

**Green Terminology** Guidebook 2024











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**Green Terminology** Guidebook 2024 **Good Neighbors International** works in over 50 countries to make the world a place without hunger and where people live in harmony. Good Neighbors is an international humanitarian and development organization founded in 1991.

For over three decades, GNI has responded to the calls of the most marginalized and vulnerable people beyond ethnicity, religion, belief, and nationality. We are dedicated to protecting their rights and fostering selfreliance.

In pursuit of lasting impact, GNI seeks to implement a community-inclusive and holistic strategy in our operations. Engaging with over 200 communities around the globe, we are empowering people and transforming communities through social and economic development initiatives.

GNI is globally accredited for its expertise and remarkable contributions to global society. We were granted General Consultative Status by the United Nations Economic and Social Council (UN ECOSOC) in 1996, a status reserved for established and broadly reaching international organizations.

GNI was also awarded the first Millennium Development Goals Award by the International Association of Economics and Social Councils and Similar Institutions (AICESIS) in 2007, in recognition of our noteworthy initiatives in education.

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The environment is an indispensable element in human life. The impact of the environment on us, amid the ever-worsening climate change, can no longer be overlooked. The international community has been actively cooperating through landmark agreements such as the Kyoto Protocol in 1997 and the Paris Climate Agreement in 2015 to combat climate change. However, responding to climate change remains an immense challenge, particularly for marginalized communities who are often the most affected. At **Good Neighbors International in Jordan**, we believe that building a sustainable environment is crucial for poverty eradication. Our projects aim to promote sustainability and environmental stewardship through education, community engagement, and practical initiatives. In recent years, we have been at the forefront of green growth initiatives in Jordan. Our efforts include empowering children and teachers through education on waste management and recycling, enhancing the resilience of communities in northern Jordan to water challenges, and establishing Climate Action Clubs to address climate issues exacerbated by severe water scarcity.

Despite the complexity of green growth terms and concepts, making them accessible is essential for effective participation in environmental issues. Based on our extensive experience, we have compiled a specialized guide that includes clear and concise explanations of **218 commonly used terms in the field of green growth**. We have contextualized these terms to fit the Jordanian context, ensuring their relevance and applicability. This terminology guide is not only a valuable resource for policymakers and students but also a vital tool for entrepreneurs. By understanding green growth concepts, entrepreneurs can identify new opportunities for sustainable business practices, innovate in ways that contribute to environmental sustainability, and align their ventures with global and national environmental goals.

By increasing understanding and awareness of green concepts, we can empower individuals and communities to take meaningful action towards a more sustainable future. Together, we can make a significant difference in combating climate change and environmental degradation.

#### **Good Neighbors International in Jordan**

#### Acknowledgments

We extend our deepest gratitude to everyone who contributed to the creation of The Green Growth Terminology Guidebook. This achievement would not have been possible without the collective effort, valuable expertise, and dedication of numerous individuals and organizations.

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Our appreciation also goes out to the dedicated team at Good Neighbors International in Jordan who worked tirelessly to produce this guide in the best possible form.

This guide is the result of fruitful collaboration between various sectors and stakeholders and reflects the joint efforts to achieve sustainable development and green growth in Jordan. We are proud of this work and reaffirm our continued commitment to moving forward towards a more sustainable future.

# **Table of Content**

Guidebook overview	9
Abbreviations	11
General Terminologies	15
Agriculture Sector	48
Water Sector	58
Energy Sector	66
Waste Management Sector	74
Tourism Sector	90
Transport Sector	94
Green Entrepreneurship	100
Cross-Cutting Terminologies	108

#### **Guidebook Overview**

The Green Growth Terminology Guidebook serves as an essential resource, offering a comprehensive glossary of terms and concepts pivotal to understanding green growth and climate change. It specifically targets the six key sectors outlined within national strategies: Agriculture, Water, Energy, Waste Management, Tourism, and Transport. This guide aims to demystify green growth terminology for stakeholders in both government and private sectors, enhancing their comprehension of these concepts. By doing so, it seeks to assist planners and entrepreneurs in assessing the relevance of these terms to both national and local contexts, thereby supporting the advancement of the Jordanian economy in harmony with green growth principles. The guide is structured around four main thematic areas:

- **General Green Terminology:** This section introduces fundamental concepts and terms related to environmental sustainability and green practices, providing a solid foundation for readers.
- **Sector-Specific Green Terminology:** Delving into the specifics, this part offers an in-depth look at green terminology relevant to the six main sectors identified in the national strategies and the Jordan National Determined Contributions.
- **Green Entrepreneurship Terminology:** Focusing on the entrepreneurial aspect, this section outlines key concepts related to green entrepreneurship, offering insights into sustainable business practices.
- **Cross-Cutting Green Terminology:** Addressing terminology that intersects multiple sectors, this section facilitates a broader understanding of green concepts that have widespread application across different areas of focus.

### Abbreviations

GNI	Good Neighbors International
GGGI	Global Green Growth Institute
UN ECOSOC	United Nations Economic and Social Council
AICESIS	International Association of Economic and Social Councils and Similar Institutions
JHCO	Jordan Hashemite Charity Organization
GAM	Greater Amman Municipality
AQI	Air Quality Index
BEV	Battery Electric Vehicle
CAF	Cancun Adaptation Framework
CCS	Carbon Capture and Storage
СОР	Conference of the Parties
CSA	Climate-Smart Agriculture
CWWTP	Centralized Wastewater Treatment Plant
DAC	Direct Air Capture
DWWTP	Decentralized Wastewater Treatment Plant
EIA	Environmental Impact Assessment
ESG	Environmental, Social, and Governance
Fin-tech	Financial Technology
GHG	Greenhouse Gas
GWP	Global Warming Potential
HEV	Hybrid Electric Vehicle

IPM	Integrated Pest Management
ISWM	Integrated Solid Waste Management
MSW	Municipal Solid Waste
IWM	Integrated Waste Management
MSWM	Municipal Solid Waste Management
MWh	Megawatt-hour
NAPs	National Adaptation Plan
NDCs	Nationally Determined Contributions
NGGP	National Green Growth Plan
RECs	Renewable Energy Certificates
RIC	Resin Identification Code
ROI	Return on Investment
SCP	Sustainable Consumption and Production
SDGs	Sustainable Development Goals
SES	Social-Ecological Systems
SSR	Single Stream Recycling
TWW	Treated Wastewater
WWTP	Wastewater Treatment Plant



# **Green Terminology** General

LET'S **SPEAK** GREEN















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Adaptation refers to the strategic adjustments and modifications undertaken in ecological, social, and economic systems to address the immediate and anticipated impacts of climate change. This process involves a proactive revision of policies, practices, and infrastructures to minimize potential damages and capitalize on any opportunities that arise from changing climate conditions. For Jordan, a country notably affected by increased aridity, significant water scarcity, and vulnerability in agricultural productivity, adaptation strategies are critical for mitigating the adverse effects of climate change such as heightened water stress, reduced crop yields, and food insecurity. Additionally, adaptation efforts aim to harness positive outcomes, such as exploring agricultural practices suited to longer growing seasons and optimizing water use efficiency in response to shift climate patterns. The goal is to enhance Jordan's resilience against the challenges posed by climate change, ensuring sustainable development and the well-being of its communities in the face of environmental uncertainties.

**Air Quality Index (AQI)** A measure of the quality of the air in a particular location. Higher AQI values indicate higher levels of air pollution. The AQI is calculated based on the concentrations of various pollutants in the air. There is no standardized formula for the AQI. It is typically reported by government agencies or other organizations that monitor air quality, AQI's preferred way to communicate is via a color-coded Air Quality Index (AQI) that is easy for the public to understand.

**Ambient Air Quality Standard** A value set for a minimum acceptable quality of ambient outdoor air, referenced as a measured mass concentration (e.g. units of micrograms per cubic meter), mixing ratio, or mole fraction (e.g. expressed for example as parts per billion, nanomoles per mole), of a specified pollutant or group or pollutants to show emissions of gases and particulate matter to the ambient air as outlined in Jordanian Standard No. 1140/2006 for the quality of the ambient air.

**Anthropogenic** Environmental change caused or influenced by people, either directly or indirectly human-produced (anthropogenic) changes in atmospheric greenhouse gases would likely cause climate change, as changes in these gases have been the case every time in the geologic past. In the early 2000s, the Theory of Anthropogenic Climate Change was solidified, which means humans are causing



most of the current changes to climate by burning fossil fuels such as coal, oil, and natural gas.

(C)

The Climate Action Gap refers to the disparity between the current levels of action taken by the government, the private sector, and individuals to reduce greenhouse gas emissions and the more significant, urgent actions required to meet both national and international climate goals. This gap underscores the need for accelerated and comprehensive efforts across all sectors of Jordanian society to address climate change effectively. Closing the climate action gap in Jordan demands ambitious initiatives to enhance energy efficiency, expand renewable energy use, and implement sustainable transportation and agricultural practices. It also calls for increased awareness and engagement among citizens to adopt more sustainable lifestyles. Addressing this gap is crucial for Jordan to fulfill its commitments under the Paris Agreement and to ensure a sustainable future for its economy and the well-being of its population, making it a national priority to mitigate the impacts of climate change and transition towards a low-carbon, resilient economy.

**Climate Change** is the long-term alterations in temperature and weather patterns experienced within the country. While some shifts might be attributed to natural phenomena such as solar variations or significant volcanic activities, the prevalent changes observed in Jordan—increasing temperatures, shifting precipitation patterns, and more frequent and intense extreme weather events primarily result from anthropogenic factors. These changes signify a substantial deviation from the average weather conditions traditionally experienced in Jordan over decades, marking a clear distinction between natural weather variability and the ongoing trend of climate change. The implications of these shifts are profound for Jordan, affecting water resources, agricultural productivity, and overall environmental stability. Recognizing and addressing climate change is crucial for Jordan, as it necessitates adaptation and mitigation strategies to safeguard water supplies, ensure food security, and protect the livelihoods of its people in the face of these changing environmental conditions. **Climate Crisis** refers to the acute and multifaceted challenges the nation faces due to the ongoing changes in global climate patterns. These challenges include increased frequency and intensity of extreme weather events, such as droughts and heatwaves, which exacerbate water scarcity—a critical issue for Jordan, one of the world's most water-stressed countries. Additionally, the crisis manifests in threats to biodiversity, agricultural productivity declines leading to food and water insecurity, heightened health risks, economic disturbances, potential displacement of communities, and the risk of increased conflict over dwindling natural resources. The term "Climate Crisis" underscores the urgency of the situation, emphasizing the immediate need for comprehensive and aggressive climate change mitigation and adaptation strategies in Jordan. It highlights the imperative to address global warming's impacts not only to safeguard the environment but also to protect the well-being and future of its people and the stability of the country.

**Climate Feedback** involves the dynamic interplay between different climate variables that either amplify or mitigate the effects of climate changes experienced in the region. For instance, an increase in temperatures might lead to more evaporation, which could subsequently affect local rainfall patterns—a process that can further influence temperature and moisture levels in the area. Negative feedback mechanisms, which could potentially counteract the warming trend, are crucial for maintaining climate stability. However, Jordan faces challenges primarily from positive feedback loops, such as decreased vegetation cover leading to reduced soil moisture and increased land surface temperatures, which in turn exacerbate water scarcity and desertification—critical issues for the country.

**Climate Finance** encompasses the mobilization of funds from diverse sources, including public, private, and alternative financing mechanisms, aimed at supporting the country's efforts in climate change mitigation and adaptation. This financial support is in line with international frameworks such as the Convention, the Kyoto Protocol, and the Paris Agreement, which advocate for financial assistance to countries that are less financially robust and more vulnerable to climate change impacts. Recognizing the disparities in contributions to climate change and capacities to address its consequences, Jordan seeks climate finance to implement large-scale investments necessary for significantly reducing greenhouse gas



emissions and to undertake adaptation measures essential for coping with the adverse effects of climate change.

In this context, entities like the Cities and Villages Development Bank in Jordan play a pivotal role in financing sustainable projects that align with the goals of the Paris Climate Agreement. These initiatives not only aim to mitigate the environmental impacts of climate change but also address economic challenges by promoting sustainable development and resilience at the local and national levels.

**Climate Governance** is a strategic and structured approach designed to guide the nation's societal systems toward effectively addressing the challenges of climate change. This governance framework involves a continuous and inclusive process of dialogue, negotiation, and collaboration among a wide array of stakeholders, including national and local government entities, international organizations, the private sector, non-governmental organizations (NGOs), and community groups. The primary objective of climate governance in Jordan is to foster opportunities for comprehensive climate action, encompassing efforts to mitigate greenhouse gas emissions, enhance resilience and adaptability to climate impacts, and transition towards a sustainable and low-carbon economy.

The processes underpinning climate governance in Jordan are characterized by their versatility, allowing for both formal and informal mechanisms of decision-making that are capable of adapting to evolving environmental conditions and scientific insights. These efforts are manifested across various governance levels, integrating local initiatives with national strategies, and aligning them with global climate objectives.

**Climate Justice** A term used for the recognition of global warming and climate change not only as environmental challenges but as profound ethical and political issues that intersect with principles of justice, equity, and human rights. This perspective emphasizes the importance of addressing climate change through a lens of environmental and social justice, ensuring that actions and policies consider the vulnerabilities, needs, and rights of all segments of society, particularly those most at risk. In Jordan, a country facing significant environmental stresses such as water scarcity and agricultural vulnerability, climate justice involves a comprehensive approach that links sustainable development with the protection of human rights. It advocates for equitable distribution of the responsibilities and

benefits associated with combating climate change, aiming to reduce the disparities between different communities and ensuring that no group bears a disproportionate share of the negative impacts. By promoting climate justice, Jordan seeks to ensure that its efforts to mitigate and adapt to climate change are inclusive, fair, and supportive of the well-being of all its citizens, particularly the most vulnerable populations, thereby fostering resilience, social cohesion, and sustainable progress.

**Climate Overshoot** describes a scenario where the average global temperature rise temporarily exceeds the critical 1.5°C threshold set to prevent the most severe impacts of climate change, before eventually stabilizing back to or below this limit. This phenomenon is expected to occur around the mid-21st century, but indications suggest it could happen sooner, posing significant risks to Jordan's environmental, economic, and social systems. Given the country's existing vulnerabilities to climate change, such as water scarcity, agricultural challenges, and urban heat islands, an overshoot period could exacerbate these issues, leading to more pronounced water shortages, reduced agricultural productivity, heightened risk of urban discomfort, and potentially, increased migration pressures as people seek more habitable conditions. Jordan's delicate ecosystems, such as coral reefs in the Gulf of Agaba and fragile desert biomes, could also suffer irreversible damage, affecting biodiversity and ecosystem services. Addressing climate overshoot in Jordan requires urgent and ambitious mitigation and adaptation strategies to minimize the duration and impact of exceeding the 1.5°C threshold, ensuring the country's resilience in the face of this global challenge.

**Climate Transition** is the strategic pathway the country is pursuing, guided by targeted policies and initiatives, towards establishing a resilient economy characterized by low greenhouse gas emissions. This transition aligns with the ambitious targets outlined in the Paris Agreement, aiming to limit global warming and mitigate the impacts of climate change. For Jordan, this entails a comprehensive shift towards renewable energy sources, enhancement of energy efficiency across all sectors, sustainable water and land management practices, and the adoption of green technologies and innovations. The transition also involves strengthening the country's adaptive capacity to climate-related hazards and ensuring that economic growth is both sustainable and inclusive.



**The Climate Transition plan** is a comprehensive, time-specific strategy designed to align the nation's economic activities, energy policies, and developmental goals with the ambitious targets of contemporary climate science. This plan details the steps Jordan will undertake to significantly pivot its existing infrastructure, operations, and economic frameworks towards sustainability, with key milestones including halving greenhouse gas (GHG) emissions by 2030 and achieving net-zero emissions by 2050, to limit global warming to 1.5°C. The plan is expected to cover various sectors such as energy production, transportation, agriculture, and water management, incorporating innovative technologies, renewable energy expansion, efficiency improvements, and carbon sequestration initiatives. Through this plan, Jordan aims to demonstrate its commitment to the Paris Agreement while ensuring economic growth, social equity, and environmental sustainability, thereby securing a resilient and prosperous future for its citizens in the face of global climate challenges.

**Climate Change Management** encapsulates a proactive and ongoing approach to navigating the multifaceted challenges and opportunities presented by climate change, focusing on the nation's unique geographical and socio-economic landscape. It involves a blend of flexibility, innovation, and inclusive problemsolving, aimed at effectively mitigating greenhouse gas emissions and enhancing the country's adaptive capacity to climate variability and its impacts. Given the potential severity of climate change effects in Jordan, such as water scarcity, agricultural stress, and increased energy demand, this management process may also encompass transformational changes in vulnerable systems to ensure the continuity of development without significant setbacks. In the Jordanian context, Climate Change Management is characterized by iterative strategies that acknowledge the complexity of integrating climate change into national development planning. It requires the engagement of various stakeholders, including government entities, the private sector, NGOs, and communities, to collaboratively identify and implement sustainable solutions.

**Conservation** is the deliberate protection and prudent utilization of the country's natural resources to guarantee their sustained availability for future generations. This concept extends to the safeguarding of biodiversity, including the preservation of unique flora and fauna, as well as the conservation of vital

ecosystems, cultural heritage sites, and historically significant structures from the adverse impacts of human activities. Given Jordan's environmental challenges, such as water scarcity, desertification, and energy dependency, conservation also emphasizes the judicious use of scarce natural assets, like water and energy. Implementing strategies for energy conservation, for instance, not only helps in reducing the national energy bill but also plays a crucial role in mitigating environmental degradation. Through these conservation efforts, Jordan aims to achieve long-term environmental sustainability, ensuring that its natural and cultural treasures remain intact and accessible for the enjoyment and benefit of future generations, while also contributing to the global fight against climate change and biodiversity loss.

**COP** The annual United Nations conference dedicated to climate change, called "the Conference of the Parties" or "COP," has been organized under the UN Framework Convention on Climate Change (UNFCCC) since 1995. At the 21st COP, or COP21, which took place in 2015, the Paris Agreement was signed.

## **(E)**

**Eco-design** in Jordan is a strategic approach that integrates environmental considerations into the design and development phases of products and services, aiming to minimize their ecological footprint across the entire lifecycle—from material extraction, manufacturing, and use to disposal or recycling. This approach is particularly relevant in Jordan, given the country's emphasis on sustainable development amidst challenges like resource scarcity and environmental degradation. Eco-Design involves evaluating and optimizing the environmental impacts of products, including energy efficiency, resource use, and waste generation, to ensure they contribute positively to Jordan's environmental goals.

**Eco-dramaturgy** represents a pioneering framework for creating and analyzing theater and performance art through the lens of environmental awareness and sustainability. It involves integrating themes of environmental conservation and narratives into the content of theatrical productions, as well as adopting sustainable practices in the production process itself. This approach reflects Jordan's growing consciousness of environmental issues and its commitment to sustainable development. By incorporating eco-dramaturgy,



Jordanian theater practitioners and scholars aim to engage audiences with environmental narratives that provoke thought and inspire action toward ecological preservation. Furthermore, the adoption of green production practices minimizes the ecological footprint of theater-making, setting a precedent for responsible cultural production in line with Jordan's broader environmental goals.

**Eco-labels** serve as crucial indicators on product packaging or electronic catalogs, designed to assist consumers and institutional buyers in identifying products that adhere to specific environmental standards, making them "environmentally preferable." These labels play a vital role in Jordan's efforts to promote environmental awareness and sustainable consumption patterns among its population. Managed by a variety of entities including government agencies, non-profit environmental groups, or private sector organizations, eco-labels in Jordan highlight products that have a reduced environmental impact, whether through energy efficiency, reduced emissions, sustainable resource use, or other environmentally friendly attributes. The adoption and recognition of eco-labels in Jordan encourage manufacturers to adopt greener practices and help in steering the market towards more sustainable options, aligning with the country's broader sustainability goals and commitments to reducing its environmental footprint.

**Eco-Logical Restoration** is a comprehensive approach aimed at rehabilitating lands degraded by mining activities, primarily for agricultural and forestry uses. This methodology underscores the importance of incorporating restoration strategies into the initial mine planning phase to ensure the sustainability of mining practices. The process involves a sophisticated blend of technical and biological methods designed to restore the affected site to a condition closely mirroring its state before mining operations commence.

Successful eco-logical restoration requires meticulous planning, gaining political and social endorsement, conducting thorough ecological risk assessments, managing resources efficiently, and meticulously reconstructing the ecosystem's various attributes. This approach is dedicated to facilitating the recovery and stewardship of ecological integrity, encompassing a wide spectrum of biodiversity, ecological processes, and structures, aligning with the regional and historical context as well as promoting sustainable cultural practices. Through ecological restoration, the goal is to not only mitigate the environmental footprint of mining



but also to reestablish ecological balance and enhance the resilience and productivity of the landscape for future generations.

**Eco-Logical/Environmental Footprint** is a metric that gauges sustainability by assessing the capacity of a population to maintain its current lifestyle without jeopardizing future generations' ability to do the same. This concept hinges on the balance between the ecological demand—such as the consumption of resources and generation of waste—against the ecological supply, namely, the Earth's capacity to regenerate those resources and assimilate waste. It's a measure of how much of the natural environment is required to support a specific way of life, articulated in terms of global hectares (Gha) or the equivalent number of Earths needed to sustain humanity's demands. An environmentally sustainable scenario is one where the generated pollution does not exceed the ecosystem's capacity to manage it, ensuring that lifestyles can be indefinitely supported without depleting or overburdening natural resources. This approach offers a comprehensive view of our environmental impact and is pivotal for guiding both individuals and communities toward more sustainable practices.

**Ecology** is a comprehensive branch of biology that delves into the study of organisms, including their abundance, biomass, and distribution, within the context of their environment. It investigates the intricate life processes, interactions, and adaptations of organisms, the movement of materials and energy through living communities, and the successful development of ecosystems. This scientific discipline explores the dynamics of cooperation, competition, and predation both within and among species, as well as the patterns of biodiversity and its profound impact on ecosystem functions. Ecology is concerned with understanding the relationships between living beings, including humans, and their physical surroundings across various levels of organization—from individual organisms and populations to communities, ecosystems, and the biosphere.

**Economic Sustainability** refers to a comprehensive framework of decisionmaking principles and business practices designed to foster economic growth while minimizing environmental degradation and ensuring the judicious use of natural capital. This approach prioritizes the development of systems and processes that consume resources at a rate that does not compromise the ability of future generations to meet their own needs. In the context of sustainable sourcing, it



mandates that businesses select supply chains or suppliers committed to adhering to socially and economically responsible practices without negatively affecting their return on investment (ROI). Economic sustainability encompasses a broad spectrum of practices including the efficient management of energy demands, ensuring financial stability, reducing energy consumption, and more, all aimed at achieving a balance between economic development and environmental stewardship, ensuring long-term prosperity and resource availability for future generations.

**Eco-system** is a cohesive unit of biology that encapsulates the interactions between living organisms and their physical surroundings, encompassing both biotic (living) and abiotic (non-living) components. These systems are characterized by a complex web of relationships where plants, animals, microorganisms, and the environment interact to form a balanced and self-supporting network. Ecosystems, which can be broadly classified into terrestrial and aquatic types, operate as open systems with energy and materials flowing through them, enabling vital processes such as nutrient cycling, primary production, and energy transfer. The structure of an ecosystem incorporates autotrophs (like plants) that produce their food, heterotrophs (animals and other consumers) that depend on others for sustenance, and saprotrophs (decomposers such as fungi and bacteria) that recycle dead organic matter, all interacting within an environment shaped by factors like sunlight, temperature, and water. This intricate interplay ensures the sustainability of life processes, underlining the importance of ecosystems in supporting biodiversity and maintaining ecological balance.

**Eco-systems service** essential ecological functions or processes that significantly contribute to the natural capital of a region and directly or indirectly enhance human well-being, impacting our survival and quality of life. These services are the myriad benefits that the natural environment provides to humanity, helping sustain and fulfill human life. Classified into four main types—provisioning, regulating, cultural, and supporting services—each plays a critical role. Provisioning services include the supply of resources like food, water, and raw materials; regulating services involve the control of climate, floods, and disease; cultural services underlie all these categories by maintaining nutrient cycles and pollination, among other ecological processes. Together, these services underscore the

invaluable role ecosystems play in maintaining a stable and healthy environment conducive to human prosperity.

**Environmental and Social Safeguards** Refer to critical frameworks comprising policies, standards, and operational procedures aimed at identifying, avoiding, mitigating, and minimizing the adverse environmental and social impacts associated with development projects. These safeguards serve as a protective measure, ensuring that project planning and execution consider and address potential negative consequences on the environment and communities involved. They are instrumental in preventing and mitigating harm to both people and their surroundings throughout the development process. While environmental safeguards focus on preserving ecological integrity by managing impacts on air, water, land, and biodiversity, social safeguards are designed to prevent social exclusion and address issues such as displacement, loss of livelihood, and infringement of indigenous rights. Together, environmental and social safeguards promote sustainable development by ensuring projects are implemented in a manner that is environmentally sound and socially equitable, thereby enhancing the positive outcomes of development initiatives.

**Environmental Care** represents a holistic approach to nurturing a healthy relationship with oneself, with a profound emphasis on environmental consciousness. It advocates for a lifestyle that prioritizes mental, physical, and spiritual well-being through practices that are harmonious with nature, thereby yielding benefits for both the individual and the wider community. At its core, Environmental Care encompasses three fundamental aspects: the physical spaces we inhabit, the equipment and technologies that support our daily lives, and the implementation of measures that safeguard the well-being of individuals, visitors, and staff within these environments. This concept extends to ensuring clean air, stable climate conditions, sufficient water supply, proper sanitation and hygiene, safe chemical usage, protection from harmful radiation, and promoting healthcentric workplaces, cities, and agricultural practices. By integrating these elements, Environmental Care underlines the indispensable role of a well-preserved natural environment in fostering overall health and well-being, urging individuals and communities to adopt sustainable practices that contribute to the health of the planet and, consequently, the health of its inhabitants.



**Environmental Impact** Any changes to the environment, whether adverse or beneficial, that result wholly or in part from human activities or organizational operations, leading to environmental imbalances. These impacts are evidenced through various indicators including air, water, and soil pollution, as well as waste production and noise pollution. In response to the critical need for managing these effects, over 100 countries have implemented legislation requiring an Environmental Impact Assessment (EIA) for any project with the potential to significantly affect local ecosystems. The EIA process is designed to evaluate the potential environmental effects of proposed projects, guided by sustainable development indicators, to ensure that decision-making processes consider the environmental consequences and work towards minimizing negative impacts while enhancing positive outcomes. This systematic approach aims to integrate environmental considerations into the early stages of project planning, promoting sustainability and the protection of natural resources.

**Environmental Sustainability** is the commitment to preserving natural resources and safeguarding global ecosystems to bolster health and well-being for all. This principle emphasizes the foresight required in decision-making processes, acknowledging that many environmental impacts may not be immediately apparent. Defined by the U.S. Environmental Protection Agency as the ability to meet the needs of the present without compromising the future generation's ability to meet their own needs, it underscores a balance between consumption and conservation. The United Nations Environment Program extends this concept to advocate for lifestyle choices that promote equality and potentially enhance the quality of life for future generations. The core aim of environmental sustainability is to elevate human life quality while minimizing the burden on Earth's ecosystems, ensuring that economic development, social equity, and environmental protection work hand in hand to create a sustainable future.

**ESG** Refers to Environmental, Social, and Governance criteria that measure the ethical and sustainability impacts of an investment in a company or business, Together, these three aspects make up a framework to evaluate issues about a company's long-term health and prosperity, and it can also be defined as a framework that helps stakeholders understand how an organization is managing risks and opportunities related to environmental, social, and governance criteria



(sometimes called ESG factors). ESG takes the holistic view that sustainability extends beyond just environmental issues.

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**Global Warming** is defined as "a gradual increase in the overall temperature of the earth's atmosphere generally attributed to the greenhouse effect caused by increased levels of carbon dioxide, CFCs, and other pollutants." The terms are most often used to refer to the warming predicted to occur because of increased emissions of greenhouse gases.

**Global warming potential (GWP)** is the cumulative radiative forcing, both direct and indirect effects, over a specified time horizon resulting from the emission of a unit mass of gas related to some reference gas.

**Green** is a holistic and progressive approach to utilizing resources in a manner that minimizes adverse effects on human health and the environment, ensuring that the needs of both present and future generations are not compromised. It encapsulates activities and philosophies aimed at enhancing the environmental sustainability of manufacturing processes, advocating for their compliance with high environmental standards and their seamless integration into a circular economy framework. The term "green" spans a wide array of environmentally friendly practices and products, covering sectors from fashion to construction, and embodies the broader movement towards ecological responsibility.

**Green Activities** are initiatives and processes that significantly surpass traditional practices in sustainability and environmental impact mitigation. These activities are pivotal in the conservation of Jordan's limited natural resources and the preservation of its diverse ecosystems. Following the EU taxonomy's framework while aligning with Jordan's specific environmental objectives and challenges, such activities in Jordan must:

- Significant Contribution: Directly support Jordan's national priorities, including climate change mitigation through renewable energy adoption, water conservation in response to scarcity, waste management to transition towards a circular economy, pollution reduction to safeguard health and ecosystems, and the preservation



and restoration of biodiversity, particularly in sensitive areas like the Azraq Wetland and the Dana Biosphere Reserve.

- Do No Significant Harm: Ensure that efforts to advance one environmental objective do not inadvertently cause significant detriment to other ecological goals, considering Jordan's unique balance of natural and cultural heritage.
- Compliance with Social and Environmental Safeguards: Adhere to Jordan's environmental regulations and international best practices, ensuring that these green activities contribute positively to social welfare and economic development without compromising environmental integrity or community rights.

Aligned with Jordan's Vision 2025 and the National Green Growth Plan, green activities encompass renewable energy projects, sustainable agriculture techniques, water-saving innovations, and eco-tourism development, reflecting Jordan's commitment to integrating sustainable practices across various sectors to achieve a more resilient and sustainable future.

**Green Bonds** represent a financial instrument designed to raise capital specifically for funding environmentally sustainable projects. The proceeds from these bonds are dedicated exclusively to finance or refinance, wholly or partially, projects that have tangible environmental benefits, such as renewable energy development, water conservation initiatives, sustainable waste management, and green building projects. This aligns with Jordan's strategic efforts to transition towards a green economy, addressing critical environmental challenges while promoting sustainable development.

**Green Sukuk** in the context of Jordan's Islamic financial market, Green Sukuk emerge as an interest-free bond variant that adheres to the principles of Shariah (Islamic law), which prohibits the payment of interest. These Sukuk provide an ethical investment opportunity, generating returns for investors through profitsharing mechanisms, while ensuring the financed projects are environmentally beneficial and Shariah-compliant. This innovative financial tool supports Jordan's environmental goals while respecting Islamic financial practices, offering a platform for raising green capital within the principles of Islamic finance.



**Green City** refers to an urban environment deliberately planned and developed to balance social, economic, and environmental sustainability. Such cities prioritize the well-being of their inhabitants and the ecological integrity of their surroundings, aligning with the principles of sustainable or eco-city design. They are characterized by their efforts to reduce carbon emissions, enhance energy and water efficiency, promote waste reduction and recycling, and ensure accessible and green public spaces. Key features include sustainable transportation systems, renewable energy infrastructure, green buildings, and the integration of natural elements into urban spaces to support biodiversity and provide residents with healthy living conditions. Jordanian green cities aim to be adaptable to climate change, equipped to withstand extreme weather conditions, and committed to fostering a resilient, inclusive, and equitable community. This approach exemplifies Jordan's commitment to pioneering sustainable urban development that respects both the natural environment and the needs of future generations.

**Green Cleaning** refers to the adoption of cleaning practices and products that are environmentally benign and designed to minimize negative impacts on both human health and the natural environment. This approach aligns with Jordan's national policies and strategies aimed at environmental conservation and sustainable development. The primary goal of green cleaning in the Jordanian context is to utilize solutions and techniques that ensure the health and safety of the population while preserving the ecological balance. Such practices are especially pertinent considering Jordan's challenges related to water scarcity and the need for sustainable resource management. Green cleaning products used in Jordan are characterized by their absence of harmful chemicals like phosphates and chlorine, the use of natural fragrances and colors, recyclable packaging, and often organic certification. By integrating green cleaning into daily routines, Jordanians contribute to the country's broader environmental goals, promoting a healthier living environment and advancing towards a more sustainable future.

**Green Economy** an economic framework aimed at fostering improved wellbeing and social equity, alongside significant reductions in environmental risks and ecological scarcities. Characterized by low carbon emissions, efficient resource use, and inclusivity, Jordan's vision of a green economy underscores the pivotal role of both public and private investments in driving economic growth. Such investments



are directed towards initiatives that not only lower carbon emissions and pollution but also bolster energy and resource efficiency. Moreover, they aim to halt the loss of biodiversity and the degradation of ecosystem services. This economic model aligns with Jordan's national strategies for sustainable development, reflecting the country's commitment to harmonizing economic growth with environmental stewardship and social prosperity. By prioritizing sectors such as renewable energy, sustainable agriculture, and eco-tourism, Jordan seeks to create a resilient economy that supports its citizens today without compromising the ability of future generations to meet their own needs.

**Green Finance** the strategic channeling of financial investments towards sustainable development projects, initiatives that bolster environmental protection, and policies that foster the transition towards a more sustainable economy. While encompassing climate finance, green finance in Jordan also extends to broader environmental goals, including industrial pollution reduction, water sanitation enhancements, and biodiversity conservation efforts. This financial approach supports a variety of sustainable endeavors, from green infrastructure projects like solar energy plants and eco-friendly buildings to initiatives aimed at environmental preservation, water resource management, and capacity building through policy development and training programs. Jordan's commitment to green finance reflects its national agenda to mitigate environmental challenges, such as water scarcity and energy dependency, while promoting economic growth and social welfare.

**Green Growth** signifies an economic growth paradigm that harmoniously blends efficiency in natural resource use, minimization of pollution and environmental impacts, and resilience against natural hazards. This approach emphasizes the importance of environmental management and the valuation of natural capital in safeguarding against physical disasters, thereby ensuring sustainable development pathways. Crucially, Jordan's vision of green growth is inherently inclusive, aiming to address the country's immediate needs for economic expansion and poverty reduction, while meticulously avoiding environmental degradation that could impose irreversible harm. This strategy aligns with Jordan's national priorities, such as enhancing renewable energy adoption, water conservation, and sustainable agriculture, to foster an economy that not only thrives but does so in a manner that is environmentally sustainable and socially equitable.



**Green Growth Planning** The process of envisioning and attending to possible climate scenarios and other foreseen developmental challenges, identifying a collectively desirable pathway, and building consensus around choices that would put a country on that path. It involves allocating resources to green sectors, and, in some cases, reallocating resources away from traditional sectors, which may require some initial investment, but which pays for itself in the long term. It involves allocating resources to green sectors, and, in some cases, reallocating resources away from traditional sectors, In 2017, the Ministry of Environment in collaboration with the Global Green Growth Institute developed a National Green Growth Plan (NGGP) to understand what is preventing Jordan from implementing the goals set out in Jordan's current plans and strategies, and to provide suggestions in the context of green growth for other aspirations that would help advance the vision of Future Jordan.

**Green Industry** Refers to economies striving for a more sustainable pathway of growth, It is a method to attain sustainable economic growth and promote sustainable economies, Green industries are those that apply the principles of sustainable development in their activities, such as using non-renewable natural resources effectively, developing the use of renewable natural resources, reducing the negative environmental impact of technological processes and products during their entire life cycle, and applying environmental management systems and sustainable consumption, economies striving for a more sustainable pathway of growth, by undertaking green public investments and implementing public policy initiatives that encourage environmentally responsible private investments.

**Green Infrastructure** refers to a strategically designed network of natural and engineered ecological systems, green spaces, and landscape elements that collectively provide essential services and functions comparable to traditional infrastructure. This concept encompasses a variety of components such as native and planted trees, wetlands, parks, urban open spaces, and the preservation of natural grasslands and woodlands. Additionally, it involves urban design solutions that integrate vegetation into buildings, streetscapes, and public spaces to enhance environmental quality and urban resilience. Green Infrastructure in Jordan plays a crucial role in addressing environmental challenges like water scarcity, urban heat



islands, and biodiversity loss by offering sustainable stormwater management, cooling urban areas, and supporting urban biodiversity.

**Green Loan** is recognized as a specialized financing instrument designed to support borrowers in funding projects that significantly contribute to environmental sustainability. To qualify for a green loan, the financing arrangement must adhere to the Green Loan Principles, which are internationally accepted standards ensuring that the funded projects deliver tangible environmental benefits. These principles are founded on four core components:

- Use of Proceeds: The financed projects must be explicitly green, contributing clear and measurable environmental advantages, with their impact thoroughly assessed, quantified, and reported by the borrower.
- Project Evaluation and Selection: Borrowers must transparently disclose their processes for evaluating and selecting green projects eligible for funding, ensuring these initiatives align with environmental objectives.
- Management of Proceeds: Funds from green loans are to be allocated to a designated account or meticulously tracked to ensure transparency and uphold the integrity of the financial product, reinforcing the commitment to genuine environmental improvement.
- Reporting: Borrowers are encouraged to report on the environmental impact of the financed projects, utilizing qualitative and, where possible, quantitative performance metrics (such as reduced greenhouse gas emissions, enhanced energy efficiency, or increased renewable energy capacity).

In Jordan, the adoption of green loans aligns with national strategies for environmental conservation and climate change mitigation, providing essential capital for renewable energy projects, water efficiency initiatives, and sustainable urban development, among others.

**Green manufacturing** represents an innovative shift in industrial production, embracing green strategies and technological advancements to enhance efficiency and environmental compatibility. This new manufacturing paradigm prioritizes processes that minimize ecological footprints through lower emissions, energy, and resource efficiency, and significantly reduced waste and pollutants. It embodies a comprehensive approach, utilizing multiple strategies to curtail environmentally harmful waste generated during manufacturing.

**Green Meeting** an event organized with a strong commitment to environmental sustainability, ensuring every aspect, from the choice of location to food services, transportation, and materials, is designed to minimize pollution and reduce the event's overall environmental footprint. This approach encompasses selecting venues that adhere to eco-friendly practices, offering sustainably sourced and locally produced food, encouraging the use of public or green transportation options, and reducing material waste through digital alternatives or recyclable resources.

**Green practices** refer to methodologies and actions within industrial development and production that are conscientiously designed to avoid harming the environment or public health. These practices embody a commitment to environmentally friendly actions that contribute to the protection of the environment and foster sustainable development. Examples of such practices include sustainable purchasing, where products and services are selected based on their environmental impact; electronics stewardship, which involves the responsible use, recycling, and disposal of electronic goods; waste diversion, aimed at reducing landfill use through recycling and composting; and pollution prevention strategies that minimize the release of pollutants into the environment

**Green Pricing** is a utility service option designed for customers who wish to support the expansion of renewable energy sources beyond what their traditional utility might otherwise invest in. By opting into this program, customers agree to pay a slight premium on their electricity bills. This premium helps cover the additional costs associated with procuring renewable energy resources, such as solar, wind, or hydroelectric power, that may exceed the market rates of conventional energy sources. Green Pricing programs are a tangible way for consumers to contribute to the reduction of greenhouse gas emissions and the promotion of clean energy, demonstrating a personal commitment to environmental sustainability. Through their participation, customers directly influence the energy market, encouraging utilities to increase their investment in



renewable resources and thus facilitating a transition towards a more sustainable energy infrastructure.

**Green Procurement** is the strategic acquisition of materials, products, services, and works that incorporate environmental considerations, aligning with the nation's commitment to sustainable development and environmental conservation. This approach is integral to minimizing the adverse environmental impacts stemming from industrial and governmental activities, in accordance with Jordan's environmental policies and national sustainability strategies. By prioritizing environmentally friendly products and services—those that use recycled materials, are energy efficient, reduce waste, and have a lower carbon footprint—Jordanian entities aim to lead by example in promoting ecological sustainability. Green Procurement in Jordan is supported by governmental regulations and initiatives that encourage both public and private sectors to adopt sustainable purchasing practices. This not only aids in achieving Jordan's environmental goals, such as reducing greenhouse gas emissions and enhancing resource efficiency but also stimulates the local green economy by increasing demand for sustainable products and services.

**Green Product is** defined as any item designed and produced with the primary goal of minimizing its environmental impact throughout its lifecycle. This encompasses products manufactured from recycled materials, designed for reuse or easy recycling, and made using renewable resources to ensure sustainability from production to disposal. Additionally, green products in Jordan may also include those that have achieved certification from recognized independent organizations, affirming their environmentally friendly attributes. This approach aligns with Jordan's environmental conservation efforts and sustainability goals, reflecting a national commitment to reducing waste, conserving natural resources, and promoting eco-friendly consumption habits.

**Green Standards** is a comprehensive set of technical criteria and benchmarks developed to guide and evaluate the environmental sustainability of activities, particularly in the fields of building design, construction, renovation, and maintenance. These standards are designed to ensure the minimized use of nonrenewable energy sources and the maximal application of sustainable materials, resources, and construction methods. Recognized by various industry sectors, these standards are typically developed through the collaboration of diverse stakeholder groups, including government agencies, industry experts, environmental organizations, and the community, aiming to set specific performance levels that denote a product or service as "environmentally preferable.".

**Green Taxonomy** refers to the systematic classification of human activities based on their type and environmental impact, establishing a framework to guide and assess the sustainability of these activities against predefined green standards. An activity is deemed "in compliance with a Green Taxonomy" when it successfully meets the established green standards, which are criteria designed to minimize environmental degradation and promote sustainable development practices across various sectors.

**Green Washing** Greenwashing in Jordan refers to the deceptive practice by some organizations and businesses of marketing their products, services, or overall brand as environmentally friendly or sustainable, without adequately addressing or improving their actual environmental impact. This practice may manifest through selective disclosure, where only positive environmental achievements are highlighted while negative impacts are obscured, or through outright false or misleading claims about the environmental benefits of their offerings. In a country like Jordan, where environmental sustainability is increasingly prioritized due to challenges such as water scarcity, energy dependence, and desertification, greenwashing not only misleads consumers but also hinders genuine efforts towards achieving sustainability and the Sustainable Development Goals (SDGs). Recognizing and combating greenwashing is crucial for ensuring that environmental claims are transparent and verifiable, and contribute meaningfully to Jordan's commitment to environmental protection, climate change mitigation, and sustainable development.

## **(I)**

**Indoor Environmental Quality** Refers to the assessment and management of the internal conditions of buildings and how these conditions affect the health, comfort, and well-being of occupants. In the Jordanian context, factors such as air quality, lighting, temperature control, and moisture levels are of particular importance due to the country's unique climate and environmental challenges.



### (M)

**Mandatory Environmental Standard** refers to the compulsory integration of specific environmental criteria or eco-labels within governmental and agency procurement processes, aimed at ensuring that all procured goods, services, and works meet a predefined minimum level of environmental performance. This approach is part of Jordan's broader strategy to embed sustainability into public sector operations, driving demand for greener products and encouraging suppliers and manufacturers to adopt more sustainable practices.

**Mitigating Climate Change** is a series of targeted actions and policies aimed at significantly reducing the emission of greenhouse gases and enhancing the capacity of natural sinks like forests, oceans, and soils to absorb these gases. This critical strategy involves transitioning to renewable energy sources to power the economy, promoting sustainable agricultural practices, advancing energy efficiency across industries, and encouraging the use of public and non-motorized transport among the populace. Additionally, it includes efforts to improve waste management and promote sustainable consumption patterns among individuals and businesses. Given Jordan's unique environmental challenges, such as its reliance on imported energy and limited water resources, the country recognizes the importance of both local and global cooperation in addressing climate change.

### (N)

**Natural Capital** is the nation's wealth of natural resources, including its diverse landscapes, water bodies, air quality, fertile soils, and the rich biodiversity of living organisms. From this invaluable natural capital, Jordan derives essential ecosystem services that underpin human survival and well-being. These services range from provisioning services like water and food, regulating services such as climate and disease control, supporting services including soil formation and nutrient cycling, to cultural services that offer recreational, spiritual, and educational benefits. Given Jordan's environmental challenges, such as water scarcity, desertification, and the need for sustainable energy sources, the country places a high emphasis on conserving and sustainably managing its natural capital.

**Nature-based solutions** are strategic actions that leverage the country's natural ecosystems for addressing environmental challenges, particularly those

related to climate change adaptation and mitigation, biodiversity preservation, and the support of sustainable livelihoods. These solutions emphasize the critical role of Jordan's diverse ecosystems—from its arid deserts to the unique marine environments of the Red Sea and the fertile valleys—acknowledging that these natural assets can provide effective, cost-efficient, and sustainable responses to environmental pressures. Nature-based solutions in Jordan are designed and implemented with a deep respect for the intrinsic value of ecosystems and biodiversity and in close collaboration with local communities and Indigenous Peoples, who bring invaluable traditional knowledge and insights into the stewardship of natural resources.

**Net Zero** is a strategic goal where the country's greenhouse gas (GHG) emissions from human activities are effectively balanced by equivalent removals from the atmosphere, achieving a neutral impact on climate change. This ambitious target involves enhancing the capacity of natural sinks like forests and agricultural lands to sequester carbon dioxide, alongside investing in advanced technologies such as carbon capture and storage (CCS) and direct air capture (DAC) to remove CO2 from the air. Jordan's approach to reaching Net Zero is multifaceted, incorporating renewable energy expansion, energy efficiency improvements, sustainable transportation, and water conservation practices, in addition to exploring innovative solutions for carbon removal.

#### **(P)**

**The Paris Agreement** represents a pivotal international framework under which the country aligns its climate action efforts. Adopted in December 2015 and entered into force in November 2016, this landmark agreement guides Jordan, along with other signatories, towards ambitious climate goals aimed at significantly reducing global greenhouse gas emissions. One of the primary objectives under the Paris Agreement that Jordan commits to is holding the increase in the global average temperature to well below 2°C above pre-industrial levels while pursuing efforts to limit the temperature increase to 1.5°C. The Paris Agreement also emphasizes the importance of enhancing adaptive capacities and resilience to climate change impacts, an aspect highly relevant to Jordan's national strategies for sustainable development. Jordan's commitment to the Agreement involves



integrating climate mitigation and adaptation measures into national policies, strategies, and planning. This includes transitioning towards renewable energy sources, improving energy efficiency, conserving water resources, and implementing sustainable land use practices.

### (R)

**Resilience** is the ability of the country's social, economic, and environmental systems to effectively withstand, adapt to, and recover from various hazards, disturbances, or adverse trends. This includes natural disasters, such as droughts and floods, economic fluctuations, and social challenges. The concept of resilience is particularly vital for Jordan, given its susceptibility to climate change impacts, water scarcity, and regional instability. It involves the capacity to maintain and restore critical functions, identities, and structures through adaptive measures, learning, and transformative actions. For Jordan, resilience means not just surviving in the face of challenges but also seizing opportunities for sustainable development and innovation. This requires comprehensive planning, investment in sustainable infrastructure, strengthening community ties, fostering economic diversification, and enhancing governance systems.

**Resource depletion** refers to the critical reduction or exhaustion of the country's natural resources, including water, arable land, and energy sources, at a pace that surpasses their natural regeneration capabilities. This issue is particularly pressing given Jordan's arid climate, limited water resources, and high dependency on imported energy. Resource depletion poses significant challenges to environmental sustainability, economic stability, and the overall well-being of Jordanian communities. It exacerbates water scarcity, affects agricultural productivity, and constrains economic development. Addressing resource depletion in Jordan requires integrated water management strategies, the promotion of renewable energy sources, sustainable agricultural practices, and the efficient use of available natural resources to mitigate environmental degradation and ensure the sustainability of these critical assets for future generations.

**Resource Efficiency** the strategic approach to enhancing the productivity and sustainability of its economy through the optimized use of natural resources and minimizing waste across all sectors. Given Jordan's environmental constraints,



particularly its limited water resources and energy dependency, improving resource efficiency is vital for ensuring economic resilience, environmental sustainability, and social well-being. This involves adopting innovative technologies and practices that reduce energy and water consumption in industries, agriculture, and households, as well as promoting recycling and the use of renewable energy sources.

### (S)

**Smart Growth** is a holistic approach to urban and rural development that seeks to harmonize environmental conservation with the creation of vibrant, economically robust, and socially inclusive communities. Drawing on the Smart Growth Network's principles and tailoring them to Jordan's unique cultural, environmental, and socioeconomic landscape, the approach emphasizes:

- Mixed Land Use: Integrating residential, commercial, and recreational spaces to foster vibrant, multi-functional communities.
- Compact Building Design: Encouraging efficient use of space to reduce sprawl, conserve land, and create more cohesive communities.
- Diverse Housing Options: Providing a spectrum of housing choices to accommodate various income levels and lifestyles.
- Walkable Neighborhoods: Designing areas that prioritize pedestrian access to essential services and community spaces.
- Distinctive, Attractive Communities: Cultivating a strong sense of place with unique local character that draws on Jordan's rich heritage and natural beauty.
- Conservation of Open Spaces and Farmland: Protecting natural landscapes, agricultural lands, and critical environmental areas from overdevelopment.
- Focused Development on Existing Communities: Revitalizing and leveraging existing infrastructure to prevent urban sprawl and enhance community cohesion.
- Diverse Transportation Options: Promoting sustainable transport modes such as public transit, biking, and walking to reduce dependency on cars.



- Predictable, Fair Development Processes: Ensuring transparent and equitable decision-making in development projects to build trust and encourage investment.
- Community and Stakeholder Engagement: Actively involving all segments of society in development decisions to ensure that growth meets the diverse needs of the population.

**Social Sustainability** a comprehensive approach aimed at enhancing the quality of life and well-being for all segments of society, both today and for future generations. It focuses on creating equitable opportunities for health, education, and economic advancement, ensuring that development efforts are inclusive and benefit the entire population. Key aspects of social sustainability in Jordan include:

- Social Justice: Promoting fair access to resources and opportunities, ensuring that all individuals, regardless of their background, have the means to contribute to and benefit from the country's development.
- Livelihood: Supporting sustainable livelihoods that provide stability and prosperity for families and communities, including efforts to diversify income sources and enhance job security.
- Health Equity: Ensuring that all Jordanians have access to quality healthcare services, with a focus on reducing disparities and improving public health outcomes.
- Community Development: Investing in community-led initiatives that strengthen social bonds, foster civic engagement, and enhance the social fabric of neighborhoods and cities.
- Social Capital: Building trust, cooperation, and networks within communities to facilitate collective action and mutual support.
- Social Support: Providing safety nets and assistance programs to protect the most vulnerable populations, including refugees, the elderly, and those facing economic hardship.
- Human and Workers' Rights: Upholding the rights and dignity of all individuals, promoting fair labor practices, and ensuring safe and equitable working conditions.

- Social Responsibility: Encouraging individuals, businesses, and institutions to act in the best interest of society, contributing positively to social, environmental, and economic sustainability.
- Resilience: Strengthening the capacity of communities and individuals to adapt to changes and challenges, including economic fluctuations, environmental pressures, and social transformations.

**Social-Ecological Systems** are understood as the complex and dynamic interconnections between human societies and the country's diverse ecosystems, from its arid deserts and fertile valleys to the unique aquatic systems of the Dead Sea and the Red Sea. This integrated perspective recognizes that humans are an integral component of nature, playing a pivotal role in the functioning and sustainability of ecosystems upon which they depend for water, food, energy, and cultural values. The SES framework in Jordan highlights the mutual influences between social systems—comprising economic activities, cultural practices, governance structures—and ecological systems, including land use, biodiversity, and water resources management.

The structure of SES in Jordan is characterized by reciprocal feedback loops where social decisions and practices impact ecological health and vice versa, underlining the necessity of adopting holistic management approaches that consider the interdependence of human and natural systems. For example, water resource management in Jordan is a critical issue that requires balancing human needs with the sustainability of aquatic ecosystems, necessitating policies and practices that foster conservation, efficient use, and equitable distribution. Similarly, agricultural practices, urban development, and energy production are areas where the SES perspective is crucial for ensuring that economic growth does not compromise ecological integrity.

**Sustainability** a comprehensive and multifaceted approach aimed at fostering ecological, economic, political, and cultural systems that are both resilient and productive, ensuring their endurance for future generations without compromising the vital social and life-supporting systems upon which humanity relies. This pursuit involves balancing the country's rapid development and urbanization with the conservation of its natural resources, cultural heritage, and social fabric. Given Jordan's unique challenges, such as limited water resources,



reliance on energy imports, and regional instability, sustainability requires innovative and adaptive strategies. These strategies include promoting renewable energy, implementing water-saving technologies, enhancing food security through sustainable agricultural practices, and preserving biodiversity. Economically, it involves diversifying the economy, investing in sustainable industries, and creating job opportunities that contribute to a stable and prosperous society.

**Sustainable Practices** refer to the ongoing efforts to enhance the efficiency of resource use in a manner that significantly reduces impacts on human health and the environment, without compromising the ability of current and future generations to meet their needs. This concept encompasses a broad spectrum of activities and principles aimed at ensuring that manufacturing processes, as well as broader industry operations, adhere to stringent environmental standards and embrace the principles of a circular economy. It involves a comprehensive approach that spans various sectors, including but not limited to, eco-friendly fashion, green building practices, and the sustainability movement at large. Sustainable practices seek to harmonize economic development with environmental stewardship and social equity, promoting a holistic approach to sustainability that integrates environmentally friendly methods and technologies across all aspects of production, consumption, and lifestyle choices, thereby fostering a more sustainable and resilient global community.

**Sustainable Consumption and Production-SCP** Evolved as a new concept defined as "the use of services and related products which respond to basic needs and bring a better quality of life, while minimizing the use of natural resources and toxic materials, as well as the production of waste and emission of pollutants over the life cycle, so as not to jeopardize the needs of future generations.

**Sustainable Development Goals (SDGs)** Refer to 17 integrated and indivisible goals with 169 associated targets that form the core of the 2030 Agenda for Sustainable Development adopted by the United Nations on 25 September 2015 to end poverty, protect the planet, and ensure prosperity for all. Each goal has specific targets to be achieved by 2030. These goals and targets have been designed for consideration by national governments but have also been increasingly used as appropriate by corporations.

**Sustainable Development** is a holistic approach to growth that meticulously integrates economic, social, and environmental objectives to utilize the nation's resources effectively, meet the current population's needs, and safeguard the rights of future generations. This strategic framework aims to harmonize Jordan's economic aspirations with the imperative of environmental conservation and social equity, ensuring a balanced progression towards prosperity that does not compromise the country's ecological or cultural heritage.

In alignment with the United Nations' Sustainable Development Goals (SDGs), Jordan has committed to a set of global targets that guide its development policies and initiatives across various sectors. These goals address a wide range of issues including poverty alleviation, education, health, gender equality, clean water and sanitation, affordable and clean energy, and climate action, among others. By incorporating the SDGs into its national strategies, Jordan seeks to tackle pressing challenges such as water scarcity, energy dependency, unemployment, and social inequality, fostering a development model that is both inclusive and sustainable.

**Sustainable Economic Growth** is the strategic expansion of the economy in ways that foster environmental stewardship, social inclusion, and the creation of opportunities for all sectors and members of society to engage in the green economy. This concept emphasizes the importance of an enabling environment that not only drives economic advancement but does so in an ecologically responsible manner, ensuring that growth does not come at the expense of Jordan's natural resources or the well-being of future generations.

In Jordan, achieving sustainable economic growth involves diversifying the economy away from energy-intensive industries towards sectors that have a lower environmental impact, such as renewable energy, sustainable tourism, and agriculture that employs water-saving technologies. It also means investing in innovation, education, and infrastructure that support sustainability, as well as implementing policies that encourage businesses and consumers to adopt greener practices.

**Sustainable Procurement** refers to the strategic approach adopted by organizations, both public and private, to procure goods, services, and utilities in a manner that ensures value for money over the entire lifespan of the product or service. This approach extends beyond the immediate financial cost to consider the



broader benefits to society, the economy, and the environment, aligning procurement practices with Jordan's national sustainability goals. Sustainable procurement in Jordan involves prioritizing products and services that have minimal environmental impact, support fair labor practices, contribute to economic development, and foster social well-being. This includes choosing suppliers that adhere to environmental standards, investing in energy-efficient and water-saving technologies, and sourcing materials that are locally produced, recycled, or derived from sustainable sources.

**Sustainable Sourcing** is a procurement strategy that emphasizes the ethical, environmental, and economic dimensions throughout the lifecycle of a product. This approach involves careful selection of suppliers and materials that contribute to minimizing adverse effects on the environment, society, and economy while enhancing positive impacts. Given Jordan's unique environmental challenges, such as water scarcity and energy dependency, sustainable sourcing plays a crucial role in promoting responsible resource management, energy conservation, and waste reduction. Sustainable sourcing in Jordan also focuses on ensuring fair labor practices, supporting local communities, and encouraging the use of locally produced or sustainably sourced materials. This not only helps in reducing the carbon footprint associated with transportation but also boosts the local economy and supports Jordanian businesses in adopting greener practices.

### **(T)**

**The National Adaptation Plan (NAPs)** Process was established under the Cancun Adaptation Framework (CAF) and enables Parties to formulate and implement national adaptation plans (NAPs) to reduce vulnerability to the impacts of climate change, by building adaptive capacity and resilience and to facilitate the integration of climate change adaptation, coherently, into relevant new and existing policies, programs and activities, it helps countries plan and implement actions to reduce vulnerability to the impacts of climate change and strengthen adaptive capacity and resilience. NAPs link to Nationally Determined Contributions (NDCs) and other national and sectoral policies and programs, The National Adaptation Plan in Jordan follows six strategic objectives which strengthen institutional framework, governance, policies, strategies, and legislations, support the coordination mechanism between the public, private community-based organizations and other



relevant stakeholders and ensure mainstreaming NAP in their strategies in Jordan, improve knowledge, awareness and communication tools for an effective NAP implementation process in Jordan, build a dynamic and sustainable funding instrument for NAP implementation in Jordan, support research and capacity building programs in the climate adaptation field, and develop a data management system for climate change adaptation.



## **Green Terminology** Agriculture







## **(A)**

**Aeroponics** is an innovative agricultural technique that allows for the cultivation of plants in an environment where nutrient-rich mist nourishes the roots instead of the soil. This method stands out, especially in the Jordanian context, where water scarcity and arid conditions pose significant challenges to traditional farming methods. Unlike hydroponics, in aeroponics, the roots are suspended in the air and directly absorb nutrients from a fine mist, eliminating the need for soil or standing nutrient solutions. This soil-less cultivation technique offers several advantages for Jordan, including substantially reduced water usage—up to 70% less compared to hydroponics—making it highly suitable for the country's arid climate. Moreover, aeroponics systems facilitate optimal CO2 absorption by the plants, enhancing photosynthesis efficiency and potentially leading to greater growth rates, yields, and quality of produce compared to soil-based cultivation. Given Jordan's focus on innovative solutions to overcome environmental constraints, aeroponics provides a promising avenue for sustainable agriculture development, contributing to food security, water conservation, and the efficient use of limited resources.

**Afforestation** refers to the strategic initiative of planting trees in regions that have lacked forest cover in recent history, marking a significant effort towards environmental restoration and sustainability. This process is particularly crucial in Jordan, given the country's challenges with desertification, land degradation, and the need for enhanced carbon sequestration. By reintroducing forests and tree cover to barren or previously agricultural lands, afforestation efforts aim to revitalize ecosystems, prevent further desertification, create vital carbon sinks to mitigate climate change, and potentially unlock new economic opportunities for local communities through sustainable forestry practices and eco-tourism.

The Jordanian Ministry of Agriculture's national afforestation project, which spans all governorates and includes the desert road areas, signifies a comprehensive effort to increase the country's green areas and combat desertification. This initiative not only contributes to Jordan's environmental goals, such as enhancing biodiversity and soil conservation but also aligns with global commitments to climate action and sustainable land management.

**Agri-Tech** the integration of technological innovations and advancements into the agricultural sector to address its unique challenges and opportunities. This



involves leveraging digital tools, precision farming techniques, and innovative approaches to significantly enhance the efficiency, yield, and profitability of agricultural practices within the arid and semi-arid landscapes that characterize the country. Agri-tech solutions in Jordan include the use of satellite imaging and drones for field monitoring, smart irrigation systems to optimize water usage, and data analytics for crop management and prediction, aiming to maximize the sustainability and productivity of food production.

The adoption of Agri-Tech in Jordan is driven by a combination of startup companies, academic institutions, and the private sector, all working towards transforming the agricultural landscape through innovation.

**Agroecology** represents a holistic approach to agriculture that integrates principles of ecological sustainability, social equity, and economic viability. It is an agricultural practice that transcends the mere aspect of crop production, focusing equally on the health of the entire ecosystem, including soil fertility, water use efficiency, biodiversity conservation, and energy efficiency. Agroecology in Jordan is about adapting and applying these principles within the context of the country's unique environmental challenges, such as water scarcity, arid conditions, and limited arable land. This approach emphasizes the importance of traditional knowledge and practices, while also incorporating modern scientific research and innovations to create sustainable farming systems that are resilient to climate change and other environmental pressures. Agroecology in Jordan seeks to foster productive agriculture that supports the livelihoods of local communities, preserves natural resources, and contributes to a balanced relationship between agriculture and the environment. By focusing on techniques such as crop rotation, organic farming, water harvesting, and the use of indigenous crops, agroecology aims to enhance food security, promote self-sufficiency, and improve the quality of life for farmers and the broader community.

**Aquaponics** an innovative and sustainable agricultural method tailored to address the country's acute water scarcity and arable land limitations. This integrated system, which combines aquaculture (the raising of aquatic animals) with hydroponics (the soilless cultivation of plants), offers a symbiotic environment where fish waste provides an organic nutrient source for plant growth, while the plants, in turn, filter and purify the water, creating a clean environment for the fish.



The inclusion of nitrifying bacteria plays a crucial role in converting ammonia from fish waste into nitrates, a form of nutrient that plants can absorb, thus ensuring the efficiency of this cycle.

Aquaponics stands out in the Jordanian agricultural landscape for its water efficiency and minimal requirement for fertile land, making it a particularly viable option for urban and peri-urban areas. The system not only conserves water by recycling it within the closed-loop system but also reduces the need for chemical fertilizers, promoting a healthier and more sustainable form of food production. As Jordan continues to face environmental challenges, aquaponics represents a promising avenue for enhancing food security, supporting local economies, and contributing to the sustainability of the country's agricultural sector.

**(B)** 

**Bio-Based** refers to products, materials, and energy derived from renewable biological resources indigenous to the region, including plant, animal, and marine sources, as well as forestry and agricultural outputs. Given Jordan's environmental challenges, such as limited water resources and arable land, the focus on bio-based solutions represents a strategic move towards sustainability and self-sufficiency. These bio-based resources are particularly valued for their environmental benefits, including reduced reliance on non-renewable petroleum-based products, lower greenhouse gas emissions, and the potential for biodegradability or easier recycling. The development and utilization of bio-based materials in Jordan aim to capitalize on local biodiversity and agricultural by-products, promoting economic diversification, and enhancing the resilience of rural communities. Bio-based products in Jordan might include biofuels generated from agricultural waste, biodegradable plastics derived from plant starches, or organic fertilizers produced from animal and plant residues.

**Biodiversity** the diverse array of living species that inhabit its unique landscapes, ranging from the lush Jordan Valley and the Dead Sea regions to the arid deserts and the highlands. This includes a wide variety of plants, animals, microorganisms, as well as distinct ecosystems such as wetlands, forests, and coral reefs in the Gulf of Aqaba. Jordan's biodiversity is a critical component of its natural heritage and plays a vital role in maintaining ecological balance, supporting



agriculture, and contributing to the livelihoods and well-being of its communities through ecosystem services like pollination, water purification, and climate regulation.

## (C)

**Climate-Smart Agriculture (CSA)** a strategic approach tailored to address the dual challenges of achieving sustainable agricultural development and ensuring food security under the constraints of a changing climate. This approach is critically relevant for Jordan, a country grappling with limited water resources, arid and semi-arid conditions, and the increasing impacts of climate change on its agricultural sector. CSA in Jordan aims to pursue three interconnected objectives:

- Sustainable Increase in Agricultural Productivity and Incomes: Enhancing the efficiency and productivity of agriculture in a way that improves the livelihoods of farmers and the rural community, without exacerbating environmental pressures.
- Adaptation and Resilience to Climate Change: Implementing practices and technologies that enable agricultural systems to adapt to adverse climate impacts and variability, thereby improving the resilience of agricultural production and food systems.
- Mitigation of Greenhouse Gas Emissions: Where feasible, adopting farming practices that contribute to the reduction or removal of greenhouse gas emissions from agricultural activities, aligning with global efforts to combat climate change.

In the Jordanian context, CSA includes the adoption of water-efficient irrigation technologies, the use of drought-resistant crop varieties, conservation agriculture practices, and integrated pest management, among others.

### (F)

**Fodder Crops** are cultivated specifically to meet the nutritional needs of livestock, playing a crucial role in supporting the country's agricultural and pastoral communities. Given Jordan's arid and semi-arid climate, the selection and cultivation of fodder crops are strategically aligned with water scarcity and land use efficiency considerations. These crops, which are not intended for human consumption, include a variety of grasses, legumes, crucifers, and other plants



suited to local environmental conditions. They are utilized in various forms, such as hay, pasture, fodder, and silage, to provide essential nutrients to livestock.

The cultivation of fodder crops in Jordan includes adapting innovative and waterefficient farming practices to enhance productivity and sustainability. This includes the use of drip irrigation, hydroponics, and the selection of drought-resistant species that can thrive in challenging climatic conditions. Fodder crops such as barley, alfalfa, and sorghum are among the key components of the livestock diet in Jordan, supporting the dairy, meat, and wool industries. Given the critical importance of livestock to many Jordanian households for income and food security, the cultivation of fodder crops is an essential aspect of the agricultural sector, contributing to the overall resilience and sustainability of rural livelihoods.

### (H)

**Hydroponics** is an innovative and water-efficient agricultural practice tailored to the country's arid conditions and scarce water resources. This soil-less cultivation method utilizes water-based mineral nutrient solutions to grow plants in inert growing media such as sand, gravel, or directly in nutrient-rich solutions. Given the pressing challenges of water scarcity and the need to maximize agricultural productivity on limited arable land, hydroponics offers a promising solution for Jordan, enabling the production of high-quality crops with significantly reduced water usage. The advantages of hydroponics in Jordan include the ability to achieve faster plant growth and higher yields compared to traditional soil-based agriculture, alongside the enhanced capability to control environmental factors such as nutrient levels, light, and temperature. This precision agriculture approach allows for yearround production, independent of climatic constraints, and can contribute to food security and diversification of crop production.

### **(I)**

**Integrated Pest Management (IPM)** represents a strategic, environmentally sensitive approach to pest management that emphasizes reducing the reliance on chemical pesticides and minimizing environmental impacts. This approach is particularly relevant in Jordan, where agriculture plays a vital role in the economy and society, yet faces challenges such as water scarcity, land degradation, and the need for sustainable practices. The goal of IPM in Jordan is to maintain pest



populations below levels that cause economic harm by employing a variety of complementary strategies, including:

- Monitoring and Identification: Regularly inspecting crops and accurately identifying pests to understand their behavior, lifecycle, and the factors contributing to their presence.
- Action Thresholds: Establishing levels at which pest populations or environmental conditions indicate that action must be taken to prevent unacceptable damage or economic loss.
- Prevention: Implementing cultural, physical, and biological measures to prevent pests from becoming a threat, such as crop rotation, improved irrigation practices, and the use of resistant crop varieties.
- Control: Applying targeted chemical, biological, or physical control methods when necessary, prioritizing the least hazardous options and using them in a manner that minimizes risks to human health, beneficial organisms, and the environment.

IPM in Jordan is not just a set of pest control techniques but a holistic decisionmaking framework that encourages the judicious use of pesticides and fosters the adoption of non-chemical methods whenever feasible.

### (G)

**Green-field land** refers to undeveloped parcels of land, whether located within urban boundaries or in rural areas, that have not previously been built on or significantly altered by human activity. These areas are often targeted for new development projects due to their untouched nature and the flexibility they offer for a wide range of uses, including residential communities, commercial complexes, industrial sites, or agricultural projects.

### **(O)**

**Organic food** refers to fresh or processed products cultivated and produced through organic farming practices that align with both international standards and local regulations specific to organic agriculture. These practices are designed to enhance resource cycling, support ecological balance, and preserve biodiversity. Emphasizing the use of natural processes and materials, organic farming in Jordan prohibits the use of synthetic pesticides, fertilizers, genetically modified organisms



(GMOs), and other artificial additives in the cultivation and processing of food products.

#### (R)

**Reduced Tillage** refers to an adaptive soil management practice designed to minimize the disruption of soil structure, thereby addressing the country's unique environmental challenges, including water scarcity, soil erosion, and the need to enhance agricultural sustainability. By adopting less intensive tillage methods, which involve shallow cultivation depths and reduced soil disturbance areas, Jordanian farmers can significantly contribute to healthier soil ecosystems, improved water retention, and reduced erosion and runoff.

**Reforestation** represents a critical environmental restoration strategy aimed at replenishing tree cover in areas that have lost their forests due to various factors, including wildfires, drought, disease, or human activities like agricultural expansion and urbanization. This initiative is of particular importance in Jordan, a country facing significant challenges related to desertification, land degradation, and water scarcity.

**Regenerative Agriculture** is a transformative farming approach aimed at enhancing soil health, conserving water, preventing land degradation, and boosting biodiversity, crucial for addressing the nation's environmental challenges. By minimizing tillage, rotating crops, and employing natural fertilizers like compost and manure, this method promotes soil carbon storage, moisture conservation, and healthier soil ecosystems. Regenerative agriculture in Jordan transcends traditional farming by improving resilience against climate change, reducing chemical reliance, and ensuring sustainable food security. It is integral to Jordan's environmental strategy, offering a sustainable path for the agricultural sector to flourish amid arid conditions and water scarcity.

**Rewilding is** a progressive approach to environmental restoration, aimed at revitalizing ecosystems degraded by human activities. This strategy goes beyond traditional conservation by emphasizing the large-scale recovery of natural processes and habitats, allowing nature to heal itself with minimal human intervention. In Jordan's context, rewilding could involve reintroducing native



species that have disappeared from the region, such as certain herbivores or predators, to restore ecological balance and promote biodiversity.

## (S)

**Sustainable Agriculture** represents a critical approach to farming that balances the needs of current populations with the preservation of the environment for future generations. This method emphasizes practices that protect the environment, enhance natural resources, and efficiently utilize non-renewable resources, all while producing food, fiber, and other plant and animal products. In a country like Jordan, where water scarcity, soil erosion, and the pressures of climate change present significant challenges, sustainable agriculture involves water-efficient irrigation, organic farming, the use of renewable energy sources, and conservation tillage.

### (U)

**Urbanization Index** measures the extent of urban development within a specific city or governorate, represented by the proportion of land that is developed for urban uses—such as residential, commercial, and industrial spaces—relative to the total land area of the governorate. This index is a critical tool for understanding the pace and scale of urban growth, assisting policymakers, urban planners, and researchers in assessing the impact of urbanization on land use, infrastructure needs, and environmental sustainability. It helps in identifying trends in urban expansion, guiding sustainable urban planning, and managing the challenges associated with urban growth, such as resource allocation, green space conservation, and the provision of public services.



## Green Terminology Water







### (G)

**Groundwater** in Jordan is a critical resource, pivotal for drinking, agriculture, and industrial activities, given the country's status as one of the most water-scarce in the world. The extraction of groundwater from aquifers through wells, boreholes, or springs plays a significant role in meeting the water demands of its population and sectors. However, the sustainable management of groundwater resources is crucial to prevent over-extraction, which can lead to aquifer depletion and contamination—issues that pose serious threats to Jordan's water security. Groundwater recharge, both naturally occurring and through artificial means like managed aquifer recharge projects, is essential for replenishing water levels in aquifers. Jordan's efforts to ensure a sustainable groundwater supply involve stringent regulation of groundwater extraction, investment in water-saving technologies, and initiatives to enhance recharge rates, thereby safeguarding this invaluable resource for future generations.

**Groundwater Risk Sites** refer to locations that pose a threat to the quality and safety of the country's groundwater resources due to potential or existing contamination. Such risks may arise from various sources, including leakage of wastewater from cesspools, septic tanks, and sewage networks, or improper handling and disposal of industrial wastewater and agricultural run-off. Given Jordan's acute water scarcity, protecting groundwater from contamination is paramount to ensuring the health and well-being of its population, as well as the sustainability of its agricultural and industrial sectors. Identifying and managing these risk sites involves continuous monitoring, implementing strict waste management practices, and investing in infrastructure improvements to prevent contamination.



### **(H)**

**Harvesting Rainwater** is/ means collecting rainwater from rooftops, roads, and open grounds, and storing it in tanks, cisterns, or reservoirs, Jordan seeks to augment its limited water resources. This collected rainwater serves various purposes, including irrigation, domestic use, and supporting industrial activities, thereby easing the pressure on municipal water systems. Rainwater harvesting not only contributes to water conservation efforts in Jordan but also plays a significant role in mitigating stormwater runoff and erosion, potentially enhancing groundwater quality through recharge.

### (N)

**Natural Buffers** are essential elements in the country's environmental management and climate adaptation strategies. These are areas where the natural landscape is preserved or restored to utilize its inherent ecological functions, such as water retention, heat mitigation, and carbon sequestration. Given Jordan's vulnerability to climate change, including increased temperatures, erratic rainfall, and water scarcity, natural buffers play a critical role in enhancing the resilience of ecosystems and human communities. They include undisturbed terrains near water bodies, vegetated areas that act as protective barriers against soil erosion, and spaces designed to absorb and filter runoff, thereby protecting water quality.

### (R)

**Rationalization of water usage** is an imperative strategy, deeply integrated into national policies and strategies to address the acute challenges of water scarcity. This approach involves a systematic application of advanced technologies and methodologies such as cascade use, water recycling, reuse, and the incorporation of water-saving devices across various sectors. Jordan's national water strategy emphasizes the critical need for comprehensive water management practices that include enhancing the efficiency of water use in agriculture through modern irrigation techniques, promoting water conservation in urban settings, and improving industrial water use efficiency.



**Restricted Irrigation** in Jordan, restricted irrigation is an essential strategy within the broader framework of sustainable water management, specifically tailored to the country's context of severe water scarcity. This practice involves the careful use of treated wastewater for the irrigation of agricultural lands, gardens, and landscaped areas, subject to specific limitations designed to optimize water utilization and ensure public health and environmental safety. The restrictions typically cover the volume of water applied, suitable crop types for wastewater irrigation, and the irrigation schedule, all aimed at reducing the potential risks associated with pathogens and pollutants in the wastewater.

### (U)

**Unrestricted Irrigation** refers to the use of treated wastewater for irrigating a wide range of crops without limitations on the types of crops, the quantity of water, or irrigation frequency. This practice is aimed at maximizing the reuse of treated wastewater to alleviate the pressure on limited freshwater resources, crucial for Jordan's agricultural sector and overall water sustainability. However, the success of unrestricted irrigation heavily depends on the quality of the treated wastewater, which must be closely monitored to ensure it meets stringent health and environmental safety standards.

### (W)

**Water conservation** entails the strategic and efficient utilization of water to curtail non-essential consumption, crucial for managing the country's limited freshwater resources sustainably, safeguarding the hydrosphere, and fulfilling the water needs of present and future populations. Key conservation activities include initiatives to minimize water loss through infrastructure repair, promote the use of water-saving technologies across agricultural, industrial, and domestic sectors, and implement practices aimed at preventing water pollution. Moreover, Jordan is focused on enhancing water management strategies to either reduce water usage without compromising service quality or augment the beneficial impacts of water use.



Water dam is a pivotal man-made structure constructed across rivers or streams, designed to impound water primarily for storage purposes, crucial in addressing the nation's severe water scarcity challenges. These dams create artificial lakes or reservoirs that are instrumental in securing a consistent water supply for irrigation, supporting Jordan's agricultural sector, which is vital for food security and economic stability. Additionally, dams in Jordan play a significant role in controlling flooding, protecting communities and agricultural lands from the destructive impacts of flash floods. While the potential for generating hydroelectric power is limited due to geographical constraints, the focus remains on leveraging dams for water conservation, supporting farming, industry, and household needs, thereby underpinning Jordan's comprehensive water management and sustainability efforts in a context marked by extreme water scarcity.

**Water management** is the strategic planning, development, and administration of water resources to address the challenges of both water scarcity and quality, catering to the diverse needs of agricultural, industrial, and domestic sectors. As one of the most water-scarce countries in the world, Jordan's approach to water management is critical for minimizing risks to life and property from waterrelated hazards, such as droughts and floods, and for optimizing the efficient and equitable use of its limited water resources. This process involves a multifaceted strategy that includes enhancing water conservation practices, investing in wastewater treatment and reuse for irrigation, upgrading infrastructure to reduce losses, and implementing innovative technologies for water harvesting and desalination. Both government bodies and local communities, along with individual households, play vital roles in managing water efficiently, reflecting a collective effort to ensure the sustainability and security of water supplies for Jordan's present and future needs.

**Water Scarcity** is a pressing issue characterized by a shortage of available water resources to meet the demands of its population and economy. This scarcity arises from a combination of natural factors, including limited rainfall and high evaporation rates, compounded by human activities such as unsustainable water usage and population growth. Jordan's arid climate and scarce water sources pose significant challenges to various sectors, including agriculture, industry, and domestic consumption. To address water scarcity effectively, Jordan implements



strategies focused on water conservation, efficient use, and the development of alternative water sources such as desalination and wastewater reuse.

Water security refers to the nation's capacity to maintain reliable access to an adequate supply of clean water, essential for sustaining livelihoods, supporting human well-being, and driving socio-economic development. This definition is particularly relevant given Jordan's arid climate, water scarcity challenges, and the importance of managing water resources effectively to meet the needs of its population and ecosystems. Given the country's arid climate and limited water resources, ensuring water security involves safeguarding against water scarcity, pollution, and related disasters while preserving ecosystems and promoting peace and political stability.

Water stress refers to a critical condition where the demand for water surpasses the available supply, either due to insufficient quantity or poor quality, leading to significant challenges in meeting various societal needs. This situation often results in the deterioration of freshwater resources, encompassing both quantitative aspects like aquifer depletion and dry rivers, as well as qualitative concerns such as pollution and saline intrusion. In Jordan, where water scarcity is a pressing issue exacerbated by arid conditions and high demand, addressing water stress requires comprehensive strategies that not only focus on increasing water availability but also emphasize conservation, efficient management practices, and sustainable use to ensure the resilience of water resources for current and future generations.

**Water sustainability** involves the thoughtful management of water resources to meet present and future needs while safeguarding the environment's ability to provide water for future generations. This approach requires a balance between water availability, usage, and quality, with a focus on preserving ecosystems and biodiversity. In Jordan, where water scarcity is a significant concern, achieving water sustainability involves implementing efficient water management practices, promoting water conservation measures, investing in water infrastructure, and fostering international cooperation to address shared water challenges in the region.



**Watershed** refers to a critical land area that directs rainfall and snowmelt towards creeks, streams, and rivers, ultimately leading to outflow points like reservoirs, bays, or the ocean. It serves as a natural boundary that separates water flowing into different rivers, basins, or seas within the region. Typically defined by the highest elevation points such as mountain ridges, a watershed plays a vital role in managing water resources and safeguarding ecosystems. In Jordan, where water scarcity is a pressing issue, understanding and effectively managing watersheds are essential for ensuring sustainable water management practices and preserving the country's freshwater sources for both present and future generations.



# Green Terminology Energy







### **(B)**

**Base Load Power Plant** refers to a facility designed to consistently generate and supply electrical energy, operating continuously throughout the year. These plants are integral to meeting the foundational demand for electricity within the country, providing a stable and reliable source of power to support various sectors and activities. Typically, base load power plants in Jordan are optimized to operate at a constant output level, ensuring a steady supply of electricity to meet the baseline energy needs of industries, businesses, and households.

**Biodiesel** refers to a renewable biofuel primarily derived from oily plants, algae, and other sources such as waste cooking fat from restaurant deep-frying. It serves as a sustainable substitute for traditional diesel fuel, offering reduced emissions and environmental benefits. Biodiesel production in Jordan often involves utilizing locally available resources such as animal fats, vegetable oils, and waste cooking oil, contributing to both waste management and energy sustainability initiatives.

**Biofuel** refers to a renewable energy source derived from biomass, encompassing plant or algae material and animal waste. It serves as a sustainable alternative to conventional fossil fuels like petroleum, coal, and natural gas due to its ability to be replenished rapidly. With the country's growing concern over rising petroleum prices and environmental impacts associated with fossil fuel use, biofuels offer a promising solution. Common types of biofuels include ethanol, biodiesel, and biogas, each offering unique benefits in terms of production, emissions reduction, and energy efficiency. By promoting the production and utilization of biofuels, Jordan aims to reduce its dependence on imported fossil fuels, mitigate greenhouse gas emissions, and foster a more sustainable energy future

### (C)

**Carbon Pricing** refers to the implementation of policies or mechanisms aimed at internalizing the cost of carbon emissions into the market. This can take the form of a carbon tax, where a fee is levied on the carbon content of fossil fuels or their emissions, or a cap-and-trade system, where a limit (or cap) is set on total emissions and permits are traded among emitters. By putting a price on carbon, these mechanisms incentivize businesses and individuals to reduce their carbon footprint by adopting cleaner technologies, improving energy efficiency, or



investing in renewable energy sources. In Jordan, carbon pricing is seen as a crucial tool for mitigating climate change, reducing greenhouse gas emissions, and transitioning towards a low-carbon economy while fostering innovation and sustainable development.

**Carbon Tax** refers to a policy measure that imposes a fee on the carbon content of fossil fuels or their emissions. This tax is intended to internalize the external costs associated with carbon dioxide emissions, such as climate change impacts, air pollution, and public health effects. By placing a price on carbon emissions, the carbon tax incentivizes individuals, businesses, and industries to reduce their carbon footprint and transition to cleaner energy sources. Revenue generated from the carbon tax can be used to fund renewable energy projects, energy efficiency programs, and climate adaptation efforts. In Jordan, implementing a carbon tax is seen as a critical step towards mitigating climate change, promoting sustainable development, and transitioning to a low-carbon economy.

**Clean Energy, also** referred to as renewable energy, encompasses energy derived from zero-emissions sources that do not release pollutants into the atmosphere when utilized. This includes solar, wind, hydropower, and geothermal energy. Jordan has been actively promoting the development and utilization of clean energy sources to reduce dependence on fossil fuels, enhance energy security, and mitigate environmental impacts. Initiatives such as the National Renewable Energy Strategy aim to increase the share of clean energy in the country's energy mix, supporting sustainable development and addressing climate change challenges.

### (D)

**Decarbonization** involves reducing the amount of greenhouse gas emissions produced by society while increasing absorption. This multifaceted approach requires significant changes across various sectors of the economy, including energy generation, production methods for goods and services, construction practices for buildings, and land management strategies.



### (G)

**Green Energy** refers to energy derived from natural resources such as sunlight, wind, or water, which are considered environmentally friendly and sustainable. This type of energy is often synonymous with renewable energy, but there are distinctions. Renewable energy encompasses sources that naturally replenish over time, including solar, wind, hydro, and biomass. Green energy, on the other hand, focuses specifically on sources that have minimal impact on the environment and contribute to reducing greenhouse gas emissions. In Jordan, efforts to promote green energy include investment in solar and wind power projects, as well as initiatives to enhance energy efficiency and reduce reliance on fossil fuels.

**Green Power Marketers** are companies that specialize in selling renewable energy to consumers and businesses. These companies typically offer Renewable Energy Certificates (RECs) to their customers, which represent the environmental attributes of one megawatt-hour (MWh) of electricity generated from a renewable energy resource. RECs are instrumental in tracking and verifying the production and use of green power, thereby supporting the development of new renewable energy projects. By purchasing green power from these marketers, consumers and businesses in Jordan can actively contribute to the expansion of renewable energy infrastructure and play a significant role in reducing greenhouse gas emissions, thus promoting environmental sustainability.

**Green Power Product/Option** refers to electricity supplied from renewable energy resources, such as solar, wind, or hydropower, and is made available to consumers through the utility grid or competitive electricity suppliers. These products, known as green pricing or green marketing, contain a higher percentage of renewable-based electricity compared to standard electrical service. Green pricing is offered by regulated utilities, while green marketing is available in competitive electric markets. By opting for green power products, consumers in Jordan can support the expansion of renewable energy infrastructure and contribute to reducing carbon emissions, thereby promoting environmental sustainability.



**Greenflation** describes the phenomenon of rising costs associated with the transition to a more sustainable economy, particularly concerning the energy sector. This term encapsulates the inflationary pressures stemming from heightened capital investments necessary to meet climate objectives. These investments often lead to increased demand for critical materials and resources essential to the energy transition, such as lithium, cobalt, nickel, graphite, and manganese. As the demand for these resources surges, their prices escalate, contributing to overall inflationary trends in the context of green initiatives and climate goals.

**Green-House Effect** is a natural process in which certain gases in Earth's atmosphere, such as water vapor, carbon dioxide, methane, and others, trap heat from the sun. These gases act like a blanket, preventing some of the heat from escaping into space. As a result, the Earth's temperature rises, creating conditions for global warming and climate change. While the greenhouse effect is essential for maintaining a habitable climate on Earth, human activities, such as burning fossil fuels and deforestation, have intensified this effect by increasing the concentration of greenhouse gases in the atmosphere, leading to accelerated warming trends and environmental change.

**Greenhouse gas emissions** refer to the release of heat-trapping gases into the Earth's atmosphere, contributing to climate change. These gases include carbon dioxide (CO2), methane (CH4), chlorofluorocarbons (CFCs), hydrofluorocarbons (HFCs), and nitrous oxide (N2O). Human activities such as burning fossil fuels, deforestation, industrial processes, and agriculture are significant contributors to greenhouse gas emissions. The accumulation of these gases in the atmosphere enhances the natural greenhouse effect, leading to global warming and various environmental impacts. Reducing greenhouse gas emissions is crucial for mitigating climate change and promoting environmental sustainability.

**Greenhouse gases (GHG)** are essential components of the Earth's atmosphere, helping to regulate the planet's temperature by trapping heat from the sun. These gases, including water vapor (H2O), carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), ozone (O3), and fluorinated gases, act like a blanket, keeping the Earth warm enough to support life. However, human activities, such as burning fossil fuels and deforestation, have significantly increased the



concentration of these gases in the atmosphere, leading to enhanced global warming and climate change. Managing and reducing GHG emissions are critical steps in mitigating the impacts of climate change and ensuring environmental sustainability.

### (R)

**Renewable Energy/ Alternative Energy** known as alternative energy, refers to energy derived from naturally replenishing sources that are continuously available and environmentally sustainable. Examples include solar energy, which harnesses sunlight through photovoltaic panels, and wind energy, which utilizes the kinetic energy of moving air to generate electricity through wind turbines. Other renewable energy sources include hydropower, geothermal energy, and biomass. Unlike fossil fuels, which are finite and contribute to environmental pollution and climate change, renewable energy sources are abundant, clean, and offer the potential for long-term energy security and sustainability.

**Renewable Resources** refer to natural assets that can naturally replenish themselves over time, either through recurring processes or sustainable practices, within a timeframe relevant to human activities. These resources hold particular significance in the Jordanian context for their potential to substitute finite or nonrenewable sources, thereby ensuring long-term environmental sustainability and energy security. Examples of renewable resources include sunlight, wind, water, geothermal energy from the Earth's heat, and biomass derived from organic materials. In Jordan, these resources are actively harnessed to generate green power, a form of renewable energy that prioritizes environmental preservation and minimizes ecological impact while addressing the country's energy needs.

### (S)

**Solar Power** is a form of renewable energy that harnesses energy from the sun's radiation. It can be utilized to produce heat, generate electricity, and initiate chemical reactions. Solar power is derived directly through photovoltaic systems or in combination with other energy sources. In Jordan, solar power plays a vital role in enhancing self-sufficiency and sustainability efforts. The Bennouna plant stands as the country's largest solar project, providing energy to approximately 160 thousand homes annually. Moreover, it significantly contributes to reducing CO2 emissions by an estimated 369 thousand tons per year.



**Sustainable Energy** refers to the utilization of energy sources that can meet current needs without jeopardizing future resource availability. These sources are characterized by minimal environmental impact and are renewable, ensuring longterm sustainability. In Jordan, sustainable energy initiatives aim to promote the use of clean, safe, and renewable energy sources to enhance environmental health and resilience, while also supporting national energy security and economic development.

#### (W)

**Wind energy** involves harnessing the kinetic energy of moving air to generate mechanical power or electricity. As a form of renewable energy, wind power contributes to reducing reliance on fossil fuels and mitigating environmental impacts. Jordan's strategic investment in wind energy, as evidenced by its ranking third in wind power production globally in 2019 with a capacity of 190 MW, reflects its commitment to sustainable energy development. Given the country's limited hydrocarbon resources and water scarcity, wind and solar power have emerged as crucial components of Jordan's renewable energy programs, offering viable alternatives for meeting energy demands while addressing environmental and economic challenges.



## Green Terminology Waste







**(B)** 

A bin is a small container designed to temporarily store limited quantities of waste before its disposal in larger containers like dumpsters. These bins are commonly placed indoors or in areas with high human traffic to prevent littering and maintain cleanliness. With waste management being a significant concern in urban areas, bins play a crucial role in facilitating proper waste disposal and promoting environmental hygiene.

**Bioreactor Landfill** refers to an engineered landfill or landfill cell where the management of liquid and gas is actively controlled to accelerate or enhance the stabilization of waste. This process may involve measures such as the controlled addition and recirculation of water and the capture of methane gas through a piping network. Bioreactor landfills are an innovative approach to waste management, aiming to optimize the decomposition of organic waste while minimizing environmental impact.

**Bulky Wastes** refer to solid waste materials that are large and cumbersome, including items such as appliances, furniture, automobile parts, and sometimes large branches and tree stumps as defined locally. Proper disposal and management of bulky waste are essential to prevent environmental pollution and ensure the efficient use of landfill space.

### **(C)**

**Compostables** are materials that can undergo natural decomposition over time, ultimately breaking down into components such as carbon dioxide, water, inorganic compounds, and biomass. Sometimes referred to as humus, compostables are often utilized as fertilizer due to their nutrient-rich composition and are beneficial for soil health and plant growth.



**Composting is** the biological process of decomposing organic waste, including mixed solid waste, under controlled conditions. It occurs aerobically, meaning in the presence of oxygen, and can take place in various settings such as open piles known as windrows or in enclosed tanks or containers, a method called in-vessel composting. During composting, microorganisms break down organic materials into nutrient-rich humus, resulting in a valuable soil amendment.

#### (D)

**Disposable/Disposal** refers to products or materials that are designed to be thrown away after a single use or a limited period. Examples include single-use plastic bottles, paper plates, and packaging. Disposal also denotes the process of discarding unwanted materials, typically sending them to landfills or combustion facilities instead of recycling, reusing, or composting them.

**Dumpster** is a large waste container, typically made of metal, designed to be lifted and emptied into a garbage or recycling truck. These containers are commonly found outdoors and are used for collecting and storing large volumes of waste or recyclable materials. They are often placed in convenient locations for easy access by garbage trucks during collection rounds.

#### **(E)**

**E-waste** refers to waste materials resulting from the use or disposal of electronic devices, such as computers, televisions, and mobile phones. These discarded electronics contain hazardous substances such as lead, mercury, and cadmium, which can pose significant risks to human health and the environment if not properly managed. In Jordan, as in many other countries, e-waste management is a growing concern due to its toxic nature and the potential for environmental contamination if not handled and disposed of responsibly.

#### (G)

**Green Purchasing (or Environmentally Preferable Purchasing)** known as environmentally preferable purchasing, involves the procurement of products or services that have a minimal adverse impact on human health and the environment compared to alternatives serving the same purpose. This approach considers the entire life cycle of products, including raw materials acquisition, production,



manufacturing, packaging, distribution, reuse, operation, maintenance, and disposal. In the Jordanian context, green purchasing initiatives aim to promote sustainable consumption practices and reduce environmental impacts across various sectors, including government procurement, private businesses, and individual consumers. These efforts contribute to advancing environmental sustainability goals and fostering a more eco-conscious economy in Jordan.

**Green Waste** refers to biodegradable waste composed of organic matter that decomposes over time through natural processes and bacterial activities. This category of waste typically includes yard trimmings, such as grass clippings, leaves, branches, and other plant-based materials. Green waste can be collected separately from other types of waste and processed through composting or other organic recycling methods to produce valuable soil amendments, such as compost or mulch. In the Jordanian context, managing green waste effectively is essential for promoting sustainable waste management practices, reducing landfill volumes, and supporting agricultural and landscaping activities through the production of organic fertilizers and soil conditioners.

#### (H)

**Hazardous Waste** refers to waste materials that have the potential to pose a danger to human health or the environment if not managed properly. This type of waste requires special precautions during disposal due to its hazardous nature. Hazardous waste typically exhibits one or more of four key traits: ignitability (capable of catching fire), reactivity (potentially explosive or reactive with other substances), corrosivity (able to corrode metal containers), and toxicity (contains substances harmful to living organisms). Proper handling, storage, transportation, and disposal methods are essential to prevent harm and minimize environmental impact. In the Jordanian context, the management of hazardous waste is regulated by specific laws and regulations to protect public health and the environment from potential risks associated with its improper handling and disposal.

#### **(I)**

**Integrated Solid Waste Management (ISWM)** in the Jordanian context refers to a comprehensive and sustainable approach to handling solid waste. It encompasses environmentally and economically sound practices aimed at



minimizing waste generation and maximizing resource recovery. ISWM integrates various strategies, including source reduction, reuse, recycling, composting, and energy recovery, as well as collection, transfer, transport, and disposal in sanitary landfills or other appropriate facilities. The goal is to manage solid waste in a manner that protects human health and the environment while conserving resources and promoting circular economy principles. Jordanian authorities and stakeholders work together to implement ISWM practices, guided by regulations and policies that prioritize waste reduction, recycling, and safe disposal methods.

**Integrated Waste Management** refers to the coordinated and comprehensive approach to managing municipal solid waste (MSW). It involves the strategic utilization of various waste management practices to ensure the safe and efficient handling of solid waste while minimizing environmental impact. IWM strategies include source reduction, recycling, composting, waste-to-energy conversion, combustion, and landfilling. By integrating these practices, Jordan aims to optimize resource recovery, reduce waste generation, and mitigate environmental pollution associated with MSW disposal. Additionally, IWM initiatives prioritize public health protection and sustainable waste management practices in alignment with national regulations and policies. Collaborative efforts among government agencies, local authorities, communities, and waste management stakeholders are essential for the successful implementation of integrated waste management systems across Jordan.

#### (L)

**Landfill** refers to a designated disposal site for non-hazardous solid waste. Waste deposited in landfills undergoes compaction to reduce its volume, and it is then buried in excavated pits. These pits are subsequently covered with soil or special fabric covers to contain and minimize potential environmental impacts. Landfills in Jordan are managed in compliance with environmental regulations and guidelines to ensure safety and prevent pollution of soil, air, and groundwater. Additionally, efforts are made to implement measures for odor control, leachate management, and methane gas capture to mitigate environmental risks associated with landfill operations. Sustainable landfill management practices prioritize the



protection of public health and the environment while effectively managing solid waste disposal in the country.

#### (M)

**Municipal Solid Waste (MSW)** refers to solid and semi-solid materials generated primarily by households, as well as similar waste produced from commercial establishments, offices, public institutions, and other activities. This waste stream encompasses materials such as paper, cardboard, plastics, food scraps, yard waste, glass, metals, and textiles, among others. MSW is collected either by municipal authorities or private sector entities, including businesses or non-profit institutions, and managed through the waste management system. Proper disposal methods for MSW in Jordan typically involve collection, transportation, and treatment or disposal in landfills, recycling facilities, composting sites, or waste-to-energy plants, aiming to minimize environmental impacts and protect public health. Additionally, initiatives for source reduction, recycling, and composting are encouraged to reduce the volume of MSW and promote sustainable waste management practices.

Municipal Solid Waste Management (MSWM) encompasses the comprehensive planning, organization, and implementation of strategies to effectively control the generation, collection, storage, transfer, transportation, processing, and disposal of solid wastes. It is guided by principles of public health, economics, engineering, conservation, aesthetics, and sustainability, aiming to health, enhance safeguard population environmental quality. promote sustainability, and support economic productivity. Proper MSWM practices are essential to mitigate the risks associated with improper waste disposal, such as unsanitary conditions, pollution, and the potential for disease outbreaks. By adopting efficient waste management practices, Jordan can address environmental challenges, protect public health, and contribute to sustainable development.

#### **(O)**

**Organic Waste** pertains to biodegradable materials derived from living organisms, such as food scraps, yard waste, and wood clippings. These materials can undergo natural decomposition processes. In waste management practices, organic waste is often segregated for recycling purposes, particularly for



composting. Through composting, organic waste can be transformed into nutrientrich compost, which can then be utilized to enrich soil health and promote agricultural sustainability. Effective management of organic waste plays a crucial role in reducing the volume of waste sent to landfills, mitigating environmental pollution, and supporting sustainable practices in Jordan's waste management system.

#### (P)

**Post-Industrial Recycled Content** refers to materials generated during manufacturing and conversion processes that are recovered or diverted from solid waste streams. These materials include industrial by-products and waste materials that are recycled or repurposed to minimize waste generation and promote resource efficiency. Examples may include scrap metal, plastic trimmings, paper trimmings, and other materials generated within industrial facilities. By incorporating post-industrial recycled content into manufacturing processes, industries in Jordan can reduce their environmental impact, conserve resources, and contribute to a more sustainable circular economy.

**Post-industrial waste** refers to products and materials generated within industrial processes that have been discarded or become obsolete before reaching the consumer. These waste materials typically include trimmings, scrap, defective products, and other by-products of manufacturing and production activities. Examples may include excess materials from production lines, defective products, and obsolete machinery or equipment. Post-industrial waste management is essential for industries in Jordan to minimize environmental impact, optimize resource utilization, and comply with waste management regulations.

**Primary treatment** refers to the initial phase of wastewater treatment aimed at removing a significant portion of suspended solids and organic matter from raw sewage or wastewater. This process typically involves physical processes such as screening, sedimentation, and/or filtration to separate solid particles and organic materials from the water. Primary treatment plays a crucial role in reducing the pollutant load in wastewater before further treatment processes and is essential for protecting public health and the environment. Proper implementation of primary treatment methods is necessary to ensure the effectiveness of downstream treatment processes and the safe disposal or reuse of treated wastewater in Jordan.



#### (R)

**Recyclable** refers to items made from materials that can be diverted from the waste stream after use and recycled into new products. These materials include paper, plastics, glass, and metal, among others. Recyclables are waste materials that have the potential to be reused or processed into new products through recycling processes. Proper recycling practices are essential for resource conservation, waste reduction, and environmental sustainability in Jordan. Implementing effective recycling programs and infrastructure is crucial for maximizing the recovery and reuse of recyclable materials and reducing the environmental impact of waste disposal.

**Recycling** encompasses the collection, reprocessing, marketing, and utilization of materials diverted or recovered from the solid waste stream. This practice provides significant environmental benefits by (1) diverting waste from landfilling or incineration, thus reducing environmental pollution and conserving valuable landfill space, and (2) reducing the demand for virgin materials needed for the manufacturing of new products. By promoting recycling initiatives and infrastructure, Jordan aims to minimize waste generation, conserve natural resources, and mitigate environmental degradation associated with traditional waste disposal methods.

**Refuse** refers to waste materials that are not recyclable or reusable, typically consisting of household waste. This includes non-biodegradable items, such as plastics and certain packaging materials, as well as organic waste that is not suitable for composting. Proper management of refuse is essential to minimize environmental pollution, conserve resources, and promote sustainable waste management practices. In Jordan, efforts are underway to improve waste collection and disposal systems to effectively handle and manage refuse, ensuring the protection of public health and the environment.

**Resin Identification Code (RIC)** is a coding system imprinted on plastics to classify the polymer and facilitate recycling processes. These codes, typically represented by numbers inside a triangle of arrows, help identify the type of plastic used in the product. For instance, polyethylene terephthalate (PET) is commonly used for beverage bottles and food containers and is identified by the number 1. High-density polyethylene (HDPE), found in milk jugs and detergent bottles, is



labeled with the number 2. Polyvinyl chloride (PVC), used in pipes and packaging, carries the number 3. The RIC assists recycling facilities in sorting and processing plastics efficiently, contributing to waste reduction and resource conservation efforts in Jordan.

**Reuse** refers to the practice of utilizing a product or material again for its original purpose or repurposing it instead of disposing of it. This approach emphasizes extending the lifespan of items by finding new uses for them, reducing the need for additional resources, and minimizing waste generation. By promoting reuse, Jordan aims to conserve natural resources, reduce environmental impact, and promote a more sustainable approach to consumption and waste management.

#### (S)

**Secondary treatment** refers to the process of removing biodegradable organic matter, suspended solids, and nutrients, such as nitrogen and phosphorus, from wastewater. This stage of wastewater treatment follows primary treatment and aims to further purify the water to meet environmental standards before discharge or reuse. Secondary treatment processes typically involve biological and chemical processes to break down organic pollutants and remove suspended solids, resulting in cleaner water that is safer for the environment and public health. This aspect of wastewater treatment is crucial for safeguarding water resources and protecting ecosystems in Jordan.

**Sewage** refers to the wastewater and excrement, known as blackwater, that is conveyed through sewers for disposal or treatment. Sewage may also include other domestic and industrial waste materials that are carried along with the wastewater in the sewerage system. Proper management of sewage is essential to prevent pollution of water bodies, protect public health, and ensure the sustainable use of water resources. In Jordan, sewage treatment facilities play a vital role in treating wastewater before it is discharged back into the environment or reused for agricultural or other purposes, contributing to the overall sanitation and environmental health of the country.

**Single Stream (SSR) or Mixed or Commingled Recycling** known as commingled recycling, refers to a waste management system where multiple recyclable materials, such as plastics, paper, metals, and glass, are collected and



stored together in a single container. Unlike traditional recycling methods that require sorting and storing each material separately, single-stream recycling simplifies the process by allowing all recyclables to be collected. Once collected, these mixed recyclables are transported to a recycling facility where they undergo sorting and processing to separate the different materials for recycling into new products. Single-stream recycling promotes convenience for residents and businesses while encouraging higher rates of recycling participation and diversion of waste from landfills. This approach aligns with Jordan's efforts to promote sustainable waste management practices and maximize resource recovery.

**Sludge** refers to the nutrient-rich organic materials that are produced as a byproduct of treating domestic sewage in wastewater treatment facilities. This sludge contains organic matter and nutrients that are removed from the wastewater during the treatment process. In Jordan, wastewater treatment facilities utilize various methods to treat sewage and remove contaminants, such as physical, chemical, and biological processes. Once treated, the remaining sludge undergoes further processing to reduce its volume and stabilize its composition before disposal or beneficial reuse. Proper management of sludge is essential to minimize environmental impact and ensure public health and safety.

**Solid Waste** refers to any discarded material, including garbage, refuse, sludge, and other waste products, generated from various sources such as residential habitation, industrial, commercial, mining, agricultural operations, and community activities. This waste may consist of solid, liquid, semisolid, or contained gaseous materials. Jordan, like many other countries, has specific regulations and laws governing the management and disposal of solid waste to ensure environmental protection and public health. Proper solid waste management practices include collection, transportation, treatment, recycling, and disposal, all aimed at minimizing environmental impact and promoting sustainable waste management strategies.

**Solid Waste Management** refers to the planned and organized handling of solid waste and recyclable materials in an environmentally and economically sound manner. This encompasses the entire waste management process, including generation, storage, collection, transfer, transportation, processing, resource recovery, reuse, and disposal of solid waste and recyclable materials. It also involves



various administrative, financial, educational, environmental, legal, planning, marketing, and operational aspects. Jordan has prioritized waste management and combating marine litter as key environmental goals, leading to the implementation of significant waste management initiatives. For instance, the "One Dead Sea is Enough" initiative, launched by the Ministry of Environment, underscores the importance of addressing marine pollution, particularly from plastic litter, which amounts to an estimated eight million tons annually. This initiative aims to raise awareness globally and implement measures to mitigate marine pollution and its adverse impacts on the environment.

**Source Reduction** refers to the deliberate effort to decrease the amount of waste entering the waste stream from specific sources by redesigning products and processes. This entails implementing measures to minimize waste generation at its source, whether through modifications in product design or changes in production processes. The objective is to reduce overall waste generation, promote resource efficiency, and mitigate environmental impacts associated with waste disposal. Source reduction initiatives in Jordan aim to optimize resource use, enhance sustainability, and contribute to the country's waste management goals by addressing waste generation at its origin.

### **(T)**

**Tertiary Treatment** refers to the stage in wastewater treatment where residual suspended solids are further removed after secondary treatment. Additionally, this stage involves additional processes for further nutrient removal and disinfection to ensure the treated water meets stringent quality standards before being discharged or reused. Tertiary treatment plays a crucial role in enhancing the quality of treated wastewater, particularly in areas where water reuse is a vital component of water resource management strategies. It aims to achieve the highest level of water quality to safeguard public health and protect the environment, aligning with Jordan's commitment to sustainable water management practices.

#### (W)

**Waste** refers to materials left over from human habitation, manufacturing, and production processes. This includes everyday items discarded by the public, ranging from durable goods to containers and packaging. Waste management



involves collecting these materials in various types of containers, such as bins, dumpsters, front load dumpsters, and totes or roll carts. Jordan emphasizes effective waste management practices to address environmental concerns and promote sustainability, with efforts focused on reducing waste generation, promoting recycling and reuse, and ensuring proper disposal methods to minimize environmental impact.

**Waste Analysis Plan** is a structured framework for managing waste substances and products across various sectors, including manufacturing, services, and offices. It entails identifying, quantifying, eliminating, and preventing waste to minimize environmental impact and ensure regulatory compliance. The plan includes detailed descriptions of the waste generated, its quantity, disposal methods, and storage locations. Moreover, it incorporates a waste minimization plan outlining strategies for reducing waste generation and promoting recycling and reuse practices. By implementing effective waste analysis plans, Jordan aims to enhance waste management practices, mitigate environmental risks, and support sustainable development initiatives.

**Waste Characterization** refers to a structured process of identifying and categorizing the materials present in a waste stream. This includes analyzing the chemical, physical, and microbiological composition of waste materials to understand their properties and potential environmental impacts. Waste characterization aims to provide valuable insights into the types and quantities of waste generated, facilitating effective waste management strategies and regulatory compliance. By conducting comprehensive waste characterization studies, Jordan seeks to enhance its waste management practices, promote recycling and resource recovery, and minimize environmental pollution.



**Waste Diversion** refers to the strategic efforts aimed at reducing the amount of waste sent to landfills or incinerators through various sustainable practices such as recycling, composting, and waste minimization. The objective of waste diversion initiatives is to mitigate environmental impacts, conserve resources, and optimize waste management processes. By implementing effective waste diversion strategies, Jordan aims to minimize the burden on landfills, alleviate environmental pollution, and promote a circular economy approach to waste management. Monitoring waste diversion rates provides valuable insights into the effectiveness of these initiatives and supports ongoing efforts to enhance waste diversion practices across the country.

**Waste Generation** encompasses the quantity and types of materials and products that enter the waste stream before undergoing recycling, composting, landfilling, or combustion processes. It includes both solid waste and other discarded materials originating from various sources such as households, businesses, industries, and institutions. Waste generation data provides insights into the overall waste management landscape, enabling policymakers and stakeholders to assess trends, identify sources of waste, and develop strategies for waste reduction and diversion. By analyzing waste generation rates at different levels—such as national, sectoral, or per capita—Jordan aims to implement targeted interventions to minimize waste generation, promote sustainable consumption and production practices, and advance towards a circular economy model.

**Waste Minimization** refers to proactive measures aimed at reducing the amount of waste generated through strategic product and process redesign initiatives. These actions focus on optimizing resource use, enhancing efficiency, and minimizing waste at various stages of production, consumption, and disposal. By adopting waste minimization strategies, industries, businesses, and households in Jordan seek to mitigate environmental impacts, conserve natural resources, and promote sustainable development. This approach aligns with Jordan's efforts to address waste management challenges, enhance resource efficiency, and transition towards a circular economy paradigm.



**Waste Reduction** entails the conscious effort to minimize waste generation by utilizing fewer materials and energy resources to preserve natural resources. This practice encompasses various strategies, including the reuse of products like plastic and glass containers, opting for more durable goods, and embracing reusable alternatives. By reducing overall material consumption, waste reduction initiatives contribute to resource conservation and environmental sustainability in Jordan. Individuals can play a significant role in waste reduction by adopting practices such as reusing products, employing resources efficiently, and facilitating the exchange or donation of items that others may find valuable, thereby promoting a culture of waste minimization and responsible consumption across communities.

(Z)

**Zero Waste** focuses on reducing solid waste generation to the lowest possible level by minimizing excess consumption and maximizing the recovery of solid wastes through recycling and composting. These efforts aim to eliminate or drastically reduce the amount of waste sent to landfills or incinerators, thereby conserving natural resources, minimizing environmental pollution, and promoting sustainable waste management practices. By encouraging responsible consumption patterns, implementing efficient recycling programs, and promoting composting practices, Jordanian communities strive to achieve the goal of zero waste, contributing to a cleaner environment, healthier ecosystems, and a more sustainable future for all.



# Green Terminology Tourism







### **(C)**

**Central Product Classification** is a comprehensive system for classifying goods and services, designed to be used internationally. It serves as a standard framework for organizing and analyzing data related to various aspects of economic activity, such as industrial production, national accounts, trade, consumption, and prices. The CPC covers a wide range of products and services and is intended to facilitate the compilation and comparison of statistics across different countries and regions. By providing a common language for categorizing goods and services, the CPC promotes consistency and harmonization in statistical reporting and analysis, enabling more accurate and meaningful international comparisons and policy assessments.

#### **(E)**

**Eco-friendly Accommodations** are establishments that prioritize environmentally sustainable practices and aim to minimize their ecological footprint. These accommodations focus on conserving natural resources, reducing waste, and supporting local communities. They often incorporate renewable energy sources, implement responsible water, and waste management strategies, and integrate eco-conscious designs into their infrastructure. One notable example of an eco-friendly accommodation is the Feynan Ecolodge in Jordan, which emphasizes sustainability through its off-grid design, use of solar power, and commitment to community engagement and conservation efforts.

**Eco-tourism** encompasses nature-based tourism activities where visitors are motivated by the desire to observe, learn, and appreciate biological and cultural diversity while maintaining a responsible attitude towards ecosystem integrity and local community well-being. It fosters awareness of biodiversity conservation, natural environments, and cultural assets among both locals and visitors, necessitating special management processes to mitigate negative impacts on the ecosystem. In Jordan, initiatives led by the Ministry of Environment, UNEP, and the EDAMA Association for Energy, Water, and Environment have collaborated with hotels and restaurants in Aqaba city to audit waste production and implement reduction measures, exemplifying the commitment to sustainable tourism practices.



#### (N)

**Natural Attractions** refer to geographical or biological features that hold specific appeal to the tourism market. Examples include lakes, rivers, waterfalls, gorges, caves, mountains, and coastal features. These attractions are often unique, shaped by the natural forces of the surrounding environment, and draw visitors seeking to experience the beauty and diversity of nature.

## (S)

**Sustainable Travel** refers to the adoption of practices aimed at minimizing the negative impacts and maximizing the positive effects of tourism on economic, social, and environmental aspects. According to the United Nations World Tourism Organization, sustainable travel considers current and future impacts on visitors, industry, the environment, and host communities. In the Middle East, sustainable tourism initiatives are promoted by various organizations. For instance, the Jordan Inbound Tour Operators Association (JITOA) has initiated the "Greening the Jordanian Tourism Sector" program to encourage sustainable tourism practices in Jordan. Best practices for sustainable travel include reducing carbon emissions, conserving water, and energy, supporting local communities, respecting local cultures and traditions, and minimizing waste and pollution.



# **Green Terminology** Transportation







### **(B)**

**Battery electric vehicle (BEV)** is a type of electric vehicle powered by a rechargeable battery pack that drives an electric motor to propel the vehicle's wheels. Unlike conventional gasoline-powered vehicles, BEVs lack internal combustion engines, fuel tanks, or exhaust pipes, resulting in zero emissions during operation. BEVs rely solely on electricity for propulsion, which can be sourced from various renewable energy plants such as solar, wind, hydro, and nuclear power facilities. Due to their energy efficiency, BEVs offer potential savings on fuel costs compared to traditional vehicles powered by gasoline.

### **(E)**

**Electric vehicles (EV)** are vehicles propelled by one or more electric motors. They can draw power from external sources through a collector system or operate autonomously using a battery, which may be charged by solar panels or through fuel conversion using fuel cells or a generator. EVs are renowned for their environmental friendliness, emitting zero emissions while in operation. There are various types of EVs, each with distinct power sources: Battery electric vehicles (BEVs) rely solely on rechargeable electric batteries, producing no tailpipe emissions and lacking a combustion engine. Plug-in hybrid electric vehicles (PHEVs) utilize both an electric motor and a small combustion engine.

**Environmentally Responsible Transportation** encompasses modes of transport designed to minimize their environmental impact. This includes mass public transportation systems like light rail, subways, and electric, hybrid, or biodiesel buses. Additionally, electric and hybrid vehicles for personal transportation are considered environmentally responsible, as they produce fewer emissions compared to traditional gasoline-powered vehicles. These transportation options aim to reduce air pollution, greenhouse gas emissions, and reliance on fossil fuels, contributing to overall environmental sustainability.



#### (G)

**Green Vehicle** refers to a road motor vehicle designed to have less harmful impacts on the environment compared to traditional internal combustion engine vehicles running on gasoline or diesel. These vehicles often utilize alternative fuels and advanced vehicle technologies to reduce air pollution and greenhouse gas emissions. Examples include hybrid electric vehicles, plug-in hybrid electric vehicles, battery electric vehicles, compressed-air vehicles, hydrogen and fuel-cell vehicles, neat ethanol vehicles, flexible-fuel vehicles, natural gas vehicles, and clean diesel vehicles.

**Green Logistics** a series of business strategies focused on mitigating the environmental effects of logistics operations and delivery processes within Jordan. These sustainable logistics practices aim to maintain a robust bottom line while safeguarding customer satisfaction and the ecological well-being of the region. In Jordan's evolving business landscape, organizations are proactively adopting and integrating sustainable logistics management approaches. Leveraging advanced technologies such as artificial intelligence, machine learning, and advanced analytics, these initiatives optimize supply chain operations and minimize environmental impact throughout the logistics network.

**Green Transportation** encompasses environmentally friendly and sustainable modes of transportation, aligning with Jordan's commitment to ecological preservation and reduced carbon emissions. It includes transportation methods that utilize renewable energy sources instead of fossil fuels, contributing to the mitigation of greenhouse gas emissions and air pollution while fostering a healthier environment. Examples of green transportation in Jordan include electric cars, bicycles, public transportation systems, and carpooling initiatives. Embracing green transportation not only benefits the environment but also offers economic advantages such as reduced fuel and maintenance costs. Government support through regulations and incentives further promotes the adoption of green transportation practices. Notably, in Amman, Jordan, initiatives supported by international organizations like the European Bank for Reconstruction and Development and the Green Climate Fund are facilitating the procurement of a more efficient bus fleet, including 15 zero-emission electric buses—the first of their kind in the country—alongside 136 Euro V diesel buses.



### **(H)**

**Hybrid electric vehicle (HEV)** represents a pivotal advancement in transportation technology, particularly significant in the context of Jordan's environmental initiatives. HEVs integrate an internal combustion engine with an electric motor, utilizing a rechargeable battery that harnesses energy from deceleration, traditionally lost as heat in conventional vehicles. This innovative design results in enhanced fuel efficiency and reduced emissions compared to traditional vehicles. Notably, HEVs come in various configurations, including parallel hybrids, series hybrids, and plug-in hybrids, each offering unique advantages in terms of performance and sustainability. In Jordan, the adoption of HEVs aligns with the country's commitment to reducing carbon emissions and promoting sustainable transportation solutions, contributing to a greener and more environmentally conscious society.



## Green Entrepreneurship





## **(A)**

**Appraisal** refers to a structured assessment of an item's value within the open market. This process entails a comprehensive examination of various factors influencing value, such as comparable sales, market trends, and the item's condition. Additionally, an appraisal provides detailed insights into the methodology used to determine the estimated value, ensuring transparency and reliability in the valuation process. Whether assessing real estate, artwork, or other assets, appraisals serve as essential tools for informed decision-making and financial planning.

**Assets** represent valuable resources owned by individuals or corporations, possessing economic value and offering potential future benefits. These resources are managed and utilized with the anticipation of enhancing a company's operations or overall value. Assets can take various forms, including tangible assets like property, equipment, and inventory, as well as intangible assets such as patents, trademarks, and goodwill. Effective asset management is crucial for maximizing returns and supporting long-term growth and sustainability.

### **(B)**

**Business incubator** is a specialized program aimed at nurturing and supporting the growth of new businesses. These programs offer a conducive environment for entrepreneurs and startups to learn, develop, and expand their ventures. Services provided by business incubators often include access to workspace, mentorship, networking opportunities, and resources at reduced rates. Entrepreneurs typically apply for acceptance into the program and commit to a specific duration. During their time in a business incubator, companies can refine their business strategies, collaborate with peers, and benefit from cost-saving measures, ultimately increasing their chances of success in the market.



**Business plan** is a comprehensive document outlining the strategic direction and operational framework of a business. It serves as a roadmap, detailing the objectives, strategies, and tactics that the business will employ to achieve its goals. Components of a business plan typically include a description of the business, market analysis, organizational structure, product or service offerings, marketing and sales strategies, financial projections, and operational plans. By providing a structured overview of the business's operations and goals, a business plan helps guide decision-making, secure funding, and communicate the business's vision to stakeholders.

## (C)

**Cash flow** refers to the net amount of cash and cash equivalents moving into and out of a business over a specified period, typically a month, quarter, or year. It represents the liquidity of a company and its ability to meet short-term financial obligations. Positive cash flow indicates that a business is generating more cash than it is spending, while negative cash flow suggests the opposite. Cash flow is crucial for ensuring that a business can cover its operating expenses, debt obligations, and investment activities. Monitoring and managing cash flow effectively is essential for maintaining financial stability and sustaining business operations.

**Competitive advantage** refers to the unique strengths or attributes that enable a company to outperform its competitors and achieve superior performance in the local market. These factors may vary depending on the industry, market conditions, and specific business strategies adopted by companies operating in Jordan. Some common sources of competitive advantage in the Jordanian business landscape include:

- Intellectual property: Patents, trademarks, copyrights, and proprietary technologies that give a company exclusive rights to valuable innovations or products developed within Jordan.
- Branding: Strong brand recognition, reputation, and customer loyalty that differentiate Jordanian companies' products or services from those of competitors.

- Cost structure: Efficient operations, economies of scale, and cost-effective production processes that allow Jordanian companies to offer competitive prices or higher margins compared to competitors.
- Product differentiation: Unique features, quality, design, or functionality tailored to meet the preferences and needs of the Jordanian market, making a company's products or services more attractive to local consumers.
- Market positioning: Strategic alignment with the cultural, economic, and social characteristics of Jordanian consumers, enabling companies to effectively target specific market segments or niches.
- Distribution channels: Access to efficient distribution networks, partnerships, or channels within Jordan that ensure broad market coverage and effective reach to customers across the country.
- Innovation and agility: Ability to innovate, adapt to local market dynamics, and respond quickly to changing consumer preferences and regulatory requirements in Jordan.

**Creative destruction** refers to the process by which innovation and technological advancements lead to the obsolescence or transformation of existing industries, business models, products, or services. In the Jordanian context, creative destruction manifests as the replacement of outdated or inefficient practices with new, more profitable ones, driving economic growth and development. This phenomenon is particularly relevant in the context of Jordan's evolving digital landscape, where emerging technologies and digital transformations are reshaping various sectors, including finance, healthcare, education, and e-commerce. As Jordan continues to embrace innovation and entrepreneurship, creative destruction plays a vital role in driving productivity, competitiveness, and sustainability in the country's economy.



## (F)

**Fin-tech**, short for **Financial Technology**, encompasses businesses and startups within the financial sector that leverage modern technology to enhance and streamline their operations. In the Jordanian context, fin-tech companies leverage digital innovation to offer a wide range of financial services, including digital banking, mobile payments, peer-to-peer lending, crowdfunding, and digital asset management. These innovative solutions cater to the evolving needs of consumers and businesses, offering convenience, accessibility, and efficiency in financial transactions. Jordan's fin-tech ecosystem is rapidly expanding, driven by advancements in digital infrastructure, regulatory support, and growing demand for digital financial services across various sectors of the economy. As Jordan embraces digital transformation, fin-tech plays a crucial role in promoting financial inclusion, driving economic growth, and fostering innovation in the financial services industry.

#### (G)

**Green Entrepreneur** is an individual who establishes and oversees a business with a central emphasis on tackling environmental concerns or advancing sustainability. These entrepreneurs are committed to developing inventive solutions that mitigate environmental harm, preserve resources, and tackle urgent issues like climate change, renewable energy, waste management, or biodiversity conservation. They place equal importance on generating profits and achieving positive environmental or social impacts, striving to build enterprises that contribute to a sustainable future. In Jordan, green entrepreneurs play a crucial role in driving innovation, fostering economic growth, and addressing environmental challenges, supported by initiatives promoting sustainable business practices and environmental stewardship.

**Green Entrepreneurship** Refers to the practice of launching and operating businesses that prioritize environmental sustainability and social responsibility. These entrepreneurs are driven by the desire to find innovative solutions that address environmental challenges while also generating profits and aim to generate employment, improve livelihoods, and address environmental problems.



**Green Entrepreneurship Ideation** encompasses the establishment and management of businesses that prioritize environmental sustainability and social responsibility. These entrepreneurs are motivated by the pursuit of innovative solutions to address environmental challenges while simultaneously striving to generate profits. They seek to create employment opportunities, enhance livelihoods, and tackle environmental issues. In Jordan, green entrepreneurship plays a significant role in driving economic development, fostering job creation, and addressing environmental concerns, contributing to the country's sustainable development goals. Government support and initiatives aimed at promoting green entrepreneurship can further accelerate progress towards a more sustainable future.

**Green Entrepreneurship Skills** encompass a range of competencies essential for initiating and executing environmentally sustainable entrepreneurial projects. These skills include:

- Project Management: Ability to plan, organize, and execute green projects effectively, including setting goals, allocating resources, and managing timelines.
- Financial Management: Proficiency in managing finances, budgeting, cost analysis, and securing funding for green ventures.
- Green Technology Skills: Understanding and application of technologies that promote environmental sustainability, such as renewable energy systems, waste management solutions, and resource-efficient technologies.
- Marketing Skills: Knowledge of marketing strategies tailored to promote green products or services, including market research, branding, and communication with eco-conscious consumers.
- Technical Skills: Expertise in specific environmental solutions relevant to the project's objectives, such as sustainable agriculture practices, water conservation techniques, or eco-friendly product development.

In Jordan, developing these skills is crucial for fostering a vibrant ecosystem of green entrepreneurship, driving innovation, and addressing pressing environmental challenges while creating economic opportunities. Training programs, educational initiatives, and collaborations with industry experts can help individuals acquire and



enhance these skills, empowering them to lead successful green entrepreneurial ventures.

## (H)

**Home-Based Business** is a venture operated primarily from the owner's residence. While the size and scope of the business can vary widely, its defining characteristic is that its main office or operational center is situated within a residential property. This type of business encompasses diverse industries and activities, ranging from freelance services and online retail to consulting, crafting, or professional services. Home-based businesses offer flexibility and convenience for entrepreneurs while minimizing overhead costs associated with traditional brick-and-mortar establishments. In Jordan, home-based businesses contribute to economic growth and provide opportunities for individuals to pursue entrepreneurship from the comfort of their own homes.

### (P)

**Pitching For Entrepreneurs** refers to the strategic and concise presentation of their business idea, product, or startup to potential investors, stakeholders, or partners. This communication method aims to effectively convey the unique value proposition of the venture, generate interest, and secure support, funding, or partnerships. In Jordan's entrepreneurial ecosystem, pitching plays a vital role in showcasing innovative ideas and attracting the necessary resources and collaborations to drive growth and success. Whether presenting at networking events, pitch competitions, or investor meetings, entrepreneurs in Jordan leverage pitching as a key tool to garner attention, build relationships, and propel their ventures forward.



## **Cross-Cutting Terminologies**





#### **(B)**

**Biosolids** refer to sewage sludge that has undergone appropriate treatment and processing, including sludge stabilization, to meet regulatory standards for land application. These processed biosolids can be utilized as a beneficial soil amendment, serving as fertilizer to enhance and sustain soil fertility and promote plant growth. In Jordan, biosolids management plays a crucial role in the sustainable utilization of sewage resources, contributing to soil health, agricultural productivity, and environmental sustainability. Properly managed biosolids offer a valuable resource for improving soil quality and supporting agricultural practices while minimizing waste and conserving natural resources.

**Black water** refers to wastewater generated from toilets and urinals, containing human bodily waste and other organic matter. In some cases, wastewater from kitchen sinks, showers, or bathtubs, especially if they contain certain contaminants or additives, may also be classified as blackwater according to state or local regulations. Compliance with the definition of blackwater is essential for project teams, and it is important to adhere to the specific guidelines established by the relevant authority having jurisdiction in their respective areas. In Jordan, adherence to such regulations ensures proper handling and treatment of wastewater to safeguard public health and environmental quality.

#### (C)

**Centralized Wastewater Treatment Plant (CWWTP)** is a managed system comprising a network of sewers and a single treatment facility designed to collect and treat wastewater from designated service areas. These treatment plants serve the purpose of processing wastewater from various sources in a centralized location, offering efficiency and cost-effectiveness compared to treating wastewater at multiple individual sites. Additionally, centralized wastewater treatment facilities often handle the treatment of industrial wastewater residuals and by-products generated by other industries, both hazardous and non-hazardous, contributing to environmental protection and regulatory compliance.

**Circular Economy** is an economic system designed to optimize resource use and minimize waste generation. It represents a shift from the traditional linear model of production and consumption ("take-make-waste") to one that emphasizes the continuous circulation and reuse of materials, products, and services. In a



circular economy, resources are used efficiently, renewable inputs are prioritized, and products are designed for longevity and ease of repair. Additionally, byproducts and waste are recovered and repurposed to create new materials or products, thereby reducing the need for virgin resources, and mitigating environmental impact.

At the national level, Jordan has recognized the importance of Sustainable Consumption and Production (SCP), with a particular emphasis on advancing circular economy principles. This focus has extended to the private sector, where initiatives such as clothing banks, organized by entities like the Jordan Hashemite Charity Organization (JHCO), contribute to circularity by collecting and redistributing donated/unwanted clothing and toys, promoting reuse and waste reduction. These efforts align with Jordan's commitment to sustainability and resource conservation.

(D)

**Decentralized Wastewater Management** refers to an approach to wastewater treatment and disposal that involves smaller-scale, localized systems rather than relying solely on large, centralized treatment plants. This approach is often more suitable for suburban and rural communities, especially those located further away from urban centers. In such areas, the costs associated with pumping wastewater over long distances to centralized treatment plants may outweigh the potential cost savings achieved through economies of scale at those plants.

Instead of channeling all wastewater to a central facility, decentralized wastewater management involves the use of smaller treatment systems distributed throughout the community. These systems may include septic tanks, aerobic treatment units, constructed wetlands, or other technologies capable of treating wastewater at or near its point of generation.

**Decentralized Wastewater Treatment Plant (DWWTP)** refers to a facility designed to collect, treat, and either reuse or dispose of wastewater at or near its point of generation, particularly suitable for suburban and rural communities where the costs of transporting wastewater to centralized treatment plants are prohibitive. These systems, often employing technologies like septic tanks, aerobic treatment units, or constructed wetlands, offer localized treatment solutions tailored to the specific needs of dispersed populations or challenging terrains. Decentralized wastewater treatment not only reduces infrastructure costs but also enhances



resilience by providing redundancy and backup options, crucial in areas prone to disruptions. In Jordan, where remote communities may lack access to centralized wastewater treatment infrastructure, DWWTPs play a vital role in ensuring effective and sustainable wastewater management, safeguarding public health and the environment while supporting local development initiatives.

**Disinfection** refers to the process of cleaning and removing harmful microorganisms from treated wastewater (TWW) before its use in irrigation, particularly employing chemical agents to inactivate bacteria and other pathogens that may cause disease. This process is essential for raising the quality of TWW to meet irrigation standards and ensure the safety of agricultural practices. Disinfection plays a critical role in preventing the spread of infectious diseases and maintaining hygiene standards in various settings, including agricultural fields where TWW is reused for irrigation purposes. Common disinfectants used in Jordan include bleach, hydrogen peroxide, and alcohol, applied to surfaces, objects, and even in the air to effectively kill harmful microorganisms and protect public health and environmental quality.

**Domestic Wastewater** consists of various types of wastewater generated from household activities and residential settlements, including blackwater and greywater. Blackwater refers to wastewater from toilets and urinals, while greywater encompasses wastewater from kitchen sinks, showers, or bathtubs. Additionally, domestic wastewater may include other types of wastewater derived from domestic sources, all of which require appropriate treatment and management to protect public health and the environment. Jordanian authorities and communities prioritize the safe and efficient treatment of domestic wastewater to mitigate environmental pollution and ensure sustainable water management practices.

#### **(E)**

**Eco-logically Appropriate- Site Features** encompass natural elements that contribute to maintaining or restoring the ecological balance of the site. These features may include native or adapted vegetation, water bodies, exposed rock formations, un-vegetated ground, or other elements that are characteristic of the region's historic natural landscape. These site features not only enhance the ecological integrity of the area but also provide habitat value for local flora and fauna.



**Energy and Water Conservation** strategies tailored to minimize energy and water consumption, are particularly relevant in Jordan given its water scarcity and energy dependency concerns. These practices involve various measures such as using energy-efficient appliances, like solar and wind power, and reducing energy usage through efficient lighting and electronics management. Similarly, water conservation efforts include fixing leaks, installing low-flow showerheads and faucets, and employing rainwater harvesting systems. Additionally, reusing wastewater and managing groundwater effectively are crucial components of water conservation in Jordan.

#### (G)

**Graywater** refers to the relatively clean wastewater generated from household activities such as bathing, laundry, and dishwashing, excluding toilet waste. Graywater typically contains fewer contaminants compared to black water and can be reused for non-potable purposes like irrigation, toilet flushing, and clothes washing. In Jordan, maximizing the reuse of graywater aligns with efforts to conserve water resources and promote sustainable practices.

**Green Collar Job** employment opportunities are pivotal in fostering environmental sustainability and supporting Jordan's transition to a greener economy. These jobs focus on promoting environmental conservation, sustainable practices, and the adoption of renewable technologies. Green-collar jobs encompass various sectors, including renewable energy, waste management, sustainable agriculture, eco-tourism, and green construction. By creating and supporting green-collar jobs, Jordan aims to address environmental challenges, reduce greenhouse gas emissions, and stimulate economic growth in sectors aligned with sustainability goals. These jobs contribute to building a skilled workforce capable of driving innovation and implementing environmentally friendly solutions to pressing environmental issues, thereby promoting a more sustainable future for Jordan and its communities.

**Green Jobs** encompass a diverse range of sectors, including traditional industries like manufacturing and construction, as well as emerging sectors such as renewable energy and energy efficiency. These jobs play a crucial role in preserving and restoring the environment by improving energy and resource efficiency, reducing greenhouse gas emissions, minimizing waste and pollution, and

supporting ecosystem protection and restoration. At the enterprise level, green jobs involve producing goods or providing services that benefit the environment, such as green buildings and clean transportation. However, it's important to note that while the outputs of green jobs may be environmentally friendly, not all processes and technologies used in their production may be considered green.

**Green Skills** are the knowledge, abilities, values, and attitudes required to foster a sustainable and resource-efficient society. In the context of green occupations, these skills are crucial for addressing environmental challenges and promoting sustainability across various sectors. The Green General Skills Index identifies several key groups of work tasks essential for green occupations, including engineering and technical skills, science skills, operation management skills, and monitoring skills. Additionally, soft skills play an increasingly important role, particularly those related to design thinking, creativity, adaptability, resilience, and empathy. These soft skills are regarded as critical for effectively navigating complex environmental issues and driving positive change toward sustainability.

### **(I)**

**Indirect Reuse**, particularly in the context of water treatment and reuse, involves schemes where treated wastewater (TWW) is blended with other water sources, primarily surface water, for purposes like agricultural irrigation. This process, also known as indirect potable reuse (IPR), entails treating wastewater to a level where it can be safely discharged into the environment, such as rivers or aquifers, and subsequently extracted and treated again to produce drinking water. In regions facing water scarcity or high costs, IPR is gaining popularity as a method to augment drinking water supplies. However, it necessitates careful management and monitoring to ensure the water's quality and absence of contaminants, making it a safe and effective approach for water reuse.

### (R)

**Reclaimed water** refers to treated wastewater that meets specified quality standards and can be reused under controlled conditions for beneficial purposes. This reclaimed water undergoes treatment processes to remove contaminants and pathogens, making it suitable for various non-potable uses such as irrigation of landscapes, parks, and golf courses, industrial processes, and replenishing



groundwater aquifers. It is an essential resource in water-stressed regions, helping to conserve freshwater supplies and reduce the strain on traditional water sources. However, proper management and monitoring are crucial to ensure the safety and effectiveness of reclaimed water reuse applications.

**Reusing Wastewater** involves treating and purifying wastewater to render it safe for reuse. The treated water can serve various purposes, including irrigation, industrial processes, and environmental rehabilitation. This practice helps alleviate pressure on freshwater sources and minimizes the volume of wastewater discharged into the environment. Additionally, it can lead to cost savings by reducing the need for extensive water treatment and supply infrastructure.

#### (W)

The water, Energy, and Agriculture Nexus Approach is a comprehensive strategy for addressing sustainable development challenges by considering the interconnectedness of multiple variables simultaneously. This approach acknowledges the intricate relationships among water, energy, agriculture, and natural ecosystems. Unlike traditional sectoral approaches that focus on individual resource security, the nexus approach recognizes that efforts to enhance one sector's sustainability may impact others negatively. Therefore, it emphasizes analyzing interlinkages, synergies, and trade-offs to identify solutions that promote water, food, and energy security while minimizing adverse impacts on waterdependent ecosystems.

**Waste-to-energy plant** facilities are designed to convert waste materials into electricity through incineration processes. In these plants, trash is burned at high temperatures, generating heat that is then used to produce high-pressure steam. This steam drives turbines, which in turn generate electricity. The electricity generated is typically sold to public utility companies under long-term contracts. Despite producing energy, waste-to-energy plants also produce residues from the incineration process, which must be disposed of. Typically, this residue is sent to landfills for final disposal.

**Wastewater Management** encompasses a range of practices aimed at minimizing pollution at its source, collecting and removing contaminants from wastewater streams, and effectively utilizing or disposing of treated wastewater and its byproducts. This comprehensive approach involves preventive measures to reduce pollution before it enters wastewater streams, such as implementing best management practices in industries and households. It also includes the collection and treatment of wastewater through various processes to remove contaminants and pathogens, ensuring that the treated water meets quality standards for safe discharge or reuse. Additionally, wastewater management involves the responsible disposal or beneficial use of treated wastewater and its byproducts, such as using treated water for irrigation or industrial processes, or safely disposing of residual sludge or biosolids.

**Wastewater Treatment Plant (WWTP)** is a specialized facility designed to treat wastewater using a combination of physical (mechanical), chemical, and biological processes. The primary objective of a WWTP is to reduce the concentration of organic and inorganic contaminants present in wastewater to acceptable levels before its discharge into the environment or reuse for beneficial purposes. The treatment processes employed in a WWTP typically include preliminary treatment to remove large debris and grit, followed by primary treatment to settle out suspended solids and grease. Subsequently, secondary treatment involves biological processes such as activated sludge or biological filtration to further remove organic matter and nutrients. Finally, tertiary treatment may be employed to remove remaining contaminants through processes like filtration, disinfection, or chemical precipitation.

**Water Reuse** involves the controlled utilization of reclaimed water for beneficial purposes, such as agricultural irrigation, landscape maintenance, industrial processes, or groundwater recharge. Reclaimed water, typically sourced from treated wastewater or other non-potable water sources, undergoes thorough treatment to meet specific quality standards before being reused. This process helps conserve freshwater resources and mitigate the strain on existing water supplies, particularly in regions facing water scarcity or drought conditions.



#### Conclusion

The Green Growth Terminology Guidebook is a testament to Good Neighbors International's commitment to fostering environmental sustainability and resilience in Jordan. This guidebook aims to bridge the knowledge gap and empower a diverse array of stakeholders, including policymakers, entrepreneurs, educators, and students. Through this comprehensive resource, users can enhance their understanding of complex green growth concepts, enabling them to make informed decisions that align with both national and global environmental goals.

The significance of this guidebook extends beyond mere definitions. It represents a strategic effort to promote sustainable practices and innovative solutions tailored to Jordan's unique environmental challenges. By demystifying green growth terminology, we aim to inspire proactive participation in environmental stewardship, fostering a culture of sustainability that permeates all sectors of society.

As Jordan continues to navigate the complexities of climate change and resource scarcity, the insights and knowledge encapsulated in this guidebook will be instrumental in driving forward-looking initiatives and policies. By embracing the principles outlined within, communities can work collectively towards a resilient, sustainable future that harmonizes economic development with ecological preservation.

In conclusion, The Green Growth Terminology Guidebook is more than just a reference tool; it is a catalyst for change, encouraging a collaborative approach to achieving sustainable development. We extend our gratitude to all contributors and partners whose expertise and dedication have made this guidebook a reality. We encourage everyone to use this guide, apply its principles, and contribute to building a greener, more sustainable future for Jordan. Together, we can make significant strides in combating climate change and promoting sustainability.

#### **Good Neighbors International in Jordan**

