



malaysiaGBC

# malaysiaGBC roadmap 2021-2025



# IMPACT TO THE ENVIRONMENT



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**Ar Serina Hijjas**  
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malaysiaGBC 2021-2023

# Malaysia Green Building Council



# Road Map 2021- 2025

Our mission is to transform the building and construction sector across three strategic areas—climate action, health & wellbeing, and resources & circularity—we are a national action network comprising of building owners, manufacturers, professionals and municipalities

## **How will we achieve it?**

As members of the World Green Building Council and UN Global Compact, we work with businesses, organisations and governments to drive the ambitions of the Paris Agreement and UN Global Goals for Sustainable Development. More than this at a Glocal level we are committed to Malaysia's Low Carbon, Sustainable Goals & Environmental, Social and Corporate Governance (ESG) focusing on the built and natural environment . Through a systems change approach, our network is leading the industry towards a net zero carbon, healthy, equitable and resilient built environment.

## **Why do we exist?**

Buildings and Construction account for 39% of energy related CO<sub>2</sub> emissions and we together can flatten the carbon curve.

# Goals 2021- 2025

What is our goal?

## Climate Action

- Promoting **Green buildings** and
- **Advancing Net Zero** towards decarbonisation of the built environment.
- Adopting & applying the **UN SDG's and ESG** for our industry

## Health & Wellbeing

- A built environment that delivers **Healthy, Equitable and Resilient** buildings, communities, townships & cities.

## Circularity & Green

- A built environment that supports the regeneration of resources and natural systems, providing socio-economic benefit through a thriving **Circular economy( Cradle to Cradle )** with clear support through **Green financing**

# Road Map initiatives 2021- 2025

- 1 Green Buildings / Climate Awareness
- 2 UN SDGs & ESG
- 3 Net Zero Carbon Tool
- 4 Health & Wellbeing
- 5 Green Finance
- 6 Circularity





	Engagement : Industry + Corporate + Professionals + Academic + Government	Measurable Targets	Projects & competitions
<b>1</b> Green Buildings & Climate Awareness	WGBC, APN & GBI. WWF	Green Building Tools, Address existing building data bank on performance	Cooler buildings Cooler environment
<b>2</b> UN SDG & ESG	Township Developers & Property investors,	Green Manufacturers + Supplier chain	Bursa, MOF, environmental agencies , municipalities
<b>3</b> Advancing Net Zero	World GBC & APN , WWF	Malaysia 2030 targets	MOF, MGTC, environmental agencies , s
<b>4</b> Health & WellBeing	World GBC	Industry professionals, real estate	MOH, & KPKT (local council),
<b>5</b> Green Financing	BURSA	Local Banks, Corporate, Capital Markets Malaysia & CGM	Bonds, Sukuk and pension Fund Management
<b>6</b> Circular Economy	Green Buildings & Climate awareness	UN SDGs & ESG	Advancing Net Zero Tool
			<ul style="list-style-type: none"> <li>96 Webinars</li> <li>Pro Series</li> <li>GBI Course</li> </ul> Cooler buildings, Cooler environment eGPM 2021/2023
			Malaysia 2030 Targets SDG analysis toolkit + consultation
			Net Zero Carbon Tool 3 <sup>rd</sup> quarter 2021
			3 Webinars/year 2 free webinars with gov agencies /year
			Ensuring Pre qualifying requirements are inclusive
			Health & WellBeing
			Cooler Building Asia Awards Cooling Challenge  APN Awards Green cup ?  IGEM  Guidance & Advisory towards adopting SDG & ESG  Deployed Pilot Project to show abatement from Bau to NZC  Award for Best H&WB Project Dev of H&WB Guidance starting with Air Quality for Pandemic  Successful application of Green Finance for pilot project  Ensure circularity & all components to enable Green Finance

Initiatives

People

Outcomes

## Measurable Targets

### 1 Green Buildings & Climate Awareness

- **Advancing Green buildings** and the adoption of **MS1525 & MS2680: 2017 EE for buildings & residential**.
- Adopting at all PBT's and government to make mandatory by 2023 to address climate change.
- Pushing for Existing building target transformation adoption by government by 2025.
- **Cooler Buildings, Cooler environment** a public- private initiative to promote climate responsive buildings in the tropics, reducing urban heat island by passive & nature based solutions.
- Increasing urban and sub urban **Ecology for urban heat island mitigation**



## Measurable Targets

# 2 UN SDG & ESG

- Integrating ESG (Sustainable Environmental, Social and Governance) and Reporting Sustainability through SDGs for Businesses and Industries
- Pilot Partners in Sustainability Reporting of integrating SDGs in line with:
  - i. Bursa Malaysia Reporting Guide and/or
  - ii. GRI Standards
- Localize the approach to ESG and Sustainability Reporting for local businesses and industries.
- Launch a guide for ESG and sustainability reporting for local built environment related businesses and industries by December 2021
- Engagement Workshops developing the key individualized frameworks for each industry.

## Measurable Targets

### 3 Carbon Neutrality + Net Zero

- **Advancing Net Zero Buildings** tool by 3<sup>rd</sup> Quarter 2021 and launch Pilot project & Beta testing
- **Generate balance** on Operational Carbon
- A plan for net zero emissions buildings by 2030 and 2050, with interim targets for emissions and energy performance, supporting policy frameworks and coordinated action across different levels of government as well as a process for reporting on progress National Construction Code that is zero carbon ready, with a forward plan for energy efficiency improvements to 2030
- Policy priorities ,Government leadership, Vision for cities & communities, Smarter infrastructure Investments

# Whole Life Carbon Vision

## 2050

New buildings, infrastructure and renovations will have **net zero embodied carbon**, and all buildings, including existing buildings, must be **net zero operational carbon**.

### Net Zero Operational Carbon

#### Definition

A net zero carbon building is highly energy efficient with all remaining energy from onsite and/or offsite renewable sources

#### Guiding Principles

- 1. Measure and disclose carbon**  
Carbon is the ultimate metric to track, and buildings must achieve an annual operational net zero carbon emissions balance based on metered data
- 2. Reduce energy demand**  
Prioritise energy efficiency to ensure that buildings are performing as efficiently as possible, and not wasting energy
- 3. Generate balance from renewables**  
Supply remaining demand from renewable energy sources, preferably on-site followed by off-site, or from offsets
- 4. Improve verification and rigour**  
Over time, progress to include embodied carbon and other impact areas such as zero water and zero waste

### Net Zero Carbon Buildings Commitment

All buildings within direct control to operate at net zero carbon by 2030



## 2030

New buildings, infrastructure and renovations will have at least **40% less embodied carbon** with significant **upfront carbon** reduction, and all new buildings must be **net zero operational carbon**.

### Net Zero Embodied Carbon

#### Definition

A net zero embodied carbon building (new or renovated) or infrastructure asset is highly resource efficient with upfront carbon minimised to the greatest extent possible and all remaining embodied carbon reduced or, as a last resort, offset in order to achieve net zero across the lifecycle.

#### Guiding Principles

- 1. Prevent**  
Avoid embodied carbon from the outset by considering alternative strategies to deliver the desired function
- 2. Reduce and optimise**  
Evaluate each design choice in terms of the upfront carbon reductions and as part of a whole lifecycle approach
- 3. Plan for the future**  
Take steps to avoid future embodied carbon during and at end of life
- 4. Offset**  
As a last resort, offset residual embodied carbon emissions within the project or organisational boundary where possible or if necessary through verified offset schemes

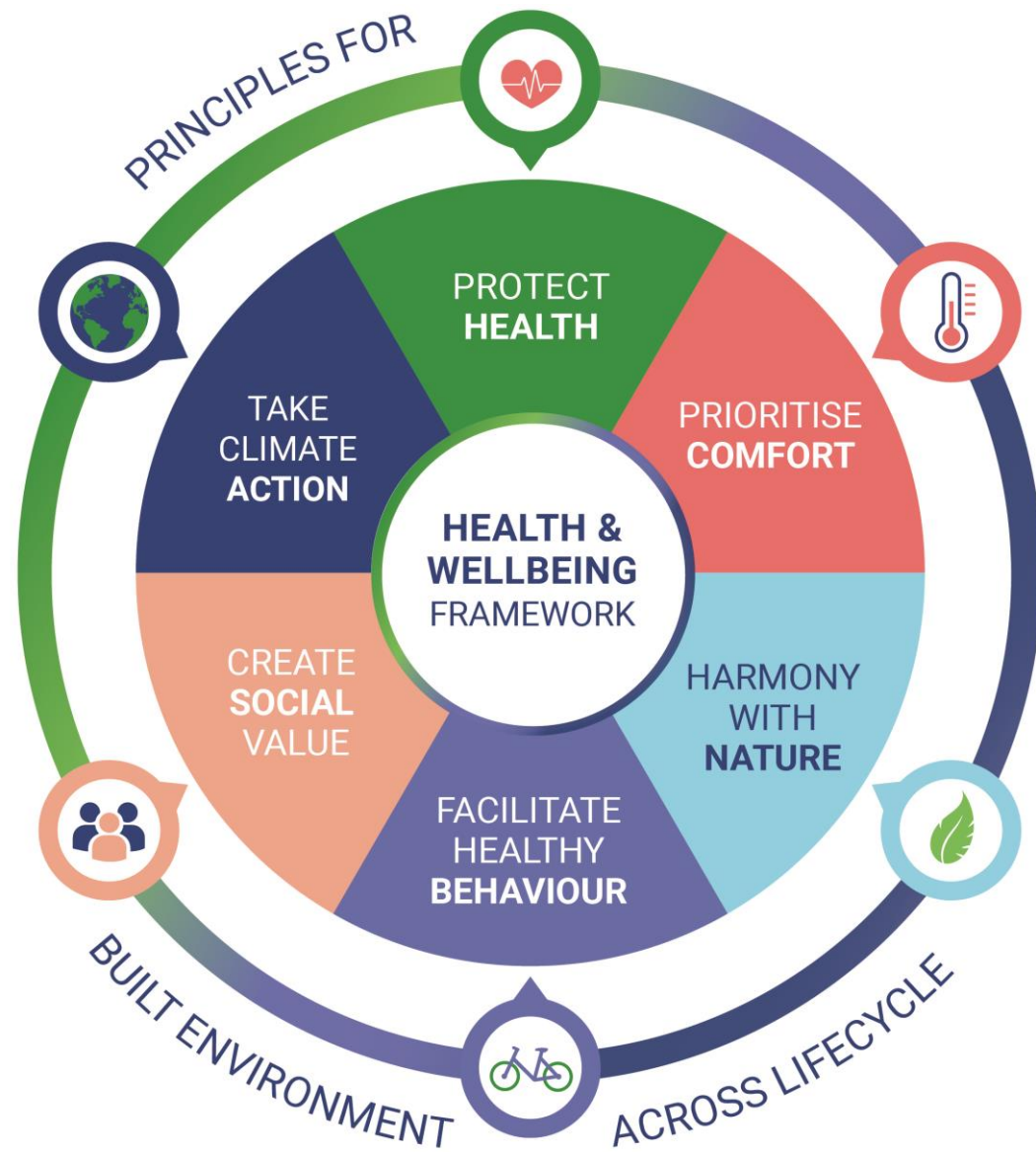
## Measurable Targets

### 4 Health & WellBeing

- to promote “Post-Pandemic building designs”; to respond to the challenges posed by the Coronavirus in terms of ventilation and sanitation requirements.
- to include all other aspects of Health & WellBeing into the above factor so as to contribute toward the achievement of “new and existing high performance buildings”.
- To ensure high quality Health & WellBeing environment within buildings so as to foster greater innovation and creativity thereby achieving greater productivity.



**4 Health & WellBeing**



courtesy of World Green building Council

With the COVID-19 pandemic bringing the link between the built environment and human health into focus, the Framework's **six principles** span indoor air quality, human rights in the supply chain, climate change resilience and more.

## Measurable Targets

### 5 Green Financing

- To continue to, locally and internationally, track and promote the positive developments on Green mechanisms such as Finance, Sukuk, Bonds, etc.
- To promote projects to use such Green Financial facilities and to realise their widespread use within the industry in Malaysia.
- To work with like minded organisations, such as CGM and Bursa Malaysia as means to instigate businesses to transform towards sustainability using possible pathways using the SDG's, ESG, NZC & Health & WellBeing.
- Promoting public-private partnerships on financing mechanisms such as green bonds
- Internal capacity building on mutual understanding of green financing

## 6 Circular Economy

### Measurable Targets

- to build capacity within the industry and for businesses on the concept of CE, its benefits and how it can be achieved
- to create synergy and symbiosis in our efforts on promoting SDGs, ESG, NCZ & H+WB, to ultimately achieve full circularity.
- to expand the role of GPM as a guide and innovator in promoting CE through the use of products and services.

# greenpages

malaysia

An information **resource directory** for green building products and services.

The primary objective is in connecting sustainable building products and services to conscientious clients, developers and building professionals.

The green building products & services directory

# greenpages

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Health & wellbeing  
in the built environment



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