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MODULES

Conclusion Environmental Social Governance in Urban Planning (ESG in UP)

Kulliyyah of Architecture & Environmental Design



Learning Outcome



MLO1: Demonstrate a comprehensive understanding of ESG principles and their direct application to sustainable urban planning practices.



MLO2: Develop practical strategies to integrate ESG into urban planning processes, specifically targeting:

- Reduction of **carbon emissions** through compact, transit-oriented development
- Enhancement of **urban biodiversity** via green corridors and nature-based solutions
- Improvement of **resource efficiency** through circular economy approaches



MLO3: Prioritise urban development strategies that support business viability, attract green investment, and align with national development agendas like Malaysia Madani.

DETAIL MODULE CONTENT



Module 1. Introduction to ESG in Urban Planning

- Foundational Concept of ESG, Context & Evolution, ESG in the Cities, the How, Performance Metrics & Evaluation, Practical Implementation, Deep Dive ESG



Module 3: Social Dimensions

- ESG 101: Social Context & Principle, Identification & Prioritisation, The Practice, The Reality (Framework & Application), Synthesis & Conclusion



Module 2. Environmental Dimensions

- The WHY, ESG framework for UP, Practical strategies for Integration, Measurement, Reporting & Governance, Consolidated Case Study



Module 4: Governance Frameworks

- Defining ESG Governance in UP, Structure & Function, Core Pillars, Regulatory Framework, Implementation & Real World Application



Conclusion

- Foundation Why It Matters, National Strategic Context, The How-To, Financing & Market Adoption, Implementation & Action, Challenges & Conclusion



I: Foundations & Why It Matters



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I: Foundations & Why It Matters

- **Introduction to Urban Planning:** Move the slides defining urban planning and its practitioners to the beginning.
- **ESG Principles:** Define the Three Pillars (Environmental, Social, and Governance)
- **The "Why":** Include the slide on ESG supporting long-term thinking and the "Who is Affected" stakeholder slide here to establish the "why" and the "who."

URBAN PLANNING



A broader category that includes different sub-fields such as **land-use planning, zoning, economic development, environmental planning, and transportation planning.**



Creating the plans requires a thorough understanding of **penal codes and zonal codes of planning.**



Urban planning is an interdisciplinary field that includes **civil engineering, architecture, human geography, politics, social science and design sciences.**



Practitioners of urban planning – research and analysis, strategic thinking, engineering architecture, urban design, public consultation, policy recommendations, implementation and management.



Related to the field of **urban design** to design streets, parks, buildings and other urban areas.



Urban planners work with civil engineering, landscape architecture, architecture, and public administration to achieve **strategic, policy and sustainability goals.**



To understand how ESG in Malaysia affects property decisions, it is essential to examine each pillar and its implications.



ENVIRONMENTAL (E)

The environmental pillar focuses on how organisations manage their impact on natural resources and climate risks. In Malaysia, this includes:



Carbon emissions and energy efficiency

Reducing emissions and improving energy performance.



Water management and waste reduction

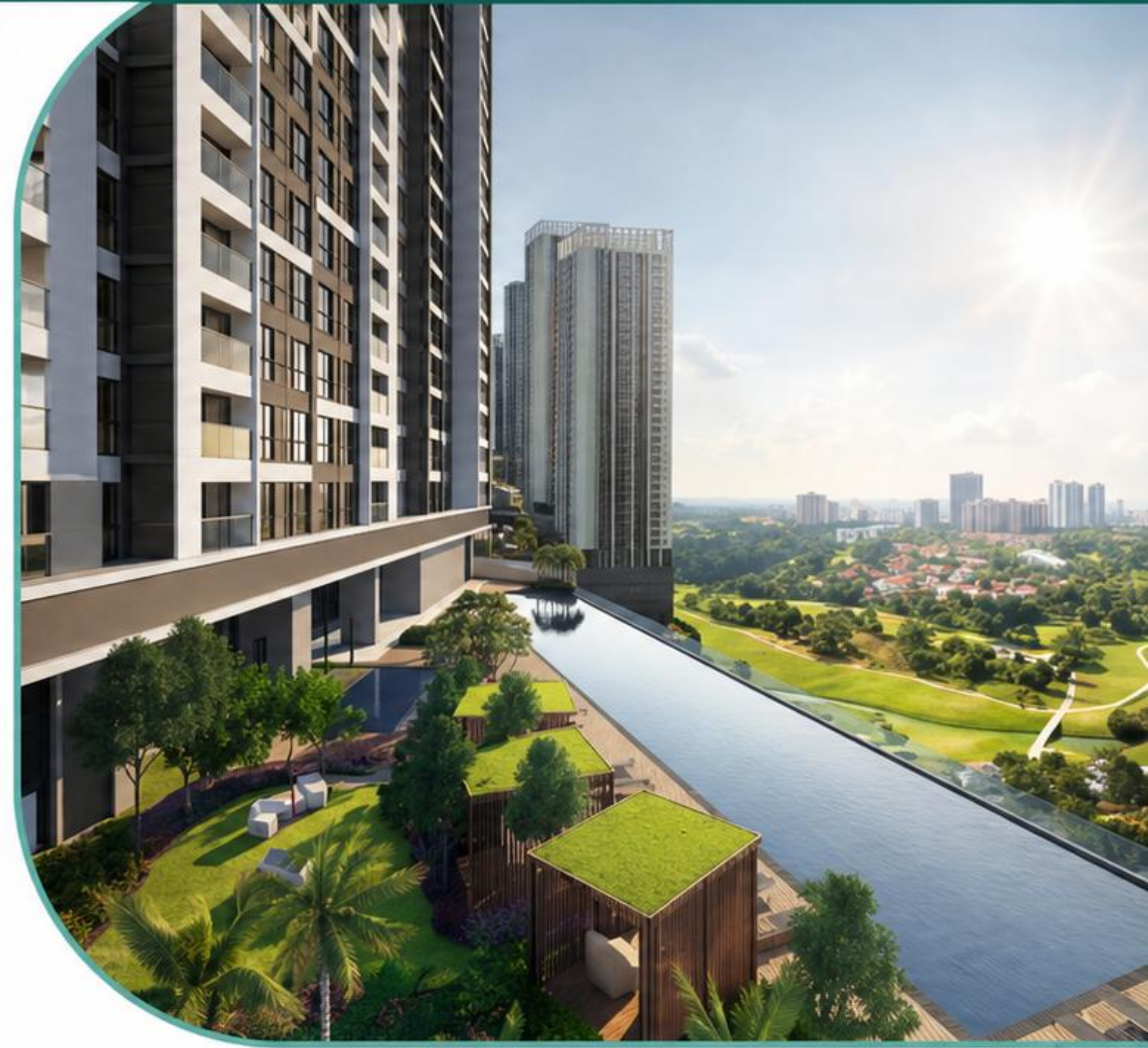
Conserving water and minimising waste generation.



Green building design and climate resilience

Designing sustainable, resilient, and future-ready buildings.

For property developers, environmental compliance increasingly determines access to green financing, planning approvals, and tenant demand. Energy-efficient buildings and sustainable infrastructure are no longer optional, they are becoming market expectations.





Social (S)

The social pillar addresses how organisations manage relationships with employees, communities, and stakeholders. Within ESG in Malaysia, this includes:



Fair labour practices and worker welfare



Workplace safety and diversity



Community engagement and social impact

In real estate, social considerations influence development approvals, community acceptance, and long-term asset viability. Projects that integrate inclusive design, worker safety, and community needs tend to face fewer regulatory and reputational risks.



What are the strategies for companies to start their **ESG Journey**?

Companies can start their ESG journey by focusing on **four key strategic areas**:



1 Climate Change

Policy-driven low-carbon transition, climate financing & resilience planning



2 Natural Capital

Sustainable resource management (water, forests, biodiversity protection)



3 Pollution & Waste

Structured waste systems with growing e-waste management, limited circular economy



4 Environmental Opportunities

Expanding renewable energy, green infrastructure, and low-carbon investments



Key Takeaway: A clear strategy across these areas enables companies to manage risks, seize opportunities, and create long-term value through sustainable growth.



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STRATEGIES FOR COMPANIES CONTRIBUTE TO THE SUCCESS OF ESG IN URBAN PLANNING

01



Sustainable Practices:

Implementing eco-friendly practices in their operations, such as reducing waste and energy consumption, can help set industry standards and influence local policy.

02



Partnerships:

Collaborating with local governments, NGOs, and community organizations to develop projects that address social equity and environmental sustainability.

03



Investment in Green Infrastructure:

Funding or participating in the development of green spaces, renewable energy projects, and sustainable transportation systems that enhance urban resilience.



Malaysia's first **EDGE Zero Carbon** development

Gamuda Cove Wetlands Arboretum Centre (WAC) is Malaysia's first development to have earned the EDGE Zero Carbon certification. The centre exemplifies sustainable development by integrating conservation, education, and climate-conscious design. This milestone was celebrated and commended by representatives from the International Finance Corporation and the World Bank.

Key features of the arboretum include:



Operating with
100%
energy savings
against the baseline



Generating
ZERO
carbon emissions
from energy



Powered entirely by
on-site renewable
energy
14,076
kWh/year



Maintaining a low
energy intensity of
31
kWh/m²/year

This recognition not only marks a significant milestone in Gamuda's journey towards achieving net-zero carbon emissions by 2060 but also demonstrates how **smart infrastructure** can flourish alongside **ecological conservation**.

Strategies for Companies Contribute to The Success of ESG in Urban Planning



04



Stakeholder Engagement: Actively involving community members in decision-making processes to ensure that projects meet local needs and foster social equity.

05

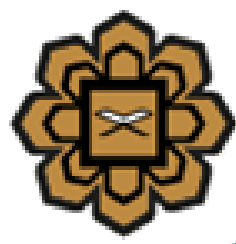


Transparency and Reporting: Committing to transparent reporting on ESG goals and progress, which builds trust and accountability within the community.

06



Innovation: Developing new technologies or services that promote sustainability, such as smart city solutions or energy-efficient building materials.



Rapid Urbanization

- Smart Growth
- Transit-Oriented Development (TOD)

Social Inequality

- Equitable Land Use Planning
- Community Engagement
- Inclusive Economic Development

Traffic Congestion and Air Pollution

- Invest in Public Transportation
- Promote Active Transportation
- Congestion Pricing

Climate Change Resilience

- Climate-Resilient Infrastructure
- Flood Mitigation
- Green Roof and Permeable Surfaces

Challenges and Solutions for Sustainable Urban Planning

Housing Affordability

- Affordable Housing Initiatives
- Rent Control
- Mixed-Income Housing

Community Resistance to Change

- Public Awareness and Education
- Incentives
- Phased Implementation

Environmental Degradation

- Green Infrastructure
- Sustainable Building Practices
- Brownfield Redevelopment

Limited Resources

- Public-Private Partnerships
- Grant and Funding Opportunities
- Resource Optimization

II: National Strategic Context



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II: National Strategic Context

- **Malaysia's Vision:** Present the Ekonomi MADANI, 13MP, and "Bandar Madani" strategies.
- **Updated Climate Policy:** Follow this immediately with the Malaysia Climate Policy 2.0 updates to show how national goals align with global commitments.

Malaysia's Current Development Strategies



Urban development in Malaysia is currently guided by the Ekonomi MADANI framework and the 13th Malaysia Plan (13MP, 2026–2030), which focuses on **“Reshaping Development”** through **sustainability, innovation, and digital transformation**.

Strategies to support business viability and green investment include:



1

High-Growth, High-Value (HGHV) Industrial Ecosystems



Targeted Green Investment: Focus on attracting investments in advanced manufacturing, renewable energy, AI-driven services, and digital technology to achieve net-zero ambitions by 2050.



Industrial Transformation: Accelerate the New Industrial Master Plan (NIMP) 2030, enhancing economic complexity and creating high-skilled jobs in high-value E&E and rare earths sectors.



Catalytic Nodes: Diversify growth beyond major cities by developing catalytic hubs such as the Johor-Singapore Special Economic Zone (JS-SEZ), Kulim Hi-Tech Park, and Penang Silicon Island.

2

Sustainable Urban Planning & Infrastructure



Bandar MADANI Framework: Implement the "Bandar Madani" concept, focusing on urban prosperity rooted in values, ethics, and sustainability.



Transit-Oriented Development (TOD): Prioritize TOD projects to enhance connectivity and create sustainable public transport networks.



Green Infrastructure & Technology: Integrate AI-driven smart infrastructure, renewable energy, and green mobility, as exemplified by the Kota MADANI smart city project in Putrajaya.



Urban Regeneration (URRA): Introduce the Urban Redevelopment Act (URRA) to modernize cities, improve aging infrastructure, and increase the availability of affordable housing by 2025.



SUSTAINABILITY



INNOVATION



DIGITAL TRANSFORMATION



GREEN GROWTH



13MP
2026–2030





MLO 3

How to prioritize urban development strategies that support business viability, attract green investment, and align with national development agendas like Malaysia Madani?



SUPPORT BUSINESS VIABILITY

Create competitive, resilient, and sustainable urban environments.



ATTRACT GREEN INVESTMENT

Build investor confidence through sustainable infrastructure, policies, and incentives.



ALIGN WITH NATIONAL AGENDAS

Advance inclusive growth, environmental stewardship, and community well-being under Malaysia Madani.





MALAYSIA UPDATES CLIMATE POLICY TO ACHIEVE 2030 CARBON GOALS



4. INTEGRATED POLICIES

Effective governance frameworks are crucial, ensuring that climate resilience measures are embedded in urban policies and regulations to enhance accountability and transparency in decision-making.



5. MONITORING AND EVALUATION

Establishing metrics to assess the effectiveness of climate resilience strategies is essential for continuous improvement and adaptation.



Supporting Net Zero and Climate Change Act by 2025

National Climate Change Policy 2.0

-  Aims for a 45% reduction in economy-wide carbon intensity by 2030 (compared to 2005 levels)
-  Sets a clear roadmap towards achieving net-zero greenhouse gas emissions by 2050
-  Introduces guidelines for governance, low-carbon development, climate adaptation, and financing
-  Malaysia to highlight its climate initiatives at UNFCCC's COP29, November 2024

III: The ESG Investment-Ready Index (The "How-To")



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III: The ESG Investment-Ready Index (The "How-To")

- **Framework Introduction:** Introduce the consolidated "ESG Investment-ready Index" matrix.
- **Sectoral Deep Dives:** Group all the specific Malaysia context slides by theme:
 - **Climate & RE: Pollution, Waste & Natural Capital:.**
 - **Governance & Smart Services:.**
- **Summary Indicators:** Use the summary E, S, and G indicator slides to wrap up this section.

WHAT CAN INVESTORS POTENTIALLY GAIN FROM ESG INVESTING?



Source: <https://www.manulifeim.com.my/insights/5-benefits-of-esg-investing.html>

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Part 2 - ESG Investment-ready Index

3 Pillars	10 Themes	37 Key Issues	
Environment	Climate Change	- Carbon Emissions - Product Carbon Footprint	- Financing Environmental Impact - Climate Change Vulnerability
	Natural Capital	- Water Stress - Biodiversity & Land Use	Raw Material Sourcing
	Pollution & Waste	- Toxic Emissions & Waste - Packaging Material & Waste	Electronic Waste
	Environmental Opportunities	- Opp's in Clean Tech - Opp's in Green Building	Opp's in Renewable Energy
Social	Human Capital	- Labor Management - Health & Safety	- Human Capital Development - Supply Chain Labor Standards
	Product Liability	- Product Safety & Quality - Chemical Safety - Financial Product Safety	- Privacy & Data Security - Responsible Investment - Health & Demographic Risk
	Stakeholder Opposition	Controversial Sourcing	
	Social Opportunities	- Access to Communications - Access to Finance	- Access to Health Care - Opp's in Nutrition & Health
Governance	Corporate Governance*	- Board* - Pay*	- Ownership* - Accounting*
	Corporate Behavior	- Business Ethics - Anti-Competitive Practices - Tax Transparency	- Corruption & Instability - Financial System Instability

Source: MSCI (2017a) [cite: 1]

Malaysia Context:



Malaysia committed to **45% carbon intensity reduction by 2030** under the Paris Agreement.



Implementation of **Low Carbon Cities Framework (LCCF)** in cities like Putrajaya & Iskandar Malaysia.



Introduction of **Voluntary Local Reviews (VLRs)** to align cities with SDGs.



Expansion of **green buildings & energy-efficient infrastructure**.



Malaysia is moving toward **carbon accounting, disclosure, and low-carbon urban planning**, though carbon credit registration at city level is still emerging.



Malaysia is advancing toward an **investment-ready ESG ecosystem** through climate action, strengthening resilience, sustainability, and long-term value creation.

PUTRAJAYA: PIONEER GREEN CITY

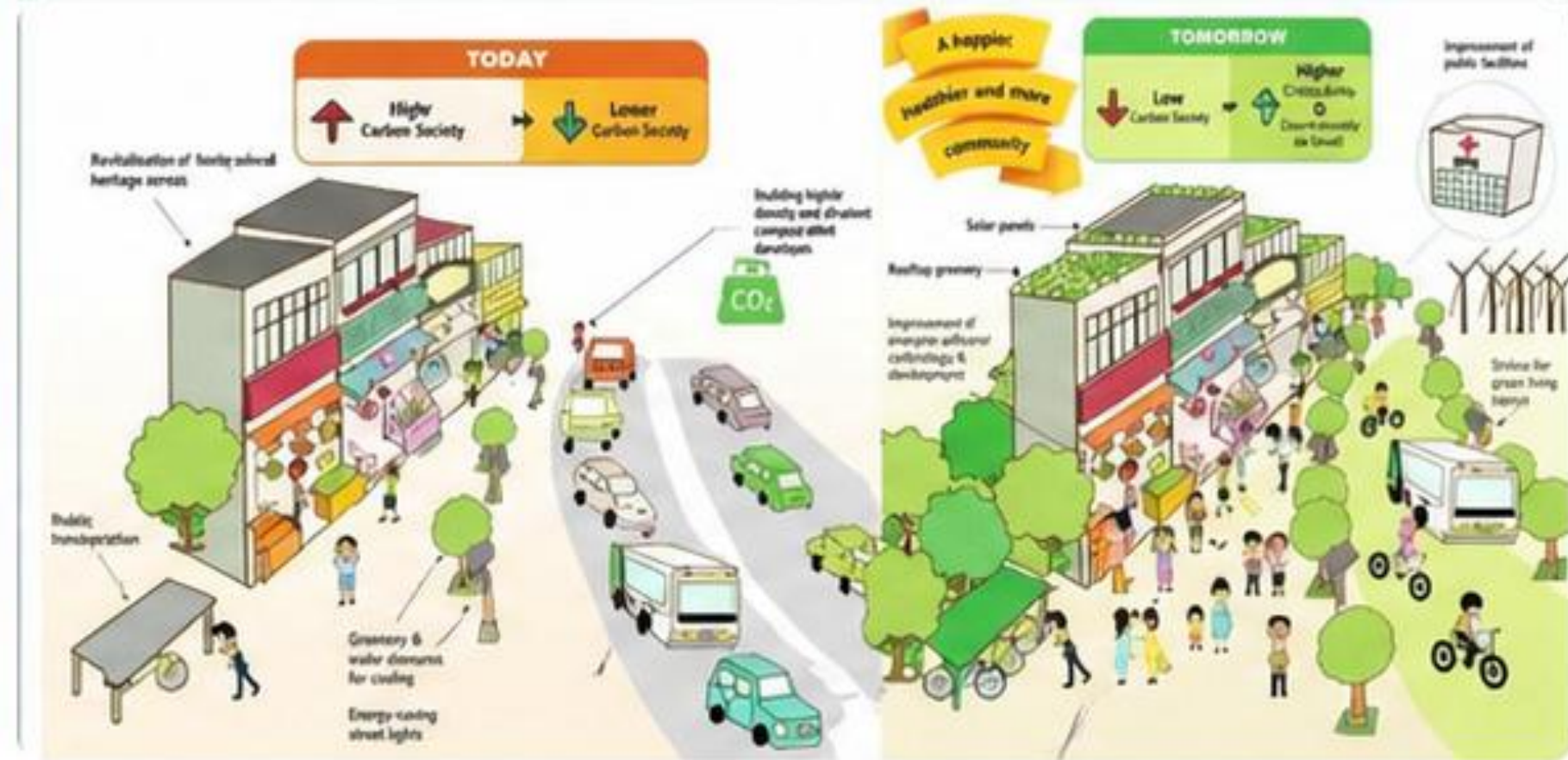


<https://una.city/nbs/putrajaya/putrajaya-pioneer-green-city>



<https://www.solarsunyield.com/latestnews/nid/167412/>

LOW CARBON SOCIETY DEVELOPMENT FOR ISKANDAR MALAYSIA



https://www.researchgate.net/publication/326630869_The_Viability_of_an_Integrative_Framework_for_Urban_Design_and_Regional_Environmental_Justice/figures?lo=1



<https://www.solarsunyield.com/latestnews/nid/173471/>



MALAYSIA CONTEXT



National Energy Transition Roadmap promotes **solar, RE integration, and decentralised energy**



Programs like **Net Energy Metering (NEM)** encourage solar adoption



Smart city initiatives include **energy-efficient lighting & smart infrastructure**



Utility companies like **Tenaga Nasional** are advancing **ESG** energy transition



Malaysia adopts **smart energy systems and solar rooftops**, though less visible at the traffic-system scale.

EXAMPLES & INITIATIVES



Solar Rooftop Installation

<https://theedgemalaysia.com/node/760872>



Floating Solar Project

<https://www.tnb.com.my/sustainability/esg-stories-tnb-hybrid-hydro-floating-solar>

Solar LED Traffic Light Signal Flashing



SPECIFICATIONS	
Material	PC,UV Resistant
Solar Panel	5W / 9V
Battery	6V / 5AH
Beam Angle	30°
CCT	Yellow / Blue
Light Intensity	≤4Scd
Wave Length	590±5nm
Dimension	350*350*100mm
IP Rate	IP55

<https://www.lightzone.com.my/showproducts/productid/6342172/cid/621782/solar-led-traffic-light-signal-flashing-light/>



Smart & Solar-Powered Lighting Solutions

<https://says.com/my/tech-news/subang-jaya-ai-traffic-lights>



Malaysia is steadily advancing its renewable energy ecosystem through supportive policies, innovative technologies, and smart infrastructure—strengthening its position as an **ESG-aligned and investment-ready market**.



OVERVIEW

The National Energy Transition Roadmap (NETR), launched in July 2023, is a pivotal initiative driving Malaysia's sustainable energy goals, aiming to increase the renewable energy (RE) mix to 70% of the nation's installed capacity by 2050.



KEY DEVELOPMENT

TNB Power Generation Sdn. Bhd. (TNB Genco) has been entrusted to spearhead one of the flagship catalysts initiatives of developing potential 2.5 GW Hybrid Hydro-Floating Solar (HHFS) photovoltaic (PV) at Genco Hydro reservoirs.

Memorandum of Understanding with Terengganu Incorporated Sdn Bhd and Perbadanan Kemajuan Negeri Perak has been signed in June and August 2023 with aims to assess the potential for developing floating solar projects.



KEY HIGHLIGHTS



70%

RE mix target of Malaysia's installed capacity by 2050 (NETR)



2.5 GW

Potential Hybrid Hydro-Floating Solar (HHFS) PV project



MoU Signed

With Terengganu Incorporated Sdn Bhd (June 2023) and Perbadanan Kemajuan Negeri Perak (August 2023)



Genco Hydro Reservoirs

Site for potential floating solar projects



Source:

<https://www.tnb.com.my/sustainability/esg-stories-tnb-hybrid-hydro-floating-solar>

ESG Investment-ready Index (Pollution & Waste)

Building a Circular and Sustainable Waste Future for Malaysia



MALAYSIA CONTEXT



National solid waste managed by companies like **Alam Flora**.

STRUCTURED. INNOVATIVE. IMPROVING.

Malaysia is advancing towards a smarter and more circular waste management ecosystem.



Daily solid waste generated in Malaysia
~38,000 tonnes¹
(2022 estimate)

Key Players

Alam Flora
Appreciating LIFE

Alam Flora is a leading concessionaire in solid waste management services across Malaysia.



Effective waste management reduces pollution, conserves resources, and drives sustainable urban growth.



GROWING FOCUS AREAS



E-WASTE RECYCLING PROGRAMMES

Expanding collection and recycling of electronic waste to recover valuable materials and reduce environmental impact.



WASTE-TO-ENERGY INITIATIVES

Turning non-recyclable waste into energy to reduce landfill dependence and support renewable energy goals.



SMART WASTE SOLUTIONS

Smart waste solutions (IoT bins, route optimisation) emerging in cities to improve collection efficiency and reduce operational costs.



CIRCULAR ECONOMY INTEGRATION

Promoting 3R practices, extended producer responsibility, and material recovery to close the loop and create value.



STRUCTURED WASTE CONCESSION SYSTEMS

Malaysia has structured waste concession systems that ensure efficient service delivery, compliance, and accountability, while enabling long-term investments in infrastructure and innovation.



REGULATED & ACCOUNTABLE

Concession frameworks ensure service standards, monitoring and compliance.



ENABLING INVESTMENT

Creates a stable environment for private investment in waste infrastructure.



DRIVING PERFORMANCE

Encourages efficiency, innovation and continuous improvement in service delivery.



SUPPORTING SUSTAINABILITY

Strengthens the foundation for a circular economy and a cleaner, healthier Malaysia.



Smart waste management today builds a cleaner environment, a stronger economy, and a better tomorrow.

¹ Source: Department of Environment (DOE) Malaysia, 2022

ESG INVESTMENT-READY INDEX (POLLUTION & WASTE)

Malaysia Case: Advancing Sustainable Waste Management



Malaysia is transforming its waste management sector into a **technology-driven, low-carbon, and circular economy** system, strengthening its ESG investment readiness and building a cleaner, more sustainable future.



305
NEW WASTE
MANAGEMENT
UNITS DEPLOYED



LOWER
EMISSIONS



STRONGER
CIRCULAR
ECONOMY



ENHANCED
ENVIRONMENTAL &
SAFETY STANDARDS



1

MODERNISING WASTE MANAGEMENT SYSTEMS



Introduction of upgraded waste collection fleet



Adoption of digital solutions (e.g., super-app integration)



Improved operational efficiency, safety, and service delivery



IMPACT: Faster operations, better service coverage, improved productivity

2

LOW-CARBON & EFFICIENT OPERATIONS

FLEET EXPANSION: 305 NEW UNITS

154
COMPACTOR
TRUCKS



37
POWERPRESS
VEHICLES



77
ARMROLL
TRUCKS



Reduced emissions through advanced engine technologies



Optimised routing systems to minimise carbon footprint



IMPACT: Lower GHG emissions, cost-efficient operations, smarter logistics

3

ENHANCING ENVIRONMENTAL & SAFETY STANDARDS



Compliance with global environmental standards



Improved leachate management systems



Stronger focus on durability and odour control



IMPACT: Reduced environmental risks, better public health, stronger compliance

4

CIRCULAR ECONOMY & E-WASTE INITIATIVES

SMALL E-WASTE ITEMS



- Phones
- Computers
- Cameras
- Appliances



Drop-off at designated outlets

LARGE E-WASTE ITEMS



- TVs
- Refrigerators
- Washing Machines



Door-to-door collection services available



IMPACT: Increased recycling rates, reduced landfill dependency, and resource recovery & reuse



KEY INSIGHT

“Malaysia’s waste sector is transitioning toward a technology-driven, low-carbon, and circular economy model—enhancing ESG investment readiness.”





Malaysia Context

- **River of Life (Kuala Lumpur)**
Urban river rehabilitation
- **Flood mitigation & Integrated River Basin Management**



Emphasis on:

- ✓ Water security
- ✓ Nature-based solutions
- ✓ Increasing adoption of **ecosystem-based planning**



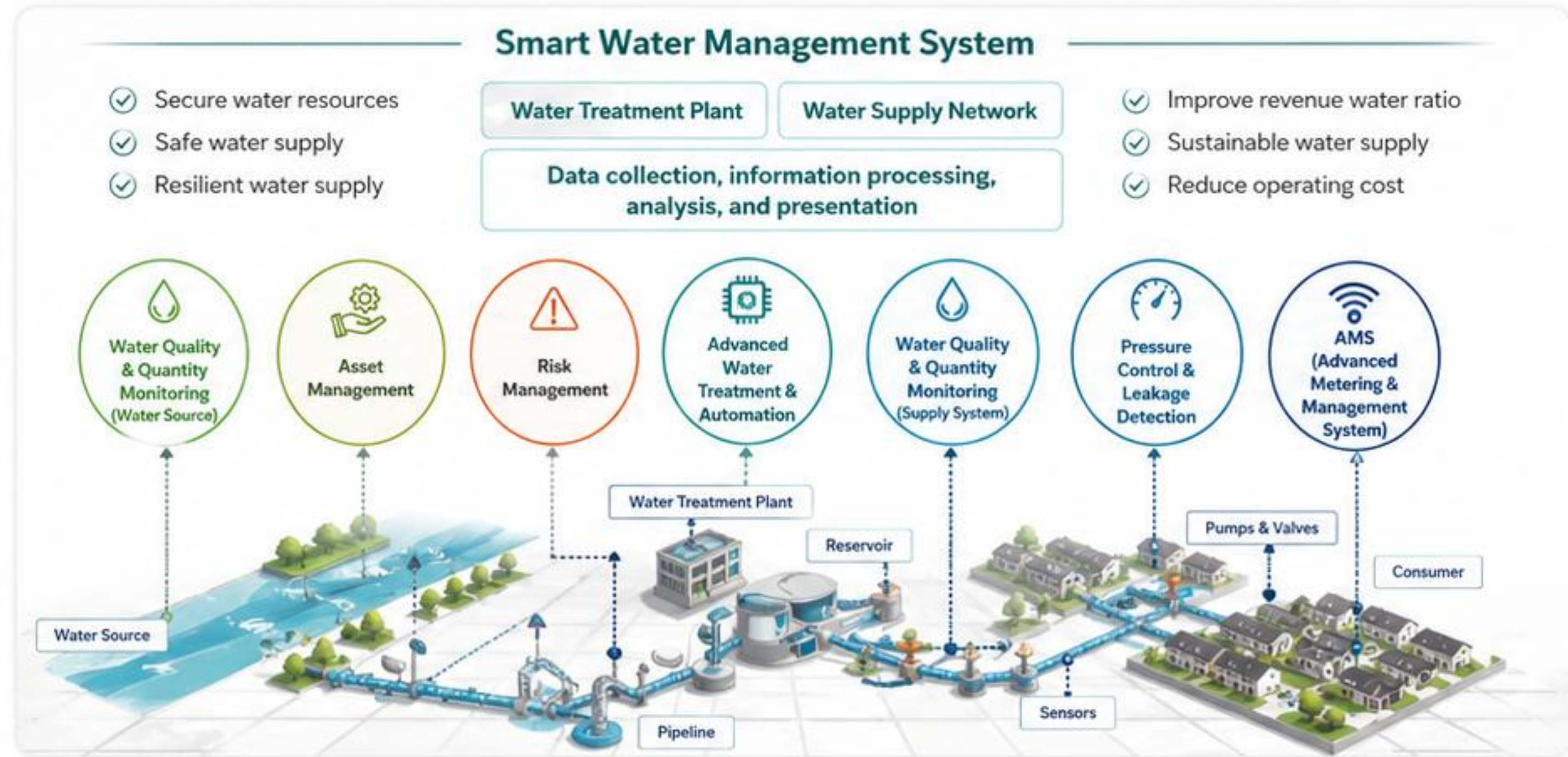
Malaysia focuses more on **flood resilience + river restoration** rather than low-cost water innovation narratives.



Proper drainage will minimise flood damage

The Star, May 9, 2023

Effective drainage and river management remain critical to reducing flood risks in communities.



Source: You Kwangtae, CEO, UnU Civil & Environmental Engineering, Republic of Korea



Smart Applications in the Water Sector

MALAYSIA CONTEXT

Strong ESG governance driven by:

- 1  **Bursa Malaysia Sustainability Reporting Framework**
Promotes consistent, comparable, and reliable sustainability disclosures.
- 2  **Anti-corruption enforcement (MACC)**
Ensures integrity and accountability in public and private sectors.
- 3  **Increasing digital governance & transparency systems**
Strengthens data integrity, access, and public trust.
- 4  **Local authorities (e.g., Putrajaya Corporation) manage:**
sanitation, planning, environment services for sustainable communities.



Malaysia emphasises **structured governance frameworks**, though implementation varies across municipalities.

NATIONAL SUSTAINABILITY REPORTING FRAMEWORK (NSRF)

The NSRF is meant to ensure corporate Malaysia provides consistent, comparable and reliable sustainability information to enhance Malaysia's competitiveness and attractiveness to investors.

Implementation of the NSRF will be through a phased and developmental approach, supporting widespread adoption and continuous improvement in the quality of disclosures. The NSRF attempts to follow the ISSB Standards closely as well as providing the same reliefs prescribed by the ISSB, subject to the respective regulators' requirements. However, given the varying levels and maturity in sustainability practices and reporting, the NSRF spreads the adoption timeline to take into account the anticipated challenges.

Climate-First Approach

Prioritising climate-related disclosures to support Malaysia's net-zero goals, with a focus on transparency and accountability. Companies are encouraged to provide clear, accurate data on their climate risks and opportunities to facilitate informed decision-making.



Phased Implementation

The NSRF provides a phased approach to sustainability reporting, allowing companies to gradually adopt the ISSB standards. This approach ensures that companies of different sizes and levels of readiness can implement reporting processes in stages, giving them time to build capacity and align with global standards.



 <https://www.sc.com.my/nsrf>



MACC investigates RM1.1 billion govt deal with overseas firm

According to sources, the investigation follows complaints from several NGOs alleging that the agreement was hastily arranged and biased and could potentially cause financial implications to the government.



Malaysia Context: Development of Smart City Framework (KPKT)

Smart applications include:



Waste monitoring systems



Public complaint apps



Traffic & mobility platforms



Malaysia is implementing
integrated smart city dashboards,
though fragmented across cities.



Integrated smart services enhance accountability, efficiency, and data-driven decision-making for sustainable urban governance.

1.2 ESG Considerations



Integration of Climate Risks:

Climate change is a critical factor in ESG assessments. Companies and governments are increasingly recognizing the need to **evaluate and disclose climate-related risks**, which can affect financial performance and operational stability.



Investment in Resilience:

Financial instruments, such as green bonds, are being utilized to fund climate adaptation projects. These investments not only support sustainable development but also align with the growing demand for responsible investment practices.



Regulatory Frameworks:

Governments are implementing regulations that require companies to disclose their climate risks and resilience strategies. This trend is pushing businesses to adopt more sustainable practices and improve their ESG reporting.



ENVIRONMENTAL (E)

Focus: Transition, Resource Efficiency, Circularity



Climate Change



Policy-driven low-carbon transition, climate financing & resilience planning



Natural Capital



Sustainable resource management (water, forests, biodiversity protection)



Pollution & Waste



Structured waste systems with growing e-waste management, limited circular economy



Environmental Opportunities



Expanding renewable energy, green infrastructure, and low-carbon investments



Social (S)

Focus: Inclusivity, Capacity, Digital Responsibility



1 Human Capital

→ Workforce upskilling, ESG talent development, responsible supply chains



2 Product Liability

→ Strengthening data privacy, cybersecurity, and consumer protection



3 Stakeholder Involvement

→ Institutionalised participation aligned with SDGs and national frameworks



4 Social Opportunities

→ Improving access to healthcare, urban services, and quality of life



Building an inclusive, responsible, and resilient society
that creates long-term value for people, communities, and the nation.

Focus: Institutional Strength, Transparency, Implementation



- Emphasis on transparency, accountability, and service delivery by local authorities



- Strong regulatory frameworks (e.g., ESG reporting), but uneven execution across regions

Overall Insight (Malaysia ESG Readiness)

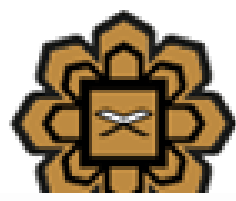


- ✔ Strong **policy and institutional frameworks**
- ✔ Clear direction in **energy transition** and **SDG alignment**
- ✔ Established **governance and reporting systems**



Gaps:

- ❌ **Implementation inconsistencies**
across cities/states
- ❌ Limited **circular economy** maturity
- ❌ Fragmented **smart city ecosystem**



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INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA
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Malaysia

ESG Investment-Ready Indicators



E Environmental

Transition, Resource Efficiency, Circularity



Climate Change
Policy-driven low-carbon transition



Natural Capital
Sustainable resource management



Pollution & Waste
Structured, e-waste management



Environmental Opportunities
Expanding renewable energy



S Social

Inclusivity, Capacity, Digital Responsibility



Human Capital
ESG talent development



Product Liability
Data privacy & cybersecurity



Stakeholder Involvement
SDG-aligned participation



Social Opportunities
Improved access to services



G Governance (G)

Institutional Strength, Transparency, Implementation



Urban Local Governance (ULB)
Transparency & accountability



Governance Behavior
Regulatory frameworks



ESG



Malaysia is ESG-ready at the policy and institutional level, with growing investment potential, but requires stronger local-level execution and system integration. 🇲🇾



E Environmental

Transition, Resource Efficiency, Circularity



Climate Change
Policy-driven low-carbon transition



Natural Capital
Sustainable resource management



Pollution & Waste
Structured, e-waste management



Environmental Opportunities
Expanding renewable energy



S Social

Inclusivity, Capacity, Digital Responsibility



Human Capital
ESG talent development



Product Liability
Data privacy & cybersecurity



Stakeholder Involvement
SDG-aligned participation



Social Opportunities
Improved access to services



G Governance (G)

Institutional Strength, Transparency, Implementation



Urban Local Governance (ULB)
Transparency & accountability



Governance Behavior
Regulatory frameworks



ESG



IV: Financing & Market Adoption

IV: Financing & Market Adoption

- **Financing Mechanisms:** Discuss ESG-related financing (Green/Social bonds, Toronto example) and the "Great Green Multiplier".
- **Incentives for Adoption:** Place the slides on SME adoption and the MIDA DIAF-ESG grant here.
- **Disclosure:** Explain how transparency and scoring attract this investment.

ESG connects environmental goals with investment and governance.



Cities and developers that adopt ESG-aligned environmental strategies are more likely to attract **green financing, climate funds, and responsible investors.**



At the same time, ESG frameworks encourage **transparent reporting, stakeholder engagement**, and integrated decision-making across departments – for example, linking transport, housing, and environment agencies in a common agenda.



STRONGER ENVIRONMENTAL PERFORMANCE



INCREASED INVESTOR CONFIDENCE



BETTER GOVERNANCE OUTCOMES

ESG supports long-term thinking

By requiring assessments of climate risk, lifecycle emissions, and ecosystem services, ESG pushes planners to consider not just short-term development gains but also long-term environmental and social costs.



This helps avoid “lock-in” to high-carbon, resource-intensive urban forms and instead promotes cities that are **low-carbon, resource-efficient, and resilient**.





- ✓ The **ESG (Environmental, Social, and Governance)** framework plays a critical role in addressing deficits in public funding for master plans by **enabling the issuance of green bonds, social bonds, and other sustainable financial incentives.**



- ✓ Governments and organisations can **attract socially responsible investors** by incorporating **ESG principles.**



- ✓ The ESG assessment for cities serves multiple purposes. It not only provides a comprehensive review of urban sustainability practices but also acts as **a tool for mobilising additional investment.**



- ✓ Cities can use the ESG framework to attract green financing and impact investment by demonstrating their **commitment to sustainability, inclusion, and good governance.**

3hii Sustainable Debt Issuance Program

The City's overall approach to Sustainable Finance includes alignment with the City's Corporate Strategic Plan¹; alignment of project financing with useful life with debt term; and generating measurable impact.

Toronto's Approach to Sustainable Finance



Building on the strength of the City's long-standing conventional bond issuances, sustainable financing has become a growing part of the City's debt issuance program in recent years.

Toronto's Debt Issuance Program



¹ Corporate Strategic Plan: The City's long-term plan to guide decisions, investments, and services.



Investment and Financing

Investment and financing refers to the **strategic allocation of financial resources** to support **sustainable, inclusive, and resilient urban development projects**, while ensuring transparency, accountability, and alignment with ESG principles.

Good governance ensures that funds are allocated efficiently, monitored for performance, and used responsibly to achieve long-term sustainability goals.



Source: <https://www.lloydsbankinggroup.com/insights/green-finance.html>





الجامعة الإسلامية العالمية ماليزيا
INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA
Garden of Knowledge and Virtue

ESG ADOPTION

AMONG MALAYSIAN DEVELOPERS AND SMEs

ESG is no longer just a corporate agenda—it's a strategic advantage for building a sustainable and resilient future.



01

A GROWING TREND

One notable trend in ESG in Malaysia is the growing participation of small and medium enterprises (SMEs). ESG adoption is no longer limited to large corporations.



02

STRONGER SUPPORT

Government initiatives such as the DIAF-ESG Grant provide financial reimbursement for ESG-related expenses, encouraging wider participation across the property value chain.



03

STRATEGIC ADVANTAGE

Many developers and contractors are now adopting ESG frameworks not just for compliance, but as a commercial strategy, improving operational efficiency, reducing long-term risks, and enhancing market positioning.



BUILDING TODAY, PRESERVING TOMORROW.

Together, we can drive sustainable growth for people, planet, and prosperity.

WHY ESG MATTERS



IMPROVE EFFICIENCY

Enhance resource use and reduce operational costs.



REDUCE RISKS

Strengthen resilience and manage long-term environmental and social risks.



ENHANCE REPUTATION

Build trust with stakeholders and strengthen brand value.



UNLOCK OPPORTUNITIES

Access green financing, grants, and new business opportunities.



DRIVE SUSTAINABLE GROWTH

Create long-term value for businesses, communities, and future generations.



ESG adoption is not just the right thing to do—it's the smart way forward for Malaysian developers and SMEs.



LEADING THE WAY
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ATTRACTING GREEN INVESTMENT

Leveraging ESG Incentives & Funding Mechanisms in Malaysia



KEY INITIATIVE: DOMESTIC INVESTMENT ACCELERATOR FUND (DIAF – ESG ADOPTION)

A matching grant introduced by MIDA to support Malaysian-owned SMEs and Mid-Tier Companies (MTCs) in the manufacturing and selected services sectors in adopting ESG practices and driving sustainable growth.



FUNDING STRUCTURE

- ✓ Matching Grant: 50:50 basis
- ✓ Maximum Funding: **RM500,000** per company
- ✓ Case-to-case evaluation subject to fund availability



ELIGIBILITY & TIMELINE

- ✓ Open to Malaysian-owned companies (SMEs & MTCs)
- ✓ Applications considered from **24 April 2024** onwards
- ✓ Subject to government policies and funding allocation



WHO CAN BENEFIT?

- ✓ Manufacturing sector
- ✓ Selected services sectors
- ✓ Companies committed to ESG adoption and sustainable transformation



SUPPORT & ENQUIRIES

TYPE OF ENQUIRIES	DIVISION IN MIDA	CONTACT	LINK / EMAIL
 Application Submission	Customer Service	 03-2267 3633	 Customer Service / Helpdesk
 Technical Assistance	Information Technology System Development	 03-2267 3746	



APPLICATION PROCESS

1



PROCESS WORKFLOW REVIEW

Understand the DIAF-ESG process and requirements.

2



SELF-ASSESSMENT SUBMISSION

Complete and submit the self-assessment via MIDA.

3



FORMAL APPLICATION

Submit the official application through MIDA.



Apply now via MIDA portal or reach out to MIDA Helpdesk for guidance and support.



STRATEGIC IMPACT FOR URBAN PLANNING



DRIVES GREEN INFRASTRUCTURE INVESTMENT

Mobilises capital for sustainable projects.



ENHANCES ESG-COMPLIANT URBAN DEVELOPMENT

Promotes responsible and inclusive growth.



SUPPORTS LOW-CARBON & RESILIENT CITIES

Builds climate-ready and sustainable urban systems.



ENCOURAGES PUBLIC-PRIVATE SUSTAINABILITY PARTNERSHIPS

Strengthens collaboration for long-term impact.

ESG DISCLOSURE AND SCORINGS

A Pathway to Sustainable Cities and Investor Confidence

1



Demonstrate Commitment to Sustainability

ESG disclosure and scorings are important ways for cities to demonstrate their commitment to sustainability and to attract investors interested in financing sustainable initiatives.



2



Improve Access to Essential Infrastructure Funding

Cities may enhance their prospects of obtaining essential funding for critical infrastructure improvements by offering transparent and accurate information on environmental, social, and governance standards.



3



Mobilise Diverse Financing for Climate Investment

Cities can utilise municipal revenues and grants, debt financing as municipal bonds and loans, and hybrid mechanisms as public-private partnerships for financing their climate-related investments.



Transparent ESG practices build trust, unlock capital, and create resilient, sustainable cities for future generations.

V: Implementation & Action



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V: Implementation & Action

- **Stakeholder & ULB Roles:** Detail the specific roles of local authorities (PBTs) and the importance of stakeholder alignment.
- **Corporate Strategies:** Provide the actionable "Strategies for Companies"

Malaysia Context:

Urban governance handled by:



City councils
(Majlis Bandaraya)



Federal entities
(Putrajaya Corporation)

Key roles of urban local bodies



Waste management

Ensure clean, healthy, and sustainable cities



Urban planning

Plan sustainable land use and livable environments



Infrastructure delivery

Deliver resilient, efficient, and inclusive infrastructure



Community services

Provide essential services that enhance quality of life



Local authorities are **primary drivers of green city success.**



Malaysia's PBT (Pihak Berkuasa Tempatan) play a similar central role.



Putrajaya Launches Three Digital Initiatives To Boost Smart City Agenda

29/01/2026 01:25 PM



PUTRAJAYA, Jan 29 (Bernama) -- Three major digital initiatives were launched today to strengthen Putrajaya's position as a smart and sustainable city, while advancing its digital transformation and community engagement agenda.



#TECH: Perbadanan Putrajaya and Vectolabs to set up first municipal IoT infrastructure

May 7, 2021 @ 1:39pm | By Bots Team



3

Business Viability and Digitalization



MSME Empowerment: Support small and medium enterprises (MSMEs) through digital adoption, access to financing, and integration into the global value chain.



Regulatory Streamlining: Improve the ease of doing business by simplifying regulations, reducing red tape, and accelerating the digitization of government services.



Adaptive Reuse Incentives: Offer tax deductions for developers who convert underutilized commercial spaces into residential units, reducing greenfield dependence.

4

Alignment with National Agendas (Malaysia MADANI)



Raising the Ceiling & Floor: The 13MP focuses on boosting national productivity while simultaneously ensuring inclusive growth through affordable housing (1 million homes planned by 2035) and human capital development.



Good Governance: Implement the National Anti-Corruption Strategy 2024–2028 and introduce the Government Procurement Act to ensure transparency in development projects.



ESG Adoption: Promote Environmental, Social, and Governance (ESG) principles to position Malaysia as a green investment destination.



Who Will Be Affected by ESG Implementation?



- **Local Communities:** Improved access to resources and enhanced quality of life through sustainable practices.



- **Businesses:** Need to adapt to new regulations, potential increased operational costs, and opportunities for innovation.



- **Governments:** Greater responsibility for developing and enforcing ESG-related policies, enhancing public trust.



- **Investors:** Shift towards sustainable investments and increased demand for transparency.



- **Employees:** Changes in workplace culture and potential job creation in green sectors.

VI: Conclusion & Challenges

VI: Conclusion & Challenges

- **Challenges:** Combine the mind map and the summarised list of Malaysian challenges
- **Final Summary:** End with the "Investment Opportunity" connection slide and the final "ESG Investment-ready Conditions" graphic.

Malaysia Context:

SDG Roadmap promotes **whole-of-nation approach**



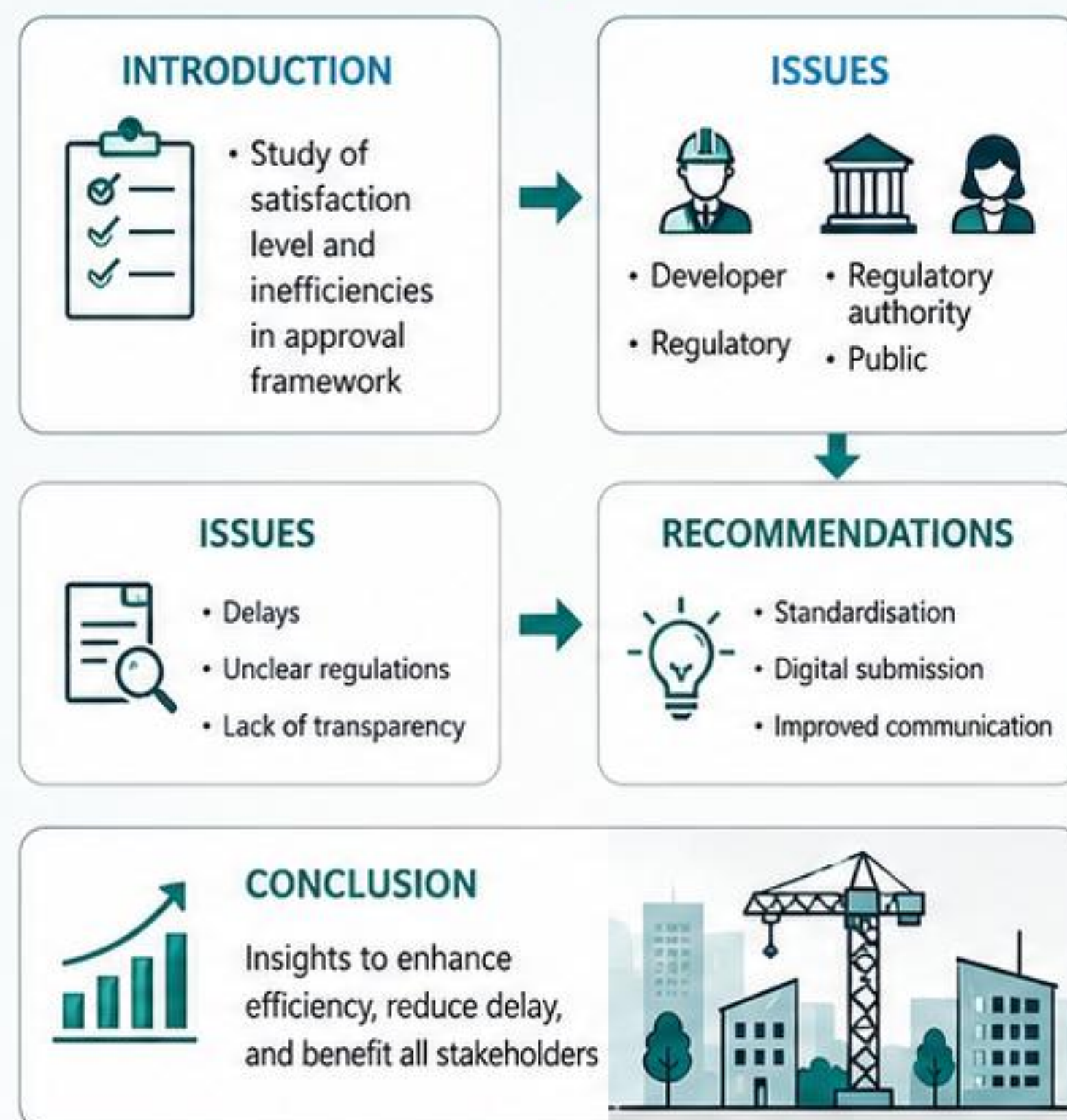
Increasing:

- ✓ Public participation in local plans
- ✓ NGO & private sector collaboration
- ✓ Smart city success strongly linked to **local authority + stakeholder alignment**



Malaysia emphasises **multi-stakeholder governance**, but participation depth varies.

IMPROVING THE BUILDING PLAN APPROVAL PROCESS



SMART CITY SUCCESS DEPENDS ON MULTI-STAKEHOLDER ALIGNMENT





! Key Challenges in Malaysia Context

1



Limited Transparency & Disclosure

- Not all PBTs publish ESG-related data
- Inconsistent reporting across municipalities

2



Data Fragmentation

- Smart city data not fully integrated
- Lack of standardized ESG indicators

3



Uneven Implementation

- Strong federal/state policies
- Variable execution at local level

4



Capacity Constraints

- Technical and financial limitations in smaller councils



Part 2 – ESG Investment-ready Index

3 PILLARS	10 THEMES	INDICATORS
 ENVIRONMENT	 Climate Change	Financing Environmental Impact & Climate Change Vulnerability
	 Natural Capital	Raw Material Sourcing to reduce water stress
	 Pollution & Waste	Handling of Electronic Waste
	 Environmental Opportunities	Opportunities in Renewable Energy
 SOCIAL	 Human Capital	Human Capital Development & Supply Chain Standards
	 Product Liability	Privacy & Data Security
	 Stakeholder Involvement	Reducing the controversies by making them involved
	 Social Opportunities	Access to Healthcare
 GOVERNANCE	 ULB Governance	Transparency & Accountability
	 Governance Behavior	Lack of Corruption & Financial Instability
 SAMPLE WAY TO REMEMBER		
● Sustainability = ESG ● ESG = Measurement & risk management ● CSR = Action & contribution		



Malaysia

ESG Investment-ready Conditions



Climate

Policy-driven low-carbon transition



Energy

System-level energy transition



Waste

Structured but less circular



Strong frameworks, uneven execution



Stakeholders



Institutionalised



Institutionalised (SDG-based)

Fragmented smart city ecosystem

THANK YOU

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