institutions, allowing them to align their efforts with Iraq's overarching development strategy.

Moreover, this framework plays a pivotal role in addressing pressing global issues such as environmental preservation, pollutions, climate change, and disaster management. It is designed to be a comprehensive roadmap for the government of Iraq, enabling the integration and mainstreaming of these crucial concerns within the broader economic and social development agenda. This approach underscores the government's commitment to ensuring that environmental



and climate-related issues are not neglected but are treated as integral components of Iraq's overall development.

Additionally, the framework functions as a blueprint for sustainable development, striking a harmonious balance between the environmental, social, and economic dimensions of growth. It recognizes the interdependence of these facets and strives to ensure that Iraq's progress is achieved without compromising the environment, the well-being of its citizens, or the economic stability of the nation.

In summary, this framework represents a comprehensive vision for Iraq's growth, encompassing strategic actions and clear guidelines. It also stands as a testament to the government's commitment to addressing environmental and climate issues while maintaining a balance between the economic, social, and environmental aspects of growth.

Decoupling Economic Growth from Resource Consumption: The framework seeks to ensure that economic growth is no longer dependent on the inefficient use of resources. Instead, it aims to harness the potential of abundant resources like sunlight, wind, silicon, sodium, and phosphate, along with the demographic dividend, to drive economic prosperity.

Inclusive Benefits of Green Globalization: An essential component of the framework is to ensure that no individual or region is left behind from the benefits of green globalization. It aspires to create an inclusive and equitable path towards sustainable development.

Ensuring comprehensive climate security: The combination of climate change and human-induced pressures on the environment significantly amplifies local tensions and escalates the fragility of communities and ecosystems. The security risks related to climate change carry substantial and enduring implications for human, community, state, and international security, notably leading to displacements. In addressing climate change and its effects, the security and justice sectors play pivotal roles, extending from security providers to judiciary, administration, and oversight bodies. Given the multidimensional nature of these challenges, clear delineation of each sector's roles and contributions in concerted climate action is imperative for sustaining the peace and development in Iraq.

Iraq's Green Growth Framework is a holistic approach that envisions the transformation of its economy, society, and natural ecosystems. By 2050, the goal is to turn challenges related to water, food, energy, health, and employment into opportunities. This transformation will be achieved through investments in youth, green technologies, small and medium-sized enterprises (SMEs), industries, job creation, preservation of natural and cultural heritages, climate change adaptation and mitigation, human resource development, and the elimination of all forms of inequalities, injustices, and discriminations.

Furthermore, the framework emphasizes the importance of individual and collective responsibility.

In summary, Iraq's Green Growth Framework represents a forward-looking and ambitious plan to address climate change and environmental degradation. It envisions a more sustainable and equitable future for the country, where economic growth is decoupled from resource consumption, and all citizens are actively engaged in preserving the health of our planet.



CHAPTER TWO: STRATEGIC DIMENSIONS OF GREEN GROWTH

Definition of green growth in Iraq

The framework for policies based on the concept of green growth approach⁶ starts with the assumption that initially the environmental assets and resources are not used efficiently. Policies, that incentivise improvements in their use can generate additional economic growth referring to as “*green growth*” that is more efficient, cleaner, and more resilient. “*Green growth policies aim to foster sustainable development by reconciling the need for environmental sustainability with that for economic growth and social improvement.*”

An economic model that fails to reflect the external cost caused by producers or consumers generates vast environmental and health risks, excessive waste, accelerates the reduction of biodiversity and exhaustibility of resources and ultimately creates an unjust society.

Hence, *Green Growth* is a general term referring to the type of economic growth that builds on resource efficiency and resilience of the underlying economy. It serves, therefore much more as a concept rather than a fully-fledged plan or framework, including a sequence of specific projects or policy interventions.

Therefore, the main purpose of the Green Growth Framework is to compile a set of key principles that will guide the design of each project, investment, or policy intervention. From this perspective, the Green Growth Framework reaches beyond the single specific environmental concern and rather ensures the consistency and coherence of the multiple parallel sectorial policies.

The “*Green Growth*” concept is developed and provides an analytical foundation for the following three key aspects⁷:


- i) Avoid inflexible, costly, and non-adjustable measures.
- ii) Strive to balance the short and long term by offsetting short-term costs.
- iii) Maximize synergies and shared economic benefits. Policy coherence is critical, with a particular focus on generating positive externalities.

As the Green Growth Framework will illustrate, the policies based on green growth concept to pursue a variety of strategic pathways. A combination of different policy instruments best serves such policies: price-based policies are important but are only one component in a policy toolbox that can also include norms and regulation, public production and direct investment, public procurement, information creation and dissemination, education, or industrial and innovation policies.

⁶ World Bank (2012c). Inclusive Green Growth: The Pathway to Sustainable Development. The World Bank, Washington, DC, U.S.A.

⁷ https://www.nber.org/system/files/working_papers/w17841/w17841.pdf





Policies inspired by the *Green Growth* concept can open new potential channels for economic growth:


- Enhanced productivity and greater efficiency in the use of resources and natural assets, including enhancing productivity, reducing waste and energy consumption, and making resources available to their highest value use.
- Innovation allows for new ways of creating value and addressing environmental problems.
- Creation of new markets by stimulating demand for green technologies, goods, and services; creating new job opportunities.
- Boosting investor confidence through greater predictability and continuity around how governments deal with major environmental issues.
- More balanced macroeconomic conditions, reduced resource price volatility and supporting fiscal consolidation through, for instance, reviewing the composition and efficiency of public spending and increasing revenues by putting a price on pollution.
- Enhancing human capital by harnessing demographic returns and providing job opportunities that promote the concepts of green employment, take into account future professions, and support innovation and equal opportunities between the men and women.

The Iraq's Green Growth Framework will identify and describe those channels through which the proposed green policies and interventions can potentially strengthen and stabilize the country's economic growth. Similarly, the Green Growth Framework will also support policymakers to capture various co-benefits from different policies, by designing the appropriate mix of policy instruments.

The simple operational definition of Green Growth in Iraq consists of 4 key dimensions: Environment, Climate Change and Disasters, Low carbon and climate resilience, and inclusiveness.

- Anything matters to ecosystem health, planetary health, including biodiversity, ecosystem services, pollutions, and natural capital are broadly considered as **Environment**, hence strategies, plans and financing such is called Environmental.
- Anything matters with variations in long term weather changes, is called climate change, and the issues associated with impacts due to such long-term weather change is called climate change impacts. Any actions to mitigate carbon emission and help to adapt to the climate change is called **climate change action**.
- Anything matters to developing with low emission (low carbon), nature based, and proven to future impacts of climate changes and disasters are generally called **low carbon and climate resilient**.
- Anything matters to support the equity and injustice is called **inclusive**.





In the context of Iraq, green growth refers to an integrated approach that promotes environmental protection, climate adaptation, low-carbon development, and inclusivity to foster sustainable economic progress. Defined by the following components:

Green = Environmental + Climate Change Response + Inclusive.

In this component, environmental means:

- Environment: Emphasizing sustainable resource management and pollution reduction.
- Nature-Based Solutions: Implementing strategies such as integrated and mixed agriculture , ecosystem restoration, and sustainable agriculture that work in harmony with natural systems.

Inclusivity means, ensuring that all communities, particularly marginalized groups, benefit from environmental protections and resource conservation.

Climate change response encompasses:

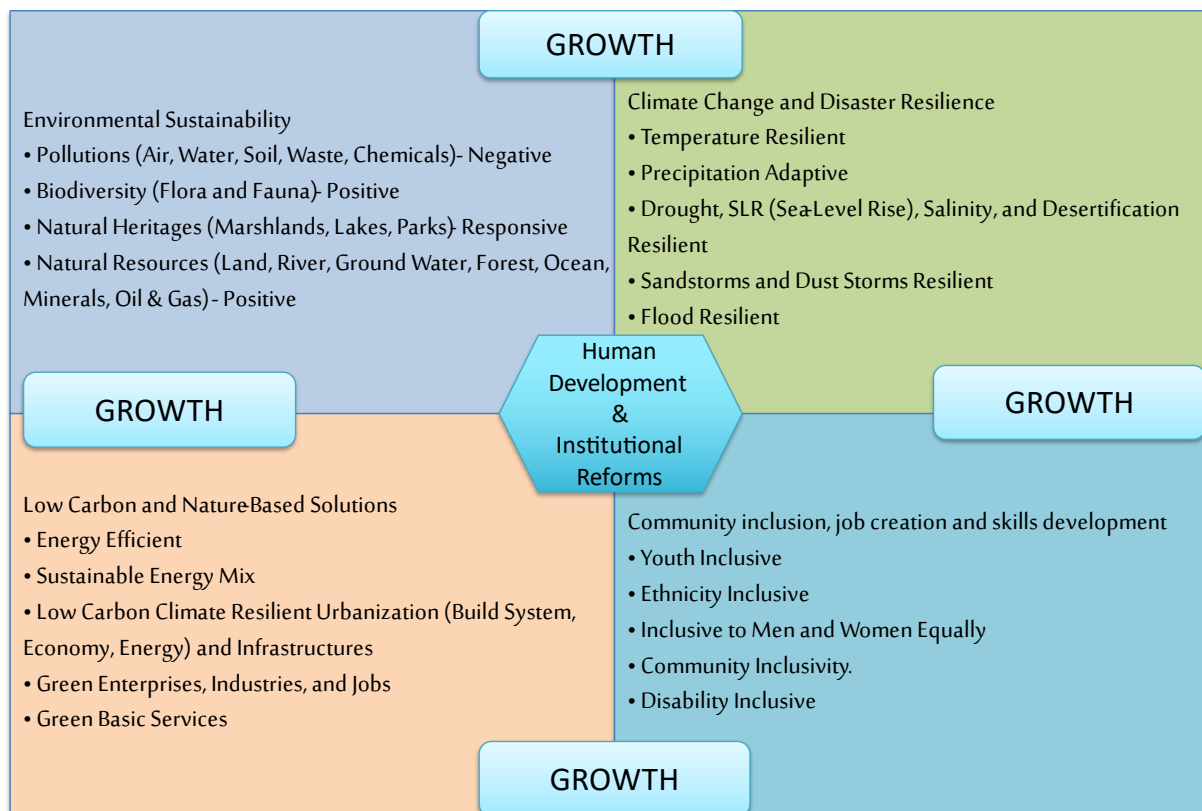
- Climate Adaptation: Enhancing resilience to the impacts of climate change through adaptive infrastructure, sustainable agriculture, and water conservation.
- Climate Change Mitigation and Low Carbon Development: Reducing greenhouse gas emissions through clean energy, efficient waste management, and green technology.
- Climate Resilience: Building systems that can withstand and recover from climate-related shocks, thus supporting long-term sustainable growth.

In this framework, green growth means aligning Iraq's economic development with environmental sustainability, low-carbon pathways, and inclusive policies to ensure that growth benefits all sectors of society while preserving natural resources and adapting to climate change.



What is Green Growth in the Context of Iraq

Figure 1: Green Growth Context of Iraq



The starting point for the Green Growth Framework is current Iraq's concept of an oil-led growth model, which has been a source of fragility and economic volatility, both negatively impacting the country's growth potential and sustainable development. The extensive role that the oil rents play in Iraq's economy, and consequently in its public spending, transfers, and employment (two-fifths of all jobs are in the public sector), represents a major resilience challenge. The oil dependency also undermines the export competitiveness of non-oil sectors. These are, however, crucial for economic diversification and are the focus of the private sector. Despite being one of the largest oil producers in the world, and almost doubling its oil production during the past decade, Iraq's development indices resemble that of low-income countries. Without key structural reforms, Iraq's pursuit of a resilient, inclusive, and diversified growth path will not materialise.

The current state of Iraq's private sector limits its capacity to mobilize green finance and drive the country's climate action. The public sector dominates the economy and limits private sector growth and capacity to create jobs. The weak private sector has emerged from decades of state control (both directly and indirectly, through state-owned enterprises), a complex political economy, the security situation, knowledge gaps, limited access to finance, and skilled labour shortages. Green growth will create green jobs and decent jobs, by providing green financial incentives for the shift towards projects that generate sustainable green job opportunities.

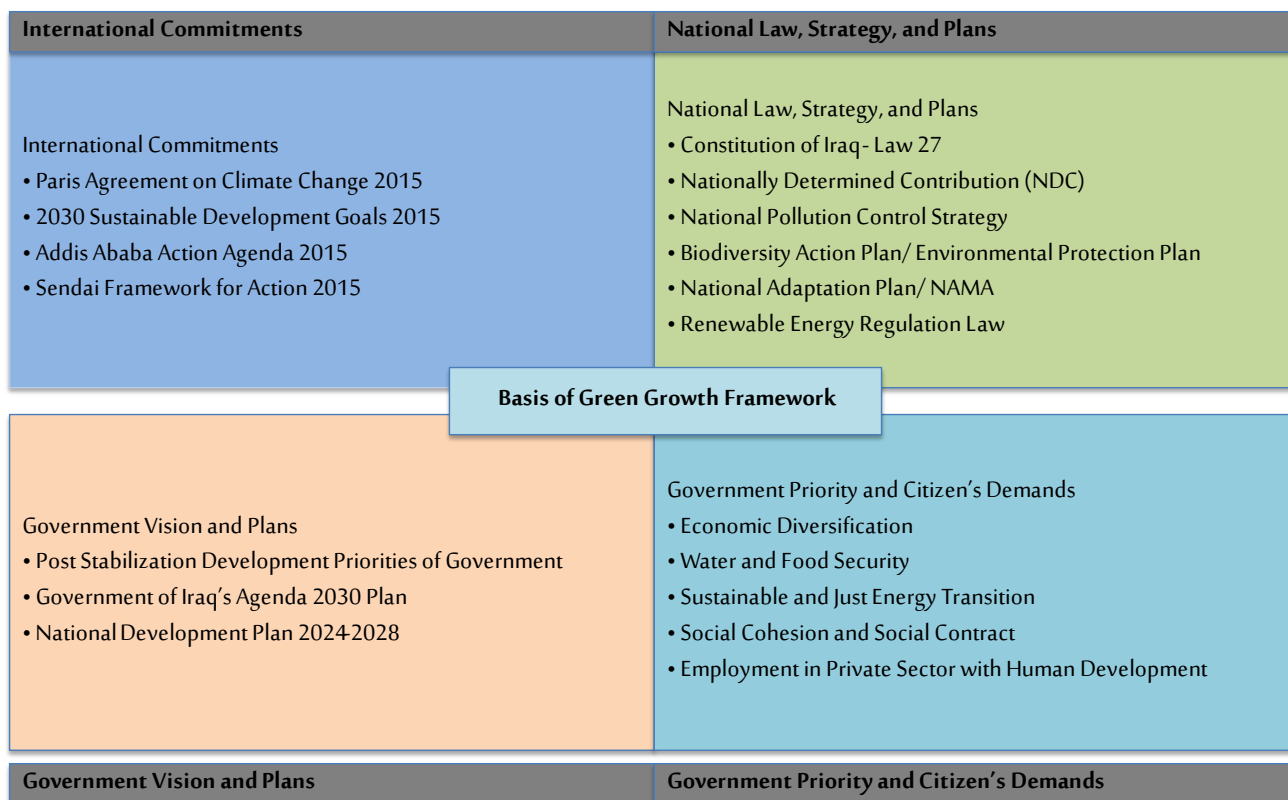
The *green growth* will address all these factors. Reforms that target improving resource allocation and management, cost recovery in the electricity sector, fiscal consolidation and boosting domestic

revenue mobilisation, improving business and financial sector environment, and securing private investments and new job creation are critical for Iraq to limit the adverse physical and fiscal effects of climate change.

Resource efficiency is key for Iraq. The country is facing increasingly limited access to water and shortage of natural gas, that has been continuously wasted (flared). Iraq ranks second in the world, after Russia, in terms of the volumes of gas flared. The country flares almost 50 million m³ of natural gas per day and imports up to 30 million m³ from Iran to fuel its power generation. The flared gas in Iraq contributes around 14 percent of the country’s total GHG emissions, which is among the highest levels in the world. The forgone annual value of the gas flared has been estimated at USD 2.5 billion. Similar amount would be sufficient to fuel more than 10 GW of much-needed electricity generation capacity.


Iraq’s Green Growth Framework

Figure 2: Basis of Green Growth in Iraq



International Commitments

In 2015, several international agreements were reached aimed at addressing pressing global issues related to sustainable development, climate change, disaster risk reduction, and financing for development. The Paris Agreement on Climate Change was adopted by nearly 200 countries with an ambitious goal of limiting global warming to well below 2°C above preindustrial levels while pursuing efforts to limit it to 1.5°C. The 2030 Sustainable Development Goals (SDGs) were also agreed upon by world leaders, comprising 17 interconnected goals focused on eradicating poverty, promoting prosperity, protecting the planet, and ensuring peace and justice for all. Additionally, the Addis Ababa



Action Agenda established a new framework for mobilizing resources and strengthening cooperation to finance sustainable development. Finally, the Sendai Framework for Disaster Risk Reduction 2015-2030 was endorsed, outlining actions to prevent and

reduce disaster losses worldwide, particularly in developing countries. Taken together, these four agreements represent a comprehensive approach to achieving a more equitable, secure, and sustainable future for all people and the planet.

National Law, Strategy, and Plans

Iraq's legislative landscape is evolving to address pressing environmental challenges and embrace sustainable development practices. The Constitution of Iraq, established in 2005, lays the foundation for democratic governance and rule of law, though its implementation has encountered hurdles. Concurrently, Iraq is committed to mitigating climate change, with an updated NDC targeting to reduce emissions by 1 to 2% unconditional and 15% conditional with the contribution of the international efforts increased focus on renewable energy, energy efficiency, and sustainable agriculture. Environmental protection strategies encompass pollution control measures, biodiversity conservation plans, adaptation initiatives, and nationally appropriate mitigation actions. The country's Renewable Energy Regulation Law provides a framework to promote renewable energy sources and aims to significantly increase their contribution to the energy mix by 2030, fostering economic growth and environmental resilience. These integrated efforts underscore Iraq's commitment to sustainable development and environmental stewardship amid evolving socio-political landscapes.


Government Development Priorities

The post-stabilization phase in Iraq heralds a strategic shift towards comprehensive development initiatives aimed at fostering sustainable growth and addressing pressing societal needs. Under the Government of Iraq's Agenda 2030 Plan, the nation outlines ambitious goals aligned with the United Nations Sustainable Development Goals (SDGs), encompassing economic diversification, social inclusivity, and environmental sustainability. Anchored within this overarching framework, the National Development Plan for 2024-2028 delineates specific strategies and policies to drive progress across key sectors such as infrastructure, education, healthcare, and industry. By prioritizing investments in human capital, infrastructure development, and institutional capacity-building, the government endeavors to propel Iraq towards a path of resilience, prosperity, and equitable development, while ensuring alignment with global sustainable development agendas.

Iraq's Green Growth Framework aligns seamlessly with Vision 2030 by supporting its foundational pillars through sustainable and climate-resilient strategies:

Human Capital (Human Development): By prioritizing green skills, Iraq aims to cultivate a workforce equipped for sustainable development, empowering communities with education in renewable energy, climate-smart agriculture, and environmental stewardship. This investment in human capital supports equitable growth, enhances health, and improves quality of life, directly contributing to Iraq's green economy.

Economic Capital (Economic Diversification): Iraq's Green growth will accelerate economic diversification by expanding non-oil sectors like agriculture, clean technology, and eco-tourism.



By encouraging green entrepreneurship and private sector involvement in renewable energy and sustainable industries, Iraq will reduce its oil dependency and create jobs that are more resilient to global economic shifts.

Environment (Sustainable Natural Resource Management): Iraq's green growth efforts emphasize sustainable resource management, addressing climate risks such as water scarcity and land degradation. This approach preserves critical ecosystems, including the Mesopotamian Marshlands and mountain regions, while promoting renewable energy solutions and conservation practices that ensure long-term ecological health.

Good Governance: Iraq's green growth relies on robust governance, aligning with Iraq's goal of enhancing transparency, reducing corruption, and building effective institutions. By creating a governance framework that integrates environmental policies, Iraq has a solid plan to better manage resources, implement reforms, and foster public trust in sustainable development initiatives.

Social Capital (Social Cohesion): Green growth will enhance social cohesion by promoting inclusive development, ensuring that all communities benefit from sustainable initiatives. By addressing inequalities and fostering social inclusion through accessible green jobs and resources, Iraq strengthens its societal resilience against climate-related disruptions.


Together, Iraq's Vision 2030 and Green Growth Framework create a pathway toward a resilient, diversified, and sustainable future that meets immediate needs while building long-term ecological and economic resilience.

Citizen's Priority Demands

Achieving economic diversification is paramount for sustainable development, as it reduces dependency on specific industries and enhances resilience against economic shocks. Coupled with ensuring water and food security, which are fundamental for human well-being, this entails efficient resource management, investment in agricultural innovation, and the promotion of sustainable farming practices. A just energy transition is essential to address climate change while safeguarding the rights and livelihoods of communities, necessitating a shift towards renewable energy sources and equitable distribution of benefits. Social cohesion and a robust social contract are crucial for fostering inclusive development and mitigating disparities, emphasizing the importance of participatory governance, equitable access to resources, and social protection mechanisms. Moreover, fostering employment in the private sector with a focus on human development is key to driving economic growth, enhancing skills, and promoting social mobility, thereby contributing to overall societal prosperity and stability.

Strategic means to achieve Green Growth Objectives in Iraq:

Employment and Employability: Green growth must stimulate job creation for the youth and women to fully harness the demographic dividends in Iraq. The job creation is potential in renewable energy, sustainable agriculture, and eco-friendly industries. Focusing on green skills training and workforce development will increase employability in emerging green sectors, reduce unemployment, and support Iraq's transition to a low-carbon economy.



Sustained Balance of Payments Capabilities: To address oil revenue dependency, Iraq’s green growth will emphasize economic diversification through renewable energy exports, sustainable agriculture, and eco-tourism. Reducing over reliance on oil revenue will stabilize Iraq’s balance of payments and foster a resilient, diversified economy.

Critical Resource Management: Effective green growth will also depend on sustainably managing Iraq’s mineral resources, such as silicon, phosphates, limestones, kaolinitic clay stones, native Sulphur, salt, and natural gas. Iraq dates is a globally reputed quality dates, which can be revitalized by effective management of water resources and ecosystem. Critical natural resources like Iraq’s Mesopotamian Marshes, Mountains, and Forests, and arable land needs to be wisely used to reduce imports and enhance exports. Prioritizing resource conservation, eco-friendly technologies, and efficient resource use ensures long-term availability and ecosystem health, supporting both economic and environmental goals.

Water and Food Security: Green growth must enhance Iraq’s resilience to climate impacts on water and food by promoting climate-smart agriculture, efficient water use, and sustainable land management. This ensures a stable food supply, protects natural resources, and secures livelihoods in the face of climate change.

Innovation and Technology: Investing in green technology and innovation is crucial for transitioning to a low-carbon economy. Iraq’s green growth must include fostering innovation in clean energy, sustainable agriculture, and waste management to drive economic efficiency and environmental sustainability.

Coordination and Cooperation: Achieving green growth requires coordination across government agencies, private sectors, and international partners. Effective collaboration is a must direction to align resources, policies, and investments, ensuring cohesive and sustainable implementation of green initiatives.

These means provide a pathway for Iraq (will be described in details in next chapter) to achieve sustainable economic growth, environmental protection, and social resilience through green growth.





CHAPTER THREE: IRAQ'S GREEN GROWTH VISION, OBJECTIVES, PRIORITIES and EXECUTIVE PATHWAYS

Vision and Objectives for Green Growth in Iraq

A prosperous, climate-resilient, and inclusive Iraq where green growth powers sustainable development, protects the environment, ensures equitable opportunities for all citizens, and transforms Iraq into a leading example of low-carbon, climate resilient, resource-efficient, and innovation-driven development by 2050.

Iraq's vision and objectives for green growth

Providing affordable, secure, and sustainable energy is the cornerstone of progress. This means ensuring that every household and business has access to reliable electricity, while also transitioning to cleaner and more efficient sources by 2050. The energy sector's transformation is part of a broader commitment to addressing climate change.

Water, being a precious resource in the region, is central to Iraq's plans. Iraq is committed to ensuring water security by adopting measures, including promoting the rational use of water and reducing its pollution. Urban wastewater treatment and water recycling are key components of the vision of Iraq's Green Growth Framework.

In the realm of agriculture, the focus is on creating a healthy food system that is eco-friendly and contains mechanisms promoting water-efficient usage and low carbon emissions.

In transportation, Iraq is striving to provide efficient, safe, and environmentally friendly public transit, reducing both congestion and emissions.

But the vision doesn't stop there. Iraq is also deeply invested in protecting its environment, rivers and sea, recognizing the importance of biodiversity and the precious resources in the Arabian Gulf. To this end, conservation efforts are underway to safeguard ecosystems and marine life.


The effort to combat land degradation is also paramount. By increasing green coverage and planting heat and drought-resistant forests, Iraq is not only capturing carbon but also generating income and reducing the severity of sandstorms.

Moreover, new construction projects for schools, universities, hospitals, and other infrastructure will be equipped with renewable energy sources and designed for energy efficiency.

Iraq sees industry as a vital part of its future, with a commitment to a competitive, green, and digitally advanced industrial sector. This approach is highly compatible with the principles of the Fourth Industrial Revolution, ensuring that Iraq remains at the forefront of technological and industrial innovation.

Research and innovation are recognized as crucial drivers of transformative change in Iraq. These areas will continue to receive significant attention and investment, further fuelling the country's development.

Finance plays a pivotal role in making this vision a reality. Sustainable investments are key to delivering Iraq's Green Growth, providing the necessary resources to turn these ambitions into



tangible achievements. It must be translated into actionable plans and programs by taking bold steps to foster economic transformation.

Pathways

The Government of Iraq developed 26 pathways as a follow up of the implementation of the recommendations of the Iraq's First Climate Conference in Basra in March 2023. The proposed 26 pathways are outlined below:

01 Energy Pathway:

Enhancing energy diversity, optimizing efficiency, and mitigating emissions.

The key performance indicators (KPIs) to measure the success and progress of energy pathway includes:

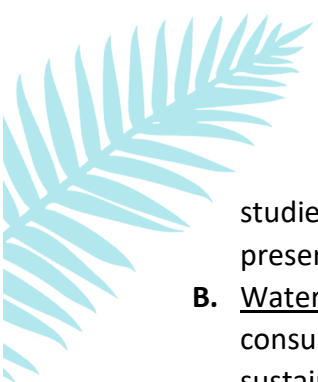
- A. Gas Flaring Reduction: Achieve zero associated gas flaring and stop burning by 2030, effectively reducing methane emissions and other greenhouse gases.
- B. Carbon Footprint Reduction: Decrease the carbon footprint of oil production processes through electrification and operational improvements while ensuring energy security and cost reduction.
- C. Renewable Energy Expansion: Expand renewable and alternative energy projects, particularly through the installation of solar energy systems, with a specific focus on government buildings.
- D. Efficiency Improvement: Improve the efficiency of electricity generation equipment by transitioning from simple cycle to combined cycle systems.
- E. Carbon Capture and Utilization: Establish stations for capturing CO₂ gas from the atmosphere and its utilization in various industrial applications, or its storage in geological formations.
- F. Electricity Loss Reduction: Reduce the loss of generated electrical energy by enhancing the efficiency of key system components (production, transportation, and distribution) and decreasing technical and non-technical losses using modern technology.
- G. Nuclear Power Feasibility Study: Conduct a feasibility study on the establishment of nuclear power plants in the long term, considering both economic and security aspects.

02 Sustainable Water Management:

Implementing integrated pathway to ensure water security while effectively managing the water footprint.

Sustainable Water Management path has well-defined key performance indicators (KPIs) to measure progress in implementing integrated water management. Here are the KPIs:

- A. Water Resources Management: Enhance water resources management in line with the principles of integrated water management, promoting sustainability and resource optimization with emphasis on preventing impacts on the ecosystem and devising suitable solutions for the resulting environmental challenges, Special attention is given to water desalination to alleviate strain on existing water sources, including conducting feasibility



studies on using desalinated water in agriculture, primarily focusing on ecosystem preservation.


- B. Water Policy Development: Develop policies and enhance plans to rationalize water consumption and improve water management, ensuring that water is used efficiently and sustainably.
- C. Water Use Efficiency: Improve water use efficiency across various sectors, including agriculture, industry, and domestic uses, reducing wastage and optimizing resource utilization.
- D. Irrigation Efficiency: Enhance field irrigation efficiency through the adoption of modern irrigation techniques, lining irrigation canals, and reducing water losses, thereby conserving water resources.
- E. Water Resource Development: Develop available water resources by implementing water harvesting systems, including rainwater harvesting and torrents, to increase water availability.
- F. Non-Conventional Water Sources: Promote the use of non-conventional water sources, such as the reuse of agricultural drainage water, to reduce pressure on traditional water sources.
- G. Environmental Runoff Reduction: Developing modern water transport mechanisms to reduce water evaporation, leakage into the soil, and pollution resulting from surface water transport, and prevent the expansion of marine water in the Shatt Al-Arab, safeguarding the ecosystem.
- H. Marsh Reflooding: Implement marsh reflooding initiatives (whenever surface water is available) to restore the integrity of marsh ecosystems, which play a crucial role in mitigation and biodiversity preservation.

03 Agricultural and Food Pathway:

Embracing water and energy smart farming practices and reshaping the agricultural landscape

Agricultural and Food path emphasizes sustainable practices and reshaping the agricultural landscape. Here are key performance indicators (KPIs) to assess the progress of this Path:

- A. Climate-Resilient Agriculture: Invest in climate-resilient agriculture by conducting a study on the water needs of plants in various growth stages, ensuring water-efficient practices.
- B. Drought-Resistant Crops: Select and promote varieties of crops that are drought-resistant, reducing the vulnerability of agriculture to water scarcity.
- C. Virtual Water Utilization: Apply the concept of virtual water when formulating agricultural plans, especially in the importation of food items that require substantial water for irrigation. This practice contributes to water-wise food sourcing.
- D. Desertification Prevention: Carry out initiatives to combat desertification by rehabilitating vegetation cover, expanding dune treatment efforts, and establishing green belts, thus mitigating the detrimental effects of desertification.
- E. Land Degradation Reduction: Implement measures to reduce agricultural land degradation and promote the recycling of agricultural and livestock waste, ensuring the sustainability of agricultural practices and minimizing environmental impact.

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- F. Adaptive Agricultural Economy: Supporting and energizing the agricultural economy by addressing production and marketing challenges while ensuring the sustainability of solutions to promote the sector's self-development in subsequent phases.

04 Environmental Pathway:

Minimizing pollution and embracing a sustainable environmental footprint

Environmental path aims to minimize pollution and establish a sustainable environmental footprint. Here are key performance indicators (KPIs) to track the progress of this path:

- A. Pollution Reduction: Reduce pollution by implementing and adhering to environmental standards and limits for pollutants, ensuring that emissions and contamination stay within acceptable boundaries.
- B. Environmental Restoration: Restore the environment by eliminating pollutants from water, air, and soil, actively addressing the legacy of pollution and contamination.
- C. Sustainable Resource Use: Promote the sustainable use of natural resources, emphasizing practices that do not harm the environment and are aligned with conservation principles.
- D. Afforestation and Protected Areas: Implement afforestation and forest cultivation initiatives while establishing protected areas to reduce air pollution, preserve biodiversity, and create green spaces for environmental health.

05 Urban Development Pathway:

Constructing climate-resilient, sustainable cities with a focus on green building principles

Urban Development path focuses on building climate-resilient and sustainable cities with an emphasis on green building principles. Here are key performance indicators (KPIs) to measure the progress of this path:

- A. Construction Material and Technology Investment: Invest in the production of construction materials and sustainable technologies that promote energy efficiency and reduce greenhouse gas emissions in urban development projects.
- B. Sustainable City Construction: Ensure that the construction of sustainable cities adheres to the principles of green construction, emphasizing eco-friendly and environmentally responsible building practices. Particularly in urban areas, green building initiatives, and renovating old and rundown government buildings into green spaces. Simultaneously, occupants are relocated to buildings on the city outskirts designed to promote environmental sustainability.
- C. Building Code and Standard Enhancement: Update and approve building codes, standards, and sustainability parameters that support climate-resilient and sustainable urban development, promoting best practices and environmental responsibility.
- D. Urban Circular Economy Implementation: Promote and implement urban circular economy principles in city development, emphasizing the reduction, reuse, and recycling of resources and waste, contributing to the sustainability and resilience of urban areas.



06 Sustainable Transportation Pathway:

Implementing modern and eco-friendly transport systems that lower emissions and protect the environment

These Key Performance Indicators (KPIs) focus on transportation and sustainability initiatives:

- A. Public Transport Network Expansion: Expand public transport networks and promote the use of modern renewable energy sources in public transportation systems, reducing emissions and enhancing efficiency.
- B. Building Greener Roads: we can conduct green ways development, decreasing emissions and improving local air quality.
- C. Electric Car Adoption: Implement plans for the gradual transition from traditional car fuel systems to electric cars, contributing to a reduction in greenhouse gas emissions and dependence on fossil fuels.
- D. Transport Engine Standards: Establish specific standards for the engines used in various modes of transportation, including aircraft, cars, trains, and other means, to improve energy efficiency and minimize environmental impact.
- E. Railway Freight Transport: Promote the utilization of railways for the transportation of goods, encouraging a more environmentally friendly and efficient mode of freight transportation.

07 Water and Sanitation Pathway:

Ensuring sustainable and secure treatment of drinking water and sanitation.

These Key Performance Indicators (KPIs) pertain to water management and environmental sustainability:

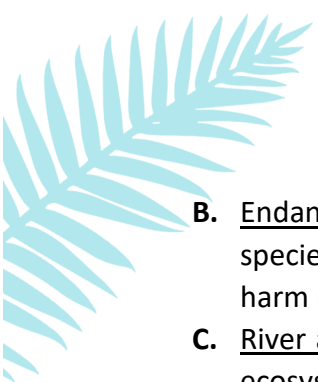
- A. Potable Water Infrastructure: Ensure the secure delivery of potable water to homes while preparing the infrastructure for long-term sustainability and promoting rational water consumption through the adoption of modern control methods.
- B. Wastewater Treatment Technology: Implement modern technologies for wastewater treatment, improving the efficiency and environmental impact of the treatment processes.
- C. Sewage Water Treatment: Establish effective sewage water treatment systems, addressing the safe and sustainable disposal of sewage.
- D. Waste Recycling and Landfill Control: Promote waste recycling and enhance control over sanitary landfill operations to minimize the environmental impact of waste disposal.
- E. Treated Sewage Water Reuse: Redirect treated sewage water to areas outside cities for agricultural and industrial purposes, optimizing the utilization of this resource.

08 Biodiversity Pathway:

Preserving biodiversity and natural ecosystems.

These Key Performance Indicators (KPIs) are related to environmental protection and conservation efforts:

- A. Protected Area Preservation: Ensure the protection and preservation of designated protected areas and critical habitats to safeguard biodiversity and sensitive ecosystems.

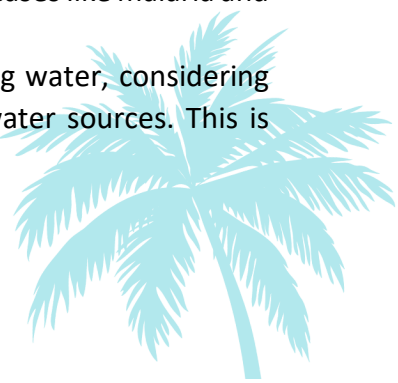
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- B. Endangered Species Conservation: Implement measures for the conservation of endangered species and the prevention of the introduction and spread of invasive alien species that can harm native ecosystems.
 - C. River and Land Pollution Prevention: Prevent pollution of river water and land by adopting ecosystem-based approaches that enhance natural processes for pollution control and ensuring rivers have a minimal level of environmental flow.
 - D. Forest and Protected Area Establishment: Establish new forests and protected areas, both in rural and urban settings, with an emphasis on providing ecosystem services that protect and enhance natural reserves.


09 Health Pathway:

Ensuring the overall well-being of the population by integrating elements of the environment and climate change into the health services for addressing the interconnected challenges that impact public health.

Key Performance Indicators (KPIs) encompass a wide spectrum of healthcare, environmental conservation, and healthcare system resilience aspects:

Environmental Health:

- A. Air Quality Management: Focus on monitoring and enhancing air quality to mitigate respiratory and cardiovascular health issues. Encourage cleaner energy sources and reduce emissions from transportation and industrial activities.
 - B. Climate-Resilient Healthcare Infrastructure: Develop healthcare facilities capable of withstanding extreme weather events, given the increasing frequency of severe natural disasters due to climate change. This includes equipping hospitals and clinics to handle emergencies and power outages.
 - C. Disease Surveillance and Early Warning Systems: Establish robust surveillance systems to track the spread of climate-sensitive diseases, as climate change can alter disease patterns. Early detection is vital for timely responses.
 - D. Health waste management: Control system establishment to monitor and regulate the disposal of sanitary facility waste, ensuring that environmental factors remain unaffected by this waste disposal process.
 - E. Establishing a monitoring and control system for animal diseases and supporting veterinary centres, considering the direct correlation of these diseases with climate change and the availability of pastures and fodder which impacts public health due to transmissible diseases.
 - F. Health Education and Climate Awareness: Raise public awareness about the health impacts of climate change, empowering individuals to take preventive measures and make informed decisions regarding their health.
 - G. Vector-Borne Disease Control: Address the expansion of disease vectors such as mosquitoes due to climate change. Implement strategies to control vector-borne diseases like malaria and dengue fever.
 - H. Water Quality and Availability: Ensure access to safe and clean drinking water, considering the impact of changing precipitation patterns and temperatures on water sources. This is crucial for preventing waterborne diseases.
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- I. Food Security: Tackle food security challenges stemming from climate change by promoting sustainable agriculture and ensuring a stable food supply, thereby minimizing malnutrition and food-related health issues.
 - J. Mental Health and Resilience: Recognize the psychological impact of climate-related disasters and stressors. Provide mental health services and resilience-building programs to help communities cope with these challenges.
 - K. Heat-Related Illness Prevention: Develop strategies to mitigate health risks associated with extreme heat, including heatstroke and heat-related illnesses. Implement cooling centers during heatwaves.
 - L. Vulnerable Populations: Prioritize the health needs of vulnerable populations, including the elderly, children, and those with preexisting health conditions, who are often disproportionately affected by climate-related health risks.
 - M. Research and Data Collection: Invest in research to better understand the links between climate change and health. Collect and analyze data to track health impacts and inform evidence-based policies.
 - N. International Collaboration: Collaborate with other countries and international organizations to exchange knowledge and resources related to climate change and health. Many health challenges are global and require a coordinated response.

Additional KPIs to be integrated into the health path, fostering a more resilient and sustainable healthcare system capable of effectively addressing the health impacts of climate change and environmental challenges:

- O. Marsh Ecosystem Rehabilitation: Implement measures for the rehabilitation and protection of ecosystems in marsh areas, particularly those designated as World Heritage Areas.
- P. Disease Prevention and Climate Change: Develop and support disease prevention systems, especially those related to diseases influenced by climate change, while combating endemic and epidemic diseases.
- Q. Infrastructure Rehabilitation for Health: Establish and rehabilitate fragile healthcare infrastructure to enhance the capacity for health response during crises.
- R. Climate-Smart Healthcare Facilities: Adopt climate-smart practices in healthcare facilities and enhance the resilience of health systems to climate-related challenges.
- S. Health and Family Program Support: Provide support for health and family programs to address various health and well-being issues.
- T. Mitigating Technological Health Impacts: Implement measures to reduce the negative health impacts of technological applications, promoting the safe and responsible use of technology.

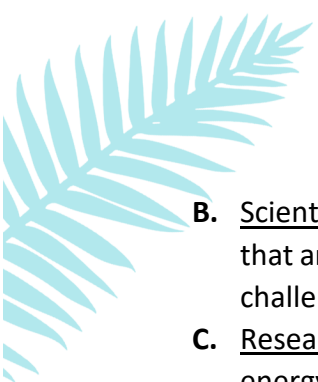
10 Education and Scientific Research Pathway:

Fostering education and research endeavours that actively address climate change and uphold environmental conservation.

These Key Performance Indicators (KPIs) pertain to education, research, and capacity building in the context of environmental and climate issues:

- A. Curriculum Integration: Ensure that educational curricula at all levels, from primary education to higher education, directly address environmental and climate issues and their impacts.



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- B. Scientific Discipline Update: Update and modernize scientific disciplines and fields of study that are pertinent to environmental and climate issues, reflecting the evolving knowledge and challenges in these domains.
 - C. Research Centre Support: Provide support to research centers focusing on energy, renewable energy, and environmental and climate change issues, fostering innovation and solutions to critical challenges.
 - D. Education for Sustainable Development (ESD): Integrate Education for Sustainable Development (ESD) into education policy and invest in building the capacity of human resources to promote sustainable practices and awareness.
 - E. Investment in Human Capital: Direct significant investments toward sectors that harness the creative potential of human capital, with a special focus on education and the advancement of scientific research, promoting innovation and sustainable development. To ensure the sustainable funding of scientific research, the financial system for scientific research should be separated from higher education. This separation aims to ensure the sustainability of financial resources supporting scientific research through the establishment of entity or academy for scientific research under the Ministry's umbrella. The initiative also includes granting awards for outstanding research and transforming universities into research-focused institutions by expanding postgraduate programs across all disciplines, including environmental studies and climate change research.

11 Housing and Climate Migration Pathway:

Ensuring secure and resilient housing in an evolving environmental landscape.

These Key Performance Indicators (KPIs) focus on addressing the impacts of climate change and ensuring the well-being of affected populations:

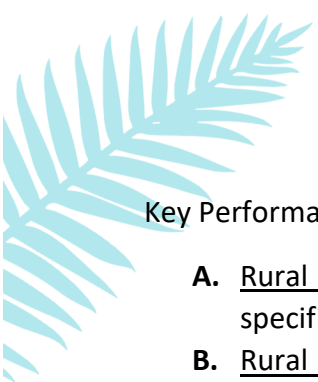
- A. Climate Change Impact Mitigation: Implement strategies to mitigate the effects of climate change on the population, emphasizing adaptation measures to enhance the quality of life in areas most affected by climate change.
- B. Reducing urban migration: Developing initiatives to limit the migration of people from rural areas to urban centres and ensure that urban residents continue to have access to essential services and maintain their quality of life.
- C. Climate Migration Management: Establish monitoring systems for climate migration and provide necessary services and support in the areas to which displaced populations have relocated, safeguarding their well-being and integration.

12 Responsive Rural Development Pathway:

Creating and sustaining rural communities that offer a high quality of life for their residents while preventing climate-induced displacement and strengthening the resilience of these communities in the face of environmental challenges.

The Responsive Rural Development path aims to establish and maintain thriving rural communities, ensuring a high quality of life for their residents, while mitigating climate-induced displacement and enhancing their resilience to environmental challenges.





Key Performance Indicators (KPIs) for this path include:

- A. Rural Services Provision: Provide essential services to rural areas while aligning with the specific needs and requirements of rural development.
- B. Rural Migration Reduction: Implement initiatives to reduce rural-to-urban migration by fostering the development and improvement of rural regions, making them more attractive for residents.
- C. Empowerment of Rural Women: Support and empower rural women, recognizing their crucial role in community development and resilience.
- D. Climate-Resilient Rural Development: Ensure effective development management that addresses the impacts of climate change on rural populations, safeguarding their well-being and livelihoods.

13 Employment and Green Job Pathway:

Generating employment prospects to address unemployment while making investments in climate-related opportunities.

The Key Performance Indicators (KPIs) are focused on promoting economic growth, job creation, and community engagement in the context of environmental and climate issues:

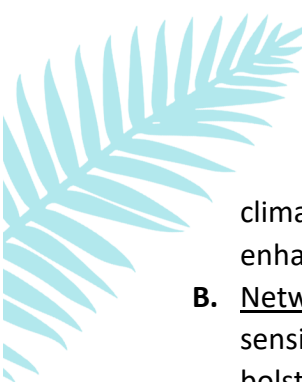
- A. Microfinance for Agricultural and Craft Industries: Provide support for microfinance initiatives aimed at developing small and medium enterprises in agricultural industries and craftsmanship, fostering economic growth in these sectors.
- B. Climate Issue Participation: Expand community participation in addressing climate issues, including through volunteer work and civic engagement, promoting a sense of collective responsibility and action.
- C. Green Jobs Creation: Create opportunities for green jobs, facilitating employment in sectors that contribute to environmental sustainability and climate resilience. Expanding opportunities to create new employment options away from densely populated areas through ideas and designs focused on climate change impacts mitigation, reducing overpopulation effects, and offering green job prospects.
- D. Job Opportunities and Support for Vulnerable Populations: Offer job opportunities for youth, climate migrants, and displaced individuals, providing them with access to financial support to enhance their economic prospects and self-reliance.

14 Risk Management Pathway:

Implementing risk management measures to mitigate the impact of climate and environmental disasters and prevent their consequences.

The Key Performance Indicators (KPIs) outlined here focus on strengthening disaster preparedness, early warning systems, and risk management related to environmental and climate issues:

- A. National Early Warning System Enhancement: Develop a comprehensive national early warning system that leverages artificial intelligence to predict weather conditions, enhance disaster preparedness, and build the capacity of institutions to address environmental and



climatic disasters. Tracking drought occurrences and identifying the most impacted areas and enhance the effectiveness of response efforts aimed at minimizing its repercussions.

- B. Network Unification for Early Warning: Integrate and unify existing early warning and remote sensing systems across relevant ministries, fostering collaboration and information-sharing to bolster the capacity of both official institutions and society in managing environmental and climate-related risks.
- C. Environmental and Climate Risk Matrix Development: Create a matrix to assess and quantify environmental and climate risks, providing a structured framework for risk analysis and mitigation.
- D. Flood Prediction and Hazard Mapping: Develop the capability to predict potential floods and map their hazards, enabling proactive measures to mitigate the impacts of flooding.

15 Private Sector and Civil Society Engagement Pathway:

Recognizing the vital role of the private sector and civil society in addressing environmental, climate, and investment challenges.


These Key Performance Indicators (KPIs) emphasize the involvement of the private sector and civil society in shaping policies and initiatives related to environmental and climate issues:


- A. Private Sector and Civil Society Engagement: Promote active participation of the private sector and civil society in the development of policies and plans addressing environmental and climate concerns. Encourage collaboration and contributions from a wide range of stakeholders.
- B. Civil Society Climate Initiatives: Encourage civil society to voluntarily undertake initiatives for both adaptation and mitigation to climate change. These initiatives can play a pivotal role in addressing climate challenges.

16 Awareness-Building Pathway:

Promoting environmental and climate awareness.

The Key Performance Indicators (KPIs) highlighted here aim to promote understanding, awareness, and education concerning environmental and climate issues including, promoting the rational use of resources to conserve ecosystems and prevent depletion:

- A. Procedures and Guidelines for Environmental Understanding: Develop and implement procedures and guidelines to enhance understanding of the environment and climate change, providing a structured framework for informed decision-making.
 - B. Environmental and Climate Awareness Programs: Create and implement awareness programs focusing on environmental and climate issues across various sectors, fostering a sense of responsibility and shared knowledge.
 - C. Integration of Environmental and Climate Education: Incorporate environmental and climate issues into educational curricula to ensure that these topics are an integral part of the learning experience from an early age.
 - D. Community Health Awareness: Raise awareness among communities exposed to climate-related diseases, equipping them with information and knowledge to protect their health in the face of climate-related health risks.
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- E. **Media and Communication Outreach:** Utilize media, satellite channels, and social media platforms as effective means for disseminating environmental and climatic culture to a wider audience. These channels can play a crucial role in raising awareness and fostering a culture of environmental stewardship.

17 Human Resources Pathway:

Investing in and empowering youth, particularly girls, and enhancing support for women and children.

The Key Performance Indicators (KPIs) provided focus on building human capacity and engaging various demographic groups in addressing climate change:

- A. **Youth Engagement in Climate Projects:** Invest in the demographic potential of young men and women by involving them in climate adaptation and mitigation projects, harnessing their energy and creativity to tackle climate challenges.
- B. **Manpower Strengthening for Improved Services:** Enhance service quality by bolstering the workforce in both the public and private sectors, ensuring that there are sufficient skilled professionals to address climate-related issues effectively.
- C. **Private Sector Capacity Building for Climate Resilience:** Equip the private sector with the necessary skills and knowledge to confront climate change, fostering resilience and sustainability in business practices.
- D. **Empowerment and Training for Rural Women:** Empower rural women through training programs that provide them and children with the tools to address climate change, enhancing their ability to adapt to environmental challenges.

18 Adaptive Legislative Pathway:

Implementing responsive legislative and legal frameworks to safeguard the environment and tackle the impacts of climate change.

The Key Performance Indicators (KPIs) provided emphasize the importance of legal frameworks and regulations for climate change adaptation and environmental protection:

- A. **Climate Change Law Update:** Revise and update existing laws and regulations related to climate change adaptation and mitigation to ensure they are in line with current environmental challenges and best practices.
- B. **Legal Framework for Environmental Protection:** Develop a comprehensive legal framework aimed at safeguarding the environment, reducing emissions, and supporting measures to address climate change, with the ultimate goal of enhancing the quality of life in Iraq.





19 Climate Technology Pathway:

Implementing eco-friendly and efficient technological solutions to confront the challenges of climate change.

The Key Performance Indicators (KPIs) provided focus on technology transfer, green and clean technologies, and the adoption of innovative approaches to address climate change and environmental sustainability:


- A. Climate Technology Transfer Expansion: Promote the expansion of climate technology transfer, tailored to the national context, with a focus on technologies that reduce greenhouse gas emissions.
- B. Support for Green and Clean Technologies: Provide support for green and clean technologies, particularly those that minimize waste, such as solar and wind energy.
- C. Technology Transfer for Climate-Smart Agriculture: Facilitate technology transfer for agriculture, including the use of soil moisture sensors and precision agriculture techniques. Embrace modern technologies to address water scarcity and implement climate-smart agriculture practices, utilizing Fourth Industrial Revolution applications like artificial intelligence, robotics, and e-waste management.
- D. Digitizing Energy and Environmentally Friendly Digital Applications: Employ digitalization processes in energy production to reduce energy losses, generate energy from renewable sources, and create environmentally friendly digital applications.
- E. Efficiency Enhancement of Information and Communication Technologies: Raise the efficiency of Information and Communication Technologies infrastructure to contribute to the development of innovative solutions for climate change mitigation.
- F. Support for Research and Development in Green Technologies: Back research and development programs in green technology applications, embracing digital transformation initiatives to establish smart cities, improve waste management, and enhance energy management for long-term sustainability.
- G. Support for Extracting and Processing Minerals for Energy Technologies: Provide support for the extraction and processing of minerals used in clean energy technologies, energy storage batteries, and electric vehicles. Modern technology utilization, to establish central control systems for managing natural resources. This includes ensuring their rational use and monitoring and addressing the impacts of climate change.

20 International Cooperation Pathway:

Playing an active role in orchestrating international collaboration to bolster environmental initiatives and combat climate change in Iraq.

The provided Key Performance Indicators (KPIs) focus on international commitments, cooperation, and partnerships to address climate change and environmental issues:

- A. Paris Agreement Commitment Implementation: Act on Iraq's commitments to the Paris Agreement, reducing emissions and air pollution, and considering healthcare aspects as stipulated in COP2 decisions.
- B. International Support for NDC Implementation: Ensure international support for the implementation of Iraq's Nationally Determined Contributions (NDC) and associated projects.

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- C. International Cooperation for Risk Management: Strengthen international cooperation for information exchange related to risk management and addressing the effects of climate change, facilitating a collaborative approach to mitigating climate-related challenges.
 - D. Memorandums of Understanding (MOUs) Incorporating Climate Change: Establish Memorandums of Understanding (MOUs) that align with climate change and development goals, creating a framework for addressing environmental and developmental challenges.
 - E. Partnerships with Energy and Emission Reduction Institutions: Activate partnerships with international institutions specializing in energy and emission reduction, such as the International Energy Agency, the International Renewable Energy Agency (IRENA), and the International Atomic Energy Agency (IAEA), to leverage expertise and resources in these areas.

21 Climate Governance Pathway:

Ensuring effective and transparent governmental performance in addressing climate issues while maintaining integrity and preventing corruption.

The Key Performance Indicators (KPIs) provided emphasize the importance of effective institutional frameworks, knowledge sharing, transparency, regulation, collaboration, and integrity in addressing climate change and environmental sustainability:

- A. Institutional Capacity Enhancement: Develop an institutional framework capable of strengthening mechanisms to improve capacity levels for effective planning and management of climate-related initiatives.
- B. Knowledge Exchange for Efficiency: Ensure that lessons learned, and best practices are shared comprehensively, leaving no one behind, to enhance the efficiency and effectiveness of climate action.
- C. Transparency and Predictability in Funding: Promote transparency in funding allocation and enhance predictability in financial support for climate-related projects and programs.
- D. Coherent Financial Regulations: Establish coherent and consistent regulations that unite financial regulators and supervisory authorities, enhancing the role of the financial system in managing climate-related risks and facilitating financial mobilization for low-carbon and climate-sensitive investments.
- E. Collaborative Approach for Stability: Adopt a collaborative approach that supports stability and prevents conflict and tension, particularly concerning issues related to water and displacement.
- F. Corruption Control in Climate Projects: Implement measures to control corruption in the implementation of climate projects and programs, ensuring that resources are allocated efficiently and transparently.
- G. Integration of Climate Measures into National Policies: Integrate climate change measures into policies, strategies, and plans at the national level to ensure a comprehensive and coordinated approach to addressing climate challenges.





22 Shift in Consumption and Production Patterns Pathway:

Embracing suitable consumption practices that are adaptable to the challenges of climate change.

The provided Key Performance Indicators (KPIs) focus on analyzing and modifying consumption patterns and promoting environmentally responsible practices:

- A. Consumption Pattern Analysis: Analyse consumption patterns in energy, food, and water to identify areas for improvement and efficiency.
- B. Supportive Policies for Reduced Consumption: Encourage the development and implementation of supportive policies aimed at reducing food and water consumption and ensuring the safe and sound disposal of solid waste.
- C. Energy-Efficient Goods: Promote the use of energy-efficient products and goods to reduce energy consumption and promote sustainability.
- D. Recycling and Waste Utilization: Encourage recycling and the utilization of municipal and agricultural waste to minimize environmental impacts and promote resource efficiency.

23 Climate Innovation Pathway:

Creating a secure and sustainable environment that fosters creativity and innovation.

The provided Key Performance Indicators (KPIs) highlight the importance of fostering creativity, innovation, and skills development in various sectors including establishing a fund to support innovations and projects that enhance resilience to climate change:

- A. Creative Capability Development: Focus on developing creative capabilities, particularly in education, training, and culture, and link them with the advanced and accurate industrial sector, with a strong emphasis on sustainable energy innovations.
- B. Practical Expertise and Skills Training: Ensure that trainees gain practical expertise and skills that are relevant to the demands of the industry.
- C. Stimulating Creativity and Innovation: Provide the necessary requirements to stimulate creativity and innovation among citizens, encouraging them to contribute to the development of new ideas and solutions.
- D. Supportive Strategies and Policies for Creative Ideas: Develop stimulating and supportive strategies and policies to effectively implement creative ideas and innovations, facilitating their Creative Capability Development: Focus on developing creative capabilities, particularly in education, training, and culture, and link them with the advanced and accurate industrial sector, with a strong emphasis on sustainable energy innovations.
- E. Development of Key Economic Sectors: Concentrate on developing economic sectors with special significance, such as Information and Communication Technology and advanced industries, to promote economic growth and sustainability.
- F. Intellectual Property Management: Apply intellectual property regulations to ensure the proper and effective management of intellectual property rights, fostering innovation and protecting the interests of innovators.



24 Financing Pathway:

Prudent allocation of financial resources and investments to address the challenges posed by climate change.

These Key Performance Indicators (KPIs) center on securing funding from various sources to support climate mitigation, resilience, and sustainability efforts:

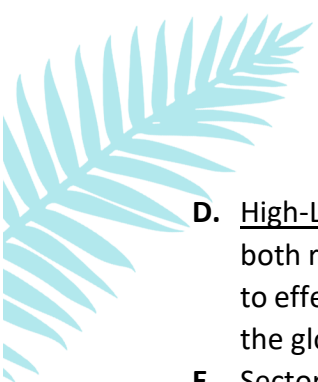
- A. National Funding for Green Initiatives: Secure national funding aligned with the reduction of greenhouse gas emissions and the establishment of infrastructure resilience and sustainability, emphasizing the importance of domestic financial support for environmentally responsible projects.
- B. International Financial Support Mobilization: Mobilize international financial support by actively engaging with developed countries to fulfil their commitments, including the goal of jointly mobilizing \$100 billion annually to meet the urgent mitigation and adaptation needs of developing countries, with a focus on cooperation with the Green Climate Fund (GCF).
- C. Private Sector Engagement in Low-Carbon Investments: Encourage private sector involvement in mobilizing finance for low-carbon and flexible investments, leveraging the potential of private capital for sustainable climate initiatives.
- D. Sustainable Financial System for Climate Initiatives: Establish a new and sustainable financial system that provides financing for private sector initiatives and innovations to address climate change and improve agricultural production in arid regions, ensuring a consistent flow of funds for climate-resilient projects.
- E. Arab and International Development Finance Support: Mobilize Arab and international development finance institutions to provide continuous funding for scientific and technical assistance initiatives aimed at implementing climate change mitigation and adaptation measures, emphasizing collaboration with regional and global partners.

25 Coordination and Unity of Efforts Pathway:

Facilitating effective coordination to bring together collective efforts in tackling climate change.

These Key Performance Indicators (KPIs) are focused on enhancing coordination and collaboration among various stakeholders to address climate-related challenges:

- A. Policy Coordination and Knowledge Exchange: Facilitate the coordination of policies, the development of national plans, research activities, and the exchange of knowledge and information among all relevant parties involved in climate initiatives, promoting a holistic and well-informed approach.
- B. Institutional Coordination Mechanism: Establish a comprehensive institutional coordination mechanism that clearly defines the roles and responsibilities of each ministry and stakeholder concerning climate issues, ensuring a well-organized and efficient response to climate challenges.
- C. Participatory Approach Promotion: Promote a participatory approach that encourages active engagement and collaboration between government agencies, civil society organizations, the private sector, and international organizations, fostering a collective effort in addressing climate-related issues.

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- D. High-Level Technical Cooperation Plans: Develop plans for high-level technical cooperation at both regional and international levels, enhancing knowledge sharing and technical assistance to effectively address climate challenges through cooperation with neighboring countries and the global community.
 - E. Sectoral Committee Coordination and National Unity: Ensure the efficient coordination of sectoral committees and unify their efforts at the national level, fostering a cohesive and synchronized approach to address climate and environmental challenges.

26 Climate Issue Monitoring and Evaluation Pathway:

Establishing sustainable mechanisms for monitoring and evaluating climate action.

The Key Performance Indicators (KPIs) for the Climate Issue Monitoring and Evaluation path:

- A. Clear Implementation Objectives and Mechanisms: Establish clear implementation objectives and define specific roles and mechanisms for follow-up, monitoring, and evaluation, ensuring that climate and environmental initiatives are effectively carried out.
- B. Standard Progress Measures: Develop standardized measures (indicators) to track progress at both national and regional levels, enabling accurate assessment of the success and impact of climate and environmental programs.
- C. Monitoring and Evaluation Committee Formation: Create follow-up, monitoring, and evaluation committees responsible for generating periodic reports on the progress of climate and environmental initiatives, enhancing transparency and accountability in the process.

Expected high level results from the green growth strategies

Therefore, Iraq expects by implementing all the 26 pathways, the country will achieve the following changes and results.

- fresh air, clean water, healthy soil, and biodiversity
- renovated, energy efficient buildings and townships.
- healthy and affordable food with lower carbon footprint
- more public transport, low carbon public transport
- cleaner energy and cutting-edge clean technological innovation to manage gas flaring.
- longer lasting products that can be repaired, recycled, and re-used.
- future-proof jobs and skills training for the transition
- globally competitive and resilient industry.
- higher water, food, energy, and health security
- reduced climate displacement and mal adaptations.
- increased number of green jobs.
- more urban centres and cities with green jobs and services and ability to absorb people from rural areas.
- Increase of national income from non-oil revenue.
- increased energy mix from renewables and clean energy.





CHAPTER FOUR: GENERAL GOVERNANCE

Governance in Green Growth for Iraq

Governance in the context of green growth refers to the policies, institutional frameworks, and decision-making processes that guide Iraq's transition toward a sustainable, low-carbon economy. Effective green governance ensures that environmental, economic, and social objectives are integrated into national development strategies while maintaining transparency, accountability, and stakeholder participation.

The transfer of governance mechanisms in Iraq and specifically in green growth efforts involves decentralization of environmental management, moving the authorities and prioritizing to local authorities (which falls under capacitating the local authorities), and engaging the private sector, civil society, and international partners in sustainable development initiatives. This includes delegating renewable energy projects to local governments, promoting public-private partnerships in clean technology, and implementing digital governance tools to track resource use and enforce environmental regulations. Strengthening governance mechanisms will ensure that Iraq's green transition is inclusive, efficient, and resilient, fostering economic diversification, climate adaptation, and sustainable resource management in alignment with national and global sustainability standards.

Stakeholders' roles in achieving green growth.

Achieving green growth in Iraq requires collaboration and coordinated efforts from various stakeholders. These includes the Government, Private Sector, Civil Society, Youth, Women, Media, Academic and Research Institution, and International Partners. The role of these stakeholders is expected as following.

Government:

The government will implement policies, regulations, and enable investments in developing facilities, infrastructure, and financing for Iraqi startups.

Role of each ministry and entities not affiliated with ministries to implement the Green Growth Framework are illustrated in Annex-1.

- **Policy Formulation:** Government will formulate and implement policies that promote green growth, such as environmental regulations, energy transition framework, renewable energy law, PPP guideline for Renewable Energy, incentives for renewable energy, climate investment plan, policy and finance for green enterprises, and sustainable development plans.
- **Investment:** Government will allocate funds for green infrastructure projects, innovation, research and development in renewable energy, green jobs, and environmental conservation efforts.
- **Regulation:** Implemented regulations to ensure businesses and industries adhere to environmental standards and promote sustainable practices.



Private Sector:

The private sector can play a crucial role in green growth through innovation, investment, and corporate social responsibility. Private companies will drive green growth by investing in renewable energy, sustainable technology, and eco-friendly production methods. Additionally, private sector may adopt sustainable practices, reduce carbon emissions, and support community initiatives for environmental conservation as part of their corporate social responsibility efforts. Encouraging green entrepreneurship further promotes innovation and economic growth in sectors like clean energy, waste management, and sustainable agriculture.

- Innovation and Investment: Private companies can drive green growth by investing in renewable energy, sustainable technology, and eco-friendly production methods.
- Corporate Social Responsibility (CSR): Companies can adopt sustainable practices in their operations, reduce carbon emissions, and support community initiatives for environmental conservation.
- Green Entrepreneurship: Encouraging entrepreneurship in green sectors, such as clean energy, waste management, and sustainable agriculture, fosters innovation and economic growth.


Civil Society:

Civil society organizations can play a vital role in environmental sustainability. They can raise awareness about environmental issues, advocate for sustainable policies, and monitor the potential environmental impacts of official and private activities. By encouraging local communities to participate in environmental conservation and monitor environmental degradation, they can drive grassroots-level change.

- Advocacy and Awareness: Civil society organizations can raise awareness about environmental issues, advocate for sustainable policies, and hold governments and corporations accountable for their environmental impact.
- Community Engagement: Mobilizing local communities to participate in environmental conservation efforts, sustainable agriculture, and recycling initiatives promotes grassroots-level change.
- Monitoring and Reporting: Civil society plays a vital role in monitoring environmental degradation, reporting violations of environmental laws, and advocating for sustainable practices.

Academic and Research Institutions:

Academic institutions contribute to green growth by conducting research on renewable energy technologies, sustainable agriculture practices, and environmental conservation methods. They provide training and education programs for professional, in addition to scientific support to policymakers on green technologies, climate change adaptation, and sustainable development strategies, while also sharing research findings and best practices to inform decision-making and promote sustainable development.

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- **Research and Development:** Academic institutions contribute to green growth by conducting research on renewable energy technologies, sustainable agriculture practices, and environmental conservation methods.
 - **Knowledge Sharing:** Sharing research findings and best practices with policymakers, businesses, and communities to inform decision-making and promote sustainable development.

International Organizations and Donor Agencies:

The international partners (UN, IFIs, OCED Countries, GCC Countries, BRICS Countries, and G-70 countries) can play a crucial role in helping Iraq's transition towards green growth.

- **Technical Assistance:** Providing technical expertise, funding, and capacity-building support to governments and local organizations to implement green growth initiatives.
- **Coordination and Collaboration:** Facilitating collaboration among countries, sharing knowledge, and coordinating international efforts to address global environmental challenges.
- **Funding and Investment:** Mobilizing financial resources for green projects, climate change mitigation, and adaptation measures in upper-middle-income countries.

Through this collaborative approach, middle-income countries like Iraq can accelerate their transition to green growth, combat climate change, and work towards achieving the Sustainable Development Goals.

Media:

The media can play a pivotal role in promoting green growth by raising awareness, shaping public opinion, and holding stakeholders accountable. Through various platforms such as television, radio, print, and online channels, the Iraqi media can educate the public about environmental issues, the benefits of sustainable practices, and the importance of conserving natural resources. By highlighting Iraq's success stories, innovations, and best practices in green technologies and initiatives, the media can inspire individuals, businesses, and governments to adopt environmentally friendly practices. Additionally, investigative journalism can uncover environmental abuses, hold polluters accountable, and advocate for stronger environmental regulations. Overall, the media can serve Iraq as a powerful tool for driving positive change towards green growth by informing, engaging, and mobilizing communities to take action for a more sustainable future.

Children:

As early adopters and powerful messengers in their households, children can anchor Iraq's shift to green growth by turning environmental learning into everyday habits—saving water, sorting waste, planting trees, and using energy wisely. Integrating hands-on climate and nature education into schools (e.g., school gardens, recycling drives, tree nurseries, and simple “citizen science” activities) builds practical skills and curiosity while improving local environments. Child-led eco-clubs and science fairs can mobilize neighbourhoods, amplify pro-environment norms, and inspire family behaviour change, especially in water-stressed and heat-exposed communities. Partnering teachers with local NGOs and municipalities enables age-appropriate projects—shade planting, safe walking



routes, clean-up days—that both protect children and enhance urban resilience. Inclusive outreach that engages girls and boys alike, including displaced and rural children, ensures equity and long-term social buy-in. With appropriate safeguards and participation in community decision-making, children become credible champions of sustainability today and the foundation of Iraq’s green economy tomorrow.

Youth:

Iraq has a very youthful demography, which can be an asset for green growth in Iraq. Youth can play a crucial role in driving green growth and shaping a sustainable future. As agents of change, they can bring fresh perspectives, innovative ideas, and boundless energy to environmental conservation efforts. By actively participating in eco-friendly initiatives such as tree planting, waste reduction, and renewable energy projects, youth can contribute directly to mitigating climate change and preserving natural resources. Moreover, youth engagement in advocacy campaigns, protests, and lobbying efforts can exert pressure on policymakers and corporations to prioritize sustainability and adopt green policies and practices. Through education, awareness-raising activities, and youth-led initiatives, young people can inspire their peers and communities to embrace sustainable lifestyles and advocate for environmental protection. By harnessing the passion and potential of youth, Iraqi societies can accelerate the transition to green growth and build a more resilient and sustainable future for generations to come.

Women:

Women can play an important role in promoting green growth and sustainable development in Iraq. As key stakeholders and drivers of development, women can bring unique perspectives, knowledge, and skills to environmental conservation efforts.

In rural areas, women often possess in-depth knowledge of local ecosystems and traditional agricultural practices, making them valuable contributors to sustainable agriculture and land management initiatives. Women’s participation in the green economy, including renewable energy, ecotourism, and sustainable livelihood projects, can accelerate economic growth and enhance social inclusion. Empowering women through education, training, access to resources, and involvement in decision-making processes strengthens their capacity to tackle environmental challenges and implement innovative solutions. Furthermore, promoting women’s empowerment and leadership in environmental management and policy-making ensures that green growth strategies are inclusive, responsive to diverse needs, and sustainable over the long term. By harnessing the potential of women as agents of change and decision-makers, Iraq can accelerate its transition to a greener, more resilient, and inclusive future.

In Iraq, collaboration among these partners is crucial for advancing green growth and achieving the Sustainable Development Goals. Each group of stakeholders plays a vital role in shaping policies, implementing initiatives, and fostering a culture of environmental stewardship and innovation.





Governance of Iraq's Green Growth Framework:

Various governance mechanisms can effectively oversee and implement the green growth framework. These mechanisms include coordination among different government entities, international partners, stakeholders, and civil society organizations. Some of the key governance mechanisms include:

High-Level Coordination: The Government of Iraq will designate high-level entities to oversee the implementation of the Green Growth Framework. This includes the Ministry of Planning, Ministry of Finance, Ministry of Environment, Ministry of Oil, Ministry of Electricity, and Ministry of Construction, Housing and Municipalities. These ministries play a central role in coordinating green growth initiatives across different sectors.

Inter-Ministerial Committees: Iraq will establish an inter-ministerial committee to facilitate coordination and collaboration among relevant government agencies involved in green growth activities. This committee will bring together representatives from different ministries to develop policies, strategies, and action plans for implementing green growth initiatives.

Sustainable Development Council: The National Sustainable Development Council will be formed as an advisory body to the government on sustainable development issues, including green growth. It includes representatives from government agencies, development partners, civil society organizations, academia, and the private sector, providing a platform for dialogue and consensus-building on green growth policies and strategies.

Strategic Planning and Monitoring: Government of Iraq will develop a strategic planning frameworks and monitoring mechanisms to track progress on green growth objectives and targets. This includes the National Development Plan, which sets out the country's medium-term vision and priorities for sustainable development, including green growth.

Stakeholder Engagement: Iraq actively engages stakeholders, including civil society organizations, private sector actors, academia, and international development partners, in the formulation and implementation of its green growth initiatives. This participatory approach ensures that diverse perspectives are considered and that stakeholders are actively involved in decision-making processes.

International Cooperation: Iraq collaborates with international organizations, development partners, and other countries to exchange knowledge, experiences, and best practices in green growth. This cooperation enhances Iraq's capacity to implement effective green growth policies and programs and mobilize financial and technical support for its initiatives.

Overall, Iraq's governance mechanisms for green growth involve multi-stakeholder collaboration, strategic planning, monitoring, and international cooperation to ensure the successful implementation of its Green Growth Framework and achieve its sustainable development goals.





Financing of the Green Growth Framework

Iraq's Green Growth Framework encompasses various financing mechanisms to support its implementation. These financing strategies aim to mobilize resources from both domestic and international sources to fund green projects, initiatives, and policies. Some key aspects of Iraq's financing for green growth include:

Domestic Investment: Iraq encourages domestic investment in green projects and initiatives through various incentives, subsidies, and tax breaks. This includes providing financial support to renewable energy projects, energy efficiency measures, sustainable agriculture practices, and eco-friendly infrastructure development.

International Cooperation and Development Assistance: Iraq welcome financial support from international development partners, multilateral organizations, and bilateral donors to fund its green growth initiatives. This may include grants, , technical assistance, and capacity-building support from entities such as the UN Agencies, IFIs, Development Partners (OECD Countries), and various bilateral aid agencies.

Green Bonds: Iraq will explore the issuance of green bonds as a mechanism to raise funds for green projects and investments. Green bonds are financial instruments specifically earmarked for environmentally sustainable projects, such as renewable energy development, energy efficiency improvements, and climate adaptation initiatives.

Public-Private Partnerships (PPPs): Iraq will promote partnerships between the public and private sectors to finance and implement green projects and initiatives. PPPs allow for the sharing of investment costs, risks, and expertise between government entities, private companies, and investors, facilitating the development of green infrastructure, renewable energy projects, and other sustainable initiatives.

Climate Finance: Iraq will leverage climate finance mechanisms, such as the Green Climate Fund (GCF), Adaptation Fund (AF), Global Environmental Fund (GEF), Carbon Finance to access funding for climate change mitigation and adaptation projects. Climate finance resources will support the implementation of Iraq's Green Growth Framework by funding renewable energy projects, climate-resilient infrastructure, sustainable agriculture practices, and other climate-related initiatives.

Climate Investment Funds: Iraq can establish dedicated climate investment funds or facilities to pool resources from various stakeholders and investors for adaptation and mitigation projects and initiatives. These funds can provide financing, technical assistance, and capacity-building support to adaptation and mitigation ventures and startups, promoting innovation and entrepreneurship in sustainable sectors.

Green Enterprises Fund: Iraq can establish a dedicated funding mechanism of Bank's consortium to create a facilities of pool resources for green enterprises, jobs and services.

Overall, Iraq's financing path for green growth involves a combination of domestic investment, international cooperation, green bonds, PPPs, climate finance, climate investment funds and green enterprises fund to mobilize resources and support the implementation of its green growth agenda.



Monitoring and Evaluation:

Monitoring and evaluation are two effective tools for decision-makers and project managers to observe the extent to which activities are being carried out according to their planned trajectories and within predetermined timeframes. Evaluation, specifically, clearly indicates whether the desired outcomes are achievable or have already been achieved in the short and medium terms. Over the long term, evaluation examines whether the program or project will have a positive impact on society.

Evaluation is fundamentally based on evidence-based evaluation, relying on measurable facts that can be quantified and verified. To ensure that evaluation results are clear and undisputed, criteria are established to measure outcomes. These criteria are scientifically selected with five key characteristics:


1. **Specific:** The criterion must be specific to the activity whose outcomes are being measured.
2. **Measurable:** The criterion should measure quantifiable outcomes (in numbers or percentages) rather than descriptive indicators to ensure the work's progress is measured accurately without differing perspectives.
3. **Achievable:** The criterion must be realistic and usable by the evaluator under the given conditions.
4. **Relevant:** The criterion should align with the activity being measured.
5. **Time-bound:** The evaluator must be able to apply the criterion at the time of evaluation.


These characteristics are often abbreviated as **SMART**.

For example, one of the criteria the government intends to use pertains to the plan for capturing associated gas during oil extraction. To ensure accuracy, the criterion will monitor the quantities or percentages of captured associated gas, preventing it from being flared each year compared to a base year. Such figures clearly indicate whether the plan is on track towards the target or if there are expected obstacles to achieving the results. This approach also applies to measures outlined in this framework, such as the introduction of electric and hybrid vehicles, upgrading the electric grid, and reducing losses in energy production, transmission, and distribution. Monitoring and evaluation criteria will be predetermined in a scientific manner.

The government plans to conduct internal monitoring and evaluation within the implementing entity and external assessments to ensure transparency and avoid conflicts of interest. The Ministry of Planning, the General Secretariat of the Council of Ministers, and the Advisory Board could play valuable roles in this regard.

The government will closely monitor the implementation of this framework from its initial stages and throughout the duration of its activities. It will also conduct scientific and impartial annual evaluations and final evaluations upon completion of the projects and programs described in this framework. The government will use monitoring results to adjust activity trajectories whenever necessary to ensure work progresses in the right direction and achieves, or even exceeds, its planned goals if circumstances are favorable. Lessons from the annual evaluation or at least the mid-term review will guide adjustments towards the targets. The final evaluation will provide the government with data identifying the strengths of the work to reinforce them in planning and implementing





future programs, and pinpointing weaknesses and their causes to prevent their recurrence in the future.

Risks: Green Growth Risk Management Challenges in Iraq

Green growth in Iraq presents both opportunities and challenges, requiring a comprehensive risk management approach that balances sustainable technologies, targeted financing, proportionate legislation, and societal integration into the transformation process. The following key challenges must be addressed to ensure a successful transition:

Employment and Workforce Capacity: While green growth offers significant job creation potential, particularly for youth and women, it requires strategic workforce development. Investing in green skills training and employment programs will be essential to reduce unemployment, enhance employability in renewable energy, sustainable agriculture, and eco-friendly industries, and support Iraq's transition to a low-carbon economy.

Economic Diversification and Balance of Payments: Iraq's heavy reliance on oil revenues poses a risk to economic stability. Green growth strategies must focus on exporting renewable energy, promoting sustainable agriculture, and expanding ecotourism to diversify the economy and reduce dependence on volatile oil markets. This will help stabilize the balance of payments and create a more resilient economic structure.

Vital Resource Management: Sustainable utilization of natural resources, including minerals, water, forests, and agricultural land, is crucial to reducing imports and boosting exports. Effective management of silicon, phosphates, limestone, kaolinitic clay stones, natural sulfur, salt, and natural gas will ensure long-term resource availability. Additionally, revitalizing Iraq's world-renowned date industry through efficient water use and ecosystem management is key to strengthening the agricultural sector.

Water and Food Security: Climate change threatens Iraq's water and food security, making climate-smart agriculture, efficient irrigation systems, and sustainable land management vital for resilience. Enhancing these areas will secure livelihoods, stabilize food supplies, and protect Iraq's natural resources from the effects of environmental degradation.

Innovation and Technological Advancement: A successful green transition requires investment in clean technologies, sustainable infrastructure, and innovation. Encouraging research and development in renewable energy, sustainable waste management, and green manufacturing will be instrumental in achieving economic efficiency and environmental sustainability.

Institutional Coordination and Stakeholder Collaboration: Green growth efforts must be supported by strong institutional coordination between government agencies, the private sector, and international partners. A unified policy framework that aligns investments, regulations, and initiatives will be essential for achieving sustainable development goals.

By addressing these green growth risk management challenges, Iraq can build a sustainable, diversified economy while protecting its environment and enhancing social resilience. The next chapter will outline the pathway for implementing green growth strategies to achieve long-term prosperity.



CHAPTER FIVE: SHORT-TERM PATHWAYS AND PRIORITY SELECTION.

pathways and priorities are to includes the following aspects:

Short Term Pathways:

1. Consider the contextual factors which may support or hinder green growth.

Local conditions or factors can be divided into constructive factors that have a positive impact and inhibitory factors that have a negative impact on sustainable development outcomes. The role of policies is to strengthen constructive conditions and eliminate or reduce the impact of inhibitory conditions.

The Government of Iraq will promote a regulatory environment that is conducive to green growth. The regulatory environment should also outline what incentives do businesses and national governments must invest and move towards green growth. This might include both generic incentives (e.g. competitive advantage for companies moving to green growth), or incentives embodied in the current institutional framework.

The government is also willing to examine whether the current structure of taxation and government spending aligns to green growth. For example, government may reconsider at the fossil fuel subsidies or energy-related taxes and tax expenditures conducive to low-carbon and green growth.

Considering the contextual factors, the Government of Iraq will prioritize the formulation of reference-priority actions across various sectors, with specified timeframes to achieve inclusive economic growth, enhance resource efficiency, and improve the competitiveness of priority sectors, including electricity, associated gas, water resources, agriculture, transportation, sanitation, and waste management.

2. Higher Committee for Sustainable Development


Green Growth Framework Key Objectives:

Policy Coordination: Facilitate coordination among government agencies, private sector entities, civil society organizations, and other stakeholders involved in green growth initiatives in Iraq, ensuring alignment with national priorities and objectives.

Implementation Guidance: Provide guidance and support for the implementation of green growth policies, programs, and projects in Iraq, including capacity building, technical assistance, and resource mobilization efforts.

Monitoring and Evaluation: Establish monitoring and evaluation mechanisms to track the progress of green growth initiatives, assess their impact on environmental, social, and economic indicators, and facilitate evidence-based decision-making.

Stakeholder Engagement: Foster meaningful engagement and participation of stakeholders in Iraq, including marginalized groups, indigenous communities, and vulnerable populations, in the development and implementation of green growth strategies.



Policy Review and Adjustment: Conduct periodic reviews of green growth policies and strategies in Iraq to identify gaps, challenges, and emerging opportunities, and make necessary adjustments to ensure their effectiveness and relevance.

Implementation Strategies:

Establishment of a Green Growth Council: Form a dedicated Green Growth Council or similar body in Iraq, comprised of representatives from relevant government ministries, private sector organizations, civil society groups, academia, and international partners, tasked with overseeing the implementation of green growth strategies and initiatives.

Formulation of Priority Actions: Formulate priority actions across various sectors, with specified timeframes to achieve inclusive economic growth, enhance resource efficiency, and improve the competitiveness of priority sectors, including electricity, associated gas, water resources, agriculture, transportation, sanitation, and waste management.

Capacity Building and Technical Assistance: Provide capacity building and technical assistance to government agencies, local authorities, and other stakeholders involved in green growth initiatives in Iraq, including training programs, workshops, and knowledge-sharing platforms.

Public Awareness and Outreach: Conduct public awareness campaigns and outreach activities to raise awareness about the importance of green growth, environmental conservation, and sustainable development among the general public, businesses, and communities in Iraq.

International Cooperation and Partnerships: Forge partnerships and cooperation agreements with international organizations, development agencies, and bilateral donors to mobilize financial resources, technical expertise, and best practices for supporting green growth initiatives in Iraq.

3. Integrating Green Growth into Public and Private Sectors in Iraq


In Iraq, addressing environmental challenges and promoting sustainable development require the integration of green growth principles into both the public and private sectors. Embedding green growth into planning, financing, policy formulation, regulatory frameworks, and judicial systems is crucial for transitioning towards a sustainable, low-carbon economy and mitigating climate risks.

Key Objectives:

Policy Alignment: Ensure alignment of Iraq's national development plans, sectoral strategies, and regulatory frameworks with green growth objectives, incorporating environmental considerations into decision-making processes at all levels of governance.

Financial Mobilization: Mobilize public and private sector financing towards green investments, projects, and initiatives that promote renewable energy, energy efficiency, sustainable infrastructure, and eco-friendly technologies in Iraq.

Regulatory Reform: Creating a legislative and institutional environment that supports and enhances green growth, alongside regulatory reforms. Reforms in regulatory frameworks in Iraq is necessary to incentivize environmentally sustainable practices, streamline permitting processes for green projects, and enforce compliance with environmental standards and regulations.



Capacity Enhancement: Build institutional capacity within the public and private sectors, and judiciary systems in Iraq to effectively implement green growth policies, enforce regulations, and adjudicate environmental disputes.

Public-Private Partnerships: Foster collaboration and partnerships between government entities, private sector companies, financial institutions, and civil society organizations in Iraq to leverage resources, expertise, and networks for advancing green growth agendas.

Implementation Strategies:

Green Procurement Policies: Implement green procurement policies and practices within government agencies and private sector organizations in Iraq to prioritize the purchase of environmentally sustainable products, services, and technologies.

Sustainable Infrastructure Investments: Direct public and private sector investments in Iraq towards sustainable infrastructure projects that promote clean energy, efficient transportation, water conservation, waste management, and climate resilience.

Capacity Building Initiatives: Provide training, technical assistance, and knowledge-sharing platforms to enhance the capacity of policymakers, business leaders, regulators, and legal professionals in Iraq to integrate green growth principles into their respective sectors.

Innovation and Technology Adoption: Encourage innovation and technology adoption in green sectors in Iraq through research and development incentives, technology transfer mechanisms, and public-private collaboration initiatives.

Monitoring and Compliance Mechanisms: Establish robust monitoring, reporting, and compliance mechanisms in Iraq to track the implementation of green growth policies, assess progress towards sustainability targets, and enforce regulatory standards effectively.

4. Raising Awareness and Incentivizing Public Participation in Green Growth Initiatives in Iraq


In Iraq, fostering a culture of environmental consciousness and encouraging active participation in green growth initiatives are vital for achieving sustainable development goals. By raising awareness and incentivizing the public to adopt eco-friendly practices, Iraq can catalyse a collective effort towards building a greener and more resilient future.

Iraq faces environmental challenges such as water scarcity, pollution, and deforestation, necessitating urgent action to mitigate environmental degradation and promote sustainable development. Raising public awareness about the importance of green growth and providing incentives for eco-friendly behaviours are essential steps towards mobilizing individuals and communities to actively contribute to environmental conservation efforts.

Key Objectives:

Awareness Raising: Increase public awareness about the importance of green growth, environmental sustainability, and the benefits of adopting eco-friendly practices in Iraq, targeting diverse audiences including citizens, businesses, schools, and communities.





Behavioural Change: Encourage behavioural change among individuals and households in Iraq towards adopting sustainable lifestyles, reducing resource consumption, minimizing waste generation, and promoting energy efficiency.

Community Engagement: Foster community engagement and grassroots initiatives for environmental conservation and green entrepreneurship, empowering local communities to take ownership of environmental stewardship efforts.

Policy Support: Advocate for supportive policies and regulations in Iraq that incentivize green practices, such as tax incentives, subsidies, and preferential treatment for environmentally friendly products and services.

Partnership Building: Forge partnerships and collaborations with government agencies, civil society organizations, businesses, media outlets, and educational institutions to amplify messages and mobilize resources for awareness-raising campaigns and green growth initiatives.

Implementation Strategies:

Public Awareness Campaigns: Launch targeted public awareness campaigns in Iraq through various channels including mass media, social media, community events, workshops, and educational programs to communicate key messages about green growth and sustainability.

Education and Training: Integrate environmental education and sustainability principles into school curricula at all levels in Iraq, providing students with knowledge and skills to become environmentally conscious citizens and future leaders.

Incentive Programs: Develop incentive programs and rewards schemes in Iraq to incentivize individuals and businesses to adopt green practices, such as discounts on eco-friendly products, tax rebates for energy-efficient appliances, or certification programs for sustainable businesses.

Community Initiatives: Support grassroots initiatives and community-led projects in Iraq that promote environmental conservation, sustainable agriculture, renewable energy adoption, waste reduction, and biodiversity protection at the local level.

Behavioural Patterns: Encouraging pro-environmental behaviours, such as adopting default options for renewable energy tariffs, using smart metering systems to monitor energy use, and promoting social practices to enhance recycling and environmental conservation.

5. Developing and Implementing a Climate Investment Plan for Green Growth in Iraq

Iraq faces significant challenges posed by climate change, including extreme weather events, water scarcity, and environmental degradation. Developing and implementing a relevant Climate Investment Plan (CIP) presents an opportunity to advance green growth, enhance resilience, and achieve climate mitigation and adaptation objectives in Iraq.

As a signatory to international climate agreements, Iraq has committed to addressing climate change and transitioning towards a low-carbon, climate-resilient economy. A Climate Investment Plan serves as a roadmap for directing financial resources towards priority areas such as renewable energy, sustainable infrastructure, ecosystem restoration, and climate-smart agriculture, thereby accelerating the transition towards a green economy while safeguarding against climate risks.



Key Objectives:

Identify Climate Priorities: Conduct a comprehensive assessment of climate vulnerabilities, risks, and opportunities in Iraq to identify priority areas for climate action and investment, taking into account sectoral needs and stakeholder inputs.

Mobilize Financial Resources: Mobilize domestic and international financial resources to support climate investments in key sectors such as energy, transportation, agriculture, water management, and urban development, leveraging public-private partnerships and innovative financing mechanisms.

Build Institutional Capacity: Strengthen institutional capacity within government agencies, financial institutions, and civil society organizations to develop, implement, and monitor the Climate Investment Plan, ensuring coordination, transparency, and accountability.

Promote Technology Transfer: Facilitate the transfer of environmentally sound technologies, know-how, and best practices to support climate adaptation and mitigation efforts in Iraq, fostering innovation and knowledge sharing.

Implementation Strategies:

Stakeholder Engagement: Engage relevant stakeholders, including government agencies, private sector firms, civil society organizations, and academic institutions, in the development and implementation of the Climate Investment Plan, ensuring inclusivity and ownership.

Sectoral Integration: Integrate climate considerations into sectoral planning processes and investment decisions across key sectors of the economy, mainstreaming climate resilience and low-carbon development principles into policies, programs, and projects.

Risk Assessment and Management: Conduct comprehensive risk assessments to identify climate-related risks and vulnerabilities in critical infrastructure, economic activities, and natural ecosystems, informing adaptation and resilience-building measures.


Monitoring and Evaluation: Establish robust monitoring, reporting, and evaluation mechanisms to track progress towards climate targets, assess the effectiveness of climate investments, and enhance adaptive management and learning.

Knowledge Sharing and Capacity Building: Promote knowledge sharing, capacity building, and South-South cooperation initiatives to enhance technical expertise and institutional capacity for climate action and investment in Iraq, fostering peer learning and collaboration.

Medium Term Pathways:

1. Natural Resources Accounting for Sustainable Development in Iraq

Iraq's rich natural resources, including oil, gas, water, and fertile land, are critical for its economic prosperity and societal well-being. However, unsustainable exploitation and management practices pose significant challenges, leading to environmental degradation, depletion of resources, and threats to ecosystem resilience. By implementing natural resources accounting, Iraq can ensure the sustainable utilization of its natural capital, mitigate environmental risks, and promote long-term



socio-economic development. Once the natural resource accounting will be done, it will give a strong basis for developing green national accounts, which means integrating environmental dimensions into national accounts, which is an important step to shift towards a green economy and achieve the dimensions of green growth.

Key Objectives:

Resource Assessment: Conduct comprehensive assessments of Iraq's natural resources, including oil, gas, water, land, forests, and biodiversity, to understand their current status, trends, and potential impacts on sustainable development.

Ecosystem Valuation: Undertake ecosystem valuation studies to quantify the economic, social, and environmental values of Iraq's ecosystems and biodiversity, highlighting their contributions to human well-being and sustainable development goals.

Integrated Planning: Integrate natural resources accounting into strategic planning processes, policy formulation, and decision-making frameworks across sectors, ensuring the optimization of natural capital while minimizing environmental degradation and resource depletion.

Policy Alignment: Align national development strategies, sectoral policies, and regulatory frameworks with sustainable development objectives and principles of natural resources accounting, fostering coherence and synergies in Iraq's socio-economic and environmental policies.

Capacity Building: Enhance institutional capacity within government agencies, research institutions, and civil society organizations to collect, analyse, and interpret data on natural resources, facilitating evidence-based decision-making and policy formulation. Capacity building should also include how to use the green taxonomy to extrapolate the green national account based on a comprehensive natural resource accounting, and environmental accounting.

Implementation Strategies:


Data Collection and Monitoring: Establish robust data collection mechanisms and monitoring systems to track changes in Iraq's natural resource base, including land use, water quality, biodiversity, and ecosystem services, ensuring timely and accurate information for decision-making.

Stakeholder Engagement: Foster multi-stakeholder dialogue and participation in natural resources accounting processes, engaging government agencies, private sector entities, civil society organizations, local communities, and indigenous peoples to ensure inclusivity and transparency.

Capacity Development: Provide training, technical assistance, and knowledge-sharing opportunities to build the capacity of relevant stakeholders in Iraq on natural resources accounting methodologies, tools, and applications, enhancing their understanding of sustainable development principles.

Policy Integration: Integrate findings from natural resources accounting into policy development processes, sectoral plans, and investment strategies, mainstreaming considerations of natural capital and ecosystem services into decision-making frameworks at all levels of governance.

International Collaboration: Foster collaboration with international organizations, development partners, and regional initiatives to exchange experiences, best practices, and lessons learned in



natural resources accounting, leveraging external expertise and resources to support Iraq's sustainable development efforts.

2. Establishing National Funds for Green Growth

In the pursuit of sustainable development, the government seeks to demonstrate its strategic commitment to mainstreaming sustainability considerations into their economic development agendas. Establishing national funds dedicated to green growth presents a proactive approach towards mobilizing resources, fostering innovation, and catalysing transformative change towards a more sustainable future.

National funds for green growth serve as a cornerstone for financing environmentally sustainable projects, initiatives, and innovations. By earmarking financial resources specifically for green investments, governments signal their commitment to transitioning towards low-carbon, resource-efficient economies. These funds facilitate the alignment of economic development objectives with environmental sustainability goals, driving inclusive and resilient growth while mitigating climate risks.

Key Objectives:

Resource Mobilization: Mobilize financial resources from domestic and international sources to fund green projects and initiatives that promote renewable energy, energy efficiency, sustainable infrastructure, and eco-friendly technologies.

Innovation and Entrepreneurship: Foster innovation and entrepreneurship in green sectors by providing seed funding, grants, and venture capital to support the development and commercialization of environmentally sustainable technologies and solutions.

Capacity Building: Build institutional capacity within government agencies, financial institutions, and private sector entities to effectively manage and allocate funds for green growth, ensuring transparency, accountability, and impact measurement.


Policy Support: Support the implementation of green growth policies and regulatory frameworks by providing targeted financial incentives, subsidies, to incentivize private sector investment in environmentally sustainable projects.

Community Engagement: Promote community engagement and participation in the design, implementation, and monitoring of green projects, ensuring that investments address local environmental priorities and contribute to sustainable development outcomes.

Implementation Strategies:

Establishment of National Green Funds: Create dedicated national funds or mechanisms specifically earmarked for financing green growth initiatives, with clear mandates, governance structures, and transparent investment criteria.

Public-Private Partnerships: Forge partnerships between government entities, financial institutions, development agencies, and private sector stakeholders to leverage resources, expertise, and networks for green financing and investment.



Green Bond Issuance: Explore the issuance of green bonds to raise capital for financing environmentally sustainable projects and initiatives, tapping into both domestic and international capital markets.

Capacity Development Initiatives: Provide training, technical assistance, and knowledge-sharing platforms to enhance the capacity of government officials, financial professionals, and project developers in green finance and investment.

Impact Monitoring and Reporting: Establish robust monitoring, reporting, and evaluation mechanisms to track the impact of green investments, measure progress towards sustainability goals, and inform evidence-based decision-making.

3. Enhancing Investment in Sustainable Cities and Green Jobs in Iraq

Iraq stands at a critical juncture in its development trajectory, poised to harness the potential of sustainable cities and green jobs to achieve sustainable production and consumption patterns. By prioritizing investments in urban sustainability and job creation, Iraq can lay the foundation for inclusive, resilient, and environmentally sustainable growth.

The rapid urbanization and industrialization witnessed in Iraq present both opportunities and challenges for sustainable development. Enhanced investment in sustainable cities and green jobs is imperative for addressing urbanization pressures, fostering economic diversification, and mitigating environmental degradation. By fostering green entrepreneurship and promoting sustainable urban planning, Iraq can transition toward more resource-efficient, inclusive, and resilient cities.

Key Objectives:


Sustainable Urban Development: Promote sustainable urban planning and infrastructure to improve quality of life, resilience to climate change, and reduce the environmental footprint in Iraqi cities.

Green Job Creation: Foster the creation of green jobs across various sectors, including renewable energy, energy efficiency, sustainable transportation, waste management, and eco-tourism, to provide employment opportunities for Iraqi youth and promote inclusive growth.

Community Engagement: Foster community participation and stakeholder engagement in the design, implementation, and monitoring of sustainable urban and employment initiatives, ensuring inclusivity and social cohesion.

Implementation Strategies:

- **Integrated Urban Planning:** Develop and implement integrated urban development plans that prioritize sustainable transportation, affordable housing, green spaces, and resilient infrastructure, leveraging international best practices and stakeholder consultations.
- **Green Skills Training:** Provide targeted training programs and vocational education opportunities to equip Iraqi workers with the skills needed for green jobs in emerging sectors, fostering entrepreneurship and economic empowerment.
- **Public-Private Partnerships:** Foster collaboration between government agencies, private sector firms, academia, and civil society organizations to co-create and implement sustainable urban development and green job initiatives.

- 
- Policy Support: Develop supportive policy frameworks, regulations, and standards to facilitate the transition toward sustainable urban development and green employment, addressing barriers to adoption and promoting market growth.

4. Facilitating Fiscal and Regulatory Incentives for Private Sector Investment in Green Growth in Iraq

Creating an environment conducive to private sector investment is crucial for advancing green growth and sustainable development in Iraq. By ensuring favourable fiscal and regulatory incentives, Iraq can attract investments that promote environmental sustainability, innovation, and economic diversification while addressing pressing environmental challenges.

The private sector plays a pivotal role in driving economic growth and innovation, making it a key stakeholder in advancing green growth agendas. By offering fiscal incentives, such as tax breaks, subsidies, and grants, as well as regulatory incentives, such as streamlined permitting processes and favourable market conditions, Iraq can incentivize private sector investment in green technologies, renewable energy, sustainable infrastructure, and eco-friendly practices.


Key Objectives:

- Attract Investment: Encourage private sector investment in green growth initiatives in Iraq by offering attractive fiscal and regulatory incentives that lower the barriers to entry and mitigate investment risks.
- Stimulate Innovation: Foster innovation and entrepreneurship in green technologies and sustainable business practices by providing financial support, technical assistance, and market incentives for research, development, and commercialization.
- Promote Economic Diversification: Diversify Iraq's economy and reduce dependence on fossil fuels by incentivizing private sector investment in renewable energy, clean technologies, sustainable agriculture, eco-tourism, and other green sectors.
- Create Green Jobs: Generate employment opportunities and promote social inclusion by stimulating investments in green industries, which have the potential to create jobs in manufacturing, construction, engineering, and services sectors across Iraq.
- Achieve Environmental Targets: Align private sector investments with Iraq's environmental objectives, such as reducing greenhouse gas emissions, conserving natural resources, improving air and water quality, and mitigating the impacts of climate change.

Implementation Strategies:

- Fiscal Incentives: Introduce tax incentives, grants, subsidies, and financial support mechanisms for private sector investments in green growth initiatives, including renewable energy projects, energy efficiency upgrades, waste management solutions, and sustainable infrastructure development.
- Regulatory Streamlining: Simplify regulatory processes and administrative procedures for obtaining permits, licenses, and approvals for green projects in Iraq, reducing bureaucratic barriers and expediting project development timelines.



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- **Market Support:** Create market incentives, such as feed-in tariffs, green procurement policies, carbon pricing mechanisms, and preferential access to government contracts, to stimulate demand for green products and services and incentivize private sector participation.
 - **Capacity Building:** Enhance the capacity of government agencies, financial institutions, and business support organizations in Iraq to design, implement, and monitor fiscal and regulatory incentives for green growth, including training programs, technical assistance, and knowledge sharing initiatives.
 - **Public-Private Partnerships:** Foster collaboration between government agencies, private sector entities, financial institutions, and international partners to leverage resources, expertise, and networks for promoting green investments and implementing sustainable development projects in Iraq.

Long Term Pathways:

1. Enhancing Capacities for Green Economy in Key Institutions and Banking Sectors

Building institutional capacity within key government institutions and banking sectors is essential for fostering the transition towards a green economy. By enhancing the capacities of institutions such as the Iraqi Development Fund (IDF), National Investment Commission (NIC), Central Bank of Iraq (CBI), and banking sectors, nations can unlock the potential for green investment and sustainable growth, driving economic prosperity while mitigating environmental risks.

The success of green economy initiatives hinges on the ability of institutions and banking sectors to effectively channel financial resources towards environmentally sustainable projects and initiatives. Enhancing their capacities in areas such as green investment analysis, risk management, project financing, and regulatory compliance is crucial for unlocking private sector investment, promoting innovation, and mainstreaming sustainability considerations into economic development strategies.

Key Objectives:

Policy Alignment: Ensure alignment of institutional mandates, policies, and strategies of IDF, NIC and CBI with green economy objectives, incorporating environmental sustainability considerations into decision-making processes and investment criteria.

Capacity Building: Provide training, technical assistance, and knowledge-sharing platforms for IDF, NIC and CBI to enhance the capacity of institutional staff and banking sector professionals in green finance, investment analysis, risk assessment, and project appraisal.

Regulatory Frameworks: Develop and enforce regulatory frameworks for IDF, NIC and CBI that incentivize green investments, promote transparency, and mitigate environmental and financial risks associated with unsustainable practices.

Market Development: IDF, NIC and CBI should facilitate the development of green financial products, instruments, and mechanisms within banking sectors, such as green bonds, , and carbon markets, to mobilize capital for environmentally sustainable projects.

Public-Private Partnerships: Forge partnerships between government institutions, banking sectors, development agencies, and private sector stakeholders to leverage resources, expertise, and networks for green finance and investment.





Implementation Strategies:

Institutional Capacity Enhancement: Strengthen the technical expertise and analytical capabilities of institutions such as the IDF, NIC, and CBI in green investment analysis, project evaluation, and risk management.

Training and Professional Development: Offer specialized training programs, workshops, and certification courses for staff members of key institutions and banking sectors to enhance their understanding of green finance principles and practices.

Policy Advocacy: Advocate for policy reforms and incentives that support the integration of green economy considerations into national development strategies, investment promotion policies, and financial regulations.

Knowledge Sharing and Best Practices: Facilitate knowledge exchange and peer learning among institutional staff, banking sector professionals, and international partners to disseminate best practices, lessons learned, and case studies in green finance and investment.

Green Investment Promotion: Promote awareness and market demand for green investments through targeted outreach campaigns, investor forums, and matchmaking events, showcasing successful green projects and investment opportunities.

2. Human Resources Development for Accelerating Green Growth in Iraq

In Iraq, the pursuit of sustainable development is imperative amidst the challenges posed by environmental degradation and climate change. The transition towards green growth emerges as a critical objective, necessitating the development of human resources as a fundamental driver. By cultivating a skilled workforce equipped with the knowledge and capabilities to spearhead green initiatives, Iraq can pave the way for sustainable development while mitigating environmental risks.


Human resources development plays a pivotal role in fostering innovation, driving technological advancements, and implementing effective policies towards green growth in Iraq. A well-trained workforce enhances the nation's capacity to adopt eco-friendly practices and fosters resilience in the face of environmental challenges. Additionally, investing in human capital yields long-term economic benefits by promoting green entrepreneurship, enhancing competitiveness, and attracting sustainable investments in Iraq's burgeoning green sector.

Key Objectives:

Capacity Building: Implement comprehensive capacity-building programs aimed at equipping individuals with skills and knowledge in renewable energy, environmental conservation, sustainable agriculture, and green technologies.

Promotion of Green Education: Integrate environmental sustainability and green principles into educational curricula at all levels in Iraq, fostering a culture of environmental stewardship and eco-literacy among future generations.

Skill Enhancement: Provide targeted training and skill enhancement programs for existing professionals across various sectors in Iraq, facilitating their transition towards green practices and technologies.



Research and Innovation: Foster an environment conducive to research and innovation in green technologies and solutions in Iraq, promoting collaboration between academia, industry, and government to develop cutting-edge solutions for environmental challenges.

Policy Support: Develop supportive policies and incentives to encourage the recruitment and retention of skilled professionals in green sectors in Iraq, while also facilitating knowledge exchange and best practices sharing.

Implementation Strategies:

Public-Private Partnerships: Forge strategic partnerships between government agencies, private enterprises, academic institutions, and civil society organizations in Iraq to leverage resources, expertise, and networks for human resources development.

Workforce Reskilling Programs: Design tailored reskilling and upskilling programs in Iraq to facilitate the transition of workers from traditional industries to green sectors, ensuring inclusivity and minimizing socio-economic disruptions.

Entrepreneurship Support: Provide incubation support, access to financing, and mentorship programs for aspiring green entrepreneurs in Iraq, fostering a vibrant ecosystem of green startups and ventures.

Cross-Sector Collaboration: Foster collaboration and knowledge sharing across diverse sectors in Iraq, encouraging interdisciplinary approaches to address complex environmental challenges and unlock synergies for green growth.

Monitoring and Evaluation: Establish robust monitoring and evaluation mechanisms in Iraq to track the effectiveness and impact of human resources development initiatives, enabling evidence-based decision-making and continuous improvement.


3. Adopting Fourth Industrial Revolution Principles in Iraq

Embracing Fourth Industrial Revolution (4IR) technologies is crucial for driving productivity gains, promoting innovation, and enhancing competitiveness in key sectors of the Iraqi economy. The integration of artificial intelligence (AI), Internet of Things (IoT), blockchain, and advanced manufacturing can revolutionize industrial processes, optimize resource use, and enhance Iraq's economic diversification efforts.

The adoption of cutting-edge technologies can help modernize traditional industries, create new economic opportunities, and support Iraq's transition to a knowledge-based economy. However, ensuring that these technologies are accessible, scalable, and aligned with Iraq's national development priorities is key to their success.

Key Objectives:

- **Technology Adoption:** Promote the integration of 4IR technologies across industries to enhance efficiency, sustainability, and innovation in key economic sectors.
- **Resource Efficiency:** Improve resource efficiency and sustainability through the adoption of circular economy principles, waste reduction measures, and eco-friendly production practices.

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- **Economic Competitiveness:** Leverage 4IR technologies to enhance Iraq's competitiveness in regional and global markets by increasing automation, digitalization, and industrial efficiency.

Implementation Strategies:

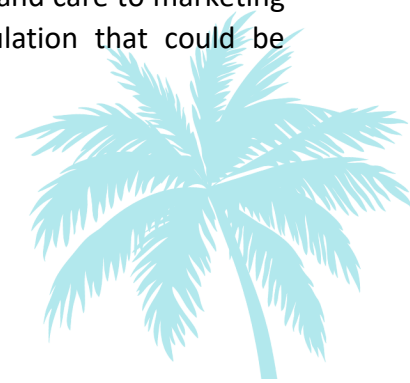
- **Technology Adoption Incentives:** Offer incentives and support mechanisms to encourage the adoption of 4IR technologies by Iraqi businesses, including tax incentives, research and development grants, and access to technology transfer programs.
- **Innovation Hubs and Research Development:** Establish innovation hubs, research centers, and technology incubators to drive technological advancements and digital transformation in Iraq.
- **Digital Infrastructure Enhancement:** Invest in modernizing digital infrastructure to ensure broad access to high-speed internet, cloud computing, and AI-powered solutions, facilitating Iraq's transition to a digital economy.
- **Public-Private Collaboration:** Strengthen collaboration between technology firms, research institutions, and the private sector to accelerate the adoption and scaling of 4IR technologies.
- **Policy and Regulatory Frameworks:** Develop legislation and policy frameworks to support digital transformation while ensuring data security, ethical AI development, and equitable access to emerging technologies.


By separating the focus on sustainable cities, green jobs, and the Fourth Industrial Revolution, Iraq can develop more targeted strategies that address urban resilience, workforce development, and technological innovation in a manner that aligns with national priorities and sustainability goals

Some Strengths in Iraq's Green Activities

Iraq has significant potential in various activities that can be implemented using green mechanisms. Among the most important strengths are:

1. **Potential for Expanding Solar Energy Use :** Iraq's long hours of sunshine, vast areas for establishing photovoltaic solar fields, and an abundant workforce that can be trained for solar energy work make Iraq one of the most favorable countries for expansion in this field. Additionally, the year-round heat from the sun in Iraq, which is generally considered a harmful effect of climate change, can be transformed into an opportunity for Iraq as it develops solar thermal energy production (Concentrated Solar Power; CSP).
2. **Improving Agricultural Production, Including Dates:** Historically, Iraq has been a top agricultural country due to its fertile lands and, at the time, abundant freshwater resources. Despite land degradation, desertification, and reduced water availability compared to previous levels, land reclamation can restore agricultural potential, and modern irrigation methods can help address water scarcity. Date palms represent a tremendous agricultural asset for Iraq, especially high-quality date varieties, which can be enhanced through methods like tissue culture. Improving the food supply chain from propagation and care to marketing can also boost agriculture. Additionally, Iraq has a livestock population that could be developed for large-scale commercial production.



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3. **Mineral Wealth:** Iraq possesses a variety of minerals that could serve as significant economic resources and create numerous job opportunities. Phosphates, silicon, and sulfur are among the most promising elements in Iraq.

For further details regarding the strengths in green growth activities, please refer to Annex 2.





ANNEX- ONE: Priority Climate Change Investment areas in Iraq

Priority investment areas have been identified by GoI, with technical support from the United Nations Development Programme to enhance broader discussions and strategically mobilize resources in key sectors.

Additionally, the Government of Iraq worked closely with the United Nations Development Programme to establish the Phase I of the Iraq Climate Investment Plan (Pathways of Climate Investment in Iraq 2025-2030),

Through the CIP was able to identify the below:

The plan is a roadmap to confront climate risks while diversifying a hydrocarbon-reliant economy. It steers a careful, stepwise transition to low-carbon energy, embeds climate resilience across sectors, and aligns with Iraq's NDC (2021), Climate Vision 2030, and the SDGs. The plan is delivered in two phases: **Phase I (2025–2030)**—the transitional phase that establishes institutions, financing, and priority investments—and **Phase II (2030–2050)**, which scales a low-carbon economy consistent with the 1.5°C objective.

Iraq faces severe impacts: higher temperatures and heatwaves, shifting rainfall, and sea-level rise that threaten food and water security, public health, livelihoods, and strategic coastal assets—while salinization degrades soils and agriculture. The economy's revenue concentration in oil and gas underscores the need to modernize mitigation sectors and fortify adaptation sectors (water, agriculture, cities).

Scale of Need & Economic Case (authors' estimates)

- **Total investment need by 2030: USD 82.85B** across water, agriculture, biodiversity, health, infrastructure, education, tourism, oil & gas transition, electricity, transport, industry, and circular economy (waste & wastewater).
- Highest capital needs include Electricity (USD 23.25B), Transport (USD 13.4B), Oil & Gas Transition (USD 11.8B), Industry (USD 7.95B), Water (USD 7.5B), and Waste/Wastewater (USD 7.05B), with substantial annual economic benefits projected from efficiency gains, avoided losses, and new value chains.


Progress & Pipeline

- **USD 2.3B** implemented in the last three years (~50% adaptation / 50% mitigation).
- USD 16B in the near-term pipeline (~USD 13.4B mitigation; ~USD 2.6B adaptation).
- Ongoing efficiency, methane, and associated-gas capture projects support delivery on the **unconditional 2% NDC reduction** and Iraq's **Methane Pledge** trajectory.

Financing Architecture—Five Streams

1. R&D, innovation, technology transfer, capacity building.
2. Targeted adaptation in water and agriculture.
3. **Integrated mitigation–adaptation projects** that deliver GHG cuts and community resilience.
4. **Renewable energy scale-up** at governorate/district level.
5. **Methane and gas capture** requiring sizable upfront capital and technology partnerships.

Priority Initiatives for 2025–2030 (USD 36.85B).



A focused portfolio to unlock near-term impact and bankability: grid transmission & transformers (USD 10B); gas capture & reuse (USD 5B); sustainable cities (USD 4B); low-carbon/public transport (USD 3B); resilient water management (USD 2.5B); waste & wastewater circular economy (USD 2B); plus industrial modernization (cement, petrochemicals, metals), sustainable agriculture and ecosystems, land restoration, agroforestry, and livestock management—each with clear efficiencies, jobs, and health co-benefits.

Implementation Model.

- **Institutions & policy:** streamline regulatory frameworks, standards, and permits; establish clear mandates and MRV; green-tag public spending.
- **State-owned enterprises (SOEs):** adopt strong ESG/CSR aligned with national climate goals to drive early decarbonization and crowd in private capital.
- **Private sector:** mobilize through PPPs, de-risking tools, dedicated credit lines, and predictable incentives; advance local value chains for clean tech and services.

Financing Strategies of blending domestic resources with **ODA and climate funds** (e.g., GCF/GEF/AF/CIF), **FDI**, and **innovative instruments** (green bonds, sustainability-linked finance, guarantees). Prioritize bankable pipelines, standardized contracts/PPAs, and customs/tariff facilitation for clean technologies.

With Phase I establishing the enabling environment and high-impact projects, **Phase II (2030–2050)** will scale investments and technology deployment to meet long-term climate goals, safeguard development gains, and position Iraq as a resilient, low-carbon economy.

Joining efforts, the Green Growth identified opportunities include the following:


Agriculture and food security

The overall goal: To increase the resilience of the agricultural sector to climate change to protect and enhance food security in the country, reduce soil degradation, and increase agricultural revenues to achieve economic diversification, reduce poverty, and support rural women through the use of modern technologies as part of achieving the SDGs.

The Iraqi agriculture sector employs roughly 20 percent of the country’s workforce and is the second largest contributor to the gross domestic product after the oil sector, accounting for 5 percent of the GDP⁸. At the same time, the sector is significantly impacted by climate change which has the risk of undermining the country’s food security. The NDC, NAP and National Food Security Strategy identified key investment areas that support resilient agriculture and enhanced food security. The investment will help climate informed advisory and risk management services to facilitate evidence-based decision-making in the sector and the reconfiguration of food systems throughout the value chain to enable adaptive capacity in mobilising, transporting, processing, storing, and distributing food products. Specific interventions include:

⁸ Agricultural value chain study in Iraq, 2021.



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1. Reducing and rehabilitating soil degradation, and improving land management practices, especially in the areas of agriculture and forestry.
 2. Modernizing, improving and developing agricultural practices and developing livestock in order to achieve the principles of adaptation to face climate changes.
 3. Deriving the dissemination of strategic agricultural crop varieties that are resistant to climate change and with low water consumption e.g. Greenhouses, labs for crop development, etc. Introduce and implement targeted reforms of the policies in the agricultural sector to redirect support (incl. subsidies) to incentivize a just transition to sustainable agriculture.
 4. Support SMEs for the creation and maintaining of climate-smart agriculture value chains. Enable them to access to government-backed financing schemes and grants.
 5. Expand national biogas programme to valorize livestock and agricultural waste into natural gas and fertilizer
 6. Create production of agri-positive fertilizers
 7. Roll out a national climate risk insurance for crops: Link agricultural insurance and social protection schemes to protect production of farmers against extreme weather events and enhance resilience.

launch a national insurance program against climate risks on crops to protect farmers' production from extreme weather events and enhance resilience.


Water security and drought, desertification, salinization and flood risk

Currently, more water is used than the volume of available resources, with water resources already well below the threshold of 1,000 m³/year, which the UN deems as the level necessary to provide enough water for drinking, agriculture, and nutrition. Conversely, Northern Iraq has a risk of increasing frequency and severity of flooding. The invest plan has identified priority investment areas that support enhanced water security, combat drought and desertification, reduce the impact of sea level rise induced salinity and increased resilience to flooding through interventions and planning. They will compel water demand management through enhancing water efficiency and encompass climate proofing of critical water infrastructure. They include:

1. Invest in demonstration projects on decentralized and nature-based solutions for wastewater treatment of small and medium settlements.
2. Roll out a national program on innovative finance mechanism for farm-level water harvesting ponds.
3. Increase water efficiency by innovation, research and development, regulatory measures, rationing and pricing.
4. Improve safety of the existing water dams
5. Eliminate river pollution by regulatory, technological, and behavioral measures.
6. Expand a nation-wide effective multi-hazard early warning system.

Ecosystems, ecosystem services and land use

The overall goal: to protect and conserve ecosystems by increasing their resilience to adapt to the effects of climate change and adopting nature-based climate solutions to protect the fragile, rare, and most vulnerable environments. There is a significant opportunity to invest in protecting, restoring and sustainably managing Marshlands and KBAs so that it can contribute to socioeconomic



development. Interventions will enable ecosystem-based management of Marshlands and terrestrial and freshwater ecosystems to enhance function at the scale needed to be ecological sustainable as well as management of coastal and marine ecosystems in Arabian Gulf. This plan has identified the following as key investment areas that support enhanced resilience to climate change for ecosystems:

Enabling Environment and Capacity Building

1. Prioritizing the delivery of Integrated Marshland Ecosystem Assessment and Management plans and the strengthening of institutional frameworks.
2. Assessing the impact of climate change on biodiversity in vulnerable areas and protected areas.
3. Developing guidelines and mechanisms for collection, maintenance, reproduction and reintroduction of plants and animal species in ex-situ programmes for endemic species.

Climate Change Interventions

1. Climate smart land use planning in Iraq.
2. Integrated Forest, Land, Wetlands Management, Conservation and Restoration.
3. Investing in ecotourism to address unsustainable tourism and increasing marshland and biodiversity development.
4. Desertification control through the production of heat, salinity and drought-tolerant trees, which can also provide quality shades and higher carbon sinks and conversation and maintenance of endangered plants.

Low-emission transport

The Gol's NAMA strategy has made sustainable, low emissions transport a key pillar of its carbon emissions mitigation strategy. These actions will help accelerate the shift toward low-emission public transport to enhance urban mobility, electrify the transportation system, and expand the scale of next-generation transportation technologies. This plan has identified the following priority investment areas, which the Iraqi government prioritizes to support the transition to low-emission transport:

1. Integrated Multi-Modal Public Transportation System in Iraq
2. Urban Electric Modern Rail Transport System
3. System Baghdad's Suspended Train
4. Bus Rapid Transit (BRT) Road
5. Develop ecosystem for Electric Vehicle





Energy

The three key sub-sectors in the energy sector discussed in this plan include Energy Efficiency, Renewable Energy, and the generation of Green Hydrogen. Under these three sub-sectors, the plan considers the following investment opportunities:

Energy Efficiency:

1. Retrofit programme for existing buildings, as well the planning to modernize building to fit better for energy efficiency.
2. Automation, controls and energy management in commercial and public buildings.
3. Reducing urban heat island through nature-based solutions.
4. Reducing cooling needs in buildings with retrofit in existing buildings and integrate passive cooling systems.
5. Investing in district cooling systems compatible with geothermal, and solar systems.
6. Energy Audit and Management Systems (EAMS).

Renewable Energy:

1. Investing in integrated solar and wind power for energy generation.
2. Investing in large scale CSP.
3. Investing in RE thermal storage facilities.
4. Investing in solar powered pumped storage hydropower.
5. Production of distribution of Hybrid Renewable Energy System (HRES) to be implemented in industry.
6. Investing in the Solar and Wind Energy Value Chain (Solar PV cell manufacturing based on Silicon resource in Iraq, Sodium ion battery industry based on the residual salts from water desalination systems in southern Governorates).

Green Hydrogen generation:

1. Using green hydrogen as an alternative energy source in Southern Iraq by using the water from Arabian Gulf.
2. Reducing emissions and switching to green ammonia in the nitrogen fertilizer sector.
3. Certificates for green hydrogen and ammonia.
4. Storage and transmission of green hydrogen and ammonia.
5. Connecting RE infrastructure for green hydrogen.
6. Green hydrogen applications and scale-up in other areas: for example, focused on waste.
7. Increased climate resilience of grid with hydrogen storage projects.





Circular urban economy

Emissions from the waste sector contribute to 9 percent of Iraq's emissions and represent a significant opportunity for emissions reduction, especially with the government developing a waste management system. The objectives aimed at reducing emissions from this sector include the following: (i) promoting reduce, reuse, recycle and recover (4Rs) concepts for municipal and agricultural waste, (ii) safe and proper disposal of solid waste in suitable landfills and landfill gas collection, and (iii) develop policies to reduce waste such as from plastics.

Waste management also acts as a cross-cutting measure, not only reducing emissions but also building resiliency by preserving the Iraq's resources from the impacts of climate change. The Ministry of Environment is developing a Trust for financing for solid waste management projects, seeing it as an important sector to contribute towards the objectives of the National Environment Strategy. The Investment Plan highlights the following investment opportunities for the waste and pollution sector:

1. The creation of a multi-capable national waste management hub.
2. Waste-to-energy projects, including adapting existing landfill sites.
3. Wastewater treatments in Cities to reduce water consumptions and filter pollutions to dispose to rivers and soil.
4. Reduce the chemical pollutions (POPS, PCBs, Mercery, and others) in water and soil.




ANNEX- TWO: Iraq's Highlighted Advantage for Green Growth

A. Critical Minerals for Iraq's Green Growth

Iraq's wealth of mineral resources presents significant opportunities for green growth over the next decade. To better utilize these resources, Iraq can focus on the following strategies:

1. Silicon for Solar Panel Manufacturing:
 - **Local Manufacturing:** Invest in developing a domestic solar panel manufacturing industry, leveraging the high-quality silicon. This can reduce dependency on imports, create jobs, and position Iraq as a regional leader in renewable energy technologies.
 - **Research and Development:** Partner with international companies and research institutions to innovate and improve the efficiency of solar panels, making Iraq a hub for advanced solar technology.
2. Phosphates (10 billion tonnes):
 - **Sustainable Agriculture:** Use phosphates to produce eco-friendly fertilizers, promoting sustainable agricultural practices that improve crop yields and reduce environmental impact.
 - **Export and Trade:** Enhance the processing and refining of phosphates for export, positioning Iraq as a key supplier in the global fertilizer market, especially as demand for sustainable agricultural inputs grows.
3. Limestone (8 billion tonnes) and Dolomite (330 million tonnes):
 - **Green Construction Materials:** Develop industries that produce low-carbon cement and concrete using limestone and dolomite. This can support Iraq's infrastructure development while reducing the carbon footprint of construction projects.
 - **Carbon Capture:** Explore the potential of using limestone in carbon capture and storage (CCS) technologies to reduce emissions from industrial processes.
4. Kaolinitic Clay Stones (1.2 billion tonnes):
 - **Ceramic and Refractory Materials:** Expand the use of kaolinitic clay in producing high-quality ceramics and refractory materials for industrial applications, promoting domestic production and reducing imports.
 - **Environmental Remediation:** Use kaolinitic clay in environmental remediation efforts, such as soil stabilization and water purification.
5. Native Sulphur (600 million tonnes):
 - **Chemical Industry:** Invest in the sulfuric acid production industry, which is essential for various chemical processes, including fertilizer production and mineral processing. This can drive industrial growth while supporting green chemistry initiatives.
 - **Energy Sector:** Utilize sulphur in the production of energy storage materials, such as batteries, contributing to the development of clean energy technologies.
6. Gypsum (130 million tonnes):
 - **Sustainable Construction:** Promote the use of gypsum in the production of drywall and plaster for energy-efficient buildings. Gypsum-based materials can improve insulation and reduce energy consumption in the construction sector.
 - **Agricultural Applications:** Use gypsum to improve soil quality and manage water resources in agriculture, supporting sustainable farming practices.

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7. Salt (50 million tonnes and more could be generated if green hydrogen project is initiated):
 - **Desalination and Water Management:** Develop desalination plants using locally sourced salt to address water scarcity issues. This can ensure a reliable water supply for agriculture and industry, crucial for sustainable growth.
 - **Chemical Industry:** Expand the salt industry to support the production of chemicals used in environmental management and industrial processes. Given Iraq's abundant salt reserves, the country could invest in the development of sodium-ion battery technology. This could include establishing R&D centers to explore the potential of sodium-ion batteries and improve their efficiency and energy density, developing a domestic battery manufacturing industry focused on sodium-ion technology, which could create jobs and reduce dependency on imported batteries, and using sodium-ion batteries for grid storage, supporting the integration of renewable energy sources like solar and wind, and ensuring a stable and reliable power supply.
 8. Natural Gas (2,835 trillion cubic feet):
 - **Clean Energy Transition:** Leverage Iraq's vast natural gas reserves to transition from oil to cleaner energy sources. Develop natural gas power plants, reduce flaring, and promote the use of natural gas as a bridge fuel towards renewable energy.
 - **Industrial Growth:** Use natural gas as a feedstock for petrochemical industries, which can produce essential materials for green technologies, such as plastics for wind turbine blades or insulation materials.

By strategically developing these resources with a focus on sustainability, Iraq can drive green growth, create jobs, and position itself as a leader in the global green economy over the next decade.

B. Dates Value Chain for Iraq's Green Growth

Revitalizing Iraq's dates value chain could significantly boost the country's agricultural sector and reestablish dates as a key export product. Here are strategies that Iraq can pursue:

1. Improving Cultivation Practices:
 - **Modern Irrigation Techniques:** Implementing drip irrigation and other water-saving technologies can help increase yields and ensure better quality dates.
 - **Pest and Disease Management:** Investing in research and development to combat pests and diseases that affect date palms can lead to healthier crops and higher productivity.
 - **Cultivar Improvement:** Selective breeding and the introduction of high-yield, disease-resistant date palm varieties can enhance the quality and quantity of production.
 2. Processing and Packaging:
 - **Modern Processing Facilities:** Developing state-of-the-art processing plants to clean, sort, and package dates can increase the value of the product and make it more appealing in international markets.
 - **Value-Added Products:** Encourage the production of value-added products such as date syrup, date paste, and confections. These products can open new markets and increase revenues.
 - **Quality Standards:** Establishing and adhering to international quality standards in processing and packaging will ensure that Iraqi dates are competitive globally.
- 



3. Market Development:

- **Branding and Promotion:** Create a strong brand identity for Iraqi dates, highlighting their unique qualities and heritage. This can be supported by international marketing campaigns.
- **Export Market Diversification:** Expand export markets beyond traditional buyers by targeting new regions such as Europe, North America, and East Asia, where there is growing demand for natural and healthy foods.
- **Fair Trade and Organic Certification:** Obtaining certifications can help Iraqi dates access premium markets and appeal to health-conscious consumers.

4. Supply Chain and Logistics:

- **Cold Chain Development:** Invest in cold storage facilities and refrigerated transport to maintain the freshness and quality of dates during transit, especially for export.
- **Infrastructure Improvement:** Upgrade transportation infrastructure, including roads and ports, to reduce costs and improve the efficiency of getting products to market.
- **Cooperatives and Farmer Support:** Encourage the formation of cooperatives to help small farmers access resources, training, and markets more effectively.

5. Government and Policy Support:

- **Subsidies and Incentives:** Provide financial support to date farmers and processors through subsidies, low-interest loans, and grants for adopting modern technologies.
- **Research and Development:** Invest in agricultural research institutions focused on date cultivation, processing, and market trends to drive innovation in the sector.
- **Trade Agreements:** Negotiate favourable trade agreements with key importing countries to reduce tariffs and other barriers for Iraqi dates.

6. Sustainability and Environmental Practices:

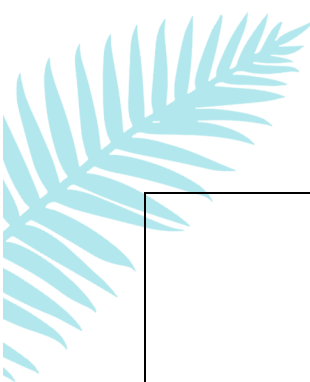
- **Sustainable Farming Practices:** Promote practices that maintain soil health, reduce water usage, and protect the environment to ensure long-term productivity.
- **Climate Adaptation:** Develop strategies to help date farmers adapt to the impacts of climate change, such as extreme temperatures and shifting rainfall patterns.

By focusing on these areas, Iraq can restore its prominence in the global dates market, boost rural economies, and create a sustainable agricultural sector that contributes to the country's overall green growth.

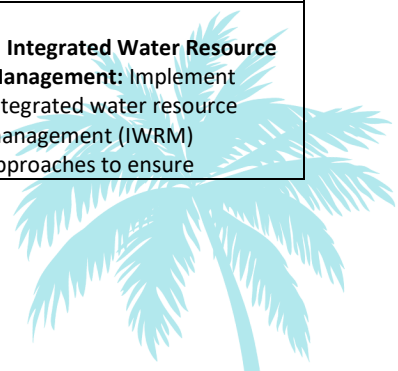


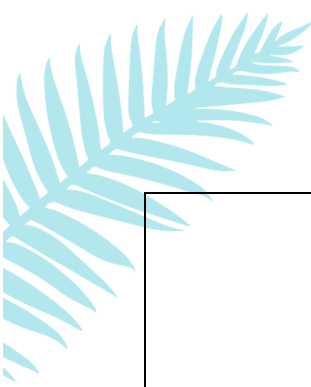
ANNEX- THREE: The Role of Ministries and Entities not Affiliated with a Ministry

Ministries and Entities not Affiliated with a Ministry	Green Growth Pathways	Sectoral Roles for Green Growth	Key Performance Indicator	Priority Actions
Ministry of Agriculture	1 2 3 4 8 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26	<p>1. Adoption of Sustainable Farming Practices: Implementing sustainable farming practices is crucial for promoting green growth in agriculture. This includes practices such as conservation tillage, crop rotation, agroforestry, and integrated pest management (IPM). These practices help improve soil health, reduce erosion, conserve water, and minimize the use of chemical inputs, thereby enhancing environmental sustainability.</p> <p>2. Enhanced Water Management: Efficient water management is essential for sustainable agriculture. Adopting water-saving irrigation techniques such as drip irrigation, precision irrigation, and rainwater harvesting can help optimize water use and adapt to decline availability of fresh water. Implementing adaptive and effective water management practices that prioritize water conservation and reduce water pollution can contribute to green growth objectives.</p> <p>3. Promotion of Agroecological Approaches: Agroecological approaches focus on integrating ecological principles into agricultural systems to enhance sustainability. By promoting biodiversity.</p> <p>4. Investment in Renewable Energy based Climate-Smart Agricultural Technologies: Investing in renewable energy and climate-smart agriculture technologies can</p>	<p>1. Reduction in Chemical Pesticide and Fertilizer Usage: promote environmentally friendly alternatives and reducing the use of pesticides and chemical fertilizers to reduce negative impacts on soil and water quality.</p> <p>2. Expansion of Agroecological Zones: Monitor the expansion of designated agroecological zones, which promote biodiversity conservation, soil health, and sustainable land management practices.</p> <p>3. Enhancement of Agricultural Biodiversity: Measure improvements in biodiversity within agricultural landscapes, including the restoration of native vegetation, creation of wildlife habitats, and conservation of endangered species.</p> <p>4. Increase in Sustainable and Climate Resilient Agricultural Practices: Measure the percentage increase in the adoption of sustainable farming techniques such as organic farming, agroforestry, and conservation agriculture, with focus on efficient water usage.</p> <p>5. Increase Crop Yield: Measure the amount of agriculture production per unit of land area aiming at identifying efficient farming practice.</p>	<p>1. Promotion of Sustainable Farming Practices: Encourage farmers to adopt sustainable agricultural practices that prioritize soil health, water conservation, and biodiversity preservation. Provide training, technical assistance, and financial incentives for implementing agroecological practices such as conservation tillage, crop rotation, and organic farming. Support the adoption of climate-smart agriculture techniques to enhance resilience to climate change impacts.</p> <p>2. Climate Adaptive Water Management and Irrigation Efficiency for the agricultural sector: Implement water management initiatives to improve irrigation efficiency and reduce water wastage in agriculture. Promote the use of drip irrigation, sprinkler systems, and other water-saving technologies to optimize water use in crop production. Invest in infrastructure for water storage, conveyance, and distribution to ensure reliable access to water for agricultural purposes.</p> <p>Promotion of Climate Risk Informed Agroforestry and Agroecosystem Restoration: Encourage the integration of trees and perennial crops into agricultural landscapes through agroforestry systems. Support agroecosystem restoration efforts to</p>

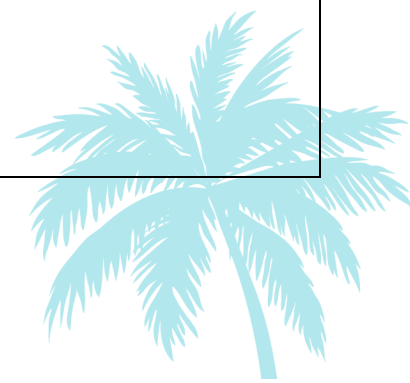


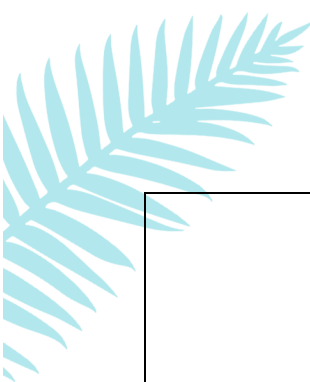
		<p>contribute to green growth in agriculture. This includes adopting renewable energy sources such as solar power and biogas for farm operations, as well as implementing climate-smart agricultural practices that help mitigate climate change impacts and build resilience. These investments can reduce greenhouse gas emissions, improve energy efficiency, and enhance the sustainability of agricultural production systems.</p>		<p>rehabilitate degraded lands, enhance ecosystem services, and promote biodiversity conservation. Facilitate community-led initiatives for reforestation, afforestation, and sustainable land management to mitigate desertification and soil erosion.</p> <p>4. Promotion of Climate-Resilient Agriculture: Support farmers in adopting climate-resilient agricultural practices to mitigate the impacts of climate change on food production. Promote the cultivation of drought-tolerant crop varieties, agroforestry systems, and conservation agriculture techniques that enhance soil moisture retention and reduce vulnerability to extreme weather events. Provide access to climate information, early warning systems, and risk management tools to help farmers adapt to changing climatic conditions.</p> <p>5. Market Access and Value-Chain Development of Climate Smart Agriculture: Strengthen agricultural value chains and promote market access for smallholder farmers and rural communities. Invest in infrastructure for post-harvest handling, processing, and storage facilities to reduce food losses and improve marketability of agricultural products. Facilitate access to credit, market information, and agricultural extension services to empower farmers and enhance their participation in local and regional markets.</p>
<p>Ministry of Water Resources</p>		<p>1. Increased Agricultural Water Use Efficiency: Enhancing water efficiency in agriculture is critical for sustainable water management. Practices such</p>	<p>1. Increase in Energy and Water Use Efficiency: Track improvements in water use efficiency in agriculture through measures such as the adoption of drip</p>	<p>1. Integrated Water Resource Management: Implement integrated water resource management (IWRM) approaches to ensure</p>





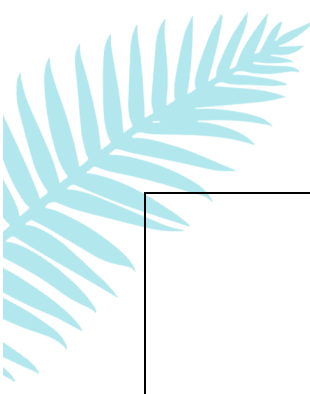
	<p>as drip irrigation, precision irrigation, and deficit irrigation can optimize water utilization and reduce wastage. By lowering the water consumption per unit of crop yield, these practices contribute to water conservation and environmental sustainability, benefiting the agricultural sector.</p> <p>2. Enhanced Water Availability through Harvesting and Recycling: Promoting water harvesting and recycling practices can boost water availability for agricultural use while reducing dependence on freshwater sources. Implementing systems for rainwater harvesting, groundwater recharge, and wastewater recycling can supplement irrigation water supplies, mitigating the depletion of natural water resources and supporting agricultural activities.</p> <p>3. Sustainable Water Management through Integrated Approaches: Embracing integrated water resource management (IWRM) is essential for addressing competing water needs across sectors, including agriculture, industry, and domestic usage. Implementing IWRM strategies that emphasize water conservation, equitable allocation, and ecosystem protection can ensure sustainable water use, benefiting agricultural production and rural communities.</p> <p>4. Adoption of Water-Efficient Technologies: Investment in water-efficient technologies and infrastructure is crucial for promoting green growth in agriculture within the water resources sector. Supporting the adoption of technologies such as water-saving irrigation systems, soil moisture sensors, and weather forecasting tools enables farmers to make</p>	<p>irrigation systems, rainwater harvesting, and efficient water management practices.</p> <p>2. Increase in Agroforestry Areas: Monitor the expansion of agroforestry systems, which integrate trees and shrubs into agricultural landscapes to enhance biodiversity, soil fertility, and climate resilience.</p> <p>3. Increase Percentage of Water Replaced and Reused: Through the enhancement of the technologies and integration of resources, improvement based on should be monitored and counted to indicate the percentages of saving the resources, to navigate the usages of techniques and improve water status.</p>	<p>sustainable use of water resources in agriculture. Develop and implement watershed management plans that balance competing water demands from agriculture, industry, and the environment. Enhance monitoring and regulation of water abstraction, groundwater recharge, and aquifer management to safeguard water availability for agriculture.</p> <p>3. Capacity Building and Institutional Strengthening: Build the capacity of water management institutions, agricultural extension services, and farmer cooperatives to support sustainable agriculture practices. Provide training, technical assistance, and knowledge-sharing platforms to enhance understanding of water-efficient farming techniques, soil conservation practices, and integrated pest management strategies. Strengthen coordination and collaboration between government agencies, research institutions, and civil society organizations to promote sustainable agriculture and water management practices.</p>
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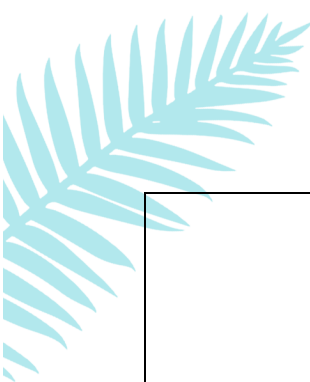
		<p>informed decisions about irrigation scheduling and water management. Additionally, modernizing irrigation infrastructure, such as canal lining and water distribution systems, can reduce water losses and enhance overall water use efficiency, benefiting the agricultural sector.</p> <p>5. Sustainable Water Reuse through Wastewater Treatment: Managing wastewater is essential for sustainable water management in agriculture. Investing in wastewater treatment plants and technologies facilitates the recycling and reuse of wastewater for agricultural purposes. This reduces pressure on freshwater sources and improves water resource management, supporting sustainable agricultural practices.</p>		
<p>Ministry of Education and Scientific Research</p>	<p>1 2 3 4 8 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26</p>	<p>1. Research and Development (R&D): Higher education institutions, and research centers play a crucial role in conducting research and developing innovative solutions to promote green growth. This includes research on sustainable farming practices, climate-smart agriculture, biotechnology, precision agriculture, and agroecology. R&D efforts focus on developing technologies, tools, and practices that enhance agricultural productivity while minimizing environmental impact.</p> <p>2. Capacity Building and Training: Higher education institutions are responsible for building the capacity of future agricultural professionals, researchers, and policymakers to address sustainability challenges in agriculture. Through curriculum development, training programs, and knowledge exchange activities, universities and colleges equip students with</p>	<p>1. Improvement in Soil Health: Measure changes in key soil health indicators such as soil organic matter content, soil fertility, and erosion rates, indicating progress towards sustainable land management practices.</p> <p>2. Expansion of Organic Agriculture: Monitor the growth of organic farming by measuring the increase in certified organic agricultural land and the number of certified organic producers.</p> <p>3. Reduction in Greenhouse Gas Emissions: Track the reduction in greenhouse gas emissions associated with agricultural activities, including methane from livestock, nitrous oxide from fertilizers, and carbon dioxide from land use changes.</p> <p>4. Energy Efficiency in Campus Buildings: This involves measuring the energy efficiency of buildings within the campus. This key performance indicator tracks energy consumption per square</p>	<p>1. Research and Innovation for Sustainable Agriculture: Invest in research and innovation to develop and promote sustainable agricultural practices. Support research projects focused on climate-resilient crop varieties, precision agriculture technologies, and agroecological approaches. Foster collaboration between universities, research institutions, and agricultural stakeholders to address key challenges facing the agricultural sector and develop innovative solutions.</p> <p>2. Capacity Building and Training Programs: Develop capacity-building programs and training initiatives to equip students, researchers, and agricultural professionals with the knowledge and skills needed for sustainable agriculture. Offer specialized courses, workshops, and field demonstrations on topics such as organic farming, agroforestry, and integrated pest management. Establish partnerships with agricultural extension services, farmer</p>





		<p>the skills and knowledge needed to promote green growth in agriculture. This includes training in sustainable agriculture practices, environmental conservation, and technology adoption.</p> <p>3. Technology Transfer and Extension Services: Higher education institutions serve as hubs for technology transfer and extension services to disseminate research findings and innovative technologies to farmers and agricultural stakeholders. Through extension programs, workshops, field days, and demonstration plots, universities and research centers facilitate the adoption of sustainable farming practices, climate-resilient crop varieties, and resource-efficient technologies at the grassroots level. This helps bridge the gap between scientific research and on-the-ground application, promoting green growth in agriculture.</p> <p>4. Collaborative Partnerships and Networking: Collaboration and partnerships among higher education institutions, government agencies, private sector entities, NGOs, and international organizations are essential for promoting green growth in agriculture. Universities and research centers collaborate on interdisciplinary research projects, joint initiatives, and knowledge-sharing platforms to address complex sustainability challenges in agriculture. Networking events, conferences, and forums provide opportunities for stakeholders to exchange ideas, share best practices, and foster innovation in green agriculture.</p>	<p>meter and implements energy-saving measures such as efficient lighting, HVAC systems, insulation, and the adoption of renewable energy sources like solar panels. Enhancing energy efficiency reduces operational costs, minimizes environmental impact, and serves as a model for sustainable practices within educational institutions.</p> <p>5. Integrating Sustainability into Curricula: This entails monitoring the incorporation of sustainability principles into academic and research programs within higher education institutions. It can include metrics such as the number of courses or degree programs focused on sustainability, the percentage of research projects addressing environmental issues, and the integration of sustainability concepts across disciplines. Embedding sustainability in the curriculum prepares students to tackle environmental challenges and fosters a culture of sustainability on campus.</p> <p>6. Green Campus Initiatives: This involves tracking the implementation of green campus initiatives aimed at reducing environmental impact and promoting sustainable practices. This key performance indicator may measure the adoption of eco-friendly practices such as waste reduction, recycling programs, sustainable transportation options, and green procurement policies. Green campus initiatives create a healthier and more sustainable environment for students, faculty, and staff while reducing the environmental footprint of higher education institutions.</p> <p>7. Research and Innovation for Sustainability: This focuses on monitoring</p>	<p>organizations, and private sector entities to facilitate knowledge exchange and technology transfer.</p> <p>3. Promotion of Sustainable Farming Practices: Integrate principles of sustainable agriculture into higher education curricula across relevant disciplines such as agronomy, agricultural engineering, and environmental science. Emphasize the importance of soil health, water conservation, and biodiversity conservation in agricultural production systems. Provide practical training opportunities for students to gain hands-on experience with sustainable farming practices through internships, research projects, and experiential learning activities.</p> <p>4. Technology Transfer and Commercialization: Facilitate the transfer of agricultural technologies and innovations from research institutions to farmers and agribusinesses. Establish technology transfer offices and incubators to support the commercialization of green technologies and agricultural innovations. Provide funding, mentorship, and networking opportunities to entrepreneurs and startups developing sustainable agriculture solutions. Foster public-private partnerships to scale up adoption of sustainable farming practices and promote market-driven approaches to agricultural development.</p> <p>5. Integrating Sustainability into Curricula: Incorporate sustainability principles, environmental education, and green technologies into the curricula of higher education institutions. Offer courses and programs focused on sustainable development, renewable energy, climate change mitigation, and environmental conservation. Encourage research and</p>
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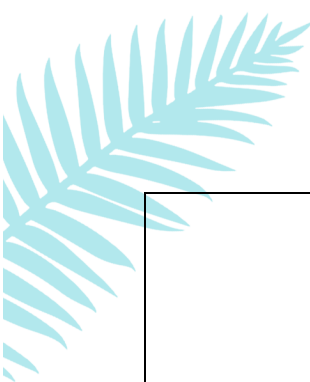




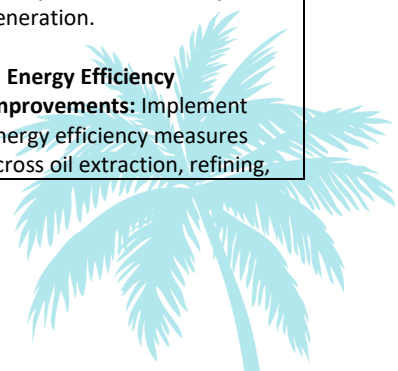
	<p>5. Campus Infrastructure Development and Management: Implement green building practices in the construction, renovation, and maintenance of campus buildings, dormitories, and facilities. Incorporate sustainable features such as energy-efficient lighting, renewable energy systems, low-flow fixtures, and green spaces to reduce environmental impact and enhance resource efficiency.</p> <p>6. Curriculum and Research Development: Integrate sustainability principles into higher education curricula across disciplines to cultivate a culture of environmental awareness and responsibility among students and faculty. Support research initiatives and academic programs focused on green building technologies, sustainable design practices, and environmental conservation.</p> <p>7. Operational Efficiency and Resource Conservation: Implement campus-wide initiatives to improve energy efficiency, conserve water, manage waste, and promote sustainable transportation options. Invest in campus infrastructure upgrades, smart building technologies, and energy management systems to optimize resource use and reduce greenhouse gas emissions.</p> <p>8. Community Engagement and Outreach: Engage students, faculty, staff, and the broader community in sustainability initiatives, awareness campaigns, and environmental stewardship programs. Collaborate with local stakeholders, government agencies, and industry partners to promote sustainable practices, facilitate knowledge exchange, and drive innovation in green building and service sectors.</p>	<p>research and innovation efforts aimed at addressing environmental challenges and developing sustainable solutions. It may include metrics such as the number of research projects related to green technology, renewable energy, sustainable agriculture, and climate change adaptation. Supporting research and innovation for sustainability contributes to knowledge creation, technology transfer, and the development of practical solutions to environmental issues.</p>	<p>innovation in sustainability-related fields to foster a culture of environmental stewardship among students and faculty.</p> <p>6. Green Campus Initiatives: Implement green campus initiatives to promote sustainability within higher education institutions. Develop and execute sustainability plans addressing energy efficiency, waste reduction, water conservation, and green transportation options. Retrofit existing buildings to enhance energy efficiency and integrate renewable energy sources like solar and wind power. Establish recycling programs, green spaces, and sustainable transportation infrastructure to create eco-friendly campuses.</p> <p>7. Research and Innovation for Sustainability: Promote research and innovation in green technologies, sustainable practices, and environmental conservation. Support interdisciplinary research projects that address pressing environmental challenges and develop solutions for sustainable development. Establish research centers, laboratories, and incubators focused on renewable energy, environmental sciences, and sustainable engineering to drive innovation and knowledge creation in green growth sectors.</p> <p>8. Partnerships for Sustainability: Foster partnerships and collaborations with government agencies, industry partners, and civil society organizations to advance sustainability goals. Build alliances with businesses and NGOs to provide students with practical learning experiences, internships, and job opportunities in sustainability-related fields. Collaborate with local communities to address environmental issues, promote community engagement, and implement sustainable</p>
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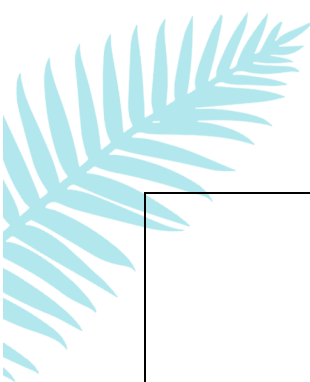


				development projects that benefit society.
Ministry of Electricity	1 4 10 13 14 16 17 19 20 23 25 26	<p>1. Policy Formulation and Regulation: The Ministry of Electricity plays a pivotal role in promoting green growth through the development and implementation of policies and regulations. These initiatives focus on setting standards for energy efficiency, emissions reductions, and sustainable production practices. Additionally, the ministry enacts regulations to incentivize the adoption of renewable energy sources and the implementation of environmentally friendly technologies. By establishing these frameworks, the ministry aims to enhance the sector's environmental sustainability, aligning it with international standards and best practices.</p> <p>2. Technology Promotion and Innovation: To drive the adoption of green technologies, the Ministry of Electricity actively promotes innovation and technology transfer. This involves supporting research and development initiatives, providing funding for innovation projects, and facilitating the transfer of technology from other sectors or countries. By fostering a culture of innovation, the ministry seeks to enable industries to transition towards more sustainable production methods and reduce their environmental impact. This approach not only enhances the sector's competitiveness but also contributes to Iraq's overall green growth agenda.</p> <p>3. Capacity Building and Training: The Ministry of Electricity recognizes the importance of building the capacity of stakeholders to embrace green practices. To achieve this, the ministry conducts training and</p>	<p>1. Renewable Energy Capacity Addition Rate: This KPI measures the rate at which new renewable energy capacity, such as solar, wind, and hydroelectric power, is added to the electricity generation mix. It reflects the progress in transitioning towards cleaner and more sustainable energy sources.</p> <p>2. Carbon Emissions Reduction: Tracking the reduction in carbon dioxide emissions resulting from electricity generation and energy efficiency activities is crucial for assessing the environmental impact of the electricity sector. This KPI demonstrates the effectiveness of measures implemented to mitigate greenhouse gas emissions and combat climate change.</p> <p>3. Grid Integration of Renewable Energy: Assessing the extent to which renewable energy sources are effectively integrated into the electricity grid is essential for ensuring stability and reliability. This KPI measures the capacity of the grid to accommodate variable renewable energy generation and reflects progress towards a more flexible and resilient energy system.</p> <p>4. Energy Access and Affordability: Monitoring the level of electricity access and affordability, particularly in rural and underserved areas, is essential for promoting inclusive and sustainable development. This KPI tracks improvements in access rates and affordability measures, ensuring that the benefits of green growth initiatives reach all segments of society.</p>	<p>1. Promotion of Renewable Energy Integration: Encourage the adoption of renewable energy sources, such as solar, wind, and hydroelectric power, in industrial operations. Provide incentives for industrial facilities to invest in on-site renewable energy generation systems, such as rooftop solar panels or wind turbines. Support the development of renewable energy infrastructure and grid integration to facilitate the deployment of clean energy technologies in the industrial sector.</p> <p>2. Energy Efficiency Measures: Implement energy efficiency measures to reduce energy consumption and lower carbon emissions in industrial processes. Conduct energy audits and assessments to identify opportunities for energy savings and process optimization. Invest in energy-efficient technologies, such as high-efficiency motors, LED lighting, and heat recovery systems, to improve energy efficiency and reduce operating costs for industrial facilities.</p> <p>3. Waste Reduction and Resource Efficiency: Promote waste reduction and resource efficiency initiatives to minimize environmental impacts and enhance sustainability in industrial operations. Encourage the adoption of circular economy principles, such as waste recycling, reuse, and resource recovery, to minimize waste generation and maximize resource utilization. Implement waste management systems and pollution control measures to mitigate environmental pollution and safeguard natural resources.</p> <p>4. Capacity Building and Technology Transfer: Build the capacity of industrial</p>

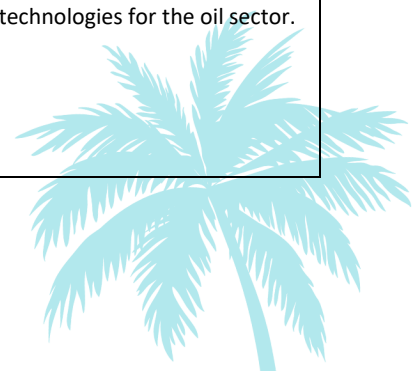


		<p>capacity building programs, including workshops, seminars, and educational campaigns. These initiatives aim to raise awareness about green practices and provide technical skills to implement them effectively. By enhancing the capacity of professionals, the ministry accelerates the transition towards green growth and ensures the long-term sustainability of the sector.</p> <p>4. Partnership and Collaboration: Collaboration is key to promoting green growth. The Ministry of Electricity collaborates with other government agencies, industry associations, academic institutions, and international organizations to achieve common goals. These partnerships leverage resources, share best practices, and coordinate efforts towards sustainable industrial development. By working collaboratively, the ministry addresses complex challenges more effectively and creates synergies between different stakeholders, ultimately driving green growth and contributing to Iraq's sustainable development.</p>	<p>5. Energy Efficiency: Monitoring implementation of energy efficiency policies such as green building codes, incentives for energy efficient technologies in buildings and appliance among others. This KPI tracks progress if integrating energy efficiency in energy consuming sectors.</p>	<p>stakeholders, including manufacturers, engineers, and policymakers, to adopt sustainable practices and technologies. Provide training, technical assistance, and knowledge-sharing platforms to enhance understanding of green technologies, clean production methods, and environmental management practices. Facilitate technology transfer and knowledge exchange partnerships between domestic and international stakeholders to accelerate the adoption of green growth solutions in the industrial sector.</p>
<p>Ministry of Oil</p>	<p>1 4 12 13 14 15 16 17 18 19 20 21 23 24 25 26</p>	<p>1. Transition to Renewable Energy: By investing in renewable energy sources such as solar and wind power, the Ministry of Oil can reduce the carbon footprint of the energy sector. This transition not only contributes to environmental sustainability but also reduces dependence on fossil fuels, enhancing energy security.</p> <p>2. Carbon Capture and Storage (CCS): Implementing CCS technologies in oil production processes can mitigate greenhouse gas emissions. This contributes to reducing the industry's environmental impact and aligning with international climate goals.</p>	<p>1. Carbon Intensity Reduction: Measure the reduction in carbon emissions per unit of oil extracted or refined. This KPI reflects efforts to improve the environmental footprint of the oil sector, including the adoption of cleaner extraction technologies, carbon capture and storage initiatives, and investments in renewable energy integration.</p> <p>2. Water Management Efficiency: Assess the efficiency of water usage in oil extraction and refining processes, including measures to minimize water consumption, recycle produced water, and prevent contamination of</p>	<p>1. Promotion of Renewable Energy Integration: Encourage the adoption of renewable energy sources within the oil industry to reduce greenhouse gas emissions and decrease reliance on fossil fuels. Invest in solar, wind, and geothermal energy projects to power oil extraction, refining, and processing operations. Implement policies and incentives to facilitate the integration of renewable energy technologies into oil production facilities, such as solar-powered pumps and wind-powered electricity generation.</p> <p>2. Energy Efficiency Improvements: Implement energy efficiency measures across oil extraction, refining,</p>



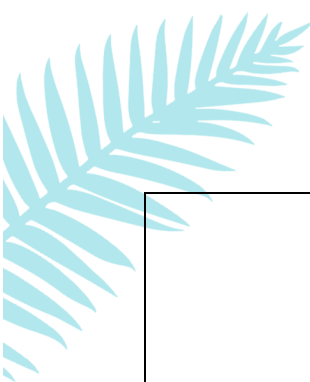


	<p>3. Efficiency Improvements: It can invest in technologies and practices that improve energy efficiency in oil extraction, refining, and distribution processes. These improvements not only reduce operational costs but also decrease the sector's overall environmental footprint.</p> <p>4. Community and Environmental Engagement: Investing in community engagement and environmental protection initiatives demonstrates the Ministry of Oil's commitment to sustainable practices. This can include biodiversity conservation efforts, community development projects, and environmental education programs.</p> <p>5. Diversification and Innovation: By diversifying its energy portfolio and investing in innovative technologies, the Ministry of Oil can position itself as a leader in sustainable energy production. This can attract investment, enhance the sector's competitiveness, and contribute to Iraq's overall green growth.</p> <p>6. International Cooperation: Given the global nature of the oil industry, the ministry would likely engage in international cooperation to advance green growth objectives. This might involve participating in multilateral initiatives to address climate change, negotiating international agreements on environmental standards for the oil sector, and collaborating with other oil-producing nations to promote sustainable practices across the industry. By fostering international partnerships, the ministry can amplify its impact and contribute to global efforts to combat climate change</p>	<p>freshwater sources. This KPI reflects the industry's commitment to responsible water stewardship and mitigating environmental impacts.</p> <p>3. Flaring Reduction: Monitor the reduction in flaring of associated gas during oil extraction and processing operations. This KPI demonstrates efforts to minimize greenhouse gas emissions, prevent air pollution, and utilize associated gas resources more effectively through capture and utilization projects.</p> <p>4. Biodiversity Conservation and Habitat Protection: Evaluate the effectiveness of measures to protect biodiversity and natural habitats in areas affected by oil operations. This could include habitat restoration initiatives, wildlife conservation programs, and adherence to environmental regulations aimed at minimizing ecological disruptions. This KPI reflects the industry's commitment to preserving biodiversity and ecosystem services while ensuring responsible resource extraction.</p>	<p>and processing operations to reduce energy consumption and enhance operational efficiency. Conduct energy audits and assessments to identify areas for improvement and prioritize investments in energy-efficient technologies and practices. Upgrade equipment, such as pumps, compressors, and boilers, to high-efficiency models and implement energy management systems to monitor and optimize energy usage.</p> <p>3. Carbon Capture and Storage (CCS) Initiatives: Invest in carbon capture and storage (CCS) technologies to mitigate greenhouse gas emissions from oil extraction and refining activities. Explore the feasibility of CCS projects to capture carbon dioxide emissions from industrial processes and safely store them underground or repurpose them for enhanced oil recovery. Collaborate with international partners and research institutions to develop and deploy CCS solutions tailored to the specific needs of the oil industry in Iraq.</p> <p>4. Research and Innovation for Sustainable Practices: Foster research and innovation in sustainable practices and technologies for the oil industry. Support research projects focused on reducing environmental impact, minimizing waste generation, and improving resource efficiency in oil extraction, refining, and processing operations. Establish partnerships with academic institutions, research organizations, and technology providers to leverage expertise and resources for developing and commercializing green technologies for the oil sector.</p>
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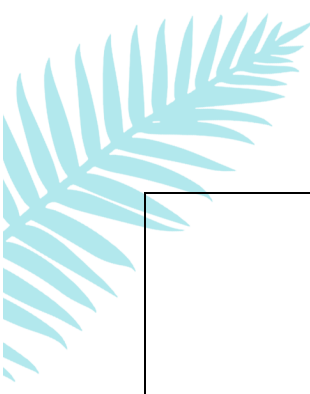
Ministry of Industry and Minerals		and promote sustainable development.		
	1 4 12 13 14 15 16 17 18 19 20 22 23 24 25 26	<p>1. Policy Development and Implementation: Formulating policies and strategies aimed at promoting green growth within the industrial sector. This includes drafting regulations and incentives to encourage industries to adopt sustainable practices, such as energy efficiency measures, waste reduction, and pollution control. Additionally, overseeing the implementation of these policies, monitoring compliance and adjusting strategies as needed to achieve environmental objectives.</p> <p>2. Technology Adoption and Innovation: Facilitate the adoption of green technologies and promote innovation within industrial processes. This involves identifying emerging technologies that enhance environmental performance, providing support for research and development initiatives, and facilitating technology transfer to industries. By promoting the adoption of sustainable technologies, the division can drive efficiency improvements and reduce the environmental footprint of industrial activities.</p> <p>3. Capacity Building and Training: Providing training and capacity building programs for industrial stakeholders. This includes offering workshops, seminars, and educational resources focused on sustainable practices, environmental management systems, and compliance with green regulations. By enhancing the capacity of industrial professionals to implement green initiatives, we can promote a culture of sustainability within the industry and facilitate the</p>	<p>1. Resource Efficiency Index: This KPI assesses the efficiency of resource usage within industrial processes. It measures the ratio of output (e.g., products manufactured) to input resources (e.g., raw materials, water, energy). A higher Resource Efficiency Index indicates more efficient use of resources, contributing to reduced waste generation and lower environmental impact.</p> <p>2. Renewable Energy Integration Rate: Monitoring the proportion of renewable energy sources integrated into industrial operations is crucial for promoting sustainable energy usage. This KPI measures the percentage of energy consumed by industries sourced from renewable sources such as solar, wind, hydroelectric, and biomass. Increasing this rate signifies progress towards reducing reliance on fossil fuels and mitigating greenhouse gas emissions.</p> <p>3. Carbon Emissions Intensity: Assessing the carbon emissions intensity per unit of industrial output provides insights into the environmental impact of industrial activities. This KPI measures the amount of carbon dioxide emitted per unit of production, indicating the carbon efficiency of industrial processes. Lowering carbon emissions intensity demonstrates a commitment to decarbonizing industrial operations and combating climate change.</p> <p>4. Green Technology Adoption Rate: Tracking the adoption rate of green technologies and sustainable practices within the industrial sector is</p>	<p>1. Promotion of Clean Technologies and Processes: Encourage the adoption of clean and sustainable technologies in industrial processes to reduce emissions, minimize waste generation, and enhance resource efficiency. Provide incentives, subsidies, and grants to industries that invest in cleaner production methods, such as renewable energy integration, energy-efficient equipment, and low-carbon manufacturing processes. Support research and development initiatives to innovate and develop green technologies tailored to the needs of different industrial sectors.</p> <p>2. Resource Efficiency and Circular Economy Practices: Promote resource efficiency and circular economy practices within the industrial sector to optimize resource use, reduce waste, and maximize value creation. Implement measures such as material recycling, waste-to-energy conversion, and industrial symbiosis to minimize resource consumption and waste generation. Facilitate the establishment of industrial eco-parks and clusters to promote resource sharing, collaboration, and synergies among industries.</p> <p>3. Capacity Building and Training Programs: Provide training, technical assistance, and capacity-building programs to industrial enterprises to enhance their knowledge and skills in sustainable practices and green technologies. Offer workshops, seminars, and certification programs on topics such as energy efficiency, pollution prevention, and environmental management systems. Develop partnerships with academic institutions, research centers, and international organizations to facilitate technology</p>

		<p>transition to greener production methods.</p> <p>4. Partnership and Collaboration: Collaborating with government agencies, industry associations, research institutions, and international organizations to advance green growth objectives. This involves forming partnerships to leverage resources, share best practices, and coordinate efforts towards common goals. By working collaboratively with diverse stakeholders, complex challenges can be addressed more effectively and promote synergies between different sectors and actors.</p> <p>5. Agent of Change: Looking at the role of Ministry of Industry towards the industrial sector. The ministry should play the bigger role as agent of change, to preform Needs Assessments and Surveys, as well a quality assurance in partnership with the Industrial Authority on all the partnered stakeholders under the sector and monitor & evaluate the efforts and implementations of the regulations, bylaws, and other instructions towards the green growth.</p>	<p>essential for driving innovation and enhancing environmental performance. This KPI measures the percentage of industrial facilities implementing eco-friendly technologies such as energy-efficient machinery, waste recycling systems, and pollution control measures. Increasing this rate signifies a transition towards greener and more sustainable industrial practices.</p>	<p>transfer and knowledge exchange.</p> <p>4. Green Industrial Zones and Eco-Industrial Parks: Establish green industrial zones and eco-industrial parks to promote sustainable industrial development and attract investment in environmentally friendly industries. Designate areas with access to renewable energy sources, efficient infrastructure, and integrated waste management systems to accommodate green industries and sustainable manufacturing processes. Provide incentives, tax breaks, and regulatory support to companies operating within these zones to encourage compliance with environmental standards and promote sustainable growth.</p>
Ministry of Trade	1 4 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26	<p>1. Green Trade Policy Development: Developing and implementing green trade policies to promote environmentally sustainable practices. This includes integrating environmental criteria into trade agreements, promoting eco-labeling for green products, and facilitating trade in renewable energy technologies. By fostering green trade policies, the ministry aims to enhance environmental protection and promote sustainable economic development.</p> <p>2. Market Access for Sustainable Products: Facilitate market access for</p>	<p>1. Sustainable Trade Volume: Measure the volume of trade involving goods and services that meet sustainability criteria, such as products certified as environmentally friendly or produced using renewable resources. This KPI tracks the growth of sustainable trade practices, encouraging the adoption of green standards and eco-certifications in international trade transactions.</p> <p>2. Carbon Footprint of Imports and Exports: Assess the carbon emissions associated with imported and exported goods and services. This KPI quantifies</p>	<p>1. Promotion of Sustainable Production and Consumption: Advocate for sustainable production and consumption practices among industrial enterprises. Encourage manufacturers to adopt eco-friendly manufacturing processes, minimize resource use, and reduce waste generation. Implement labeling schemes and certification programs to inform consumers about the environmental footprint of products and encourage the purchase of sustainable goods. Foster partnerships between manufacturers and retailers to promote the availability and uptake of environmentally</p>



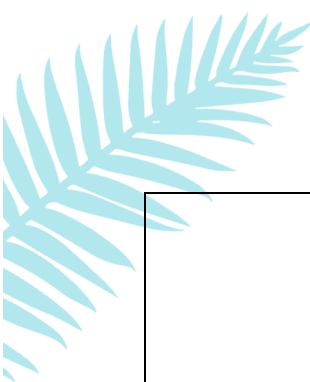
		<p>sustainable products and services by reducing trade barriers for environmentally friendly goods. This involves supporting exporters of green products through trade promotion programs and advocating for international standards that recognize sustainable production practices. By improving market access, the ministry encourages businesses to adopt sustainable practices and drive green growth.</p> <p>3. Capacity Building and Awareness: Building capacity among traders and businesses to engage in green trade practices. This includes providing training on sustainability standards, raising awareness about the benefits of green trade, and facilitating knowledge sharing among industry stakeholders. By empowering traders with the necessary skills, the ministry promotes the adoption of sustainable practices across the sector.</p> <p>4. Promotion of Sustainable Value Chains: development of sustainable value chains within the trade sector by integrating sustainability criteria into supply chain management practices. This involves fostering partnerships between producers, suppliers, and buyers to improve sustainability performance and incentivizing investment in environmentally friendly technologies. By promoting sustainable value chains, the ministry drives systemic changes that lead to more sustainable trade practices and contribute to the transition to a green economy.</p>	<p>the environmental impact of trade activities, including transportation and production processes, and guides efforts to minimize carbon emissions through sustainable logistics, energy-efficient transportation modes, and localization of production.</p> <p>3. Green Export Market Share: Monitor the share of green or environmentally friendly products in the total export market. This KPI reflects the competitiveness of sustainable goods and services in international markets, encouraging the expansion of green exports and supporting industries that prioritize environmental sustainability.</p> <p>4. Trade-related Environmental Regulations Compliance: Evaluate the level of compliance with international environmental regulations and standards in trade-related activities, including product labeling, packaging, and waste management. This KPI ensures adherence to environmental commitments and promotes responsible trade practices that minimize negative environmental impacts.</p>	<p>friendly products in the market.</p> <p>2. Support for Green Export Industries: Provide support and incentives to green export industries that produce environmentally friendly products and services. Facilitate market access for sustainable products through trade agreements, tariff reductions, and export promotion initiatives. Offer financial assistance, technical support, and market intelligence to help green export industries expand their market share and compete internationally. Promote Iraq's green industries as sustainable and responsible suppliers in global markets.</p> <p>3. Capacity Building and Training Programs: Develop capacity-building programs and training initiatives to enhance the competitiveness of industrial enterprises in adopting green practices and technologies. Offer workshops, seminars, and technical assistance on topics such as energy efficiency, waste management, and environmental compliance. Collaborate with industry associations, chambers of commerce, and academic institutions to deliver targeted training programs tailored to the needs of different industrial sectors.</p> <p>4. Market Development for Green Products: Stimulate demand for green products and services through targeted marketing campaigns, consumer education, and awareness-raising activities. Showcase the benefits of sustainable products, such as energy savings, resource efficiency, and environmental protection, to consumers and businesses. Encourage public procurement policies that prioritize the purchase of green products and services by government agencies, municipalities, and public</p>
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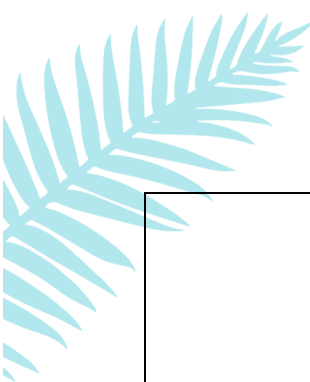
				institutions. Foster collaboration between the public and private sectors to create favorable market conditions for green industries and stimulate investment in sustainable manufacturing.
Endowments	1 4 13 14 15 16 17 19 20 21 22 23 24 25 26	<p>1. Renewable Energy Infrastructure Development: The Endowments can invest and promote the development of renewable energy infrastructure. This could include the installation of solar panels, wind turbines, or other renewable energy technologies on Endowment properties. By generating clean energy on-site, this will reduce its reliance on fossil fuels, lower its carbon footprint, and contribute to the transition towards a greener, sustainable cycle.</p> <p>2. Energy Efficiency Improvements: Implementing energy efficiency measures by the entity in its operations and properties, can involve retrofitting buildings with energy-efficient lighting, heating, and cooling systems, as well as management systems to monitor and optimize energy usage. This will result in reducing energy consumption, lowering operating costs, and decreasing the environmental impact.</p> <p>3. Green Building Construction and Maintenance: This can involve incorporating sustainable building materials, designs, and practices into new construction projects, as well as retrofitting existing buildings to meet green building standards, reaching energy-efficient, resource-efficient, and environmentally friendly status, to lower operating costs and improve occupant comfort and well-being.</p>	<p>1. Energy Efficiency of Endowment Properties: Measure the energy efficiency of buildings and facilities owned or managed by the Endowments. This KPI assesses energy consumption per square meter of space and tracks improvements over time through energy-saving measures such as insulation, efficient lighting, and HVAC system upgrades.</p> <p>2. Renewable Energy Integration: Monitor the integration of renewable energy sources, such as solar panels or wind turbines, into the energy mix of Endowments properties. This KPI reflects efforts to reduce reliance on fossil fuels, lower carbon emissions, and promote sustainable energy practices within religious institutions.</p> <p>3. Water Conservation and Management: Evaluate water usage and conservation practices within Endowments properties, including measures to minimize water waste, promote rainwater harvesting, and implement efficient irrigation systems in gardens and landscaping. This KPI aims to reduce water consumption, protect water resources, and enhance environmental sustainability.</p> <p>4. Waste Reduction and Recycling: Track the implementation of waste reduction and recycling initiatives within Endowments properties, including segregation of waste streams, composting organic waste, and recycling materials such as paper,</p>	<p>1. Promotion of Sustainable Industries: Encourage the establishment and growth of sustainable industries within the Shiite Endowment's jurisdiction. This could involve supporting eco-friendly manufacturing processes, such as recycling, renewable energy production, and low-impact manufacturing. Encourage businesses within the Endowments to adopt sustainable practices that minimize environmental impact while promoting economic development.</p> <p>2. Investment in Green Infrastructure: Invest in green infrastructure projects that support sustainable industrial development. This may include initiatives such as upgrading industrial facilities to be more energy-efficient, implementing wastewater treatment systems, and developing green transportation options for goods and personnel. By investing in green infrastructure, the Endowments can improve the environmental performance of industrial activities while enhancing the quality of life for surrounding communities.</p> <p>3. Promotion of Eco-Tourism and Cultural Industries: Leverage the cultural and historical significance of sites within the Endowments to promote eco-tourism and cultural industries. Encourage the development of sustainable tourism initiatives that showcase the rich cultural heritage of the region while preserving natural resources and promoting environmental stewardship. Support local artisans and cultural entrepreneurs in producing sustainable goods and services</p>





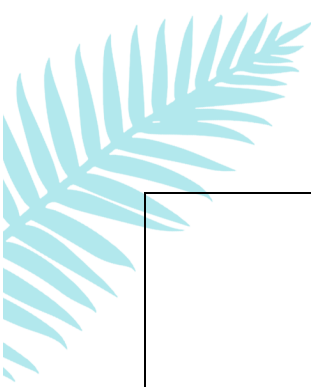
	<p>4. Promotion of Sustainable Practices: Promoting sustainable practices and behaviors among the stakeholders and the wider community will shed a light on the importance of environmental conservation and sustainability, providing training and education on sustainable practices, and implementing initiatives to reduce waste, conserve resources, and protect the environment. By promoting sustainable practices, the Endowment can inspire others to take action and contribute to a more sustainable future.</p> <p>5. Environmental Awareness in Religious Education: Integrate teachings on environmental stewardship and respect for nature into religious education programs and materials. Emphasize the importance of sustainable practices, conserving natural resources, and protecting the environment as part of religious teachings and ethical values.</p> <p>6. Community Engagement and Outreach: Organize educational seminars, workshops, and community events to raise awareness about environmental issues and promote green practices within communities. Encourage individuals to adopt eco-friendly habits such as waste reduction, recycling, water conservation, and energy efficiency in their daily lives.</p> <p>7. Green Initiatives in Endowment Facilities: Implement sustainability measures in the management and operation of endowment facilities, including mosques, religious schools, and cultural centers. Introduce energy-saving technologies, eco-friendly practices, and green infrastructure improvements to reduce environmental impact and resource consumption.</p>	<p>plastic, and glass. This KPI measures progress in diverting waste from landfills, promoting circular economy principles, and reducing the environmental footprint of endowment activities.</p> <p>5. Integrating Environmental Education in Religious Curricula: Monitor the incorporation of environmental education into religious curricula within religious educational institutions. This includes assessing the inclusion of teachings on environmental ethics, stewardship, and sustainability in religious studies. Increasing the integration of environmental education ensures that students receive religious teachings aligned with environmental responsibility, fostering a culture of environmental awareness within religious educational institutions.</p> <p>6. Development of Green Infrastructure in Religious Institutions: Track the development of green infrastructure within religious educational institutions and their associated facilities. This may include metrics such as the installation of energy-efficient lighting, renewable energy systems, water conservation measures, and sustainable landscaping practices. Developing green infrastructure reduces environmental impact, enhances resource efficiency, and demonstrates the commitment of Sunni endowments to sustainable practices.</p> <p>7. Environmental Advocacy and Awareness: Monitor efforts to promote environmental advocacy and awareness within Sunni educational institutions. This may involve organizing awareness campaigns, workshops, and seminars on environmental conservation,</p>	<p>that celebrate the traditions and values of the community.</p> <p>4. Community Engagement and Education: Engage with local communities and stakeholders to raise awareness about the importance of sustainable industrial development within the Shiite Endowment. Provide educational programs, workshops, and outreach activities to inform community members about the benefits of green growth strategies and empower them to participate in decision-making processes. Foster partnerships with educational institutions, civil society organizations, and local businesses to promote environmental literacy and community involvement in sustainable development initiatives.</p> <p>5. Integrating Environmental Education into Curricula: Develop and incorporate environmental education modules into the curricula of Shiite educational institutions. This includes integrating teachings on environmental ethics, sustainability, and stewardship across various subjects. By educating students on environmental issues and solutions, institutions can foster a culture of environmental awareness and responsibility.</p> <p>6. Establishing a Green Campus Initiative: Launch a Green Campus Initiative aimed at promoting sustainable practices within Shiite educational institutions. This initiative may include implementing energy-saving measures, waste reduction programs, sustainable transportation options, and green landscaping practices on campus. By creating a more eco-friendly campus, institutions can serve as role models for sustainable practices.</p> <p>7. Developing Green Infrastructure:</p>
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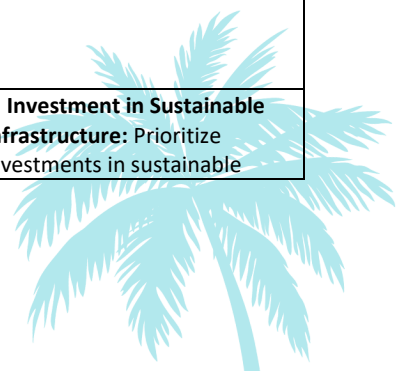


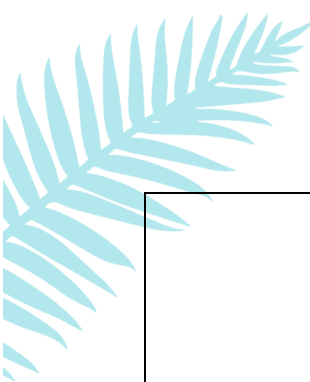
		<p>8. Collaboration with Environmental Organizations: Collaborate with environmental NGOs, government agencies, and educational institutions to share knowledge, resources, and best practices related to environmental conservation and sustainable development. Support joint initiatives and projects focused on environmental education, community engagement, and sustainable practices within Shiite communities.</p>	<p>sustainable living, and climate change adaptation. Engaging students, educators, and community members in environmental advocacy fosters a sense of responsibility toward the environment and encourages sustainable behaviors within the community.</p> <p>8. Integrating Sustainable Practices in Daily Operations: Track the integration of sustainable practices in the daily operations of religious educational institutions. This may include implementing waste reduction and recycling programs, promoting energy and water conservation measures, and adopting eco-friendly procurement policies. Incorporating sustainable practices in daily operations reduces environmental footprints, conserves resources, and sets an example for students and staff.</p>	<p>Invest in the development of green infrastructure within Shiite educational institutions. This includes installing energy-efficient lighting systems, solar panels for renewable energy generation, water-saving fixtures, and green spaces for recreation and biodiversity enhancement. By investing in green infrastructure, educational institutions can reduce their environmental footprint and contribute to broader sustainability efforts.</p> <p>8. Promoting Environmental Advocacy and Awareness: Organize awareness campaigns, workshops, and seminars to promote environmental advocacy and awareness within the college community. Encourage students, faculty, and staff to participate in environmental initiatives and adopt sustainable behaviors on campus and in their personal lives. By raising awareness and fostering a sense of responsibility toward the environment, educational institutions can empower individuals to take action for sustainability.</p>
<p>1 4 13 14 15 16 17 20 21 22 23 24 25 26</p>		<p>1. Renewable Energy Integration: Promoting green growth by integrating renewable energy sources into the entity's operations. by investing in solar, wind, or other renewable energy technologies to power military bases and installations. By reducing reliance on fossil fuels and transitioning to clean energy sources, the military can lower its carbon footprint and contribute to national and global efforts to combat climate change.</p> <p>2. Energy Efficiency Upgrades: Implement energy efficiency upgrades in its facilities and equipment. By retrofitting buildings with energy-efficient lighting, heating, and cooling systems, as well as upgrading vehicles to include more fuel-efficient</p>	<p>1. Energy Efficiency of Military Installations: Measure the energy efficiency of military bases, facilities, and operations. This KPI assesses energy consumption per unit area or activity and tracks improvements over time through energy-saving measures such as building insulation, efficient lighting, and optimized HVAC systems.</p> <p>2. Renewable Energy Integration: Monitor the integration of renewable energy sources, such as solar photovoltaic systems or wind turbines, into military installations. This KPI reflects efforts to reduce reliance on fossil fuels, lower carbon emissions, and enhance energy security</p>	<p>1. Energy Efficiency and Renewable Energy Integration: Implement energy efficiency measures and integrate renewable energy sources into military operations and facilities. This could involve upgrading equipment to be more energy-efficient, such as lighting and HVAC systems, and incorporating renewable energy technologies like solar panels and wind turbines. By reducing energy consumption and reliance on fossil fuels, the military can lower operational costs and decrease its environmental footprint.</p> <p>2. Sustainable Procurement and Supply Chain Management: Adopt sustainable procurement practices to promote the purchase of environmentally friendly products and services.</p>





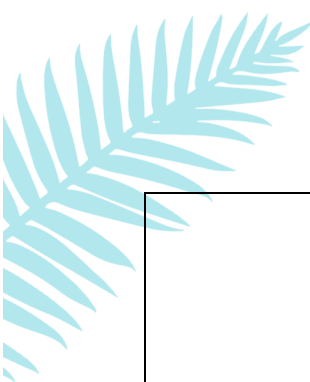
		<p>and low-emission mechanisms.</p> <p>3. Green Infrastructure Development: Promoting green growth by investing in green infrastructure projects. This can be constructing sustainable buildings and infrastructure, such as LEED-certified buildings, green roofs, and permeable pavement. Additionally, the military can invest in infrastructure projects that support public transportation, biking, and walking, reducing reliance on single-occupancy vehicles and promoting sustainable transportation options.</p> <p>4. Environmental Stewardship and Conservation: Environmental stewardship and conservation efforts, by protecting and preserving natural habitats and ecosystems on military lands, as well as implementing sustainable land management practices to minimize environmental degradation. The military can also participate in habitat restoration projects and biodiversity conservation initiatives to promote ecosystem health and resilience.</p> <p>5. Climate and Defence Support Mechanism: Assessing the potential security impacts of climate change on the population, especially tackling the vulnerable communities and vulnerable countries to the climate change impact, incorporating Climate Resilience and Research to enhancing the ability of defence infrastructure and personnel to withstand climate-related challenges, as well focused research and innovation in climate security and defence.</p>	<p>through the use of sustainable energy sources.</p> <p>3. Water Conservation and Management: Evaluate water usage and conservation practices within military facilities, including measures to minimize water waste, promote rainwater harvesting, and implement efficient irrigation systems. This KPI aims to reduce water consumption, protect water resources, and enhance environmental sustainability in military operations.</p> <p>4. Environmental Compliance and Impact Reduction: Track compliance with environmental regulations and standards in military activities, including measures to mitigate environmental impacts such as habitat disruption, pollution, and resource depletion. This KPI assesses the effectiveness of environmental management practices and guides efforts to minimize the ecological footprint of military operations.</p>	<p>This includes sourcing goods and materials from suppliers with strong environmental credentials and prioritizing products with minimal environmental impact throughout the supply chain. By choosing sustainable options, the military can support green industries and contribute to the transition towards a more sustainable economy.</p> <p>3. Environmental Protection and Conservation: Implement measures to protect and conserve natural resources in areas where military operations occur. This includes minimizing pollution, managing waste responsibly, and preserving biodiversity. Incorporate environmental considerations into military training exercises and operations to mitigate negative impacts on ecosystems and promote responsible stewardship of the environment.</p> <p>4. Community Engagement and Environmental Education: Engage with local communities and stakeholders to raise awareness about environmental issues and promote sustainable practices. This could involve organizing outreach events, educational programs, and community clean-up efforts to foster environmental literacy and build partnerships with local residents. By involving communities in environmental initiatives, the military can strengthen relationships, enhance trust, and contribute to broader societal efforts towards sustainability.</p>
Ministry of Transport	1 4 13	1. Development and Deployment of Sustainable Transportation	1. Modal Shift to Low-Emission Transport: Measure the shift towards	1. Investment in Sustainable Infrastructure: Prioritize investments in sustainable



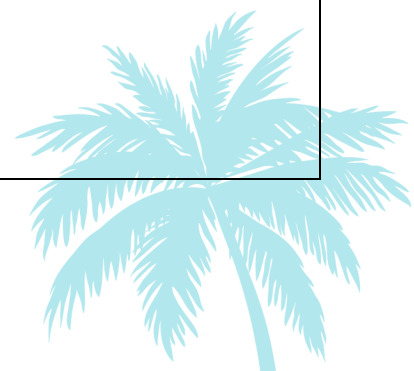


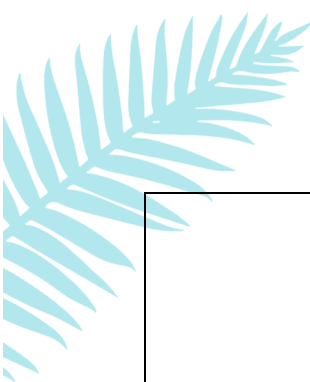
<p>14 15 16 17 19 20 21 22 23 24 25 26</p>	<p>Technologies: Ministry of Transport can lead the development and deployment of sustainable transportation technologies and expand by using electric vehicles (EVs), hybrid vehicles, and vehicles powered by alternative fuels such as hydrogen or biofuels, mass transportations (Metros, Buses, etc.), Mass transit will greatly help reduce the number of cars in traffic.</p> <p>2. Infrastructure Development for Sustainable Mobility: Contributing to green growth by investing in the development of sustainable transportation infrastructure. This involves introducing components for public transit systems, including electric buses, light rail vehicles, and charging stations for EVs. Additionally, materials for the construction of bike lanes, pedestrian-friendly walkways, and other sustainable mobility infrastructure projects can be produced.</p> <p>3. Promotion of Green Logistics and Supply Chain Management: Promoting green growth by adopting sustainable practices in logistics and supply chain management. This includes optimizing transport routes to minimize fuel consumption and emissions, investing in fuel-efficient vehicles and technologies, and adopting renewable energy sources for powering warehouses and distribution centers. By implementing green logistics practices.</p> <p>4. Raising awareness about sustainable transportation policies: Raising awareness on policies and regulations that support green growth and sustainability within the transport sector. This includes lobbying for</p>	<p>low-emission modes of transportation, such as public transit, cycling, walking, and electric vehicles (EVs). This KPI assesses the percentage increase in the use of sustainable transportation modes compared to conventional vehicles powered by fossil fuels. Encouraging a modal shift reduces greenhouse gas emissions, improves air quality, and mitigates traffic congestion.</p> <p>2. Fuel Efficiency Improvement: Track improvements in fuel efficiency across various modes of transportation, including road vehicles, maritime vessels, and aircraft. This KPI measures the reduction in fuel consumption per unit of distance traveled or cargo transported. Enhancing fuel efficiency reduces dependency on fossil fuels, lowers operating costs, and decreases carbon emissions associated with transportation activities.</p> <p>3. Infrastructure Investment in Sustainable Transport: Monitor the investment in infrastructure supporting sustainable transport modes, such as public transit systems, cycling lanes, pedestrian pathways, and EV charging stations. This KPI measures the extent of funding allocated to infrastructure projects that promote environmentally friendly transportation options. Investing in sustainable transport infrastructure improves accessibility, reduces environmental impacts, and supports economic development.</p> <p>4. Emissions Reduction Targets: Set and track targets for reducing greenhouse gas emissions and air pollutants generated</p>	<p>transportation infrastructure, including public transit systems, bicycle lanes, pedestrian pathways, and electric vehicle charging stations. Develop and upgrade roads, highways, and bridges to accommodate sustainable modes of transportation and reduce congestion. Incorporate green design principles into infrastructure projects to minimize environmental impact and enhance resilience to climate change.</p> <p>2. Promotion of Public Transit and Non-Motorized Transport: Promote the use of public transit and non-motorized modes of transport, such as walking and cycling, to reduce reliance on private cars and mitigate traffic congestion and air pollution. Expand and improve public transit networks, including buses, trams, and metro systems, to provide affordable, convenient, and environmentally friendly transportation options for urban and rural residents. Develop infrastructure and policies to support active transportation, such as bike lanes, pedestrian zones, and bike-sharing programs.</p> <p>3. Adoption of Clean and Efficient Vehicles: Encourage the adoption of clean and fuel-efficient vehicles to reduce emissions and improve air quality. Provide incentives, subsidies, and tax breaks for the purchase of electric, hybrid, and alternative fuel vehicles. Establish vehicle emission standards and regulations to limit pollution from internal combustion engines and promote the use of cleaner fuels. Invest in the development of charging infrastructure and refueling stations to support the transition to low-emission transportation technologies.</p> <p>4. Integration of Smart Mobility Solutions: Embrace smart mobility solutions and</p>
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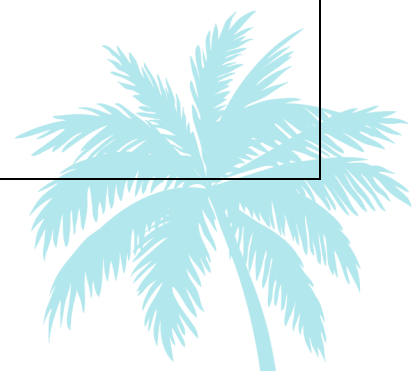


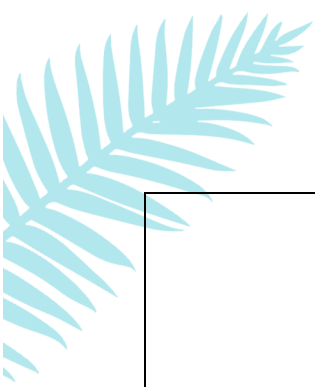
		<p>incentives and subsidies for the adoption of clean transportation technologies, advocating for stricter standards for vehicles emissions, and supporting initiatives to promote sustainable urban planning and smart mobility solutions. By actively engaging with policymakers and advocating for supportive policies, an enabling environment for green growth within the transport sector can be created.</p>	<p>by the transportation sector. This KPI measures the progress towards achieving emission reduction goals outlined in the Green Growth. Implementing measures such as vehicle emission standards, clean fuel policies, and green logistics initiatives helps mitigate environmental impacts and improve air quality.</p>	<p>technologies to enhance the efficiency, safety, and sustainability of transportation systems. Implement intelligent transportation systems (ITS) to optimize traffic flow, reduce travel times, and minimize fuel consumption and emissions. Deploy digital platforms and apps to provide real-time information on transit schedules, traffic conditions, and alternative routes to encourage mode shifting and reduce single-occupancy vehicle usage.</p>
<p>Ministry of Telecommunication</p> <p>CMC/ Media Networks</p>		<p>1. Renewable Energy Integration: Communication entities can play a significant role in integrating renewable energy sources into their operations. This includes deploying solar panels, wind turbines, or other renewable energy technologies to power data centers, communication networks, and infrastructure. By transitioning to renewable energy sources, these sectors can reduce carbon emissions and dependence on fossil fuels, contributing to green growth.</p> <p>2. Energy Efficiency Technologies: Promoting approaches for green growth, and renewable, eco-friendly technologies, this step will have more focus on raising awareness for the communities, and much more impact on the consumer behaviors, leading to raise in the movement towards renewable energy, and less consumption for resources, and environmental impacts.</p> <p>3. E-waste Management and Recycling: Proactive measures to address e-waste management and recycling challenges. Implementing responsible e-waste disposal practices and collaborating with recycling facilities to recover valuable materials from electronic waste. By promoting e-waste recycling and circular economy</p>	<p>1. Public Awareness and Education Campaign Reach: Measure the reach and effectiveness of public awareness campaigns related to sustainable transportation practices. This KPI assesses the number of people reached through communication channels such as social media, television, radio, and print media. Increasing the reach of communication campaigns raises awareness about the benefits of sustainable transportation modes and encourages behavior change among the public.</p> <p>2. Promotion of Sustainable Transportation Options: Track the promotion and adoption of sustainable transportation options through communication efforts. This KPI evaluates the effectiveness of communication strategies in promoting modes such as public transit, cycling, walking, carpooling, and electric vehicles (EVs). Increasing the adoption of sustainable transportation options reduces carbon emissions, congestion, and air pollution associated with conventional vehicle use.</p> <p>3. Stakeholder Engagement and Collaboration: Assess the level of stakeholder engagement and collaboration in transportation-related</p>	



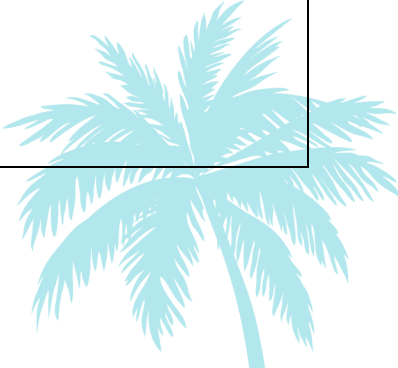


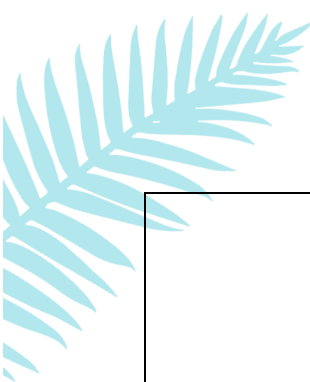
		<p>principles, these entities minimize environmental pollution and resource depletion associated with electronic waste generation.</p> <p>4. Development of Sustainable Technologies: Driving innovation and development of sustainable technologies that support green growth objectives. Investing in research and development of eco-friendly materials, energy-efficient devices, and sustainable communication infrastructure. fostering the adoption of sustainable technologies, these sectors can create new business opportunities, technology transfer, enhance competitiveness, and contribute to a more environmentally sustainable future.</p> <p>5. Advocacy and Promoting: in partnering with telecommunication companies and entities, the Ministry of Communication can serve the purpose by advocating for the Green Growth and promote the integration of Eco Friendly and renewable resources, driving the change to the community in levels of reaching the individuals and targeting in direct manners.</p>	<p>sustainability initiatives. This KPI measures the involvement of government agencies, transportation authorities, businesses, non-profit organizations, and community groups in promoting sustainable transportation practices through communication efforts. Effective stakeholder engagement fosters partnerships, builds consensus, and drives collective action towards shared sustainability goals.</p> <p>4. Feedback and Perception Surveys: Conduct surveys to gather feedback and assess public perception of transportation-related communication efforts. This KPI measures the effectiveness of communication messages, channels, and strategies in shaping public attitudes and behaviors towards sustainable transportation. Feedback from surveys helps refine communication approaches, address concerns, and tailor messages to target audiences more effectively.</p>	
<p>Ministry of Construction, Housing, Municipalities and Public Works: Baghdad Mayoralty</p>	<p>1 4 6 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26</p>	<p>1.Green Building Materials and Technologies: Quality Assurance departments within the ministry and Baghdad Mayoralty, that regulates the resources management such as cement, steel, glass, and insulation, can contribute to green growth by developing and producing sustainable/green building materials and technologies. This includes manufacturing materials with lower carbon footprints, such as recycled or renewable materials, as well as developing energy-efficient and environmentally friendly construction technologies,</p>	<p>1. Green Building Certification Rate: Measure the rate of green building certification for new construction and renovation projects within municipalities. This KPI assesses the percentage of buildings certified under green building standards such as LEED (Leadership in Energy and Environmental Design) or equivalent local standards. Increasing the green building certification rate demonstrates progress towards promoting energy efficiency, resource conservation, and indoor environmental quality in the built environment.</p>	



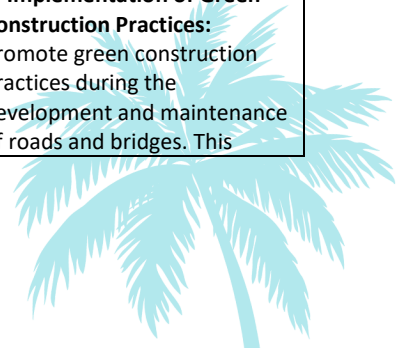


	<p>such as green roofs, passive heating and cooling systems, and smart building automation systems. By promoting the use of green building materials and technologies, these sectors can help reduce energy consumption, carbon emissions, and environmental impact associated with construction activities.</p> <p>2. Energy-Efficient Infrastructure and Utilities: Promoting green growth by investing in and implementing energy-efficient infrastructure and utilities systems. This includes developing and upgrading transportation networks, water and wastewater treatment facilities, and energy distribution systems to minimize energy consumption, optimize resource use, and reduce environmental impact.</p> <p>3. Waste Management and Recycling: Construction, housing, and municipal entities can also contribute to green growth by implementing effective waste management and recycling practices. This includes developing innovative waste management technologies, such as waste-to-energy systems and advanced recycling technologies, as well as promoting the reuse and recycling of construction and demolition waste materials. By diverting waste from landfills, reducing resource consumption, and promoting circular economy principles.</p> <p>4. Green Urban Planning and Design: Industrial sectors involved in urban planning, architecture, and design can play a crucial role in promoting green growth by integrating sustainability principles into urban</p>	<p>2. Energy Efficiency of Municipal Infrastructure: Track improvements in energy efficiency across municipal infrastructure, including buildings, street lighting, water supply systems, and wastewater treatment plants. This KPI measures the reduction in energy consumption per unit of service delivered or infrastructure asset. Implementing energy-efficient technologies, energy management systems, and renewable energy solutions helps lower energy costs, reduce greenhouse gas emissions, and enhance sustainability in municipal operations.</p> <p>3. Waste Reduction and Recycling Rate: Monitor the waste reduction and recycling rate within municipalities, including construction and demolition waste, household waste, and industrial waste. This KPI assesses the percentage of waste diverted from landfills through recycling, composting, and other waste minimization practices. Increasing the waste reduction and recycling rate promotes circular economy principles, conserves resources, and mitigates environmental impacts associated with waste disposal.</p> <p>4. Green Infrastructure Development: Assess the development and integration of green infrastructure within municipalities, including parks, green spaces, urban forests, and sustainable drainage systems. This KPI measures the area of green infrastructure added or enhanced within urban areas. Investing in green infrastructure enhances biodiversity, improves air and water quality, reduces urban heat island effects,</p>	
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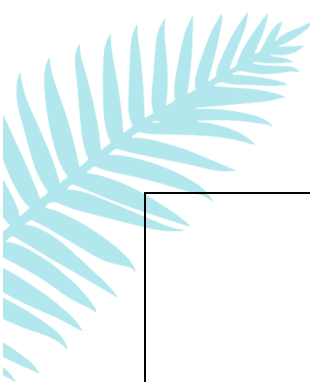




		<p>development projects. This includes designing energy-efficient and environmentally friendly buildings, neighborhoods, and urban spaces, as well as incorporating green infrastructure elements, such as parks, green roofs, and permeable pavement, to enhance environmental quality and resilience. By adopting green urban planning and design practices, these sectors can create healthier, more livable, and more sustainable communities while reducing environmental impact and promoting green growth.</p>	<p>and enhances the overall livability and resilience of cities.</p>	
<p>Roads and Bridges Directorate within the Ministry of Construction, Housing, Municipalities, and Public Works</p>	<p>1 4 12 13 14 15 16 17 19 20 21 22 23 24 25 26</p>	<p>1. Sustainable Construction Materials: Quality Assurance departments within the ministry responsible for resources such as asphalt, concrete, steel, and aggregates, can contribute to green growth by developing and producing sustainable materials. This includes manufacturing materials with lower carbon footprints, such as recycled or renewable materials, as well as developing innovative materials that improve durability, reduce maintenance needs, and minimize environmental impact.</p> <p>2. Low-Carbon Construction Techniques: Promoting green growth by adopting low-carbon construction techniques and practices. This includes implementing innovative construction methods, such as prefabrication, modular construction, and cold recycling of asphalt, to reduce energy consumption, minimize waste generation, and optimize resource use. By adopting low-carbon construction techniques, these sectors can reduce construction-related emissions, lower project costs, and improve environmental sustainability.</p>	<p>1. Carbon Emissions Reduction: Monitor the reduction in carbon emissions associated with road and bridge infrastructure projects. This KPI measures the decrease in greenhouse gas emissions, including those generated during construction, maintenance, and operation of roads and bridges. Implementing sustainable construction practices, using low-carbon materials, and promoting efficient transportation systems contribute to lowering carbon emissions in the sector.</p> <p>2. Materials Efficiency and Recycling Rate: Track improvements in materials efficiency and recycling within road and bridge construction projects. This KPI assesses the percentage of materials recycled or reused in infrastructure projects, such as asphalt, concrete, and steel. Increasing the recycling rate reduces resource consumption, minimizes waste generation, and promotes circular economy principles in infrastructure development.</p> <p>3. Resilience to Climate Change and Extreme Events: Evaluate the</p>	<p>1. Integration of Sustainable Design Principles: Planning, construction, and maintenance of roads and bridges. This includes using environmentally friendly materials, such as recycled or locally sourced materials, to reduce carbon footprint and minimize resource extraction. Design infrastructure projects to minimize habitat disruption, preserve biodiversity, and mitigate negative environmental impacts.</p> <p>2. Promotion of Low-Carbon Transportation: Encourage the adoption of low-carbon transportation modes to reduce emissions and air pollution associated with road and bridge infrastructure. Invest in public transit systems, such as buses and trams, to provide efficient and affordable transportation options that reduce reliance on private vehicles. Develop infrastructure to support non-motorized transportation modes, such as pedestrian pathways and cycling lanes, to promote active transportation and reduce congestion on roadways.</p> <p>3. Implementation of Green Construction Practices: Promote green construction practices during the development and maintenance of roads and bridges. This</p>

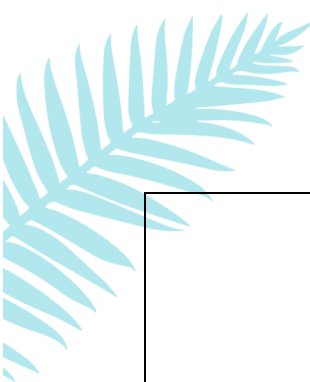


		<p>3. Green Infrastructure Design: Contribute to green growth by incorporating green infrastructure elements into transportation projects. This includes designing roads and bridges with features that enhance environmental quality, such as permeable pavements, vegetated swales, and green bridges, to improve stormwater management, reduce heat island effects, and enhance biodiversity.</p> <p>4. Renewable Energy Integration: Industrial sectors involved in road and bridge infrastructure development can play a role in promoting green growth by integrating renewable energy technologies into transportation projects. This includes incorporating solar panels, wind turbines, or other renewable energy systems into roadways, bridges, and related infrastructure to generate clean energy and reduce reliance on fossil fuels. By harnessing renewable energy sources, these sectors can reduce greenhouse gas emissions, improve energy security, and support the transition to a low-carbon economy.</p>	<p>resilience of roads and bridges to climate change impacts and extreme weather events. This KPI assesses the ability of infrastructure assets to withstand flooding, storms, temperature fluctuations, and other climate-related risks. Enhancing resilience through design modifications, maintenance practices, and disaster preparedness measures ensures the longevity and functionality of transportation infrastructure in a changing climate.</p> <p>4. Promotion of Sustainable Transportation Modes: Measure the promotion and integration of sustainable transportation modes within road and bridge projects. This KPI assesses the inclusion of features such as dedicated lanes for public transit, pedestrian walkways, bicycle lanes, and infrastructure for electric vehicles. Promoting sustainable transportation modes reduces reliance on private vehicles, improves air quality, and enhances mobility options for communities.</p>	<p>includes minimizing construction-related emissions and pollution through proper waste management and sediment control measures. Adopt techniques such as permeable pavement and green stormwater infrastructure to reduce runoff and improve water quality. Utilize energy-efficient lighting and traffic management systems to minimize energy consumption and enhance safety.</p> <p>4. Investment in Resilient Infrastructure: Invest in resilient infrastructure that can withstand the impacts of climate change, such as extreme weather events and rising sea levels. Incorporate climate resilience considerations into the design and construction of roads and bridges to ensure long-term durability and functionality. Implement measures such as slope stabilization, flood protection, and coastal defenses to mitigate the risks associated with climate-related hazards and ensure the reliability of transportation networks.</p>
Civil Aviation Authority		<p>1. Air Traffic Management and Operations: Companies involved in air traffic management and operations play a crucial role in promoting green growth within the National Aviation Authority. This includes implementing advanced air traffic control systems, such as satellite-based navigation and optimized flight routes, to reduce fuel consumption, minimize emissions, and improve airspace efficiency. Additionally, industrial players can develop and deploy sustainable aviation fuel (SAF) infrastructure to enable the use of alternative fuels and reduce the carbon intensity of flights.</p>	<p>1. Fuel Efficiency Improvement: Monitor improvements in fuel efficiency across the aviation sector. This KPI assesses the reduction in fuel consumption per passenger-kilometer or per ton-kilometer of freight transported. Implementing measures such as modernizing the fleet, optimizing flight routes, and enhancing operational practices contributes to reducing fuel consumption, lowering greenhouse gas emissions, and improving overall environmental performance.</p> <p>2. Adoption of Sustainable Aviation Fuels (SAFs): Track</p>	<p>1. Adoption of Sustainable Aviation Fuels (SAFs): Encourage the adoption and use of sustainable aviation fuels (SAFs) within the aviation sector. Collaborate with industry stakeholders, airlines, and fuel producers to develop and implement strategies for the production, distribution, and use of SAFs. Provide incentives and support for research and development efforts to improve the efficiency and sustainability of SAF production processes. SAFs can significantly reduce greenhouse gas emissions compared to traditional jet fuels, contributing to the sector's environmental sustainability.</p>



		<p>2. Airport Infrastructure and Operations: Aviation Authorities tackling infrastructure and operations can contribute to green growth by implementing sustainable practices and technologies to reduce environmental impact. This includes investing in energy-efficient terminal buildings, ground support equipment, and lighting systems to minimize energy consumption and carbon emissions. Additionally, airports can adopt renewable energy sources, such as solar panels and wind turbines, to power operations and reduce reliance on fossil fuels. Furthermore, implementing sustainable water management systems and promoting waste reduction and recycling initiatives can help minimize environmental footprint.</p> <p>3. Research and Innovation: Research and innovation play a vital role in advancing green growth within the National Aviation Authority. This includes investing in research projects and collaborative initiatives to develop breakthrough technologies and solutions for reducing aviation emissions and environmental impact. Research areas may include sustainable aviation fuels, electrification of aircraft propulsion systems, carbon capture and utilization, and noise reduction technologies. By driving innovation and fostering collaboration among industry stakeholders, these sectors can accelerate the transition towards a more sustainable aviation sector.</p>	<p>the adoption and use of sustainable aviation fuels (SAFs) within the aviation sector. This KPI measures the percentage of SAFs incorporated into aircraft fuel blends. Increasing the use of SAFs derived from renewable sources such as biofuels reduces the carbon footprint of aviation operations and supports the transition to a more sustainable aviation industry.</p> <p>3. Noise Reduction Measures: Evaluate the implementation of noise reduction measures at airports and in aircraft operations. This KPI assesses the reduction in noise levels generated by aircraft during takeoff, landing, and taxiing. Implementing noise abatement procedures, investing in quieter aircraft technology, and implementing land-use planning measures around airports help minimize noise pollution and mitigate community impacts.</p> <p>4. Emissions Reduction Targets: Set and monitor targets for reducing greenhouse gas emissions and air pollutants from aviation activities. This KPI measures the progress towards achieving emission reduction goals outlined in the Green Growth. Implementing measures such as aircraft technology upgrades, air traffic management improvements, and operational efficiencies helps mitigate environmental impacts and supports sustainable growth in the aviation sector.</p>	<p>2. Investment in Green Airport Infrastructure: Prioritize investments in green airport infrastructure and facilities to minimize environmental impact and improve operational efficiency. Implement energy-efficient technologies, such as LED lighting, solar panels, and energy management systems, to reduce energy consumption and lower carbon emissions. Develop sustainable water management systems, including rainwater harvesting and wastewater recycling, to conserve water resources and reduce water usage. Enhance waste management practices, such as recycling and composting, to minimize waste generation and promote resource conservation.</p> <p>3. Promotion of Air Traffic Management Efficiency: Enhance air traffic management systems and procedures to improve operational efficiency and reduce fuel consumption and emissions. Implement modern air traffic control technologies, such as satellite-based navigation and surveillance systems, to optimize flight routes and reduce flight distances. Collaborate with regional and international aviation authorities to harmonize airspace management and facilitate more direct and fuel-efficient flight paths. Promote the use of continuous descent and climb procedures to minimize fuel burn during takeoff and landing operations.</p> <p>4. Investment in Sustainable Airport Ground Transportation: Invest in sustainable ground transportation options to improve access to airports and reduce emissions from passenger and cargo vehicles. Develop and expand public transit services, such as bus and rail connections, to airports to provide convenient and environmentally friendly</p>
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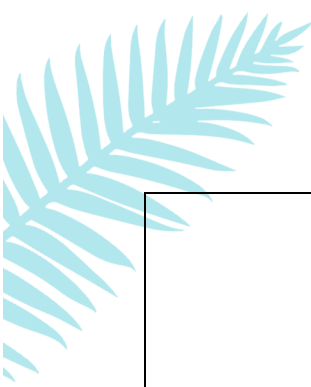




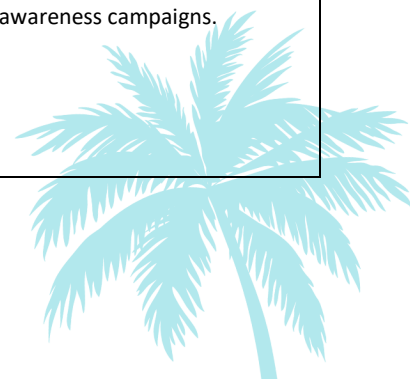
				transportation options for travelers and airport employees. Implement electric vehicle charging infrastructure and promote the use of electric and low-emission vehicles for airport ground operations, including shuttle buses, taxis, and ground support equipment.
Ministry of Interior	1 4 6 13 14 15 16 17 18 19 20 21 22 23 24 25 26	<p>1. Energy Efficiency and Sustainable Infrastructure: Supporting green growth within the Ministry of Interior by designing and constructing energy-efficient and sustainable buildings and facilities. This includes implementing green building principles, such as energy-efficient HVAC systems, LED lighting, and renewable energy integration, to minimize energy consumption and reduce environmental impact. Additionally, industrial players can develop sustainable infrastructure solutions, such as smart transportation systems and eco-friendly public facilities, to enhance environmental sustainability and resilience within communities served by the Ministry of Interior.</p> <p>2. Green Technology Integration: Promoting green growth by developing and implementing green technologies for law enforcement, public safety, and administrative operations. This includes deploying energy-efficient IT systems, digital communication networks, and smart surveillance solutions to improve operational efficiency and reduce energy consumption. Additionally, industrial players can develop innovative solutions for waste management, water conservation, and environmental monitoring to support sustainable practices within the Ministry of Interior's operations.</p>	<p>1. Traffic Accident Reduction: Measure the reduction in the number of traffic accidents and related fatalities within the jurisdiction of the Ministry of Interior. This KPI assesses the effectiveness of road safety measures, law enforcement efforts, and infrastructure improvements in reducing traffic accidents and improving road safety. Decreasing the incidence of traffic accidents enhances public safety, reduces human casualties, and mitigates the environmental impact associated with road collisions.</p> <p>2. Implementation of Sustainable Transportation Policies: Track the implementation of policies and regulations promoting sustainable transportation practices within the Ministry of Interior's jurisdiction. This KPI measures the adoption of measures such as vehicle emissions standards, traffic management strategies, and sustainable urban planning initiatives. Implementing sustainable transportation policies reduces air pollution, congestion, and greenhouse gas emissions, contributing to environmental sustainability and public health improvement.</p> <p>3. Public Transportation Accessibility and Efficiency: Monitor the accessibility and efficiency of public transportation services within the Ministry of Interior's jurisdiction. This KPI assesses indicators such</p>	<p>1. Promotion of Sustainable Public Transport: Encourage the use of sustainable public transportation options by investing in and promoting efficient and accessible public transit systems. This includes improving bus services, developing tram or light rail networks, and enhancing connectivity between different modes of public transport. Prioritize the use of clean energy sources for public transportation vehicles to reduce emissions and improve air quality.</p> <p>2. Enhancement of Traffic Management Systems: Implement advanced traffic management systems to optimize traffic flow, reduce congestion, and minimize fuel consumption and emissions. Use technologies such as intelligent transportation systems (ITS) to monitor traffic conditions in real-time, manage traffic signals efficiently, and provide travelers with accurate information about alternative routes and transportation options. By reducing traffic congestion, these measures can contribute to lower fuel consumption and greenhouse gas emissions.</p> <p>3. Promotion of Active Transportation: Encourage walking and cycling as viable modes of transportation by investing in infrastructure that supports active mobility. Develop pedestrian-friendly infrastructure such as sidewalks, crosswalks, and pedestrian bridges to improve safety and accessibility for pedestrians. Create dedicated cycling lanes and bike-sharing</p>

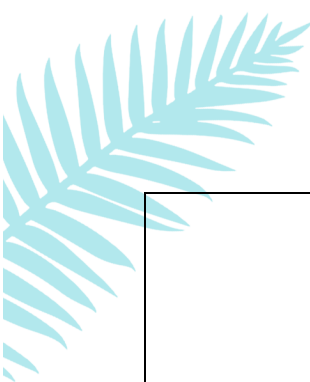


	<p>3. Environmental Compliance and Enforcement: Environmental compliance, monitoring, and enforcement can contribute to green growth within the Ministry of Interior by supporting efforts to enforce environmental regulations and promote sustainable practices. This includes providing expertise and resources for environmental inspections, pollution control measures, and enforcement actions to ensure compliance with environmental laws and regulations. Additionally, the development and implementation of environmental policies, guidelines, and training programs to promote sustainability awareness and best practices within the Ministry of Interior and its affiliated agencies.</p> <p>4. Green Procurement and Supply Chain Management: Procurement and supply chain management for the Ministry of Interior can play a role in promoting green growth by integrating sustainability criteria into procurement processes and supply chain management practices. This includes sourcing environmentally friendly products, materials, and services, as well as promoting green procurement policies and initiatives to minimize environmental impact and promote sustainability throughout the supply chain.</p>	<p>as coverage area, frequency of service, reliability, and affordability of public transit options. Improving public transportation accessibility and efficiency encourages modal shift from private vehicles to public transit, reducing traffic congestion, air pollution, and energy consumption associated with individual car use.</p> <p>4. Promotion of Active Transportation: Track efforts to promote active transportation modes such as walking and cycling within urban areas under the Ministry of Interior's jurisdiction. This KPI measures the implementation of infrastructure improvements, pedestrian-friendly measures, and cycling infrastructure development projects. Promoting active transportation modes enhances public health, reduces traffic congestion, and supports environmental sustainability by reducing reliance on motorized transportation.</p>	<p>programs to promote cycling as a sustainable and healthy transportation option. Encourage mixed-use urban planning to reduce the need for motorized transportation and promote walkable communities.</p> <p>4. Enforcement of Vehicle Emission Standards: Strengthen enforcement of vehicle emission standards and regulations to reduce air pollution from motor vehicles. Implement regular vehicle inspections to ensure compliance with emission standards and address any violations effectively. Provide incentives for the adoption of cleaner and more fuel-efficient vehicles, such as tax breaks or subsidies for electric or hybrid vehicles. By reducing vehicle emissions, these measures can improve air quality and public health while contributing to environmental sustainability.</p>
Ministry of Defense	<p>1. Energy Efficiency and Renewable Energy Integration: Technology, and infrastructure management in the Ministry of Defense can contribute to green growth by promoting energy efficiency and integrating renewable energy sources into military operations and facilities. This includes developing energy-efficient vehicles, aircraft, ships, and equipment, as well as deploying renewable energy</p>	<p>1. Fuel Efficiency Improvement: Monitor improvements in fuel efficiency across the transportation fleet managed by the Ministry of Defense. This KPI assesses the reduction in fuel consumption per unit distance traveled or per operational mission. Implementing measures such as fleet modernization, route optimization, and fuel-efficient driving practices</p>	<p>1. Adoption of Green Fleet Initiatives: Implement initiatives to transition the military fleet to greener and more fuel-efficient vehicles. This includes replacing older, less efficient vehicles with newer models that meet higher fuel efficiency standards or are powered by alternative fuels such as biodiesel or compressed natural gas (CNG). Additionally, explore the possibility of incorporating</p>

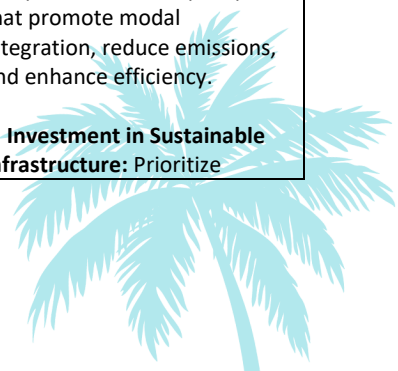


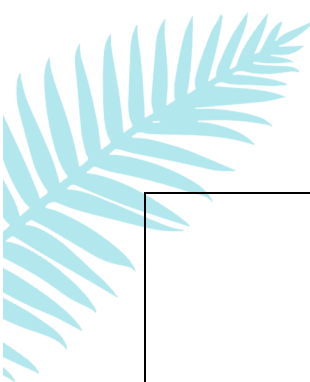
	<p>systems such as solar panels, wind turbines, and biomass facilities to power military bases and installations. By reducing reliance on fossil fuels and minimizing energy consumption, these sectors can enhance energy security, reduce carbon emissions, and promote environmental sustainability within the Ministry of Defense.</p> <p>2. Green Defense Procurement and Supply Chain Management: Procurement and supply chain management can play a role in promoting green growth by integrating sustainability criteria into procurement processes and supply chain management practices. This includes sourcing environmentally friendly materials, components, and technologies for defense equipment and systems, as well as promoting green procurement policies and initiatives to minimize environmental impact throughout the supply chain. Collaborate with suppliers and vendors to adopt sustainable practices, reduce carbon emissions, and promote responsible sourcing of goods and materials for the Ministry of Defense’s operations.</p> <p>3. Environmental Compliance and Conservation: Environmental compliance, monitoring, and conservation can contribute to green growth within the Ministry of Defense by supporting efforts to comply with environmental regulations and protect natural resources. This includes providing expertise and resources for environmental assessments, pollution prevention measures, and habitat conservation initiatives to minimize environmental impact from military activities. The development</p>	<p>contributes to reducing fuel costs, carbon emissions, and environmental impact associated with military transportation activities.</p> <p>2. Adoption of Alternative Fuels: Track the adoption and use of alternative fuels within the transportation fleet of the Ministry of Defense. This KPI measures the percentage of alternative fuels, such as biodiesel, ethanol, or synthetic fuels, incorporated into military vehicles and aircraft. Increasing the use of alternative fuels reduces dependency on fossil fuels, diversifies the energy mix, and promotes environmental sustainability in military transportation operations.</p> <p>3. Green Infrastructure Development: Evaluate the development and integration of green infrastructure within military bases and facilities managed by the Ministry of Defense. This KPI assesses the implementation of measures such as renewable energy systems, energy-efficient buildings, and sustainable transportation infrastructure. Investing in green infrastructure enhances energy security, reduces environmental footprint, and supports resilience in military operations.</p> <p>4. Environmental Compliance and Conservation: Monitor compliance with environmental regulations and conservation measures within transportation activities conducted by the Ministry of Defense. This KPI measures adherence to environmental standards, pollution prevention practices, and habitat conservation efforts. Ensuring environmental compliance minimizes</p>	<p>electric or hybrid vehicles into the fleet where feasible.</p> <p>2. Efficient Logistics Planning: Improve logistics planning and transportation management to reduce fuel consumption and emissions during military operations and training exercises. Utilize advanced logistics software and technologies to optimize route planning, vehicle loading, and supply distribution processes. By minimizing unnecessary travel and maximizing the efficiency of transportation operations, the environmental impact of military transport can be reduced.</p> <p>3. Investment in Sustainable Infrastructure: Upgrade military bases and facilities with sustainable infrastructure solutions to support greener transportation practices. This includes investing in energy-efficient lighting, renewable energy systems, and electric vehicle charging stations. Develop infrastructure for alternative transportation modes such as bicycle lanes and pedestrian pathways to promote sustainable commuting options for military personnel.</p> <p>4. Training and Awareness Programs: Implement training and awareness programs to educate military personnel about the importance of environmental sustainability in transportation operations. Provide training on fuel-efficient driving techniques, vehicle maintenance best practices, and the proper handling of hazardous materials to minimize environmental impact. Foster a culture of environmental stewardship within the military community through educational initiatives and awareness campaigns.</p>
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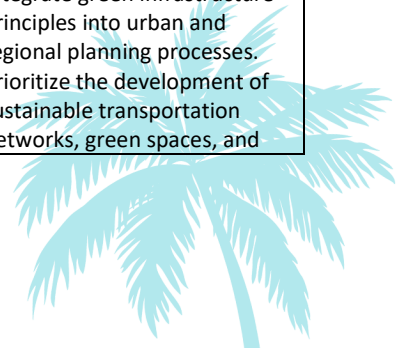


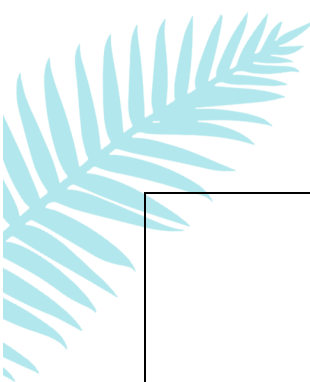
		<p>and implementation of environmental management plans, training programs, and sustainability initiatives to promote responsible environmental stewardship within the Parliament, and Cabinet Secretariat.</p> <p>4. Innovation and Research for Sustainable Defense Solutions: Defense innovation and research can play a crucial role in promoting green growth by developing and implementing sustainable defense solutions. This includes researching and developing technologies for energy-efficient propulsion systems, lightweight materials, renewable energy integration, and environmental monitoring and remediation to enhance the sustainability and resilience of military operations. GIS and Remote Sensing and other tools that would facilitate the movements and reduce energy consumption approaches, by investing in innovation and research for sustainable defense solutions, these sectors can address environmental challenges, reduce environmental impact, and promote green growth within the Ministry of Defense.</p>	<p>negative impacts on natural ecosystems, protects biodiversity, and fosters sustainable resource management within military operations.</p>	
<p>Ministry of Planning</p>	<p>1-26</p>	<p>1. Sustainable Infrastructure Development: Infrastructure development can contribute to green growth by promoting sustainable infrastructure projects aligned with the Ministry of Planning's development goals. This includes investing in the construction of green buildings, energy-efficient transportation systems, renewable energy infrastructure, and water and sanitation facilities that minimize environmental impact and enhance resilience to climate change. By prioritizing sustainable</p>	<p>1. Integration of Sustainable Transportation in National Development Plans: Monitor the integration of sustainable transportation objectives and initiatives within national development plans formulated by the Ministry of Planning. This KPI assesses the extent to which sustainable transportation practices, such as public transit expansion, active transportation promotion, and emissions reduction targets, are incorporated into long-term development strategies. Ensuring the</p>	<p>1. Integrated Transport Planning: Develop and implement integrated transport planning frameworks that prioritize sustainability and environmental considerations. This involves coordinating with relevant stakeholders, including concerned ministries, local authorities, and transportation providers, to develop comprehensive transport plans that promote modal integration, reduce emissions, and enhance efficiency.</p> <p>2. Investment in Sustainable Infrastructure: Prioritize</p>





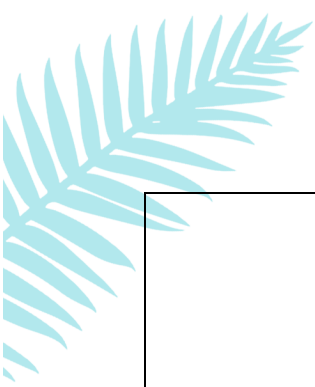
	<p>infrastructure development, these sectors can support economic growth, improve quality of life, and reduce carbon emissions within the communities served by the Ministry of Planning.</p> <p>2. Green Technology Innovation and Adoption: Research, development, and manufacturing of green technologies can play a crucial role in promoting green growth within the Ministry of Planning's development initiatives. This includes developing innovative solutions for renewable energy generation, energy efficiency, waste management, water conservation, and sustainable agriculture that support the transition to a low-carbon economy. Additionally, this can facilitate the adoption of green technologies through capacity building, technology transfer, and financial incentives to promote sustainable development practices across various sectors of the economy.</p> <p>3. Data Analytics for Sustainable Development: Data analytics and information technology can contribute to green growth by providing data-driven insights and decision support tools to inform sustainable development planning and policy formulation within the Ministry of Planning. This includes leveraging big data analytics, geographic information systems (GIS), remote sensing technologies, and artificial intelligence (AI) to analyze environmental trends, assess resource availability, and monitor progress towards sustainability goals. By harnessing the power of data analytics, these sectors can enhance evidence-based decision-making, optimize resource allocation, and</p>	<p>alignment of transportation planning with sustainability goals facilitates coordinated efforts and promotes green growth across sectors.</p> <p>2. Investment in Green Transportation Infrastructure: Track investments in green transportation infrastructure projects within the Ministry of Transportation's portfolio. This KPI measures the allocation of funds for initiatives such as public transit expansion, cycling infrastructure development, electric vehicle charging stations, and sustainable urban mobility projects. Increasing investment in green transportation infrastructure supports economic growth, reduces greenhouse gas emissions, and enhances urban livability.</p> <p>3. Promotion of Intermodal Connectivity: Evaluate efforts to promote intermodal connectivity and multimodal transportation systems within national transportation plans developed by the Ministry of Planning. This KPI assesses the integration of different modes of transportation, such as road, rail, waterway, and air transport, to facilitate seamless passenger and freight mobility. Enhancing intermodal connectivity improves transportation efficiency, reduces congestion, and enhances overall sustainability in the transportation sector.</p> <p>4. Monitoring of Sustainable Transportation Indicators: Monitor key indicators related to sustainable transportation performance, such as modal share of public transit, vehicle emissions intensity, and active transportation mode share. This KPI tracks progress towards</p>	<p>investments in sustainable transportation infrastructure, such as public transit systems, cycling infrastructure, and pedestrian facilities, through strategic planning and resource allocation. This includes identifying priority areas for infrastructure development, leveraging funding opportunities from national and international sources, and ensuring that infrastructure projects adhere to green design principles and environmental standards.</p> <p>3. Policy Support for Green Transport Initiatives: Develop and implement policies and regulations that support the adoption of green transport initiatives and technologies. This may include incentives for the deployment of electric vehicles, fuel-efficient transportation modes, and alternative fuels. Additionally, establish regulations to promote sustainable land use planning, transit-oriented development, and the reduction of vehicle emissions in urban areas.</p> <p>4. Data-driven Decision Making: Utilize data-driven approaches and analytical tools to inform transport planning and decision-making processes. This includes collecting and analyzing data on travel patterns, congestion levels, air quality, and greenhouse gas emissions to identify areas for improvement and measure the effectiveness of green transport interventions. By leveraging data and technology, the Ministry of Planning can optimize transport systems and policies to achieve environmental sustainability goals.</p> <p>5. Green Infrastructure Planning: Integrate green infrastructure principles into urban and regional planning processes. Prioritize the development of sustainable transportation networks, green spaces, and</p>
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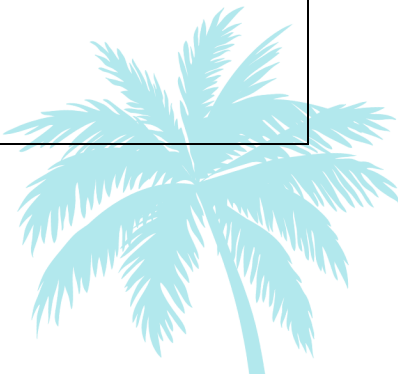


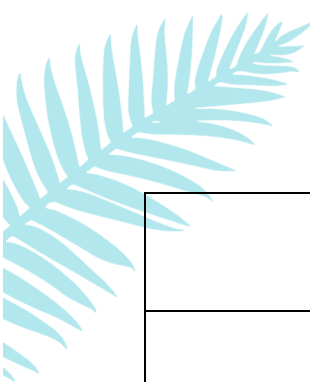
		<p>promote effective implementation of sustainable development initiatives.</p> <p>4. Capacity Building and Institutional Strengthening: Supporting capacity building and institutional strengthening efforts to enhance sustainability governance and implementation capacity. By providing training, technical assistance, and knowledge sharing programs to government officials, policymakers, and other stakeholders involved in sustainable development planning and implementation. Additionally, collaborating with academic institutions, research organizations, and civil society groups to foster partnerships and networks for sharing best practices, promoting innovation, and addressing capacity gaps related to green growth and sustainable development.</p> <p>5. International Cooperation: Ministry of Planning can play a pivotal role in engaging with the international partners to communicate the series work the Gol implementing in the sector of Green Growth and combating Climate Change, to have a the alignment and support on the international community, and the global acknowledgement of the efforts, that would lead to chances of international investment in the Green Growth.</p> <p>6. Monitoring and Evaluating the Green Growth Implementation: One of the tasks of planning entities is taking the lead in monitoring and evaluating the process of regulate, implement the Green Growth and Mapping, to collectively assess and evaluate the process and</p>	<p>sustainability targets outlined in national transportation plans and allows for ongoing monitoring and evaluation of transportation policies and interventions. Monitoring sustainable transportation indicators enables evidence-based decision-making, performance assessment, and continuous improvement in transportation planning and implementation.</p> <p>5. Green Building Certification Rate: Monitor the percentage of new construction projects that achieve recognized green building certifications, such as LEED (Leadership in Energy and Environmental Design) or similar standards. This key performance indicator reflects the adoption of sustainable building practices, including efficient resource use, waste reduction, and improved indoor environmental quality. An increase in green building certifications demonstrates the ministry's commitment to environmentally responsible construction practices.</p> <p>6. Energy Efficiency in Public Infrastructure: Measure energy efficiency in public infrastructure projects managed by the Ministry of Planning. This key performance indicator involves tracking energy consumption per unit of output or service provided and implementing energy-saving measures such as efficient lighting, HVAC systems, transportation systems, and adopting renewable energy sources whenever possible. Improving energy efficiency reduces operational costs, lowers carbon emissions, and contributes to overall environmental sustainability.</p>	<p>energy-efficient buildings to enhance environmental sustainability and improve quality of life. Incorporate climate resilience measures into infrastructure planning to mitigate the impacts of climate change and ensure long-term sustainability.</p> <p>6. Data Collection and Analysis for Sustainable Development: Strengthen data collection and analysis capabilities to support evidence-based decision-making for sustainable development. Invest in the development of data systems and analytical tools to monitor environmental indicators, track progress toward sustainability goals, and identify areas for intervention. Use data-driven insights to guide policy development, prioritize investments, and allocate resources for green growth initiatives.</p> <p>7. Advancing Sustainable Development Goals (SDGs): Align national development plans and strategies with the Sustainable Development Goals (SDGs) to promote a holistic and integrated approach to sustainable development. Integrate SDG targets related to environmental conservation, climate action, and sustainable resource management into policy frameworks and action plans. Foster partnerships and collaboration among multiple stakeholders to accelerate progress toward achieving the SDGs in Iraq.</p> <p>8. Capacity Building and Knowledge Sharing: Build the capacity of government officials, planners, and stakeholders to integrate green growth principles into planning and decision-making processes. Provide training, technical assistance, and knowledge-sharing platforms to enhance understanding of sustainable development concepts, best practices, and tools. Strengthen partnerships with academic institutions, research organizations, and international agencies to</p>
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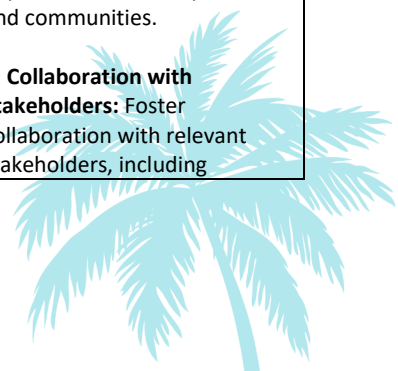


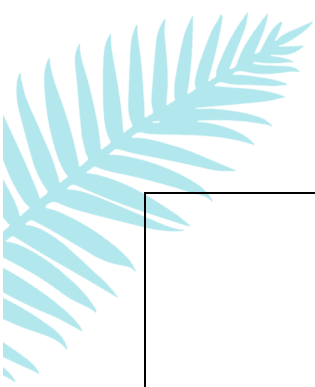
	<p>rectify the procedures if needed</p> <p>7. Urban Planning and Land Use Management: Integrate green building principles into urban planning processes to minimize urban sprawl. Implement land use policies that encourage sustainable development practices such as mixed-use development, transit-oriented design, and green infrastructure.</p> <p>8. Building Standards and Regulations: Develop green building standards to ensure that new construction projects and retrofits meet environmental sustainability criteria. Collaborate with stakeholders to establish guidelines for energy efficiency, water conservation, waste management, and indoor environmental quality in buildings.</p> <p>9. Infrastructure Planning and Development: Prioritize investments in green infrastructure projects that enhance climate resilience, such as sustainable transportation systems, renewable energy facilities, and water management infrastructure. Incorporate green infrastructure elements like green roofs, permeable pavements, and urban gardens into urban development projects to mitigate stormwater runoff and improve water quality.</p> <p>10. Strategic Environmental Assessment and Policy Integration: Conduct strategic environmental assessments to evaluate the environmental impacts of proposed policies, plans, and programs. Integrate green growth objectives into national, regional, and local planning frameworks by mainstreaming environmental considerations into decision-</p>	<p>7. Green Infrastructure Integration: Monitor the integration of green infrastructure into urban planning and development projects. This may include metrics such as the creation of green spaces, implementation of sustainable transportation systems, and promotion of green building practices. Green infrastructure enhances biodiversity, improves air quality, mitigates urban heat island effects, and boosts the overall quality of life for residents.</p> <p>8. Environmental Impact Assessment (EIA) Implementation: Track compliance with Environmental Impact Assessment (EIA) requirements for major development projects. This key performance indicator ensures that proposed projects undergo rigorous environmental assessments to evaluate potential impacts on natural resources, ecosystems, and communities.</p>	<p>leverage expertise and resources for capacity building and institutional strengthening.</p>
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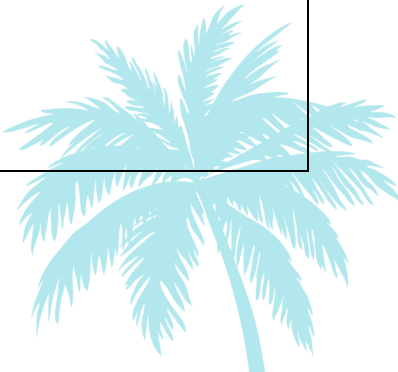


		making processes and policy development.		
National Security	1 4 8-26	<p>1. Energy Security and Resilience: Energy production, distribution, and infrastructure play a vital role in ensuring energy security and resilience. By transitioning to renewable energy sources, enhancing energy efficiency in operations, and investing in smart grid technologies, these sectors contribute to reducing reliance on fossil fuels, mitigating the risk of energy supply disruptions, and enhancing national energy security. Additionally, integrating renewable energy systems into critical infrastructure such as military bases, communication networks, and emergency response facilities improves resilience to disruptions caused by natural disasters or cyberattacks.</p> <p>2. Cybersecurity and Information Assurance: Cybersecurity technologies departments and services are instrumental in safeguarding national security interests in the digital domain. By developing robust cybersecurity solutions, implementing secure communication networks, and fostering a culture of cyber resilience, these sectors protect critical infrastructure, sensitive data, and national defense systems from cyber threats and attacks. Furthermore, incorporating green IT practices, such as energy-efficient data centers and sustainable hardware procurement, promotes both environmental sustainability and cybersecurity resilience.</p> <p>3. Environmental Intelligence and Monitoring: Environmental monitoring, intelligence gathering, and</p>	<p>1. Resilience of Transportation Infrastructure: Monitor the resilience of transportation infrastructure to natural disasters, climate change impacts, and security threats. This KPI assesses the ability of critical transportation assets such as airports, seaports, and highways to withstand and recover from disruptions. Enhancing infrastructure resilience reduces vulnerabilities, ensures continuity of transportation services during emergencies, and supports national security and disaster response efforts.</p> <p>2. Energy Security in Transportation: Track efforts to enhance energy security within the transportation sector. This KPI measures progress in diversifying energy sources, reducing dependency on imported fossil fuels, and promoting domestic energy production. Increasing energy security through measures such as alternative fuels adoption, renewable energy integration, and energy-efficient transportation technologies strengthens national resilience and reduces geopolitical risks associated with energy dependence.</p> <p>3. Environmental Protection and Conservation: Monitor environmental protection measures and conservation efforts related to transportation activities. This KPI assesses compliance with environmental regulations, pollution prevention practices, and habitat conservation initiatives. Implementing measures to minimize environmental impacts such as air and water pollution,</p>	<p>1. Energy Efficiency Measures: Implement energy efficiency measures across transportation fleets and infrastructure under the National Security purview. This includes optimizing fuel consumption through route planning and vehicle maintenance practices. Encourage the use of fuel-efficient vehicles and alternative fuels where feasible to reduce carbon emissions and dependency on fossil fuels.</p> <p>2. Investment in Green Technology: Invest in green technology solutions for transportation within the National Security framework. This may include transitioning to electric or hybrid vehicles for non-combat purposes, as well as incorporating renewable energy sources such as solar power for military bases and facilities. Additionally, explore innovations in logistics and supply chain management to reduce energy consumption and emissions associated with transportation.</p> <p>3. Environmental Impact Assessments: Conduct comprehensive environmental impact assessments for transportation-related activities and infrastructure projects undertaken by National Security entities. This involves evaluating the potential environmental consequences of military transportation operations, such as air and noise pollution, habitat destruction, and fuel spills. Implement mitigation measures to minimize adverse impacts on local ecosystems and communities.</p> <p>4. Collaboration with Stakeholders: Foster collaboration with relevant stakeholders, including</p>

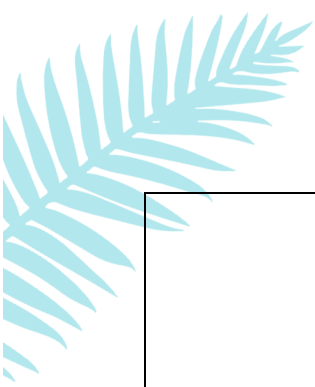




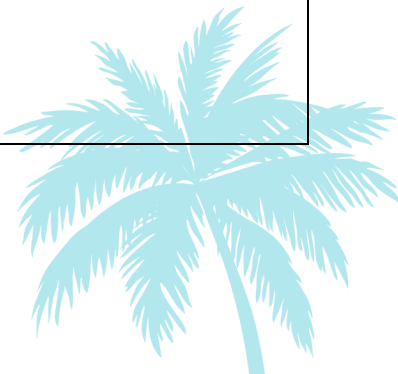
	<p>geospatial analysis provide valuable insights for national security planning and decision-making. By leveraging advanced technologies such as satellite imaging, remote sensing, and environmental sensors, these sectors contribute to monitoring environmental changes, identifying potential security risks, and assessing the impact of climate change on national security. Integrating environmental intelligence into national security strategies helps anticipate and mitigate security threats stemming from environmental degradation, resource scarcity, and climate-related disasters.</p> <p>4. Supply Chain Security and Resilience: Supply chain management and logistics play a critical role in ensuring the security and resilience of essential goods and services. By adopting sustainable supply chain practices, optimizing transportation routes, and diversifying sourcing strategies, these sectors reduce vulnerabilities to disruptions caused by natural disasters, geopolitical tensions, or pandemics. Enhancing supply chain resilience through green procurement, circular economy principles, and local sourcing strengthens national security by ensuring continuity of operations and minimizing dependencies on foreign resources.</p> <p>5. Climate and Defence Support Mechanism: By assessing the potential security impacts of climate change on the population, especially tackling the vulnerable communities and vulnerable countries to the climate change impact, incorporating Climate Resilience and Research to enhancing the ability of cybersecurity infrastructure and personnel to withstand</p>	<p>habitat destruction, and biodiversity loss supports national security by preserving natural resources, ensuring ecosystem resilience, and safeguarding public health and well-being.</p> <p>4. Cybersecurity and Digital Resilience: Evaluate cybersecurity measures and digital resilience in transportation systems and networks. This KPI assesses the readiness to defend against cyber threats, safeguard critical infrastructure assets, and ensure the secure operation of digital transportation technologies. Strengthening cybersecurity resilience protects against cyberattacks, data breaches, and disruptions to transportation operations, thereby safeguarding national security interests and ensuring the integrity of transportation services.</p>	<p>government agencies, local communities, and environmental organizations, to promote sustainable transportation practices within the National Security sector. Engage in dialogue and knowledge sharing to identify best practices, leverage expertise, and address common challenges related to transportation and environmental sustainability.</p>
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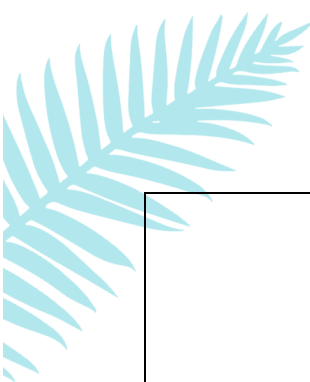
		climate-related challenges, as well focused research and innovation in climate security and Intelligence.		
Council of Representatives	1-26	<p>1. Energy-Efficient Building Design and Construction: The construction sector can play a pivotal role in promoting green growth within these entities by designing and constructing energy-efficient buildings. This involves incorporating sustainable design principles, such as proper insulation, passive heating and cooling systems, energy-efficient lighting, and renewable energy technologies (like solar panels), to minimize energy consumption and carbon emissions. By constructing energy-efficient buildings, Parliament can reduce its environmental footprint and operational costs while providing a healthier and more comfortable environment for legislators and staff.</p> <p>2. Green Infrastructure and Landscaping: The landscaping and infrastructure sector can contribute to green growth within These entities by implementing green infrastructure practices and sustainable landscaping designs. This includes creating green spaces, such as gardens and courtyards, using native plants and drought-resistant vegetation, and implementing rainwater harvesting systems and permeable surfaces to manage stormwater runoff. Green infrastructure enhances biodiversity, improves air and water quality, mitigates urban heat island effects, and provides aesthetic and recreational benefits. Integrating green infrastructure into These entities premises demonstrates a commitment to environmental sustainability and enhances</p>	<p>1. Legislative Initiatives for Sustainable Building and services: Monitor the introduction and passage of legislative initiatives related to sustainable Buildings and Services within the Council of Representatives. This KPI assesses the development and enactment of laws, regulations, and policies aimed at promoting sustainable transportation modes, enhancing infrastructure resilience, and reducing environmental impacts. Legislative initiatives can include measures to incentivize public transit use, promote active Buildings and Services, and support the adoption of clean energy technologies in Buildings and Services.</p> <p>Oversight of Buildings and Services Sustainability Goals: Track the House of Representatives' oversight functions related to Buildings and Services sustainability goals and targets. This KPI measures the extent of parliamentary scrutiny and accountability mechanisms for monitoring the implementation of green growth strategies within the transportation sector. Oversight activities may include hearings, inquiries, and reports on Buildings and Services policies, programs, and performance indicators related to environmental sustainability.</p> <p>Advocacy for Green Buildings and Services Policies: Evaluate advocacy efforts within the House of Representatives to promote green transportation policies and initiatives. This KPI assesses parliamentary engagement in raising awareness, building</p>	<p>1. Energy Efficiency Improvements: Conduct energy audits to identify areas of energy inefficiency within the parliamentary buildings. Implement energy-saving measures such as upgrading lighting systems to LED, installing energy-efficient HVAC systems, and improving insulation. By reducing energy consumption, these entities can lower operational costs and decrease its carbon footprint.</p> <p>Waste Reduction and Recycling Programs: Establish waste reduction and recycling programs within the parliamentary buildings. This may include segregating waste streams, providing recycling bins, and promoting responsible waste disposal practices. Implementing composting for organic waste and recycling for paper, plastic, and other recyclables can significantly reduce the amount of waste sent to landfills.</p> <p>Water Conservation Measures: Implement water conservation measures to reduce water consumption within the parliamentary buildings. This may involve installing low-flow fixtures, implementing water-saving technologies, and repairing leaks. Additionally, consider harvesting rainwater for landscaping and irrigation purposes. By conserving water, the These entities can contribute to sustainable water management and reduce its environmental impact.</p> <p>Green Procurement Practices: Adopt green procurement practices for purchasing goods and services within the parliamentary buildings. This involves prioritizing</p>



		<p>the overall quality of the built environment.</p> <p>3. Energy Management and Conservation: The facilities management sector plays a vital role in ensuring energy management and conservation within Parliament. This involves implementing energy management systems, conducting energy audits, and monitoring energy consumption to identify opportunities for efficiency improvements. Additionally, facilities managers can implement energy conservation measures, such as adjusting temperature settings, optimizing lighting schedules, and promoting energy-saving behaviors among occupants. By prioritizing energy management and conservation, the These entities can reduce energy costs, enhance energy security, and demonstrate leadership in sustainable resource management.</p> <p>4. Waste Management and Recycling: The waste management sector can contribute to green growth within the These entities by implementing comprehensive waste management and recycling programs. This includes segregating waste streams, promoting recycling and composting initiatives, and minimizing single-use plastics and other non-recyclable materials. Additionally, the These entities can adopt sustainable procurement practices, prioritize products with minimal packaging and recyclable materials, and implement waste reduction strategies to minimize environmental impact. By promoting waste management and recycling, the These entities can reduce landfill waste, conserve resources, and demonstrate</p>	<p>consensus, and mobilizing support for sustainable transportation measures among legislators, government agencies, civil society organizations, and the public. Advocacy activities may include parliamentary debates, resolutions, and cross-party alliances to advance green growth objectives within the transportation sector.</p> <p>Public Engagement and Stakeholder Consultation: Monitor public engagement and stakeholder consultation processes facilitated by the House of Representatives on Buildings and Services sustainability issues. This KPI measures the level of participation, inclusiveness, and transparency in decision-making processes related to Buildings and Services policies and programs. Public engagement activities may include public hearings, consultations, and feedback mechanisms to solicit input from diverse stakeholders on green Buildings and Services priorities, concerns, and recommendations.</p>	<p>environmentally friendly products, materials, and vendors that adhere to sustainability standards and practices. Consideration should be given to factors such as energy efficiency, recycled content, and environmental certifications when making procurement decisions.</p>
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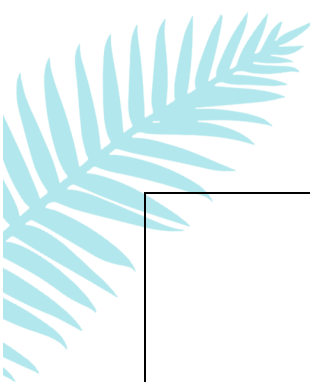


		a commitment to environmental stewardship.		
Federal Board of Supreme Audit		<p>1. Green Building Design and Construction: The construction sector plays a crucial role in promoting green growth within the Financial Supervision Bureau by incorporating sustainable design principles into building projects. This involves using eco-friendly building materials, optimizing energy efficiency through insulation and efficient HVAC systems, and incorporating renewable energy sources such as solar panels or geothermal heating. By constructing green buildings, the Bureau can reduce energy consumption, lower operational costs, and demonstrate a commitment to environmental responsibility.</p> <p>2. Energy Management and Efficiency: The facilities management sector within the Bureau is responsible for ensuring efficient energy use within its premises. This includes implementing energy management systems, conducting regular energy audits, and retrofitting existing buildings with energy-efficient technologies. Additionally, promoting energy-saving practices among staff, such as turning off lights and computers when not in use, contributes to reducing energy consumption and carbon emissions. By prioritizing energy management and efficiency, the Bureau can lower utility bills, improve operational resilience, and contribute to environmental sustainability.</p> <p>3. Waste Management and Recycling: Implementing comprehensive waste management and recycling programs is essential for promoting green growth within the Financial Supervision Bureau. This</p>	<p>1. Budget Allocation for Green Buildings and Services Projects: Monitor the allocation of budgetary resources for green transportation projects within the Buildings and Services. This KPI assesses the percentage of the transportation budget dedicated to initiatives such as public transit expansion, cycling infrastructure development, and renewable energy integration in Buildings and Services systems. Increasing budget allocation for green transportation projects demonstrates a commitment to sustainability and supports the implementation of the Green Growth.</p> <p>2. Efficient Resource Utilization: Track the efficiency of resource utilization within Buildings and Services projects overseen by the Financial Supervision Bureau. This KPI measures the effectiveness of budget utilization, cost management practices, and procurement processes to ensure optimal use of financial resources. Improving resource efficiency minimizes wastage, maximizes project outcomes, and enhances the economic viability of green transportation investments.</p> <p>3. Financial Performance of Green Buildings and Services Investments: Evaluate the financial performance of green transportation investments funded by the Ministry of Transportation. This KPI assesses the return on investment (ROI), cost-benefit analysis, and financial sustainability of green transportation projects over time. Analyzing the financial performance of investments</p>	<p>1. Energy Efficiency Improvements: Conduct energy audits to identify areas of energy inefficiency within the bureau's buildings. Implement energy-saving measures such as upgrading lighting systems to LED, installing energy-efficient HVAC systems, and improving insulation. By reducing energy consumption, the bureau can lower operational costs and decrease its carbon footprint.</p> <p>2. Waste Reduction and Recycling Programs: Establish waste reduction and recycling programs within the bureau's buildings. This may include segregating waste streams, providing recycling bins, and promoting responsible waste disposal practices. Implementing composting for organic waste and recycling for paper, plastic, and other recyclables can significantly reduce the amount of waste sent to landfills.</p> <p>3. Water Conservation Measures: Implement water conservation measures to reduce water consumption within the bureau's buildings. This may involve installing low-flow fixtures, implementing water-saving technologies, and repairing leaks. Additionally, consider harvesting rainwater for landscaping and irrigation purposes. By conserving water, the bureau can contribute to sustainable water management and reduce its environmental impact.</p> <p>4. Green Procurement Practices: Adopt green procurement practices for purchasing goods and services within the bureau. This involves prioritizing environmentally friendly products, materials, and vendors that adhere to sustainability standards and practices. Consideration should be given to factors such as energy efficiency, recycled</p>

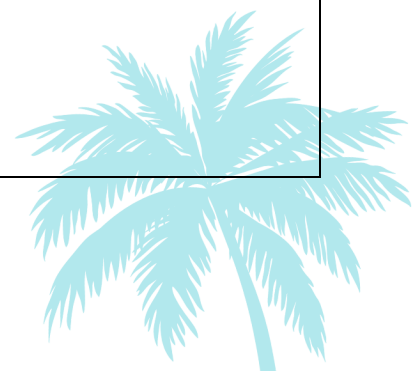


		<p>involves segregating waste streams, promoting recycling initiatives, and minimizing waste generation through sustainable procurement practices. Additionally, reducing single-use plastics and promoting reusable alternatives can help minimize environmental impact. By prioritizing waste management and recycling, the Bureau can reduce landfill waste, conserve resources, and demonstrate environmental stewardship.</p> <p>4. Financial Oversight and Incentives: The Financial Supervision Bureau can also promote green growth through financial oversight and incentives. This includes incentivizing financial institutions to invest in green projects, such as renewable energy and energy efficiency initiatives, through preferential lending rates or tax incentives. Additionally, incorporating environmental criteria into financial risk assessments and disclosure requirements encourages transparency and accountability in environmental performance. By promoting green finance and integrating environmental considerations into financial oversight, the Bureau can facilitate the transition to a more sustainable economy.</p>	<p>helps identify successful initiatives, address challenges, and guide future investment decisions to maximize environmental and economic benefits.</p> <p>4. Compliance with Financial Regulations and Standards: Monitor compliance with financial regulations, accounting standards, and transparency requirements in Buildings and Services projects overseen by the Financial Supervision Bureau. This KPI assesses adherence to fiscal discipline, risk management practices, and governance principles to ensure accountability and integrity in financial operations. Maintaining high standards of financial management fosters public trust, attracts investment, and facilitates financing for green transportation initiatives.</p>	<p>content, and environmental certifications when making procurement decisions.</p>
<p>Commission of Integrity</p>		<p>1. Green Building Design and Construction: The construction sector plays a significant role in promoting green growth within integrity-related institutions by prioritizing sustainable building design and construction practices. This involves incorporating eco-friendly building materials, optimizing energy efficiency through insulation and efficient HVAC systems, and integrating renewable energy sources such as solar panels or geothermal heating. By constructing green buildings, integrity-</p>	<p>1. Transparency in Decision-Making Processes: Monitor the transparency of decision-making processes within the Buildings and Services. This KPI assesses the extent to which decisions related to green growth initiatives, budget allocation, and project selection are made openly, with clear criteria and documented procedures. Ensuring transparency fosters public trust, minimizes opportunities for corruption, and promotes accountability in achieving green growth objectives.</p>	<p>1. Energy Efficiency Improvements: Conduct energy audits to identify areas of energy inefficiency within integrity institutions' buildings. Implement energy-saving measures such as upgrading lighting systems to LED, optimizing HVAC systems, and improving building insulation. By reducing energy consumption, these institutions can lower operational costs and decrease their carbon footprint.</p> <p>2. Waste Reduction and Recycling Programs: Establish waste reduction and recycling</p>

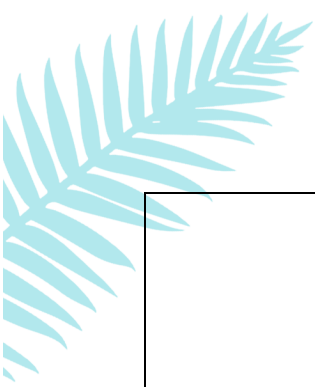




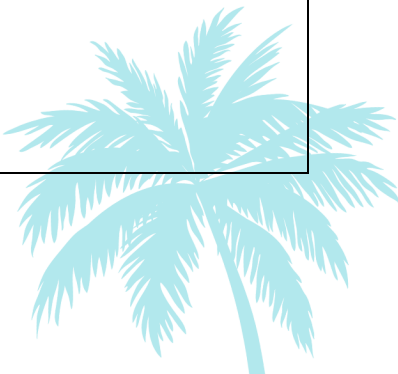
		<p>related institutions can reduce their environmental footprint, demonstrate commitment to sustainable development, and set an example for ethical and responsible conduct.</p> <p>2. Energy Management and Efficiency: Integrity-related institutions can contribute to green growth by ensuring efficient energy use within their premises. This includes implementing energy management systems, conducting regular energy audits, and promoting energy-saving practices among staff. By optimizing energy efficiency in lighting, heating, and cooling systems, these institutions can reduce energy consumption, lower operational costs, and minimize environmental impact. Additionally, adopting smart building technologies and occupancy sensors helps to further optimize energy usage.</p> <p>3. Waste Management and Recycling: Implementing comprehensive waste management and recycling programs is essential for promoting green growth within integrity-related institutions. This involves segregating waste streams, promoting recycling initiatives, and minimizing waste generation through sustainable procurement practices. Additionally, reducing single-use plastics and promoting reusable alternatives can help minimize environmental impact. By prioritizing waste management and recycling, these institutions can reduce landfill waste, conserve resources.</p> <p>4. Environmental Management and Reporting: Integrity-related institutions can enhance their commitment to green growth by incorporating environmental</p>	<p>2. Ethical Conduct and Compliance: Evaluate adherence to ethical standards and compliance with integrity policies and regulations within the Buildings and Services. This KPI measures the level of awareness, training, and enforcement of ethical conduct among staff, contractors, and stakeholders involved in green growth initiatives. Upholding ethical standards reduces the risk of misconduct, fraud, and conflicts of interest, enhancing the credibility and effectiveness of green growth efforts.</p> <p>3. Risk Management and Internal Controls: Monitor the effectiveness of risk management practices and internal controls in mitigating integrity risks within the Buildings and Services. This KPI assesses the identification, assessment, and mitigation of integrity risks associated with green growth projects, procurement processes, and financial transactions. Implementing robust risk management measures and internal controls minimizes vulnerabilities to fraud, corruption, and mismanagement, safeguarding the integrity of green growth initiatives.</p> <p>4. Anti-Corruption Measures and Investigations: Track the implementation of anti-corruption measures and investigations related to green growth projects and activities within the Ministry of Transportation. This KPI measures the responsiveness and effectiveness of anti-corruption mechanisms, such as reporting channels, whistleblower protection, and investigative procedures, in addressing</p>	<p>programs within the buildings of integrity institutions. This may include segregating waste streams, providing recycling bins, and promoting responsible waste disposal practices. Implementing composting for organic waste and recycling for paper, plastic, and other recyclables can significantly reduce the amount of waste sent to landfills.</p> <p>3. Water Conservation Measures: Implement water conservation measures to reduce water consumption within integrity institutions' buildings. This may involve installing low-flow fixtures, implementing water-saving technologies, and repairing leaks. Additionally, consider harvesting rainwater for landscaping and irrigation purposes. By conserving water, these institutions can contribute to sustainable water management and reduce their environmental impact.</p> <p>4. Green Procurement Practices: Adopt green procurement practices for purchasing goods and services within integrity institutions. This involves prioritizing environmentally friendly products, materials, and vendors that adhere to sustainability standards and practices. Consideration should be given to factors such as energy efficiency, recycled content, and environmental certifications when making procurement decisions.</p>
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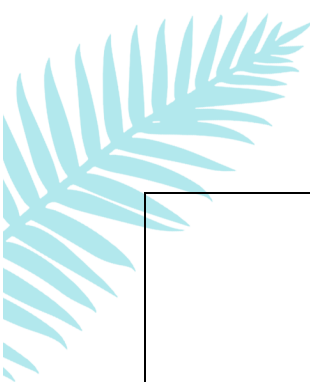


		<p>considerations into their governance frameworks and reporting mechanisms. This involves establishing environmental management systems, setting environmental performance targets, and regularly monitoring and reporting on environmental performance metrics. By transparently disclosing environmental impacts and initiatives, these institutions can enhance accountability, build trust with stakeholders, and foster a culture of integrity and sustainability.</p>	<p>allegations of corruption and misconduct. Taking prompt and decisive action against corruption reinforces integrity, deters unethical behavior, and preserves public confidence in green growth initiatives.</p>	
Reconstruction Fund		<p>1. Green Infrastructure Development: The construction sector plays a pivotal role in promoting green growth within a Reconstruction Fund by prioritizing the development of green infrastructure. This involves integrating sustainable design principles into infrastructure projects, such as roads, bridges, buildings, and utilities. Green infrastructure initiatives may include incorporating eco-friendly building materials, implementing energy-efficient lighting and HVAC systems, and integrating renewable energy sources like solar or wind power. By prioritizing green infrastructure development, the Reconstruction Fund can enhance environmental sustainability, resilience, and long-term economic viability in rebuilt communities.</p> <p>2. Energy-Efficient Building Construction: Within the construction sector, emphasis should be placed on energy-efficient building construction to promote green growth. This involves designing and constructing buildings with high energy performance standards, such as LEED (Leadership in Energy and Environmental Design) certification or equivalent green building standards. Energy-efficient building practices may</p>	<p>1. Integration of Sustainable Design Principles: Monitor the integration of sustainable design principles into Buildings and Services infrastructure projects funded by the Reconstruction Fund. This KPI assesses the extent to which projects incorporate features such as energy efficiency, renewable energy integration, green building materials, and climate-resilient design. Integrating sustainable design principles promotes environmental stewardship, enhances infrastructure resilience, and reduces the carbon footprint of transportation projects.</p> <p>2. Environmental Impact Reduction: Track efforts to minimize the environmental impact of transportation infrastructure projects financed by the Reconstruction Fund. This KPI measures progress in mitigating adverse environmental effects such as habitat destruction, air and water pollution, and ecosystem degradation associated with construction and operation activities. Implementing measures to reduce environmental impact safeguards natural resources, preserves biodiversity, and supports long-term sustainability in infrastructure development.</p>	<p>1. Energy Efficiency Improvements: Conduct energy audits to identify areas of energy inefficiency within the buildings managed by the Reconstruction Fund. Implement energy-saving measures such as upgrading lighting systems to LED, optimizing HVAC systems, and improving building insulation. By reducing energy consumption, the Reconstruction Fund can lower operational costs and decrease its carbon footprint.</p> <p>2. Waste Reduction and Recycling Programs: Establish waste reduction and recycling programs within the buildings managed by the Reconstruction Fund. This may include segregating waste streams, providing recycling bins, and promoting responsible waste disposal practices. Implementing composting for organic waste and recycling for paper, plastic, and other recyclables can significantly reduce the amount of waste sent to landfills.</p> <p>3. Water Conservation Measures: Implement water conservation measures to reduce water consumption within the buildings managed by the Reconstruction Fund. This may involve installing low-flow fixtures, implementing water-saving technologies, and repairing leaks. Additionally,</p>

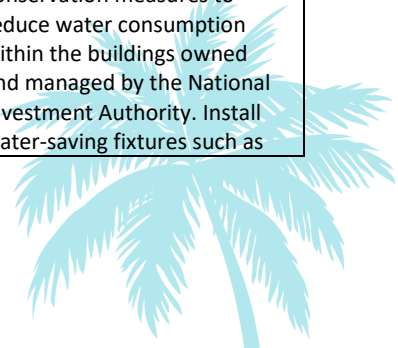


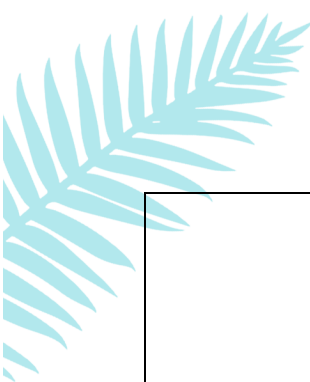
	<p>include proper insulation, efficient lighting and appliances, passive heating and cooling systems, and renewable energy integration. By prioritizing energy-efficient building construction, the Reconstruction Fund can reduce energy consumption, lower operational costs, and mitigate environmental impact in reconstructed areas.</p> <p>2. Waste Management and Recycling Infrastructure: Implementing comprehensive waste management and recycling infrastructure is essential for promoting green growth within a Reconstruction Fund. This involves developing efficient waste collection systems, establishing recycling facilities, and promoting waste segregation and recycling initiatives. Additionally, incorporating sustainable waste management practices, such as composting organic waste and reducing single-use plastics, helps minimize environmental impact and promote resource conservation. By prioritizing waste management and recycling infrastructure, the Reconstruction Fund can minimize landfill waste, conserve resources, and foster a circular economy in reconstructed communities.</p> <p>4. Environmental Impact Assessment and Mitigation: The Reconstruction Fund should prioritize conducting environmental impact assessments (EIAs) for infrastructure projects to identify and mitigate potential environmental risks and impacts. This involves assessing the potential effects of construction activities on air quality, water resources, ecosystems, and communities, and</p>	<p>3. Community Engagement and Stakeholder Consultation: Evaluate community engagement and stakeholder consultation processes incorporated into transportation infrastructure projects supported by the Reconstruction Fund. This KPI assesses the extent of public participation, inclusiveness, and transparency in decision-making processes related to project planning, design, and implementation. Engaging communities and stakeholders ensures their voices are heard, enhances project acceptance, and fosters local ownership of green infrastructure initiatives.</p> <p>4. Monitoring of Green Performance Indicators: Monitor the performance of Buildings and Services infrastructure projects against green performance indicators and sustainability criteria established by the Reconstruction Fund. This KPI measures project outcomes related to energy efficiency, emissions reduction, resource conservation, and social benefits. Monitoring green performance indicators enables the evaluation of project effectiveness, identifies areas for improvement, and informs future investment decisions to prioritize sustainable Buildings and Services infrastructure.</p>	<p>consider harvesting rainwater for landscaping and irrigation purposes. By conserving water, the Reconstruction Fund can contribute to sustainable water management and reduce its environmental impact.</p> <p>4. Green Procurement Practices: Adopt green procurement practices for purchasing goods and services within the Reconstruction Fund. This involves prioritizing environmentally friendly products, materials, and vendors that adhere to sustainability standards and practices. Consideration should be given to factors such as energy efficiency, recycled content, and environmental certifications when making procurement decisions.</p>
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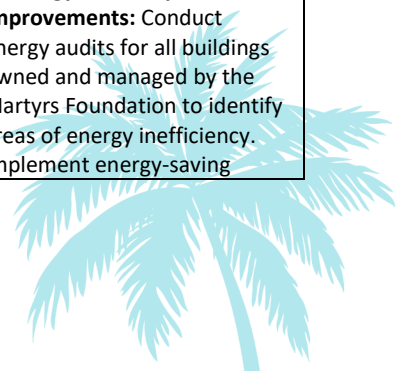


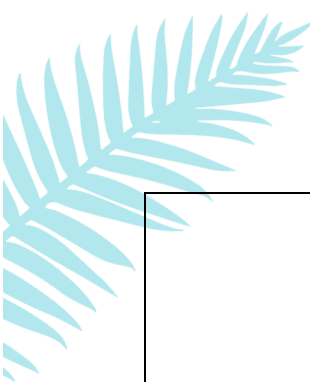
		<p>implementing measures to minimize negative impacts. Additionally, incorporating environmental mitigation measures, such as habitat restoration, erosion control, and pollution prevention, helps preserve natural resources and enhance environmental sustainability in reconstructed areas. By prioritizing environmental impact assessment and mitigation, the Reconstruction Fund can ensure responsible and sustainable reconstruction practices that minimize harm to the environment and promote long-term ecological resilience.</p>		
NIC	1-26	<p>1. Green Infrastructure Investment: The NIC can promote green growth by prioritizing investments in green infrastructure projects. This includes funding initiatives such as renewable energy projects, energy-efficient building retrofits, sustainable transportation systems, and green urban planning initiatives. By directing investment capital towards green infrastructure projects, the NIC can stimulate economic growth, create job opportunities, and contribute to environmental sustainability.</p> <p>2. Energy-Efficient Building Construction: Within the construction sector, emphasis should be placed on energy-efficient building construction to promote green growth. This involves supporting projects that prioritize sustainable building design principles, such as energy-efficient HVAC systems, insulation, lighting, and renewable energy integration. By investing in energy-efficient building construction, the NIC can reduce energy consumption, lower operational costs, and minimize environmental impact.</p>	<p>1. Green Building Certification Rate: Measure the percentage of buildings in NIC’s investment portfolio that achieve recognized green building certifications, such as LEED (Leadership in Energy and Environmental Design) or BREEAM (Building Research Establishment Environmental Assessment Method). This KPI demonstrates the NIC’s commitment to sustainable building practices and environmental stewardship.</p> <p>2. Energy Efficiency Improvement: Track the improvement in energy efficiency across NIA-managed properties. This could involve monitoring metrics such as energy consumption per square meter, implementation of energy-efficient technologies, and adoption of renewable energy sources. Improving energy efficiency reduces operational costs, enhances asset value, and contributes to mitigating climate change.</p> <p>3. Sustainable Transportation Infrastructure Investment: Monitor the allocation of investments towards sustainable transportation</p>	<p>1. Energy Efficiency Improvements: Conduct energy audits for all buildings owned and managed by the National Investment Authority to identify areas of energy inefficiency. Implement energy-saving measures such as upgrading lighting systems to LED, optimizing HVAC systems, and improving building insulation. By reducing energy consumption, the National Investment Authority can lower operational costs and minimize its environmental footprint.</p> <p>2. Waste Reduction and Recycling Programs: Establish waste reduction and recycling programs within the buildings of the National Investment Authority. Implement proper waste management protocols, including waste segregation, recycling, and responsible disposal practices. Introduce recycling initiatives for paper, plastics, and other materials to reduce waste sent to landfills and promote a circular economy approach.</p> <p>3. Water Conservation Measures: Implement water conservation measures to reduce water consumption within the buildings owned and managed by the National Investment Authority. Install water-saving fixtures such as</p>



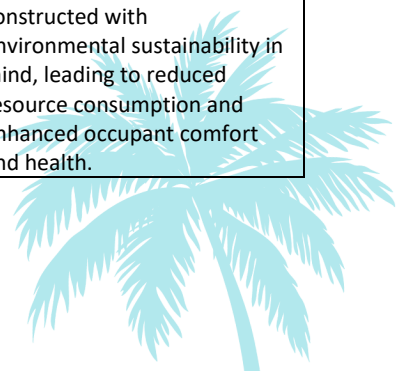


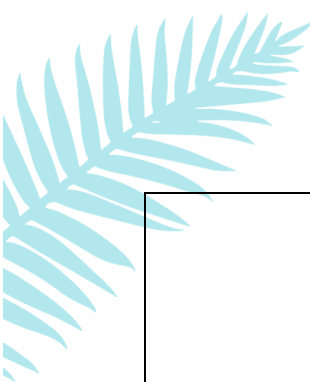
		<p>3. Waste Management and Recycling Infrastructure: The NIC can support investments in waste management and recycling infrastructure to promote green growth. This includes funding projects to develop efficient waste collection systems, recycling facilities, and waste-to-energy technologies. Additionally, supporting initiatives to promote waste reduction, reuse, and recycling helps minimize landfill waste and conserve resources. By investing in waste management and recycling infrastructure, the NIC can create economic opportunities, reduce environmental pollution, and promote sustainable resource management.</p> <p>4. Environmental Sustainability Criteria for Investments: The NIC can incorporate environmental sustainability criteria into its investment decision-making processes. This involves conducting environmental impact assessments for proposed investments, evaluating potential environmental risks and opportunities, and prioritizing investments that align with sustainable development goals. Additionally, engaging with stakeholders, including environmental organizations and local communities, helps ensure that investments are socially and environmentally responsible. By integrating environmental sustainability criteria into investment decisions, the NIC can promote green growth, mitigate environmental risks, and generate positive social and environmental outcomes.</p>	<p>infrastructure projects within NIC's portfolio. This KPI could include funding for public transportation systems, electric vehicle charging infrastructure, and pedestrian and cycling infrastructure. Investing in sustainable transportation reduces carbon emissions, alleviates traffic congestion, and promotes healthier urban environments.</p> <p>4. Environmental Impact Reduction: Measure the reduction in environmental impact associated with NIA-managed properties and investments. This could involve tracking metrics such as carbon emissions, water consumption, and waste generation per unit area or investment. Implementing sustainable practices and technologies helps minimize environmental degradation and fosters long-term resilience.</p>	<p>low-flow toilets and faucets, and address leaks promptly. Consider implementing rainwater harvesting systems and utilizing greywater for non-potable purposes to reduce reliance on freshwater resources.</p> <p>4. Green Building Standards and Certifications: Incorporate green building standards and certifications into new construction and renovation projects undertaken by the National Investment Authority. Adopting internationally recognized standards such as LEED (Leadership in Energy and Environmental Design) or EDGE (Excellence in Design for Greater Efficiencies) ensures that buildings are designed and constructed with environmental sustainability in mind, leading to reduced resource consumption and enhanced occupant comfort and health.</p>
The Martyrs Foundation		<p>1. Green Building Design and Construction: The Martyrs Foundation can promote green growth by prioritizing sustainable building design and construction practices. This involves incorporating</p>	<p>1. Energy Efficiency of Foundation Buildings: Measure the energy efficiency of buildings owned or managed by the Martyrs Foundation. This KPI could involve tracking</p>	<p>1. Energy Efficiency Improvements: Conduct energy audits for all buildings owned and managed by the Martyrs Foundation to identify areas of energy inefficiency. Implement energy-saving</p>



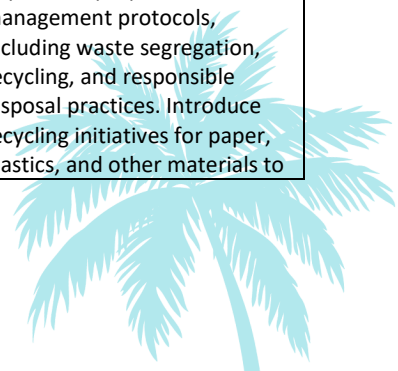


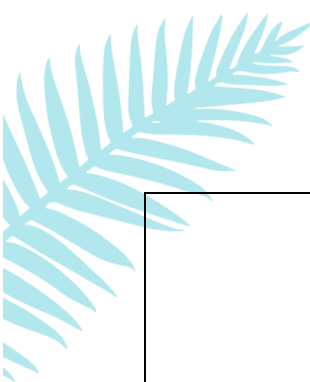
	<p>eco-friendly building materials, optimizing energy efficiency through insulation and efficient HVAC systems, and integrating renewable energy sources such as solar panels or geothermal heating. By constructing green buildings, the Martyrs Foundation can reduce its environmental footprint, minimize energy consumption, and create healthier and more sustainable environments for its beneficiaries and activities.</p> <p>2. Energy Efficiency and Renewable Energy Integration: The foundation should prioritize energy efficiency and integrate renewable energy sources into its facilities. This includes implementing energy management systems, conducting energy audits, and retrofitting existing buildings with energy-efficient technologies. Additionally, deploying renewable energy systems such as solar panels, wind turbines, and micro-hydro generators helps reduce reliance on fossil fuels and minimize carbon emissions. By prioritizing energy efficiency and renewable energy integration, the Martyrs Foundation can lower energy costs, enhance energy security, and reduce environmental impact.</p> <p>3. Waste Management and Recycling: Developing comprehensive waste management and recycling programs is essential for promoting green growth within the Martyrs Foundation. This includes segregating waste streams, promoting recycling initiatives, and minimizing waste generation through sustainable procurement practices. Additionally, reducing single-use plastics and promoting reusable</p>	<p>energy consumption per square meter, implementing energy-saving measures such as insulation, LED lighting, and efficient HVAC systems, and adopting renewable energy sources like solar panels. Improving energy efficiency reduces operational costs, lowers environmental impact, and supports sustainable development goals.</p> <p>2. Water Conservation and Management: Monitor water usage and conservation practices within Foundation properties. This KPI could include metrics such as water consumption per capita, implementation of water-saving technologies like low-flow fixtures and rainwater harvesting systems, and initiatives to reduce water waste through leak detection and repair. Efficient water management promotes resource conservation, mitigates water scarcity risks, and contributes to environmental sustainability.</p> <p>3. Waste Reduction and Recycling: Track efforts to minimize waste generation and implement recycling programs within Martyrs Foundation premises. This KPI may involve measuring the percentage of waste diverted from landfills through recycling or composting, implementing waste reduction initiatives such as reducing single-use plastics and promoting sustainable procurement practices, and raising awareness among staff and visitors about waste management best practices. Reducing waste supports environmental conservation, minimizes pollution, and fosters a culture of sustainability.</p>	<p>measures such as upgrading lighting systems to LED, optimizing HVAC systems, and improving building insulation. By reducing energy consumption, the Martyrs Foundation can lower operational costs and minimize its environmental footprint.</p> <p>2. Waste Reduction and Recycling Programs: Establish waste reduction and recycling programs within the buildings of the Martyrs Foundation. Implement proper waste management protocols, including waste segregation, recycling, and responsible disposal practices. Introduce recycling initiatives for paper, plastics, and other materials to reduce waste sent to landfills and promote a circular economy approach.</p> <p>3. Water Conservation Measures: Implement water conservation measures to reduce water consumption within the buildings owned and managed by the Martyrs Foundation. Install water-saving fixtures such as low-flow toilets and faucets, and address leaks promptly. Consider implementing rainwater harvesting systems and utilizing greywater for non-potable purposes to reduce reliance on freshwater resources.</p> <p>4. Green Building Standards and Certifications: Incorporate green building standards and certifications into new construction and renovation projects undertaken by the Martyrs Foundation. Adopting internationally recognized standards such as LEED (Leadership in Energy and Environmental Design) or EDGE (Excellence in Design for Greater Efficiencies) ensures that buildings are designed and constructed with environmental sustainability in mind, leading to reduced resource consumption and enhanced occupant comfort and health.</p>
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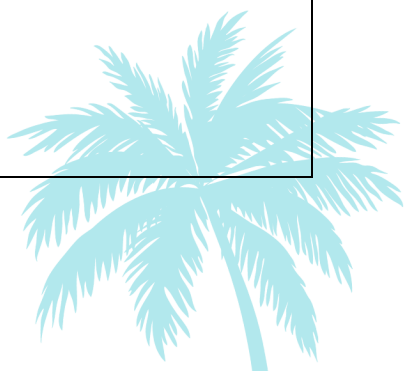


		<p>alternatives can help minimize environmental impact. By prioritizing waste management and recycling, the Martyrs Foundation can reduce landfill waste, conserve resources, and promote environmental stewardship among its beneficiaries and staff.</p> <p>4. Environmental Awareness and Education: The foundation can promote green growth by raising awareness and educating its beneficiaries and staff about environmental conservation and sustainability. This involves organizing workshops, training sessions, and educational programs on topics such as energy conservation, waste reduction, and sustainable living practices. By fostering environmental awareness and education, the Martyrs Foundation can empower its beneficiaries to adopt environmentally friendly behaviors and contribute to green growth initiatives in their communities.</p>	<p>4. Green Procurement and Sustainable Practices: Monitor the adoption of green procurement policies and sustainable practices within the Martyrs Foundation. This could include tracking the percentage of environmentally friendly products and materials used in building construction and maintenance, promoting eco-friendly transportation options for staff and visitors, and implementing sustainable landscaping practices. Emphasizing green procurement and sustainable practices reduces the organization's ecological footprint, supports local economies, and demonstrates environmental leadership within the community.</p>	
Prison Service	1 4 13 14 15 16 17 22 24 25	<p>1. Green Building Design and Construction: The Prison Service can promote green growth by prioritizing sustainable building design and construction practices for correctional facilities. This involves incorporating eco-friendly building materials, optimizing energy efficiency through insulation and efficient HVAC systems, and integrating renewable energy sources such as solar panels or geothermal heating. By constructing green buildings, the Prison Service can reduce its environmental footprint, minimize energy consumption, and create healthier and more sustainable environments for inmates and staff.</p> <p>2. Energy Efficiency and Renewable Energy Integration: The foundation should prioritize energy</p>	<p>1. Energy Efficiency of Foundation Buildings: Measure the energy efficiency of buildings owned or managed by the Prison Service. This KPI could involve tracking energy consumption per square meter, implementing energy-saving measures such as insulation, LED lighting, and efficient HVAC systems, and adopting renewable energy sources like solar panels. Improving energy efficiency reduces operational costs, lowers environmental impact, and supports sustainable development goals.</p> <p>2. Water Conservation and Management: Monitor water usage and conservation practices within Foundation properties. This KPI could include metrics such as water consumption per</p>	<p>1. Energy Efficiency Improvements: Conduct energy audits for all buildings owned and managed by the Prison Service to identify areas of energy inefficiency. Implement energy-saving measures such as upgrading lighting systems to LED, optimizing HVAC systems, and improving building insulation. By reducing energy consumption, the Prison Service can lower operational costs and minimize its environmental impact.</p> <p>2. Waste Reduction and Recycling Programs: Establish waste reduction and recycling programs within the buildings of the Prison Service. Implement proper waste management protocols, including waste segregation, recycling, and responsible disposal practices. Introduce recycling initiatives for paper, plastics, and other materials to</p>

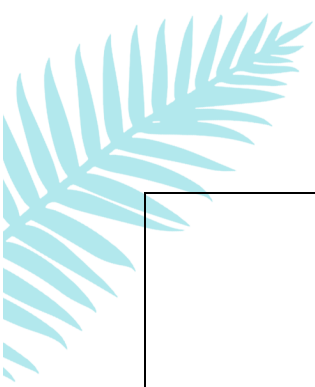




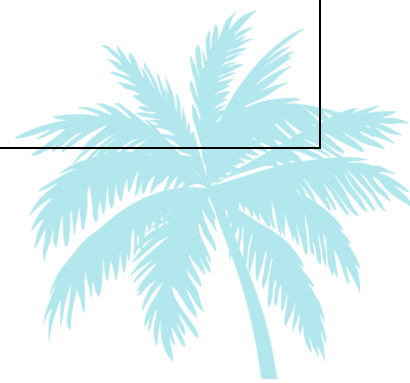
		<p>efficiency and integrate renewable energy sources into its correctional facilities. This includes implementing energy management systems, conducting energy audits, and retrofitting existing buildings with energy-efficient technologies. Additionally, deploying renewable energy systems such as solar panels, wind turbines, and micro-hydro generators helps reduce reliance on fossil fuels and minimize carbon emissions. By prioritizing energy efficiency and renewable energy integration, the Prison Service can lower energy costs, enhance energy security, and reduce environmental impact.</p> <p>3. Waste Management and Recycling: Developing comprehensive waste management and recycling programs is essential for promoting green growth within correctional facilities. This includes segregating waste streams, promoting recycling initiatives, and minimizing waste generation through sustainable procurement practices. Additionally, reducing single-use plastics and promoting reusable alternatives can help minimize environmental impact. By prioritizing waste management and recycling, the Prison Service can reduce landfill waste, conserve resources, and promote environmental stewardship among inmates and staff.</p> <p>4. Environmental Education and Rehabilitation Programs: The foundation can promote green growth by providing environmental education and rehabilitation programs for inmates. This involves organizing workshops, training sessions, and educational programs on topics such as energy conservation, waste reduction, and sustainable</p>	<p>capita, implementation of water-saving technologies like low-flow fixtures and rainwater harvesting systems, and initiatives to reduce water waste through leak detection and repair. Efficient water management promotes resource conservation, mitigates water scarcity risks, and contributes to environmental sustainability.</p> <p>3. Waste Reduction and Recycling: Track efforts to minimize waste generation and implement recycling programs within the Prison Service premises. This KPI may involve measuring the percentage of waste diverted from landfills through recycling or composting, implementing waste reduction initiatives such as reducing single-use plastics and promoting sustainable procurement practices, and raising awareness among staff and prisoners about waste management best practices. Reducing waste supports environmental conservation, minimizes pollution, and fosters a culture of sustainability.</p> <p>4. Green Procurement and Sustainable Practices: Monitor the adoption of green procurement policies and sustainable practices within the Prison Service. This could include tracking the percentage of environmentally friendly products and materials used in building construction and maintenance, promoting eco-friendly transportation options for staff and visitors, and implementing sustainable landscaping practices. Emphasizing green procurement and sustainable practices reduces the organization's ecological footprint, supports local economies, and demonstrates</p>	<p>minimize waste sent to landfills and promote a circular economy approach.</p> <p>3. Water Conservation Measures: Implement water conservation measures to reduce water consumption within the buildings owned and managed by the Prison Service. Install water-saving fixtures such as low-flow toilets and faucets, and address leaks promptly. Consider implementing rainwater harvesting systems and utilizing greywater for non-potable purposes to reduce reliance on freshwater resources.</p> <p>4. Green Building Standards and Certifications: Incorporate green building standards and certifications into new construction and renovation projects undertaken by the Prison Service. Adopting internationally recognized standards such as LEED (Leadership in Energy and Environmental Design) or EDGE (Excellence in Design for Greater Efficiencies) ensures that buildings are designed and constructed with environmental sustainability in mind, leading to reduced resource consumption and enhanced occupant comfort and health.</p>
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		living practices. By fostering environmental awareness and providing inmates with opportunities to learn new skills related to green technologies and practices, the Prison Service can support their rehabilitation and reintegration into society while promoting environmental sustainability.	environmental leadership within the community.	
Ministry of Foreign Affairs	1 4 13 14 16 17 20 25 26	<p>1. Green Diplomatic Infrastructure: The Ministry can promote green growth by prioritizing sustainable design and construction practices for diplomatic missions, embassies, and consulates. This involves incorporating eco-friendly building materials, optimizing energy efficiency through insulation and efficient HVAC systems, and integrating renewable energy sources such as solar panels or geothermal heating. By constructing green diplomatic infrastructure, the Ministry can reduce its environmental footprint, minimize energy consumption, and demonstrate environmental leadership on the international stage.</p> <p>2. Energy Efficiency and Sustainable Operations: Emphasizing energy efficiency and sustainable operations in diplomatic facilities is essential for promoting green growth. This includes implementing energy management systems, conducting energy audits, and retrofitting existing buildings with energy-efficient technologies. Additionally, promoting sustainable procurement practices, waste reduction initiatives, and water conservation measures helps minimize environmental impact and lower operational costs. By prioritizing energy efficiency and sustainable operations, the Ministry can enhance diplomatic effectiveness</p>	<p>1. Green Diplomatic Facilities Certification: Measure the percentage of diplomatic facilities abroad that achieve recognized green building certifications, such as LEED (Leadership in Energy and Environmental Design) or BREEAM (Building Research Establishment Environmental Assessment Method). This KPI demonstrates a commitment to sustainable practices and environmental stewardship in the construction and operation of diplomatic premises.</p> <p>2. Energy Efficiency Improvement: Track the improvement in energy efficiency across diplomatic buildings and facilities. This could involve monitoring metrics such as energy consumption per square meter, implementation of energy-saving technologies, and adoption of renewable energy sources. Improving energy efficiency reduces operational costs, enhances environmental sustainability, and showcases leadership in climate action.</p> <p>3. Sustainable Transportation Practices for Diplomatic Missions: Monitor the adoption of sustainable transportation practices for diplomatic missions, including the use of fuel-efficient vehicles, electric vehicles, or public transportation options. This KPI reflects efforts to reduce carbon emissions, alleviate traffic congestion, and promote eco-friendly</p>	<p>1. Energy Efficiency Improvements: Conduct energy audits for all buildings owned and managed by the Ministry of Foreign Affairs to identify areas of energy inefficiency. Implement energy-saving measures such as upgrading lighting systems to LED, optimizing HVAC systems, and improving building insulation. By reducing energy consumption, the Ministry of Foreign Affairs can lower operational costs and minimize its environmental footprint.</p> <p>2. Waste Reduction and Recycling Programs: Establish waste reduction and recycling programs within the buildings of the Ministry of Foreign Affairs. Implement proper waste management protocols, including waste segregation, recycling, and responsible disposal practices. Introduce recycling initiatives for paper, plastics, and other materials to minimize waste sent to landfills and promote a circular economy approach.</p> <p>3. Water Conservation Measures: Implement water conservation measures to reduce water consumption within the buildings owned and managed by the Ministry of Foreign Affairs. Install water-saving fixtures such as low-flow toilets and faucets, and address leaks promptly. Consider implementing rainwater harvesting systems and utilizing greywater for non-potable purposes to reduce reliance on freshwater resources.</p>

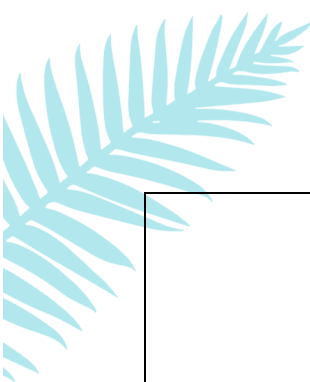


		<p>while reducing its environmental footprint.</p> <p>3. Green Diplomacy and Environmental Cooperation: Integrating environmental considerations into diplomatic activities is crucial for promoting green growth. This involves advocating for international environmental agreements, participating in climate negotiations, and fostering cooperation on environmental issues with other countries. Additionally, promoting sustainable development projects, capacity-building initiatives, and technology transfer programs can contribute to global efforts to address climate change and promote green growth. By incorporating green diplomacy into its foreign policy agenda, the Ministry can demonstrate leadership in environmental stewardship and contribute to sustainable development goals.</p> <p>4. Environmental Education and Cultural Exchange: The Ministry can promote green growth by incorporating environmental education and cultural exchange programs into its diplomatic activities. This includes organizing workshops, seminars, and cultural events to raise awareness about environmental issues, promote sustainable living practices, and foster cross-cultural understanding. Additionally, supporting educational exchanges, research collaborations, and environmental awareness campaigns helps build partnerships and promote mutual understanding on environmental issues. By promoting environmental education and cultural exchange, the Ministry can empower individuals and communities to take action on environmental challenges</p>	<p>mobility solutions among diplomatic staff.</p> <p>4. Promotion of Environmental Diplomacy and Partnerships: Evaluate efforts to promote environmental diplomacy and partnerships with host countries and international organizations. This could include initiatives to address global environmental challenges, advocate for sustainable development goals, and support green initiatives through diplomatic channels. Promoting environmental diplomacy enhances international cooperation, fosters alliances, and contributes to global sustainability efforts.</p>	<p>4. Green Procurement Practices: Adopt green procurement practices for purchasing goods and services within the Ministry of Foreign Affairs. This involves prioritizing environmentally friendly products, materials, and vendors that adhere to sustainability standards and practices. Consideration should be given to factors such as energy efficiency, recycled content, and environmental certifications when making procurement decisions.</p>
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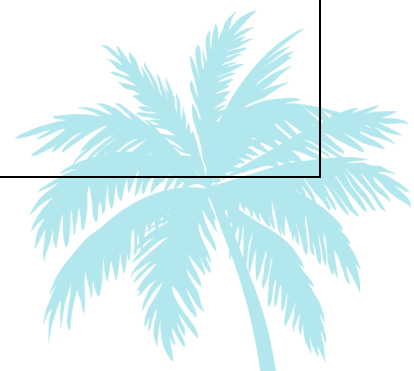


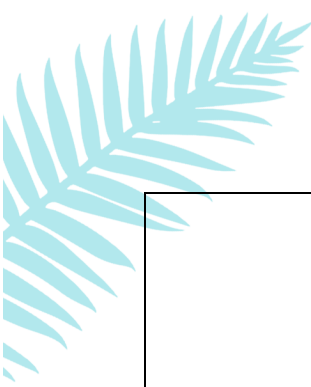
		and promote green growth globally.		
Ministry of Finance	1-26	<p>1. Green Fiscal Policies and Incentives: The Ministry can promote green growth by developing and implementing fiscal policies that incentivize environmentally sustainable practices. This includes offering tax incentives, grants, or subsidies for investments in energy efficiency, renewable energy, and environmentally friendly technologies. Additionally, incorporating environmental considerations into budgeting and financial planning processes helps prioritize green projects and allocate resources effectively. By aligning fiscal policies with green growth objectives, the Ministry can encourage private sector investment in sustainability and promote environmental stewardship.</p> <p>2. Energy Efficiency in Financial Infrastructure: Implementing energy-efficient practices in financial infrastructure is crucial for promoting green growth. This involves optimizing energy usage in office buildings, data centers, and other financial facilities through energy-efficient lighting, HVAC systems, and building automation technologies. Additionally, investing in renewable energy sources such as solar panels or wind turbines can help offset energy consumption and reduce carbon emissions. By prioritizing energy efficiency in financial infrastructure, the Ministry can lower operational costs, enhance resilience, and demonstrate environmental leadership.</p> <p>3. Sustainable Procurement and Supply Chain Management: The Ministry can promote green growth by integrating sustainability criteria into procurement</p>	<p>1. Investment in Green Building Projects: Measure the proportion of finance sector investments directed towards green building projects in Iraq. This KPI reflects the commitment to supporting sustainable infrastructure development and reducing the environmental footprint of the built environment. Tracking the volume and value of investments in green buildings demonstrates the finance sector's contribution to promoting energy efficiency, environmental sustainability, and climate resilience.</p> <p>2. Integration of Environmental and Social Risk Management: Evaluate the implementation of environmental and social risk management frameworks within financial institutions. This KPI assesses the extent to which financial institutions incorporate environmental and social considerations into lending and investment decisions, ensuring that projects funded by the sector adhere to sustainable development principles and mitigate adverse environmental impacts.</p> <p>3. Support for Renewable Energy Financing: Monitor the provision of financing for renewable energy projects in Iraq. This KPI measures the finance sector's support for transitioning to clean energy sources and reducing dependence on fossil fuels. Tracking investments in renewable energy infrastructure, such as solar and wind farms, demonstrates the sector's contribution to mitigating climate change and promoting sustainable energy solutions.</p>	<p>1. Energy Efficiency Improvements: Conduct energy audits for all buildings owned and managed by the Ministry of Finance to identify areas of energy inefficiency. Implement energy-saving measures such as upgrading lighting systems to LED, optimizing HVAC systems, and improving building insulation. By reducing energy consumption, the Ministry of Finance can lower operational costs and minimize its environmental footprint.</p> <p>2. Waste Reduction and Recycling Programs: Establish waste reduction and recycling programs within the buildings of the Ministry of Finance. Implement proper waste management protocols, including waste segregation, recycling, and responsible disposal practices. Introduce recycling initiatives for paper, plastics, and other materials to minimize waste sent to landfills and promote a circular economy approach.</p> <p>3. Water Conservation Measures: Implement water conservation measures to reduce water consumption within the buildings owned and managed by the Ministry of Finance. Install water-saving fixtures such as low-flow toilets and faucets, and address leaks promptly. Consider implementing rainwater harvesting systems and utilizing greywater for non-potable purposes to reduce reliance on freshwater resources.</p> <p>4. Green Procurement Practices: Adopt green procurement practices for purchasing goods and services within the Ministry of Finance. This involves prioritizing environmentally friendly products, materials, and vendors that adhere to sustainability standards and practices. Consideration should</p>

		<p>and supply chain management processes. This includes sourcing eco-friendly office supplies, furniture, and equipment, as well as prioritizing suppliers with strong environmental credentials. Additionally, implementing sustainable transportation practices, such as electric vehicle fleets or public transit subsidies, helps reduce carbon emissions associated with government operations. By promoting sustainable procurement and supply chain management, the Ministry can reduce environmental impact, support green industries, and foster a culture of sustainability.</p> <p>4. Green Building Standards and Certification: The Ministry can promote green growth by implementing green building standards and certification programs for government-owned or financed buildings. This involves requiring compliance with energy efficiency, water conservation, and environmental sustainability criteria in building design, construction, and operation. Additionally, encouraging green building certification, such as LEED (Leadership in Energy and Environmental Design) or equivalent standards, helps ensure that government buildings meet high environmental performance standards. By promoting green building standards and certification, the Ministry can lead by example, inspire private sector investment in green buildings, and contribute to environmental sustainability.</p>	<p>4. Promotion of Green Financial Products: Evaluate the availability and uptake of green financial products, such as green bonds, sustainable investment funds, and green mortgages, within the finance sector. This KPI assesses the sector's efforts to mobilize capital towards environmentally beneficial projects and incentivize sustainable consumption and investment behaviors among clients and investors. Increasing the availability and awareness of green financial products contributes to mainstreaming sustainable finance practices and advancing green growth objectives.</p>	<p>be given to factors such as energy efficiency, recycled content, and environmental certifications when making procurement decisions.</p>
High Commission of Hajj and Umrah	1 4 13 14 16 17 18 20	<p>1. Green Infrastructure Development: The High Commission of Hajj and Umrah can promote green growth by prioritizing sustainable infrastructure development in pilgrimage sites and accommodation</p>	<p>1. Energy Efficiency of Pilgrimage Facilities: Measure the energy efficiency of buildings and facilities managed by the High Commission of Hajj and Umrah. This KPI involves tracking energy</p>	<p>1. Energy Efficiency Improvements: Conduct energy audits for all buildings owned and managed by the High Commission of Hajj and Umrah to identify areas of energy inefficiency. Implement energy-saving measures such</p>

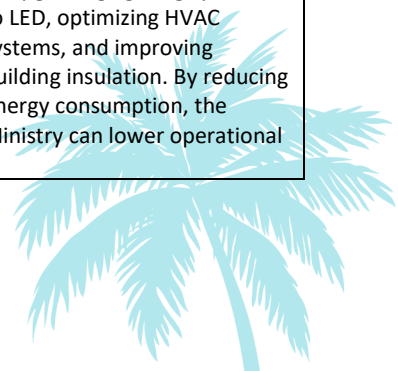


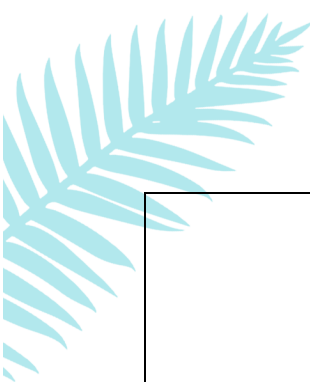
	<p>24 25</p>	<p>facilities. This involves incorporating eco-friendly building materials, optimizing energy efficiency through insulation and efficient HVAC systems, and integrating renewable energy sources such as solar panels or wind turbines. By constructing green infrastructure, the Authority can reduce its environmental footprint, minimize energy consumption, and create healthier and more sustainable environments for pilgrims.</p> <p>2. Waste Management and Recycling: Developing comprehensive waste management and recycling programs is essential for promoting green growth within pilgrimage sites and accommodations. This includes implementing waste reduction strategies, segregating waste streams for recycling, and promoting composting and reuse initiatives. Additionally, reducing single-use plastics and promoting reusable alternatives can help minimize environmental impact. By prioritizing waste management and recycling, the High Commission of Hajj and Umrah can minimize landfill waste, conserve resources, and promote environmental stewardship among pilgrims and staff.</p> <p>3. Water Conservation and Management: Implementing water conservation and management practices is crucial for promoting green growth within pilgrimage sites and accommodations, considering the water-intensive nature of such facilities. This involves implementing water-saving fixtures, promoting efficient irrigation practices for landscaping, and investing in water recycling and reuse systems. Additionally, raising awareness among pilgrims and staff about the</p>	<p>consumption per square meter, implementing energy-saving measures such as efficient lighting, heating, and cooling systems, and adopting renewable energy sources like solar panels. Improving energy efficiency reduces operational costs, lowers environmental impact, and enhances the sustainability of pilgrimage infrastructure.</p> <p>2. Water Conservation and Management: Monitor water usage and conservation practices within pilgrimage facilities. This KPI could include metrics such as water consumption per capita, implementation of water-saving technologies like low-flow fixtures and efficient irrigation systems, and initiatives to reduce water waste through leak detection and repair. Efficient water management promotes resource conservation, mitigates water scarcity risks, and supports environmental sustainability during the pilgrimage season.</p> <p>3. Waste Reduction and Recycling: Track efforts to minimize waste generation and implement recycling programs within pilgrimage sites. This KPI may involve measuring the percentage of waste diverted from landfills through recycling or composting, implementing waste reduction initiatives such as reducing single-use plastics and promoting sustainable procurement practices, and raising awareness among pilgrims about waste management best practices. Reducing waste supports environmental conservation, minimizes pollution, and fosters a culture of sustainability among pilgrims.</p>	<p>as upgrading lighting systems to LED, optimizing HVAC systems, and improving building insulation. By reducing energy consumption, the Authority can lower operational costs and minimize its environmental footprint.</p> <p>2. Waste Reduction and Recycling Programs: Establish waste reduction and recycling programs within the buildings and services of the High Commission of Hajj and Umrah. Implement proper waste management protocols, including waste segregation, recycling, and responsible disposal practices. Introduce recycling initiatives for paper, plastics, and other materials to minimize waste sent to landfills and promote a circular economy approach.</p> <p>3. Water Conservation Measures: Implement water conservation measures to reduce water consumption within the buildings and services owned and managed by the High Commission of Hajj and Umrah. Install water-saving fixtures such as low-flow toilets and faucets, and address leaks promptly. Consider implementing water reuse systems and promoting water-saving practices among pilgrims to reduce reliance on freshwater resources.</p> <p>4. Green Transportation Initiatives: Promote green transportation options for pilgrims visiting holy sites. Invest in infrastructure for sustainable transportation modes such as electric buses, bicycles, and pedestrian pathways. Encourage the use of public transportation and carpooling to reduce traffic congestion and emissions around pilgrimage sites.</p>
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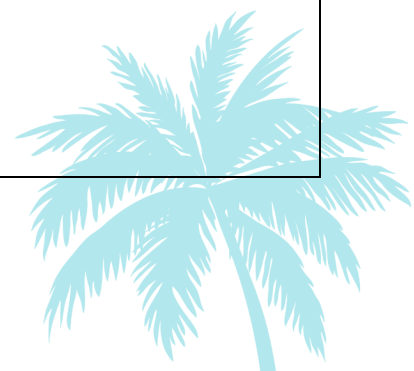


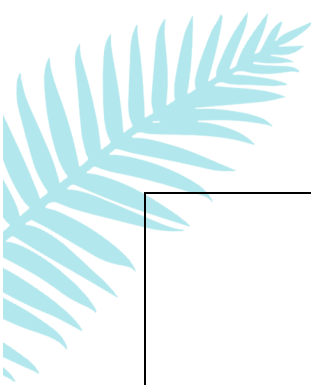
		<p>importance of water conservation helps minimize water waste and preserve precious resources. By prioritizing water conservation and management, the High Commission of Hajj and Umrah can reduce water usage, minimize environmental impact, and promote sustainable stewardship of water resources.</p> <p>4. Environmental Education and Awareness: The High Commission of Hajj and Umrah can promote green growth by raising environmental awareness and promoting sustainable practices among pilgrims and staff. This involves organizing educational campaigns, distributing informational materials, and providing training on topics such as waste reduction, water conservation, and energy efficiency. Additionally, incorporating environmental considerations into pilgrimage-related activities, such as providing eco-friendly transportation options and promoting sustainable food choices, helps minimize environmental impact. By fostering environmental education and awareness, the High Commission of Hajj and Umrah can empower pilgrims and staff to adopt environmentally friendly behaviors and contribute to green growth efforts.</p>	<p>4. Green Transportation Initiatives: Monitor the adoption of green transportation practices for pilgrims and staff members. This could include metrics such as the percentage of pilgrims using public transportation, electric vehicles, or shared transportation options, as well as initiatives to reduce traffic congestion and vehicle emissions around pilgrimage sites. Promoting green transportation options reduces carbon emissions, alleviates traffic congestion, and enhances the environmental sustainability of pilgrimage activities.</p>	
<p>Ministry of Labor and Social Affairs</p>	<p>1-26</p>	<p>1. Green Building Design and Construction for Social Welfare Facilities: The Ministry can promote green growth by prioritizing sustainable building design and construction practices for social welfare facilities such as rehabilitation centers, shelters, and vocational training centers. This involves incorporating eco-friendly building materials, optimizing energy efficiency through insulation</p>	<p>1. Energy Efficiency of Ministry Buildings: Measure the energy efficiency of buildings owned or managed by the Ministry of Labor and Social Affairs. This KPI involves tracking energy consumption per square meter, implementing energy-saving measures such as efficient lighting, HVAC systems, and insulation, and adopting renewable energy sources like solar panels. Improving</p>	<p>1. Energy Efficiency Improvements: Conduct energy audits for all buildings owned and managed by the Ministry of Labor and Social Affairs to identify areas of energy inefficiency. Implement energy-saving measures such as upgrading lighting systems to LED, optimizing HVAC systems, and improving building insulation. By reducing energy consumption, the Ministry can lower operational</p>





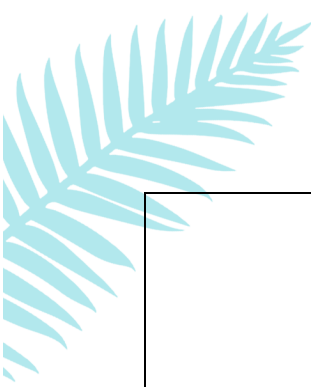
		<p>and efficient HVAC systems, and integrating renewable energy sources such as solar panels or geothermal heating. By constructing green buildings, the Ministry can reduce its environmental footprint, minimize energy consumption, and create healthier and more sustainable environments for vulnerable populations.</p> <p>2. Energy Efficiency and Sustainable Practices in Labor Offices: Emphasizing energy efficiency and implementing sustainable practices in labor offices and administrative buildings is crucial for promoting green growth within the Ministry. This includes implementing energy management systems, conducting energy audits, and retrofitting existing buildings with energy-efficient technologies. Additionally, adopting paperless office initiatives, promoting telecommuting options, and encouraging sustainable transportation practices help minimize environmental impact. By prioritizing energy efficiency and sustainable practices in labor offices, the Ministry can lower operational costs, reduce resource consumption, and demonstrate environmental leadership.</p> <p>3. Waste Management and Recycling Programs: Developing comprehensive waste management and recycling programs is essential for promoting green growth within the Ministry of Labor and Social Affairs. This includes implementing waste reduction strategies, promoting recycling and composting, and investing in modern waste collection and disposal systems. Additionally, promoting e-waste recycling initiatives and donating surplus materials to community</p>	<p>energy efficiency reduces operational costs, lowers environmental impact, and demonstrates the Ministry's commitment to sustainability.</p> <p>2. Inclusive Green Building Practices: Monitor the adoption of inclusive green building practices within Ministry facilities. This KPI could include metrics such as the accessibility of buildings for people with disabilities, the incorporation of green spaces and recreational areas for social well-being, and the provision of sustainable transportation options for staff and visitors. Inclusive green building practices ensure that sustainability efforts benefit all members of society, including vulnerable and marginalized populations.</p> <p>3. Promotion of Green Jobs and Skills Development: Track efforts to promote green jobs and skills development within the Ministry's programs and initiatives. This KPI may involve measuring the number of training programs focused on green industries, the percentage of workforce employed in environmentally friendly sectors, and the integration of green skills into vocational training and education curricula. Promoting green jobs and skills development contributes to economic growth, social inclusion, and environmental sustainability.</p> <p>4. Community Engagement and Social Impact: Evaluate the Ministry's engagement with communities and the social impact of its green growth initiatives. This could include metrics such as the participation of local communities in sustainability projects, the</p>	<p>costs and minimize its environmental impact.</p> <p>2. Waste Reduction and Recycling Programs: Establish waste reduction and recycling programs within the buildings and services of the Ministry. Implement proper waste management protocols, including waste segregation, recycling, and responsible disposal practices. Introduce recycling initiatives for paper, plastics, and other materials to minimize waste sent to landfills and promote a circular economy approach.</p> <p>3. Water Conservation Measures: Implement water conservation measures to reduce water consumption within the buildings and services owned and managed by the Ministry. Install water-saving fixtures such as low-flow toilets and faucets, and address leaks promptly. Consider implementing rainwater harvesting systems and utilizing greywater for non-potable purposes to reduce reliance on freshwater resources.</p> <p>4. Promotion of Green Jobs: Develop programs and initiatives to promote green jobs within the Ministry and across the labor market. Encourage the adoption of environmentally friendly practices in various industries, such as renewable energy, sustainable agriculture, and waste management. Provide training and support for workers to transition to green jobs, fostering economic growth while contributing to environmental sustainability.</p>
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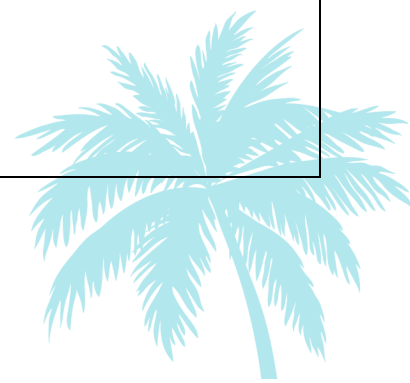


		<p>organizations help minimize environmental impact. By prioritizing waste management and recycling, the Ministry can minimize landfill waste, conserve resources, and promote environmental stewardship among staff and service recipients.</p> <p>4. Environmental Awareness and Training for Social Welfare Programs: Incorporating environmental awareness and training into social welfare programs is crucial for promoting green growth within the Ministry. This involves educating staff and service recipients about the importance of environmental conservation, promoting sustainable practices in daily operations, and providing training on waste management, energy conservation, and environmental stewardship. Additionally, integrating environmental considerations into vocational training programs helps prepare individuals for green jobs and sustainable careers. By raising awareness and fostering a culture of sustainability among staff and service recipients, the Ministry can promote environmental stewardship and contribute to green growth initiatives.</p>	<p>improvement of social cohesion and well-being through green infrastructure development, and the reduction of environmental disparities among vulnerable populations. Community engagement and social impact assessment ensure that green growth strategies address the diverse needs and priorities of society.</p>	
Ministry of Health	1 4 5 9 12 13 14 15 16 17 20 24 25 26	<p>1. Green Healthcare Infrastructure: The Ministry can promote green growth by prioritizing sustainable building design and construction practices for healthcare facilities such as hospitals, clinics, and medical laboratories. This involves incorporating eco-friendly building materials, optimizing energy efficiency through insulation and efficient HVAC systems, and integrating renewable energy sources such as solar panels or geothermal heating. By constructing green healthcare infrastructure, the Ministry</p>	<p>1. Energy Efficiency of Healthcare Facilities: Measure the energy efficiency of buildings owned or managed by the Ministry of Health. This KPI involves tracking energy consumption per square meter, implementing energy-saving measures such as efficient lighting, HVAC systems, and insulation, and adopting renewable energy sources like solar panels. Improving energy efficiency reduces operational costs, enhances resilience, and supports environmental sustainability in healthcare facilities.</p>	<p>1. Energy Efficiency Improvements: Conduct energy audits for all healthcare facilities owned and managed by the Ministry of Health to identify areas of energy inefficiency. Implement energy-saving measures such as upgrading lighting systems to LED, optimizing HVAC systems, and improving building insulation. By reducing energy consumption, the Ministry of Health can lower operational costs and minimize its environmental impact.</p> <p>2. Waste Reduction and Recycling Programs: Establish waste reduction and recycling</p>

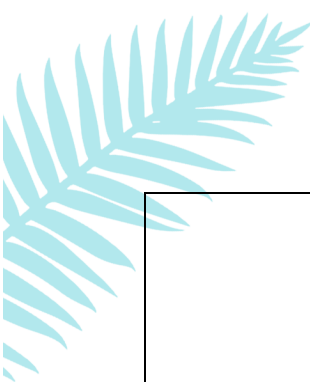




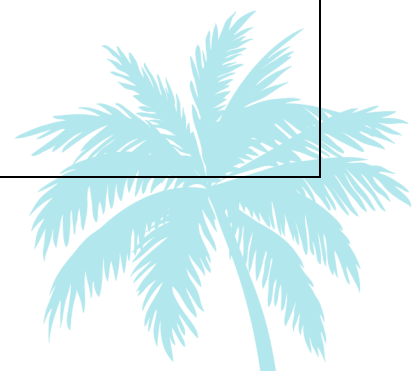
	<p>can reduce its environmental footprint, minimize energy consumption, and create healthier and more sustainable environments for patients and healthcare workers.</p> <p>2. Energy Efficiency and Renewable Energy Integration: Emphasizing energy efficiency and integrating renewable energy sources into healthcare facilities is crucial for promoting green growth within the Ministry of Health. This includes implementing energy management systems, conducting energy audits, and retrofitting existing buildings with energy-efficient technologies. Additionally, deploying renewable energy systems such as solar panels, wind turbines, and micro-hydro generators helps reduce reliance on fossil fuels and minimize carbon emissions. By prioritizing energy efficiency and renewable energy integration, the Ministry of Health can lower operational costs, enhance energy security, and reduce environmental impact.</p> <p>3. Waste Management and Recycling Programs: Developing comprehensive waste management and recycling programs is essential for promoting green growth within healthcare facilities. This includes implementing waste reduction strategies, promoting recycling and composting, and investing in modern waste collection and disposal systems. Additionally, reducing single-use plastics and promoting reusable alternatives can help minimize environmental impact. By prioritizing waste management and recycling, the Ministry of Health can minimize landfill waste, conserve resources, and promote environmental</p>	<p>2. Healthcare Waste Management and Recycling: Monitor efforts to minimize healthcare waste generation and implement recycling programs within Ministry facilities. This KPI may involve measuring the percentage of healthcare waste diverted from landfills through recycling or treatment, implementing waste reduction initiatives such as segregation at the source and safe disposal practices, and ensuring compliance with environmental regulations. Effective healthcare waste management minimizes environmental pollution, reduces health risks, and fosters a culture of sustainability within healthcare settings.</p> <p>3. Promotion of Sustainable Healthcare Practices: Track the adoption of sustainable healthcare practices within Ministry facilities and healthcare delivery systems. This could include metrics such as the implementation of green procurement policies, the promotion of energy-efficient medical equipment and technologies, and the integration of environmental sustainability into healthcare policies and guidelines. Promoting sustainable healthcare practices reduces environmental impact, improves patient outcomes, and supports public health objectives.</p> <p>4. Green Infrastructure Development: Monitor the development of green infrastructure within healthcare facilities and surrounding areas. This KPI involves measuring the expansion of green spaces, the implementation of nature-based solutions for climate resilience, and the integration of sustainable</p>	<p>programs within healthcare facilities. Implement proper waste management protocols, including waste segregation, recycling, and responsible disposal practices. Introduce recycling initiatives for medical waste, paper, plastics, and other materials to minimize waste sent to landfills and promote a circular economy approach.</p> <p>3. Water Conservation Measures: Implement water conservation measures to reduce water consumption within healthcare facilities. Install water-saving fixtures such as low-flow toilets and faucets, and address leaks promptly. Consider implementing water reuse systems and promoting water-saving practices among staff to reduce reliance on freshwater resources.</p> <p>4. Promotion of Green Healthcare Practices: Integrate environmentally sustainable practices into healthcare delivery. Encourage the use of eco-friendly medical supplies, equipment, and technologies. Promote green building design principles in the construction and renovation of healthcare facilities, incorporating features such as natural lighting, green spaces, and energy-efficient systems to enhance patient comfort and well-being.</p>
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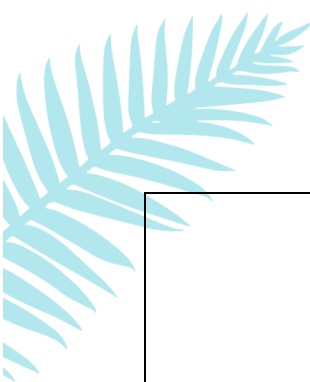


		<p>stewardship among healthcare staff and patients.</p> <p>4. Environmental Health and Awareness: Incorporating environmental health considerations and promoting awareness of environmental issues within healthcare facilities is crucial for promoting green growth within the Ministry of Health. This involves educating healthcare staff and patients about the importance of environmental conservation, promoting sustainable practices in healthcare operations, and providing training on waste management, energy conservation, and environmental stewardship. Additionally, integrating environmental health considerations into public health initiatives helps address environmental determinants of health and promote sustainable behaviors. By raising awareness and fostering a culture of environmental stewardship within healthcare facilities, the Ministry of Health can promote green growth and contribute to broader public health and sustainability goals.</p>	<p>landscaping practices. Green infrastructure enhances the healing environment, improves air quality, reduces stress, and promotes physical activity, contributing to the overall health and well-being of patients, staff, and visitors.</p>	
Ministry of Environment		<p>1. Green Building Standards and Certification: The Ministry of Environment can promote green growth by developing and implementing green building standards and certification programs. This involves setting criteria for environmentally sustainable building design, construction, and operation, as well as providing guidance and incentives for compliance. By promoting green building standards and certification, the Ministry encourages the adoption of energy-efficient technologies, renewable energy sources, and eco-friendly materials, leading to reduced environmental</p>	<p>1. Energy Efficiency of Ministry construction: Measure the energy efficiency of buildings owned or managed by the Ministry of Environment. This KPI involves tracking energy consumption per square meter, implementing energy-saving measures such as efficient lighting, HVAC systems, and insulation, and adopting renewable energy sources like solar panels. Improving energy efficiency reduces operational costs, lowers greenhouse gas emissions, and demonstrates the Ministry's commitment to environmental sustainability.</p>	<p>1. Energy Efficiency Improvements: Conduct energy audits for all buildings owned and managed by the Ministry of Environment to identify areas of energy inefficiency. Implement energy-saving measures such as upgrading lighting systems to LED, optimizing HVAC systems, and improving building insulation. By reducing energy consumption, the Ministry can lead by example in environmental stewardship and lower operational costs.</p> <p>2. Waste Reduction and Recycling Programs: Establish waste reduction and recycling programs within the ministry's buildings and services. Implement proper waste</p>

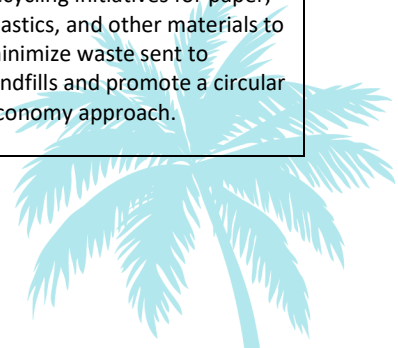


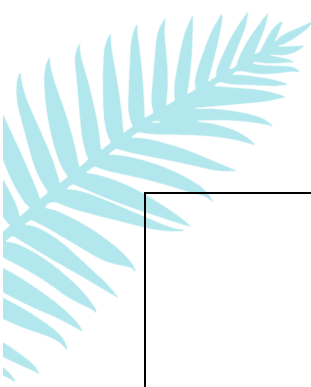
		<p>impact and resource conservation.</p> <p>2. Environmental Management Systems for Ministry Facilities: Implementing environmental management systems (EMS) within Ministry facilities is crucial for promoting green growth. An EMS provides a framework for identifying, managing, and improving environmental performance, including energy and water use, waste generation, and pollution prevention. By integrating EMS principles into facility management practices, such as conducting environmental audits, setting environmental objectives and targets, and implementing continuous improvement initiatives, the Ministry can enhance its sustainability efforts and demonstrate environmental leadership.</p> <p>3. Sustainable Infrastructure Development and Restoration Projects: The Ministry of Environment plays a key role in promoting green growth through sustainable infrastructure development and restoration projects. This involves prioritizing investments in green infrastructure, such as parks, wetlands, and greenways, that provide ecosystem services, enhance biodiversity, and mitigate climate change impacts. Additionally, implementing projects to restore degraded ecosystems, such as reforestation, habitat restoration, and soil conservation, contributes to environmental sustainability and resilience. By prioritizing sustainable infrastructure development and restoration projects, the Ministry supports green growth objectives and fosters a healthier environment for communities.</p>	<p>2. Green Building Certification Rate: Monitor the percentage of new Ministry construction projects that achieve recognized green building certifications, such as LEED (Leadership in Energy and Environmental Design) or equivalent standards. This KPI reflects the adoption of sustainable building practices, including efficient resource use, waste reduction, and indoor environmental quality improvements. Increasing the rate of green building certifications enhances environmental performance and sets a benchmark for sustainable building practices in Iraq.</p> <p>3. Waste Reduction and Recycling: Track efforts to minimize waste generation and implement recycling programs within Ministry facilities. This KPI may involve measuring the percentage of waste diverted from landfills through recycling or composting, implementing waste reduction initiatives such as reducing single-use plastics and promoting sustainable procurement practices, and raising awareness among staff about waste management best practices. Reducing waste supports environmental conservation, minimizes pollution, and fosters a culture of sustainability.</p> <p>4. Ecosystem Restoration and Biodiversity Conservation: Monitor efforts to restore ecosystems and conserve biodiversity within Ministry jurisdiction. This could include metrics such as the area of degraded land restored through reforestation or habitat restoration projects, the number of protected areas established or expanded,</p>	<p>management protocols, including waste segregation, recycling, and responsible disposal practices. Introduce recycling initiatives for paper, plastics, and other materials to minimize waste sent to landfills and promote a circular economy approach.</p> <p>3. Water Conservation Measures: Implement water conservation measures to reduce water consumption within the ministry's buildings and services. Install water-saving fixtures such as low-flow toilets and faucets, and address leaks promptly. Consider implementing rainwater harvesting systems and utilizing greywater for non-potable purposes to reduce reliance on freshwater resources.</p> <p>4. Environmental Education and Awareness Programs: Develop and implement educational programs to raise awareness about environmental issues and promote sustainable practices among staff and the public. Offer training sessions, workshops, and outreach activities on topics such as climate change, biodiversity conservation, and sustainable development. Engage with local communities to foster a culture of environmental responsibility and stewardship.</p>
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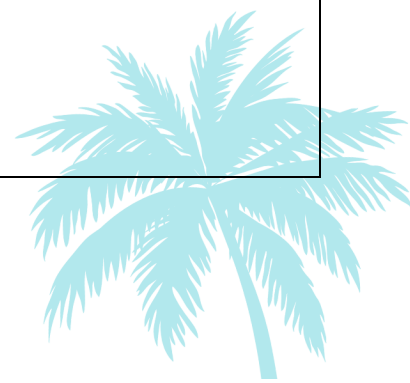


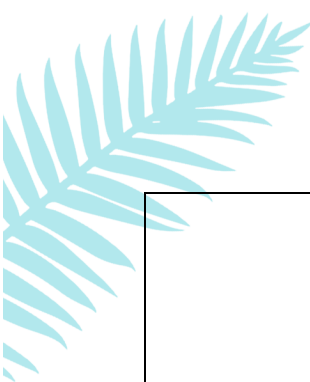
		<p>4. Environmental Education and Awareness Programs: The Ministry of Environment can promote green growth by implementing environmental education and awareness programs. This involves raising public awareness about environmental issues, promoting sustainable behaviors, and providing training and capacity-building opportunities for stakeholders. By engaging with schools, communities, businesses, and government agencies, the Ministry fosters a culture of environmental stewardship and promotes green growth principles. Additionally, collaborating with civil society organizations, media outlets, and other partners amplifies the reach and impact of environmental education initiatives, leading to greater awareness and participation in green growth efforts.</p>	<p>and the implementation of biodiversity conservation programs. Promoting ecosystem restoration and biodiversity conservation enhances ecological resilience, protects critical habitats, and supports sustainable development goals.</p>	
<p>Ministry of Defense</p>	<p>1 4 13 14 15 16 17 20 22 24 25 26</p>	<p>1. Green Military Infrastructure: The Ministry of Defense can promote green growth by prioritizing sustainable building design and construction practices for military installations, barracks, and training facilities. This involves incorporating eco-friendly building materials, optimizing energy efficiency through insulation and efficient HVAC systems, and integrating renewable energy sources such as solar panels or wind turbines. By constructing green military infrastructure, the Ministry can reduce its environmental footprint, minimize energy consumption, and create healthier and more sustainable environments for military personnel.</p> <p>2. Energy Efficiency and Renewable Energy Integration: Emphasizing energy efficiency and integrating renewable energy sources into military facilities is crucial for</p>	<p>1. Energy Efficiency of Military Facilities: Measure the energy efficiency of buildings and infrastructure owned or managed by the Ministry of Defense. This KPI involves tracking energy consumption per square meter, implementing energy-saving measures such as efficient lighting, HVAC systems, and insulation, and adopting renewable energy sources like solar panels. Improving energy efficiency reduces operational costs, enhances resilience, and supports environmental sustainability in military facilities.</p> <p>2. Green Procurement and Sustainable Practices: Monitor the adoption of green procurement policies and sustainable practices within the Ministry of Defense. This could include tracking the percentage of environmentally friendly products and materials used in construction and maintenance projects,</p>	<p>1. Energy Efficiency Improvements: Conduct energy audits for all buildings owned and managed by the Ministry of Defense to identify areas of energy inefficiency. Implement energy-saving measures such as upgrading lighting systems to LED, optimizing HVAC systems, and improving building insulation. By reducing energy consumption, the Ministry of Defense can lower operational costs and minimize its environmental impact.</p> <p>2. Waste Reduction and Recycling Programs: Establish waste reduction and recycling programs within the buildings and services of the Ministry of Defense. Implement proper waste management protocols, including waste segregation, recycling, and responsible disposal practices. Introduce recycling initiatives for paper, plastics, and other materials to minimize waste sent to landfills and promote a circular economy approach.</p>



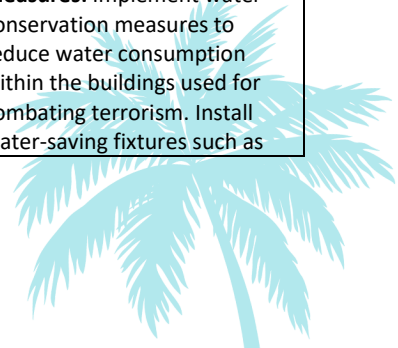


	<p>promoting green growth within the Ministry of Defense. This includes implementing energy management systems, conducting energy audits, and retrofitting existing buildings with energy-efficient technologies. Additionally, deploying renewable energy systems such as solar panels, wind turbines, and micro-hydro generators helps reduce reliance on fossil fuels and minimize carbon emissions. By prioritizing energy efficiency and renewable energy integration, the Ministry of Defense can lower operational costs, enhance energy security, and reduce environmental impact.</p> <p>3. Waste Management and Recycling Programs: Developing comprehensive waste management and recycling programs is essential for promoting green growth within military installations. This includes implementing waste reduction strategies, promoting recycling and composting, and investing in modern waste collection and disposal systems. Additionally, reducing single-use plastics and promoting reusable alternatives can help minimize environmental impact. By prioritizing waste management and recycling, the Ministry of Defense can minimize landfill waste, conserve resources, and promote environmental stewardship among military personnel.</p> <p>4. Environmental Training and Awareness: Incorporating environmental training and awareness programs into military operations is crucial for promoting green growth within the Ministry of Defense. This involves educating military personnel about the importance of</p>	<p>promoting sustainable transportation options for military personnel, and implementing resource-efficient practices in military operations. Emphasizing green procurement and sustainable practices reduces the ecological footprint of defense activities and supports national environmental objectives.</p> <p>3. Waste Reduction and Recycling: Track efforts to minimize waste generation and implement recycling programs within military facilities. This KPI may involve measuring the percentage of waste diverted from landfills through recycling or composting, implementing waste reduction initiatives such as reducing single-use plastics and promoting sustainable procurement practices, and raising awareness among personnel about waste management best practices. Reducing waste supports environmental conservation, minimizes pollution, and fosters a culture of sustainability within the military.</p> <p>4. Environmental Compliance and Conservation: Monitor compliance with environmental regulations and initiatives to conserve natural resources within Ministry operations. This could include metrics such as the implementation of environmental management systems, the establishment of protected areas on military bases, and the integration of environmental considerations into training exercises and operational planning. Ensuring environmental compliance and conservation demonstrates responsible stewardship of natural resources and minimizes</p>	<p>3. Water Conservation Measures: Implement water conservation measures to reduce water consumption within the buildings and services owned and managed by the Ministry of Defense. Install water-saving fixtures such as low-flow toilets and faucets, and address leaks promptly. Consider implementing rainwater harvesting systems and utilizing greywater for non-potable purposes to reduce reliance on freshwater resources.</p> <p>4. Green Transportation Initiatives: Promote green transportation options for Ministry of Defense personnel and vehicles. Encourage the use of fuel-efficient vehicles, carpooling, and public transportation. Invest in infrastructure for electric vehicle charging stations and prioritize the use of alternative fuels to reduce emissions and dependence on fossil fuels.</p>
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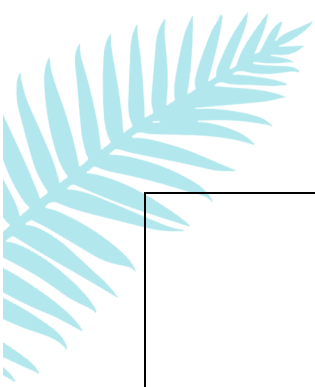




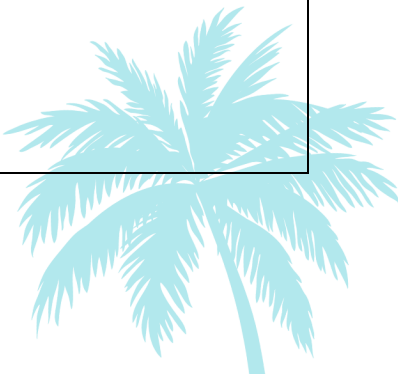
		<p>environmental conservation, promoting sustainable practices in training exercises and operations, and providing training on waste management, energy conservation, and environmental stewardship. Additionally, integrating environmental considerations into military planning and decision-making processes helps minimize environmental impact and enhance sustainability. By raising awareness and fostering a culture of environmental stewardship among military personnel, the Ministry of Defense can promote green growth and contribute to broader environmental goals.</p>	<p>adverse environmental impacts associated with defense activities.</p>	
ICTS	<p>1 4 13 14 15 16 17 22 24 25</p>	<p>1. Energy Efficiency in Security Infrastructure: Enhancing energy efficiency in security infrastructure is crucial for promoting green growth. This involves implementing energy-saving technologies and practices in surveillance systems, command centers, and border security installations. For example, using energy-efficient lighting, HVAC systems, and surveillance equipment can reduce energy consumption and operational costs while minimizing environmental impact.</p> <p>2. Sustainable Operations in Counterterrorism Facilities: Integrating sustainable practices into the operations of counterterrorism facilities can contribute to green growth. This includes implementing waste reduction and recycling programs, optimizing water usage through efficient plumbing fixtures, and promoting eco-friendly procurement practices. Additionally, utilizing renewable energy sources such as solar power for backup systems or remote</p>	<p>1. Security-enhanced Energy Efficiency: Measure the energy efficiency of buildings used for counter-terrorism operations. This KPI would involve tracking energy consumption per square meter while ensuring that energy-saving measures such as efficient HVAC systems and lighting do not compromise security protocols. Improving energy efficiency reduces operational costs and environmental impact while maintaining or enhancing security standards.</p> <p>2. Resilient Infrastructure: Monitor the resilience of infrastructure critical for counter-terrorism efforts to climate-related risks and security threats. This KPI would assess the ability of buildings and transportation systems to withstand extreme weather events, natural disasters, or security incidents. Enhancing infrastructure resilience ensures continuity of operations and protects against disruptions.</p> <p>3. Sustainable Transportation Practices: Track the adoption of</p>	<p>1. Energy Efficiency Improvements: Conduct energy audits for all buildings used for combating terrorism purposes to identify areas of energy inefficiency. Implement energy-saving measures such as upgrading lighting systems to LED, optimizing HVAC systems, and improving building insulation. By reducing energy consumption, these facilities can lower operational costs and minimize their environmental footprint.</p> <p>2. Waste Reduction and Recycling Programs: Establish waste reduction and recycling programs within the buildings used for combating terrorism. Implement proper waste management protocols, including waste segregation, recycling, and responsible disposal practices. Introduce recycling initiatives for paper, plastics, and other materials to minimize waste sent to landfills and promote a circular economy approach.</p> <p>3. Water Conservation Measures: Implement water conservation measures to reduce water consumption within the buildings used for combating terrorism. Install water-saving fixtures such as</p>



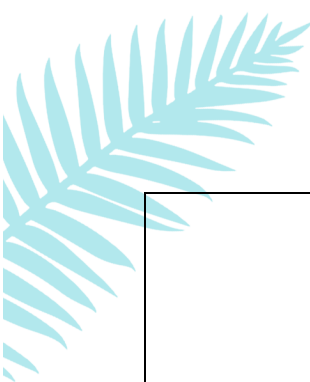
		<p>facilities can enhance sustainability and resilience.</p> <p>3. Green Design for Border Infrastructure: Green design principles can be applied to border infrastructure projects aimed at combating terrorism. This involves incorporating sustainable materials, landscaping with native vegetation to minimize environmental impact, and integrating energy-efficient technologies into border control facilities and checkpoints. By prioritizing green design, border infrastructure projects can mitigate environmental harm and contribute to local ecological resilience.</p> <p>4. Environmental Stewardship in Counterterrorism Training: Incorporating environmental stewardship principles into counterterrorism training programs is essential for promoting green growth. This includes minimizing environmental damage during training exercises by adhering to environmental regulations, using biodegradable materials for simulated scenarios, and conducting environmental assessments to mitigate any adverse impacts. By promoting environmental awareness among counterterrorism personnel, training programs can instill a culture of sustainability and responsibility.</p>	<p>sustainable transportation practices within counterterrorism operations. This could involve promoting the use of fuel-efficient vehicles, electric vehicles, or alternative transportation modes for personnel commuting and operational activities. Sustainable transportation reduces carbon emissions, lessens dependency on fossil fuels, and contributes to environmental sustainability without compromising operational effectiveness.</p> <p>4. Environmental Impact Mitigation: Measure efforts to minimize the environmental impact associated with counterterrorism operations. This KPI could include reducing carbon emissions, implementing waste reduction, and recycling programs, and preserving natural habitats within operational areas. Mitigating environmental impact demonstrates responsible stewardship and fosters positive relationships with local communities.</p>	<p>low-flow toilets and faucets, and address leaks promptly. Consider implementing rainwater harvesting systems and utilizing greywater for non-potable purposes to reduce reliance on freshwater resources.</p> <p>4. Green Infrastructure Development: Invest in green infrastructure within the properties used for combating terrorism. This may include installing renewable energy systems such as solar panels, incorporating green roofs and walls for insulation and air quality improvement, and creating green spaces for recreation and biodiversity enhancement. Green infrastructure not only reduces environmental impact but also enhances resilience and security.</p>
Ministry of Justice	1 4 13 14 16 17 18 20 24 25	<p>Infrastructure Development and Management: Overseeing the development and management of environmentally sustainable infrastructure within the justice system. This includes courthouses, detention facilities, administrative buildings, and related infrastructure. Implementing green building standards and practices to reduce energy consumption, promote renewable energy</p>	<p>1. Energy Efficiency of Judicial Buildings: Measure the energy efficiency of buildings owned or managed by the Ministry of Justice. This KPI involves tracking energy consumption per square meter, implementing energy-saving measures such as efficient lighting, HVAC systems, and insulation, and adopting renewable energy sources like solar panels. Improving</p>	<p>1. Energy Efficiency Improvements: Conduct energy audits for all buildings owned and managed by the Ministry of Justice to identify areas of energy inefficiency. Implement energy-saving measures such as upgrading lighting systems to LED, optimizing HVAC systems, and improving building insulation. By reducing energy consumption, the Ministry of Justice can lower operational</p>



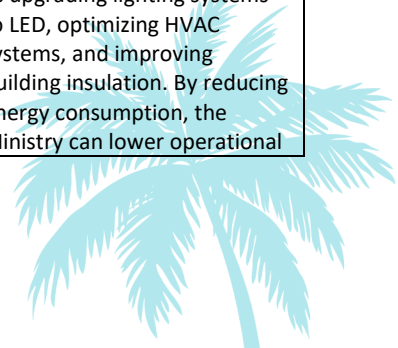
	<p>integration, optimize water usage, and enhance waste management within justice facilities.</p> <p>2. Policy Development and Regulation: Developing and enforcing policies, regulations, and standards related to green building practices and environmental sustainability within the justice sector. Collaborating with relevant stakeholders to establish guidelines for energy efficiency, eco-friendly construction materials, waste reduction, and sustainable procurement practices in justice-related infrastructure projects.</p> <p>3. Environmental Integration and Innovation: Identifying and promoting innovative technologies and solutions to improve the environmental performance of justice facilities and services. This may include adopting smart building systems, IoT (Internet of Things) applications for energy management, and renewable energy technologies. Facilitating research and development initiatives to advance green building technologies and promote their adoption within the justice sector.</p> <p>4. Capacity Building and Training: Providing training and capacity-building programs for justice sector personnel, including architects, engineers, facility managers, and administrators, on green building principles and practices. Raising awareness among staff and stakeholders about the benefits of sustainable building and service practices, as well as providing guidance on implementing and maintaining environmentally responsible initiatives.</p>	<p>energy efficiency reduces operational costs, lowers environmental impact, and demonstrates the Ministry's commitment to sustainability.</p> <p>2. Green Procurement and Sustainable Practices: Monitor the adoption of green procurement policies and sustainable practices within the Ministry of Justice. This could include tracking the percentage of environmentally friendly products and materials used in building construction and maintenance, promoting eco-friendly transportation options for staff and visitors, and implementing resource-efficient practices in procurement processes. Emphasizing green procurement and sustainable practices reduces the Ministry's ecological footprint and supports broader environmental objectives.</p> <p>3. Waste Reduction and Recycling: Track efforts to minimize waste generation and implement recycling programs within Justice facilities. This KPI may involve measuring the percentage of waste diverted from landfills through recycling or composting, implementing waste reduction initiatives such as reducing paper usage and promoting digitalization, and raising awareness among staff about waste management best practices. Reducing waste supports environmental conservation, minimizes pollution, and fosters a culture of sustainability within the Ministry of Justice.</p> <p>4. Environmental Compliance and Conservation: Monitor compliance with environmental regulations and initiatives to conserve</p>	<p>costs and minimize its environmental impact.</p> <p>2. Waste Reduction and Recycling Programs: Establish waste reduction and recycling programs within the buildings and services of the Ministry of Justice. Implement proper waste management protocols, including waste segregation, recycling, and responsible disposal practices. Introduce recycling initiatives for paper, plastics, and other materials to minimize waste sent to landfills and promote a circular economy approach.</p> <p>3. Water Conservation Measures: Implement water conservation measures to reduce water consumption within the buildings and services owned and managed by the Ministry of Justice. Install water-saving fixtures such as low-flow toilets and faucets, and address leaks promptly. Consider implementing rainwater harvesting systems and utilizing greywater for non-potable purposes to reduce reliance on freshwater resources.</p> <p>4. Green Procurement Practices: Adopt green procurement practices for purchasing goods and services within the Ministry of Justice. This involves prioritizing environmentally friendly products, materials, and vendors that adhere to sustainability standards and practices. Consideration should be given to factors such as energy efficiency, recycled content, and environmental certifications when making procurement decisions.</p>
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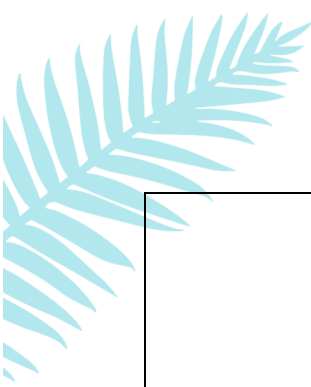


			natural resources within Justice operations. This could include metrics such as the implementation of environmental management systems, the integration of environmental considerations into legal proceedings and policies, and the establishment of programs to address environmental justice issues. Ensuring environmental compliance and conservation demonstrates responsible stewardship of natural resources and promotes environmental justice within the legal system.	
Ministry of Education	1 4 13 14 15 16 17 20 22 24 25	<p>1. Green Campus Development and Management: Implementing sustainable practices in the design, construction, and management of educational facilities to create green campuses. This includes incorporating energy-efficient building designs, utilizing renewable energy sources like solar power, implementing efficient water management systems, and promoting green spaces. Developing and enforcing green building standards and guidelines for educational institutions to ensure that new construction projects and renovations prioritize environmental sustainability.</p> <p>2. Curriculum Integration and Environmental Education: Integrating environmental education and sustainability principles into the curriculum across all levels of education, from kindergarten to higher education. This involves incorporating topics such as climate change, conservation, and sustainable development into various subjects. Promoting hands-on learning experiences, such as school gardens, eco-clubs, and environmental projects, to engage students in practical</p>	<p>1. Energy Efficiency of Educational Buildings: Measure the energy efficiency of buildings owned or managed by the Ministry of Education. This KPI involves tracking energy consumption per square meter, implementing energy-saving measures such as efficient lighting, HVAC systems, and insulation, and adopting renewable energy sources like solar panels. Improving energy efficiency reduces operational costs, lowers environmental impact, and sets an example for sustainable practices within educational facilities.</p> <p>2. Integration of Environmental Education: Monitor the integration of environmental education into the curriculum and extracurricular activities within educational institutions. This KPI may involve assessing the inclusion of environmental topics, such as climate change, biodiversity conservation, and sustainable development, in lesson plans, educational materials, and school events. Promoting environmental education raises awareness, fosters environmental literacy, and empowers students to</p>	<p>1. Energy Efficiency Improvements: Conduct energy audits for all educational buildings owned and managed by the Ministry of Education to identify areas of energy inefficiency. Implement energy-saving measures such as upgrading lighting systems to LED, optimizing HVAC systems, and improving building insulation. By reducing energy consumption, the Ministry can lower operational costs and minimize its environmental impact.</p> <p>2. Waste Reduction and Recycling Programs: Establish waste reduction and recycling programs within educational facilities. Implement proper waste management protocols, including waste segregation, recycling, and responsible disposal practices. Introduce recycling initiatives for paper, plastics, and other materials to minimize waste sent to landfills and promote a circular economy approach.</p> <p>3. Water Conservation Measures: Implement water conservation measures to reduce water consumption within educational buildings. Install water-saving fixtures such as low-flow toilets and faucets, and address leaks promptly. Consider implementing rainwater</p>

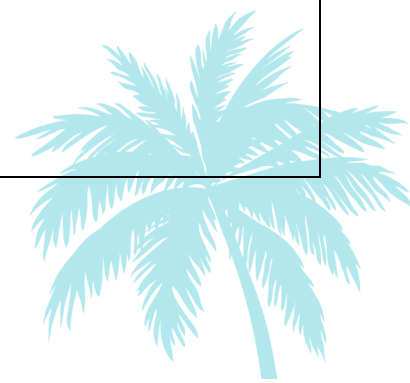


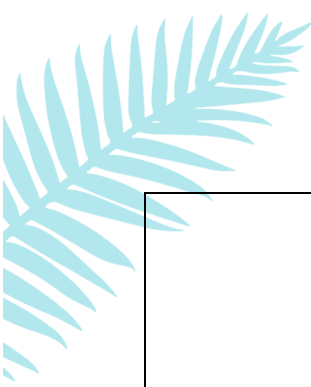
		<p>sustainability initiatives and foster environmental stewardship.</p> <p>3. Resource Efficiency and Waste Management: Implementing initiatives to improve resource efficiency and reduce waste generation within educational institutions. This includes promoting recycling programs, minimizing paper usage through digitalization efforts, and adopting sustainable procurement practices for school supplies and equipment. Educating students and staff about the importance of waste reduction and recycling and providing infrastructure such as recycling bins and composting facilities to support these efforts.</p> <p>4. Community Engagement and Partnerships: Collaborating with local communities, government agencies, non-profit organizations, and industry partners to promote green initiatives and share best practices in sustainable development. Engaging parents, teachers, students, and other stakeholders in sustainability-related events, workshops, and outreach activities to build a culture of environmental responsibility within the education sector and the broader community.</p>	<p>become stewards of the environment.</p> <p>3. Green Infrastructure Development: Track the development of green infrastructure within educational facilities and surrounding areas. This could include metrics such as the implementation of energy-efficient technologies, the creation of green spaces, and the promotion of sustainable transportation options for students and staff. Green infrastructure enhances the learning environment, improves air quality, reduces stress, and provides opportunities for outdoor education and recreation.</p> <p>4. Waste Reduction and Recycling Programs: Monitor efforts to minimize waste generation and implement recycling programs within educational institutions. This KPI may involve measuring the percentage of waste diverted from landfills through recycling or composting, implementing waste reduction initiatives such as reducing paper usage and promoting reusable materials, and organizing educational campaigns to raise awareness about waste management and recycling. Engaging students and staff in waste reduction and recycling efforts instills a culture of sustainability and responsibility.</p>	<p>harvesting systems and utilizing greywater for non-potable purposes to reduce reliance on freshwater resources.</p> <p>4. Promotion of Environmental Education: Integrate environmental education into the curriculum to raise awareness about sustainability and encourage environmentally friendly behaviors among students and staff. Offer educational programs, workshops, and extracurricular activities focused on topics such as climate change, biodiversity conservation, and sustainable development. Create opportunities for hands-on learning experiences, such as school gardens and eco-clubs, to engage students in practical environmental stewardship activities.</p>
<p>Ministry of Youth and Sports</p>		<p>1. Sports Facilities Development and Management: Planning, designing, and constructing sports facilities such as stadiums, arenas, and training centers with a focus on eco-friendly building practices. Implementing green building standards and certifications to optimize energy efficiency, water conservation, waste</p>	<p>1. Energy Efficiency of Sports Facilities: Measure the energy efficiency of sports facilities owned or managed by the Ministry of Youth and Sports. This KPI involves tracking energy consumption per square meter, implementing energy-saving measures such as efficient lighting, HVAC systems, and insulation, and adopting renewable energy sources</p>	<p>1. Energy Efficiency Improvements: Conduct energy audits for all buildings owned and managed by the Ministry of Youth and Sports to identify areas of energy inefficiency. Implement energy-saving measures such as upgrading lighting systems to LED, optimizing HVAC systems, and improving building insulation. By reducing energy consumption, the Ministry can lower operational</p>



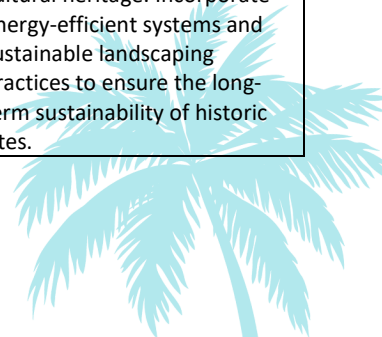


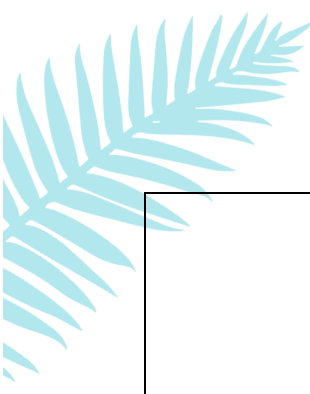
		<p>management, and indoor air quality in sports facilities.</p> <p>2. Youth Engagement and Environmental Education: Integrating environmental education and awareness programs into youth initiatives and sports activities to promote sustainable behavior and practices among young people. Organizing workshops, seminars, and campaigns to raise awareness about the importance of environmental stewardship and the role of sustainable buildings in mitigating climate change.</p> <p>3. Community Sports Infrastructure Development: Supporting the development of community-based sports infrastructure, including parks, playgrounds, and recreational centers, with an emphasis on green design and sustainability. Collaborating with local authorities and community organizations to implement green infrastructure projects that enhance access to sports and recreational facilities while preserving natural habitats and ecosystems.</p> <p>4. Sports Tourism and Events Management: Promoting eco-friendly practices in sports tourism and event management, including venue selection, transportation, waste management, and hospitality services. Encouraging the adoption of sustainable event standards, such as ISO 20121, to minimize the environmental impact of sports events and maximize their positive social and economic contributions.</p>	<p>like solar panels. Improving energy efficiency reduces operational costs, lowers environmental impact, and sets an example for sustainable practices within sports facilities.</p> <p>2. Promotion of Sustainable Sports Events: Monitor the promotion of sustainable practices in sports events organized or sponsored by the Ministry of Youth and Sports. This KPI may involve implementing measures to reduce carbon emissions, minimize waste generation, and promote eco-friendly transportation options for participants and spectators. Promoting sustainable sports events raises awareness about environmental issues, demonstrates leadership in sustainability, and encourages behavior change among young people.</p> <p>3. Green Infrastructure Development in Sports Facilities: Track the development of green infrastructure within sports facilities and surrounding areas. This could include metrics such as the installation of energy-efficient lighting, the creation of green spaces for recreational activities, and the implementation of water-saving measures. Green infrastructure enhances the quality of sports facilities, improves the well-being of athletes and participants, and provides opportunities for outdoor recreation and environmental education.</p> <p>4. Youth Engagement in Environmental Conservation: Monitor youth engagement in environmental conservation initiatives and sustainability projects organized by the Ministry of Youth and Sports. This KPI involves measuring the participation</p>	<p>costs and minimize its environmental impact.</p> <p>2. Waste Reduction and Recycling Programs: Establish waste reduction and recycling programs within sports facilities and youth centers. Implement proper waste management protocols, including waste segregation, recycling, and responsible disposal practices. Introduce recycling initiatives for paper, plastics, and other materials to minimize waste sent to landfills and promote a circular economy approach.</p> <p>3. Promotion of Sustainable Sports Events: Encourage the organization of sustainable sports events that prioritize environmental protection and minimize ecological footprints. Implement practices such as waste minimization, recycling, and carbon offsetting for travel and venue operations. Promote the use of eco-friendly materials and equipment and raise awareness among participants and spectators about the importance of sustainability.</p> <p>4. Development of Green Sports Infrastructure: Invest in the development of green sports infrastructure, such as eco-friendly stadiums and sports complexes. Incorporate sustainable design principles, such as green building materials, renewable energy systems, and rainwater harvesting, to minimize environmental impact and promote energy efficiency. Create outdoor recreational spaces that encourage physical activity and connection with nature while preserving natural habitats and biodiversity.</p>
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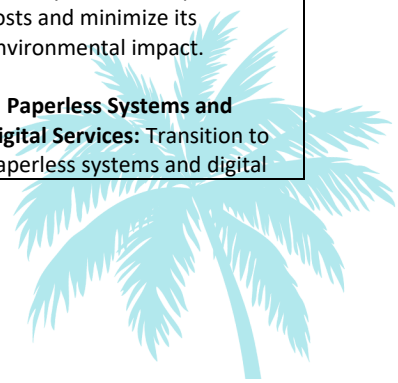


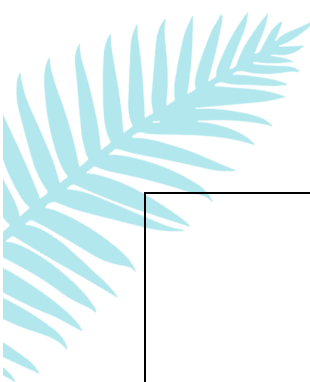
			of young people in environmental education programs, community clean-up events, and conservation projects. Engaging youth in environmental conservation builds their leadership skills, instills a sense of responsibility towards the environment, and empowers them to become advocates for sustainability in their communities.	
Ministry of Culture, Tourism and Antiquities	1 4 13 14 15 16 17 20 22 24 25	<p>1. Heritage Conservation and Preservation: Implementing green building practices in the conservation and restoration of cultural heritage sites, historic buildings, and monuments. Balancing preservation efforts with sustainability goals by adopting energy-efficient technologies, eco-friendly materials, and sustainable maintenance practices.</p> <p>2. Cultural Infrastructure Development: Planning and developing cultural facilities such as museums, theaters, libraries, and art galleries with a focus on environmental sustainability. Incorporating green design principles to minimize environmental impact, reduce resource consumption, and promote biodiversity in cultural infrastructure projects.</p> <p>3. Cultural Events and Festivals Management: Promoting sustainability in the planning and organization of cultural events, festivals, and exhibitions. Encouraging event organizers to adopt eco-friendly practices such as waste reduction, recycling, renewable energy use, and sustainable transportation options.</p> <p>4. Community Engagement and Cultural Tourism: Engaging communities in sustainable cultural practices</p>	<p>1. Energy Efficiency of Cultural Buildings: Measure the energy efficiency of buildings owned or managed by the Ministry of Culture. This KPI involves tracking energy consumption per square meter, implementing energy-saving measures such as efficient lighting, HVAC systems, and insulation, and adopting renewable energy sources like solar panels. Improving energy efficiency reduces operational costs, lowers environmental impact, and sets an example for sustainable practices within cultural institutions.</p> <p>2. Heritage Conservation and Sustainable Restoration: Monitor efforts to conserve cultural heritage sites and implement sustainable restoration practices. This KPI may involve assessing the integration of environmentally friendly materials and techniques in restoration projects, promoting adaptive reuse of historic buildings, and implementing green infrastructure solutions to mitigate environmental impacts. Combining heritage conservation with sustainable practices ensures the preservation of cultural identity while minimizing environmental degradation.</p> <p>3. Promotion of Sustainable Cultural Events: Track the promotion of sustainable</p>	<p>1. Energy Efficiency Improvements: Conduct energy audits for all cultural buildings owned and managed by the Ministry of Culture to identify areas of energy inefficiency. Implement energy-saving measures such as upgrading lighting systems to LED, optimizing HVAC systems, and improving building insulation. By reducing energy consumption, the Ministry can lower operational costs and minimize its environmental impact.</p> <p>2. Promotion of Sustainable Cultural Practices: Integrate sustainability principles into cultural programming and activities. Promote eco-friendly practices such as waste reduction, recycling, and sustainable transportation options for cultural events and exhibitions. Encourage the use of digital technologies for virtual exhibitions and cultural exchanges to reduce the environmental footprint of cultural activities.</p> <p>3. Preservation of Historic Buildings and Sites: Implement sustainable conservation practices for historic buildings and archaeological sites under the Ministry's jurisdiction. Adopt green building techniques and materials for restoration projects to minimize environmental impact while preserving cultural heritage. Incorporate energy-efficient systems and sustainable landscaping practices to ensure the long-term sustainability of historic sites.</p>



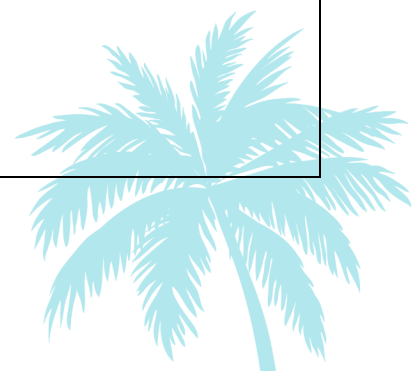


		<p>and promoting awareness of environmental issues through cultural programs, workshops, and initiatives. Developing sustainable tourism strategies that highlight cultural heritage sites, traditions, and local craftsmanship while minimizing negative environmental impacts.</p> <p>5. Promoting Heritage and UNESCO sites: The ministry has a great role to promote Eco, Heritage tourism, within promoting and advocating for Green Growth and great contribution of the positive engagement of the community towards these sites, the awareness could be raised through such initiatives will have great outcomes towards the marshlands, the ecosystem and heritage of the country, enabling the attraction of global/international tourism, as well investment opportunities through sustaining these facilities.</p>	<p>practices in cultural events organized or sponsored by the Ministry of Culture. This KPI could include measures to reduce waste generation, minimize energy consumption, and promote eco-friendly transportation options for participants and visitors. Promoting sustainable cultural events raises awareness about environmental issues, fosters a sense of community responsibility, and contributes to the cultural sector's efforts towards sustainability.</p> <p>4. Environmental Education and Awareness: Monitor the integration of environmental education and awareness programs into cultural initiatives and exhibitions. This could involve measuring the inclusion of environmental themes and messages in cultural exhibitions, organizing educational workshops and seminars on environmental topics, and collaborating with environmental organizations to raise awareness among visitors and stakeholders. Integrating environmental education into cultural programs enhances public understanding of environmental issues and inspires action towards sustainability.</p>	<p>4. Cultural and Environmental Education: Develop educational programs that highlight the connection between culture, heritage, and the environment. Offer workshops, seminars, and guided tours that focus on sustainable cultural practices, traditional ecological knowledge, and the importance of preserving natural resources. Engage local communities in cultural and environmental initiatives to foster a sense of ownership and stewardship.</p>
<p>Ministry of Migration and Displacement</p>	<p>1 4 13 14 15 16 17 20 22 24 25</p>	<p>1. Green Infrastructure for Migration Centers: Implementing green building standards and practices in the construction and renovation of migration centers, detention facilities, and administrative offices. Incorporating energy-efficient technologies, renewable energy sources, and sustainable materials to reduce energy consumption, lower carbon emissions, and minimize environmental impact.</p> <p>2. Sustainable Transportation and Mobility Services:</p>	<p>1. Energy Efficiency of Migration Facilities: Measure the energy efficiency of buildings and facilities managed by the Ministry of Migration. This KPI involves tracking energy consumption per capita or per square meter, implementing energy-saving measures such as efficient lighting, HVAC systems, and insulation, and adopting renewable energy sources like solar panels. Improving energy efficiency reduces operational costs, lowers environmental impact, and demonstrates the Ministry's</p>	<p>1. Energy Efficiency Improvements: Conduct energy audits for all migration buildings and facilities to identify areas of energy inefficiency. Implement energy-saving measures such as upgrading lighting systems to LED, optimizing HVAC systems, and improving building insulation. By reducing energy consumption, the Ministry can lower operational costs and minimize its environmental impact.</p> <p>2. Paperless Systems and Digital Services: Transition to paperless systems and digital</p>

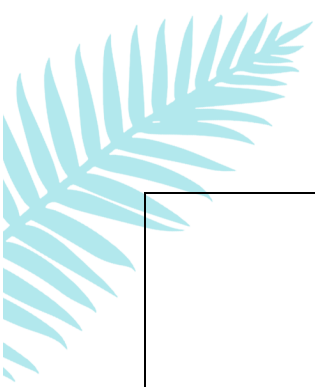




		<p>Promoting sustainable transportation options for immigrants and refugees, including public transit, cycling infrastructure, and carpooling programs. Integrating green mobility solutions such as electric vehicles, bike-sharing systems, and pedestrian-friendly designs to reduce reliance on fossil fuels and mitigate air pollution.</p> <p>3. Community Engagement and Integration Programs: Engaging immigrants, refugees, and host communities in environmental education, awareness campaigns, and community gardening initiatives. Providing training and resources for sustainable living practices, waste reduction, recycling, and green entrepreneurship to promote environmental stewardship and social integration.</p> <p>4. Policy Development and Advocacy: Advocating for policies and regulations that support green growth, sustainable development, and climate resilience in migration-related services and facilities. Collaborating with government agencies, non-profit organizations, and international partners to address environmental challenges and promote inclusive, environmentally sustainable migration policies.</p>	<p>commitment to sustainability.</p> <p>2. Sustainable Refugee Shelter Design and Construction: Monitor the design and construction of refugee shelters with a focus on sustainability. This KPI may involve metrics such as the use of environmentally friendly materials, incorporation of energy-efficient features, and implementation of waste management and recycling systems. Sustainable refugee shelter design improves living conditions for displaced populations, reduces environmental impact, and supports long-term resilience.</p> <p>3. Integration of Environmental Education for Migrants and Refugees: Track efforts to integrate environmental education and awareness programs for migrants and refugees. This could include providing information on sustainable living practices, environmental conservation, and waste management. Integrating environmental education empowers migrants and refugees to adopt sustainable behaviors, reduces their environmental footprint, and fosters a sense of responsibility towards the environment.</p> <p>4. Community Engagement in Environmental Conservation: Monitor community engagement initiatives for migrants and refugees aimed at environmental conservation. This KPI may involve metrics such as participation in community clean-up events, tree planting campaigns, and environmental restoration projects. Engaging migrants and refugees in environmental conservation activities promotes social cohesion, builds relationships with</p>	<p>services to reduce paper usage and streamline administrative processes. Implement electronic document management systems, online application portals, and digital communication platforms to facilitate efficient and eco-friendly migration services. This not only reduces paper waste but also enhances service accessibility and responsiveness.</p> <p>3. Green Transportation Initiatives: Promote green transportation options for migration staff and visitors. Encourage the use of public transportation, carpooling, and cycling by providing incentives such as subsidies for public transit passes or designated bike parking areas. Invest in infrastructure for electric vehicle charging stations to support the adoption of electric vehicles and reduce emissions from transportation.</p> <p>4. Sustainable Infrastructure Development: Incorporate sustainable design principles into the construction and renovation of migration facilities. Prioritize energy-efficient building materials, renewable energy systems, and green building certifications such as LEED (Leadership in Energy and Environmental Design). Design facilities with features such as natural lighting, efficient water fixtures, and green spaces to enhance occupant comfort and environmental performance.</p>
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			host communities, and contributes to broader environmental sustainability efforts.	
Higher Judiciary Council		<p>1. Courtroom and Office Building Construction and Renovation: Implementing green building standards and practices in the construction, renovation, and maintenance of courtrooms, administrative offices, and judicial facilities. Incorporating energy-efficient lighting, HVAC systems, insulation, and sustainable materials to reduce energy consumption, lower operating costs, and promote environmental sustainability.</p> <p>2. Paperless and Digital Solutions: Promoting the adoption of paperless and digital solutions within judicial processes, including electronic filing systems, digital documentation, and online court proceedings. Transitioning to digital platforms and e-services not only reduces paper usage and waste but also increases efficiency, accessibility, and transparency in the judicial system.</p> <p>3. Environmental Compliance and Sustainability Initiatives: Ensuring compliance with environmental regulations and standards in court operations, waste management, and resource utilization. Implementing sustainability initiatives such as waste reduction, recycling programs, water conservation measures, and energy-saving practices to minimize the environmental footprint of judicial operations.</p> <p>4. Judicial Education and Awareness Programs: Providing training and education programs for judges, court staff, and legal professionals on</p>	<p>1. Energy Efficiency of Judicial Buildings: Measure the energy efficiency of buildings owned or managed by the Supreme Judicial Council. This KPI involves tracking energy consumption per square meter, implementing energy-saving measures such as efficient lighting, HVAC systems, and insulation, and adopting renewable energy sources like solar panels.</p> <p>2. Paperless Court Proceedings: Monitor the transition to digital and paperless court proceedings within the Supreme Judicial Council. This KPI may involve tracking the percentage of court documents filed electronically, implementing electronic case management systems, and promoting digital signatures and documentation. Transitioning to paperless court proceedings reduces paper usage, minimizes waste generation, and contributes to environmental conservation efforts.</p> <p>3. Green Procurement Policies: Monitor the adoption of green procurement policies within the Supreme Judicial Council. This could include metrics such as the percentage of office supplies and equipment sourced from environmentally friendly suppliers, the inclusion of environmental criteria in procurement contracts, and the promotion of sustainable procurement practices among staff. Implementing green procurement policies reduces environmental impact throughout the supply chain and supports</p>	<p>1. Energy Efficiency Improvements: Conduct energy audits for all buildings owned and managed by the Supreme Judicial Council to identify areas of energy inefficiency. Implement energy-saving measures such as upgrading lighting systems to LED, optimizing HVAC systems, and improving building insulation. By reducing energy consumption, the Council can lower operational costs and minimize its environmental impact.</p> <p>2. Waste Reduction and Recycling Programs: Establish waste reduction and recycling programs within judicial facilities. Implement proper waste management protocols, including waste segregation, recycling, and responsible disposal practices. Introduce recycling initiatives for paper, plastics, and other materials to minimize waste sent to landfills and promote a circular economy approach.</p> <p>3. Water Conservation Measures: Implement water conservation measures to reduce water consumption within judicial buildings. Install water-saving fixtures such as low-flow toilets and faucets, and address leaks promptly. Consider implementing rainwater harvesting systems and utilizing greywater for non-potable purposes to reduce reliance on freshwater resources.</p> <p>4. Promotion of Sustainable Practices: Promote sustainable practices and environmental awareness among judiciary staff and stakeholders. Offer training sessions and workshops on sustainability topics such as energy conservation, waste reduction, and water management. Encourage the adoption of green procurement policies</p>



		<p>environmental law, sustainability principles, and green practices. Raising awareness among judicial stakeholders about the importance of environmental protection, sustainable development, and the role of the judiciary in promoting environmental justice.</p>	<p>sustainable development goals.</p> <p>4. Environmental Compliance in Judicial Operations: Track compliance with environmental regulations and initiatives within judicial operations. This could include metrics such as the implementation of environmental management systems, adherence to environmental standards for waste management and disposal, and integration of environmental considerations into court decisions and policies. Ensuring environmental compliance demonstrates the council's commitment to environmental stewardship and upholding environmental laws.</p>	<p>and practices to prioritize environmentally friendly products and services.</p>
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