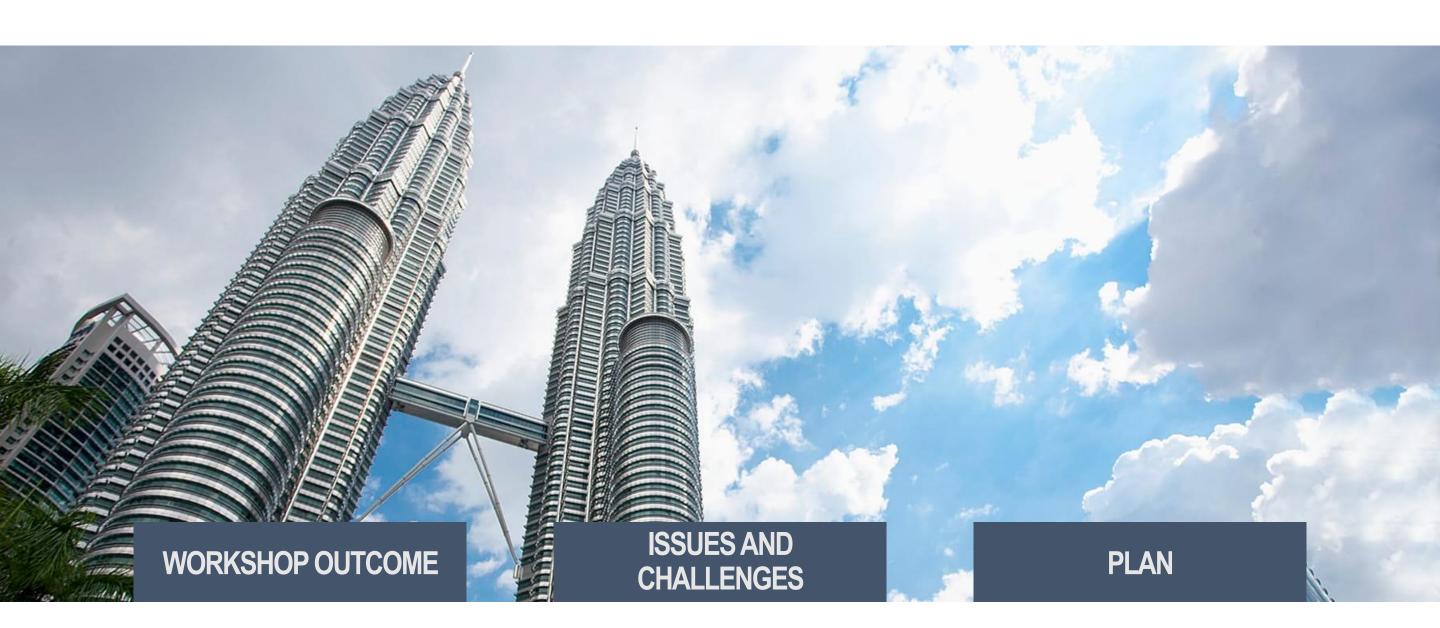


# OUTLINE



- ZEB Family
- Key Takeways

- Issues / CurrentSituation
- Challenges and Barrier

Future Plan

## WORKSHOP OUTCOME

# ZEB Family

#### **PROJECT**

- Important of demonstration project
- Eye opener

#### **PLAN**

- Comprehensive policy in placed to drive and spur the implementation of the ZEB agenda
- Good promotions strategy

#### **EDUCATION**

- Intensive training to building designers and engineers on the ZEB concept
- Awareness of the ZEB concept

#### INTRODUCTION

- Definition of ZEB
- Criteria of the ZEB concept
- Understanding of BEC/GBC and building regulation in Japan



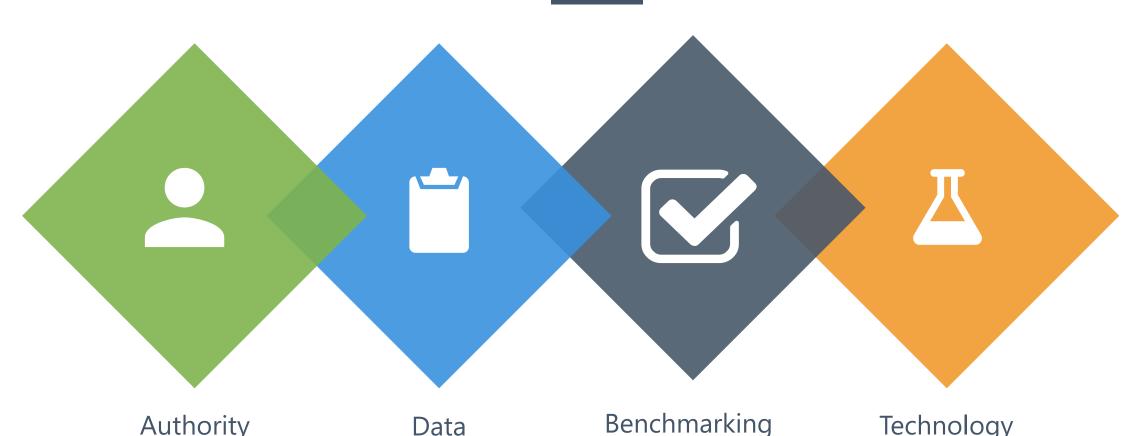


#### **SUCCESS**

- Good support from the Government. Eg financial, development of simulation tools
- A lot of country expert to assist in this initiative

### WORKSHOP OUTCOME

### **Key Takeaways**



Authority
To have a dedicated agency/ authority to championing ZEB initiative

Data
Data gathering is vital
to understand current
condition for the
building sector

Data analysis to introduce benchmark system which can be separated to 3 elements eg types, index and level to be aimed

Technology
New technology in
place in order to
support the
achievement of the
ZEB initiative

## WORKSHOP OUTCOME

### **Key Takeaways**



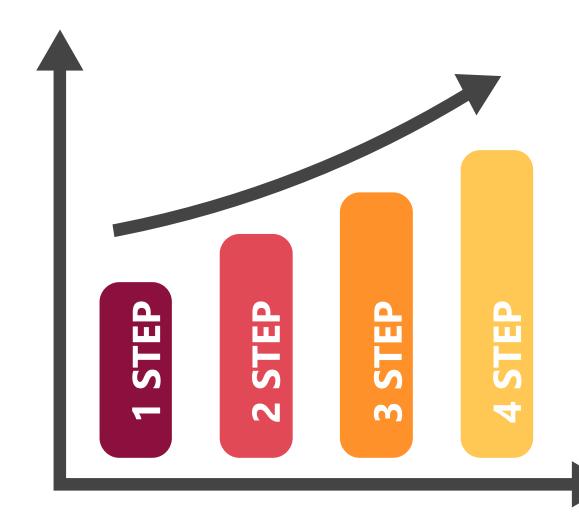
#### **STARTUP**

- Focus on energy conservation.
- Enhance the awareness
- Minimize the load. E.g.
   Enhance the cooling insulation



#### **EQUIPMENT**

- Focus on Energy Efficiency
- Introducing high efficiency systems



Procedure to achieve ZEB

## SOURCE OF ENERGY

 Utilizing renewable energy



#### **RESULT**

Achieve low energy building / ZEB



## ISSUES AND CURRENT SITUATION

#### Information

- Lack of awareness and dissemination of ZEB Family concepts
   Lack of knowledge, definition of ZEB
   Confusing between Green Building and ZEB

#### Coordination

- Lack of coordination among government agencies who involved directly or indirectly to ZEB
   No direction from the government on ZEB

#### Implementation

- Lack of promotion and recognition on ZEB
  Lack of motivation by the developer to implement ZEB
  No incentive in place specifically in ZEB





### CHALLENGES AND BARRIERS

To increase promotion and awareness to the people and industry

Separate ministry
handling different energy
sector (MESTECC,
MoW, Ministry of
housing and Local Gov)

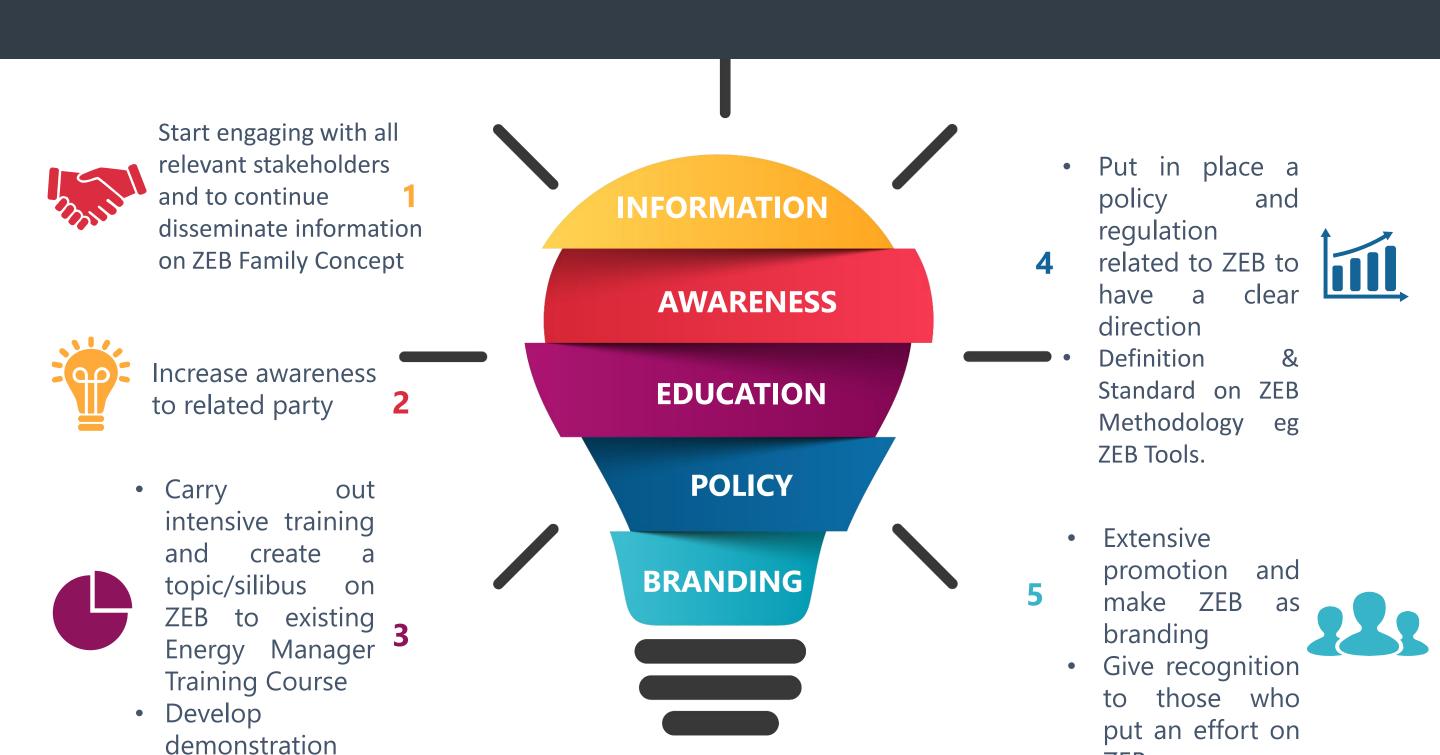
**Technology** 

Lack of technical expert which is specialise in ZEB

High Cost for implementing ZEB

No dedicate Act to govern EE Building in Malaysia

### **FUTURE PLAN**



project on ZEB

ZEB

# **ACTION PLAN**

ISSUES	WHO	TO WHOM	DO WHAT	HOW	BY WHEN / IMPACT	PROGRESS
Awareness & Dissemination	MESTE	Agencies: - SEDA, MGTC	Promotion of ZEB	Engagement with relevant gov. agencies & industry	<ul> <li>Clear on ZEB concept.</li> <li>To organise ZEB     Seminar in 18<sup>th</sup> Oct     2018 in KLCC.</li> <li>Planning:     ZEB Seminar on     Feb 2020</li> </ul>	- Briefing to Local selected Authorities - DONE.
Definition & Standard on ZEB Methodology	MESTE	Department of Standard (DSM), SEDA, MGTC	Explore & possible adoption of ZEB Methodology	Coordinate & create WG Committee	Available ZEB Methodology & Definition for Malaysia.  - 2019: Collaboration with ASEAN Centre of Energy.	- Early communication with accredited body (SIRIM) has started in Sept 2018.
To have coordination among agencies	MESTE CC	Governmen t agencies & industry players	Stakeholders engagement	<ul><li>Focus Group     Discussion     (FGD).</li><li>Strategic     workshops</li></ul>	Common under standing and roles.  2019: 2 <sup>nd</sup> FGD.	1 <sup>ST</sup> FGD DONE IN MAC 2018

Disclaimer : This action plan is a preliminary proposal and subject to acceptance by the Government of Malaysia

## **ACTION PLAN**

ISSUES	WHO	TO WHOM	DO WHAT	HOW	BY WHEN / IMPACT	PROGRESS			
Need Direction	MESTECC, KKR, KPKT (Ministries)	Relevant governmen t agencies	Propose ZEB Program for consideration To have clear policy direction to support low and carbon neutral target	- To use the agencies – ministry discussion platform, presentation to the Minister.	ZEB program will be mainstream in low carbon development  2018: SEDA to present	- Early communications with senior management of Ministry.			
Need promotion & recognition	MESTECC	Agencies	Create recognition / award program	<ul> <li>Adoption ZEB</li> <li>assessment under the existing low carbon development program (EE, RE, NEM, LCCF).</li> <li>Propose new award category under NEA (National) &amp; Asean Energy Award (International).</li> </ul>	ZEB Program established & able to motivate building owners.  2019: - NEA - AEA	Progress: - SEDA had started the ICB / ZEB Facilitation Program ACE/ECCJ/J ASE-W are currently in progress.			
Required tool to assess ZEB	SEDA	Governme nt Agency	Building owners	Adopted the Construction Industry Standard (CIS 20).	Ready tool for assessment.	Progress: DONE:			

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