

70 BY 30
A GREENER BETTER
KUALA LUMPUR



DRAFT KUALA LUMPUR
LOW CARBON SOCIETY BLUEPRINT 2030

Low Carbon Asia Research
Network (LoCARNet) 6th
Annual Meeting
1-3 November 2017, Century Park Hotel
Bangkok, Thailand

KL LCSBP 2030

Kuala Lumpur Low Carbon Society
Blueprint 2030

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**KUALA LUMPUR
LOW CARBON SOCIETY
BLUEPRINT 2030**

Kuala Lumpur Low Carbon Society Blueprint 2030

OVERVIEW

Consultancy and Research Team	Universiti Teknologi Malaysia (UTM), Kyoto University (KU), E-KONZAL Japan	
Client	Kuala Lumpur, Jurisdiction area falls under Kuala Lumpur City Hall	
Period	2016-2017	
	Base year 2010	Target year 2030



Kuala Lumpur Low Carbon Society Blueprint 2030

OVERVIEW



Kuala Lumpur, as a vibrant capital city aims to become a **world class metropolis** that will boast top standards in every aspect of **business infrastructure** and **livable environment** that will serve a major global and regional role for the benefit of all its inhabitants, workers, visitors and investors.

Being the **national capital**, it is only appropriate that Kuala Lumpur lead the way in contributing to honouring Malaysia's pledge to reduce its **carbon emission intensity of GDP** by **45% (based on 2005 emission levels)** by 2030.

Kuala Lumpur Low Carbon Society Blueprint 2030

AIM

Integrate existing plans and projects in the city of Kuala Lumpur that relate to climate change mitigation and low carbon measures into a **comprehensive framework** for implementation towards cutting the city's CO₂ emission intensity by **70%** by 2030 **without compromising** the city's vision and economic growth targets.



Kuala Lumpur Low Carbon Society Blueprint 2030

OBJECTIVES

1

To **review** various related but **unconnected existing policies** and development plans of Kuala Lumpur.

2

To **benchmark** Kuala Lumpur with selected **major world cities'** low carbon best practices.

3

To **develop future scenarios** and **quantify carbon emissions** for low carbon Kuala Lumpur based on the KL City Plan 2020.

4

To propose **carbon mitigation measures** for reducing carbon emissions, **improving livability** and ensuring **green growth** (co-benefits) for Kuala Lumpur.

5

To identify appropriate **timeframe** and relevant **agencies** for the proposed carbon mitigation measures **implementation** of low carbon Kuala Lumpur.

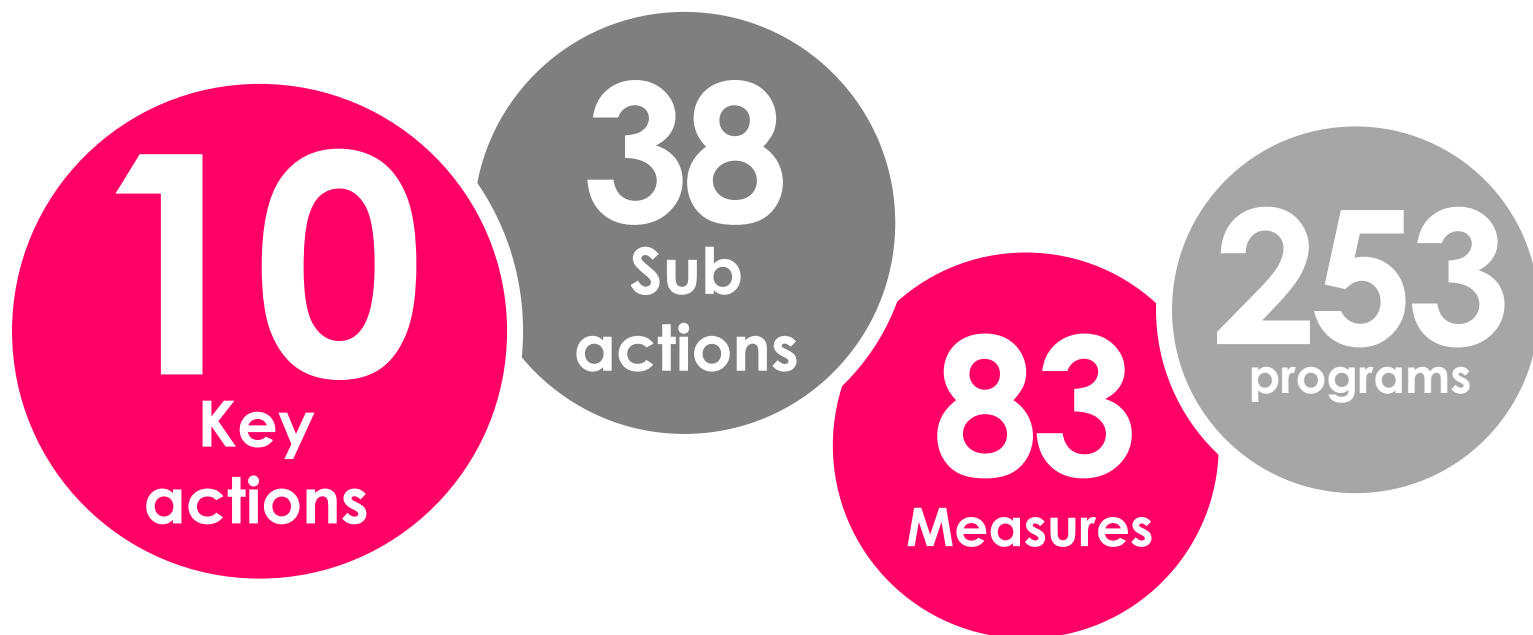
Kuala Lumpur Low Carbon Society Blueprint 2030

PROCESS OF PREPARATION



DRAFT REPORT

KUALA LUMPUR LOW CARBON SOCIETY 2030



Draft
KL LCSBP2030

Date:
February
2017

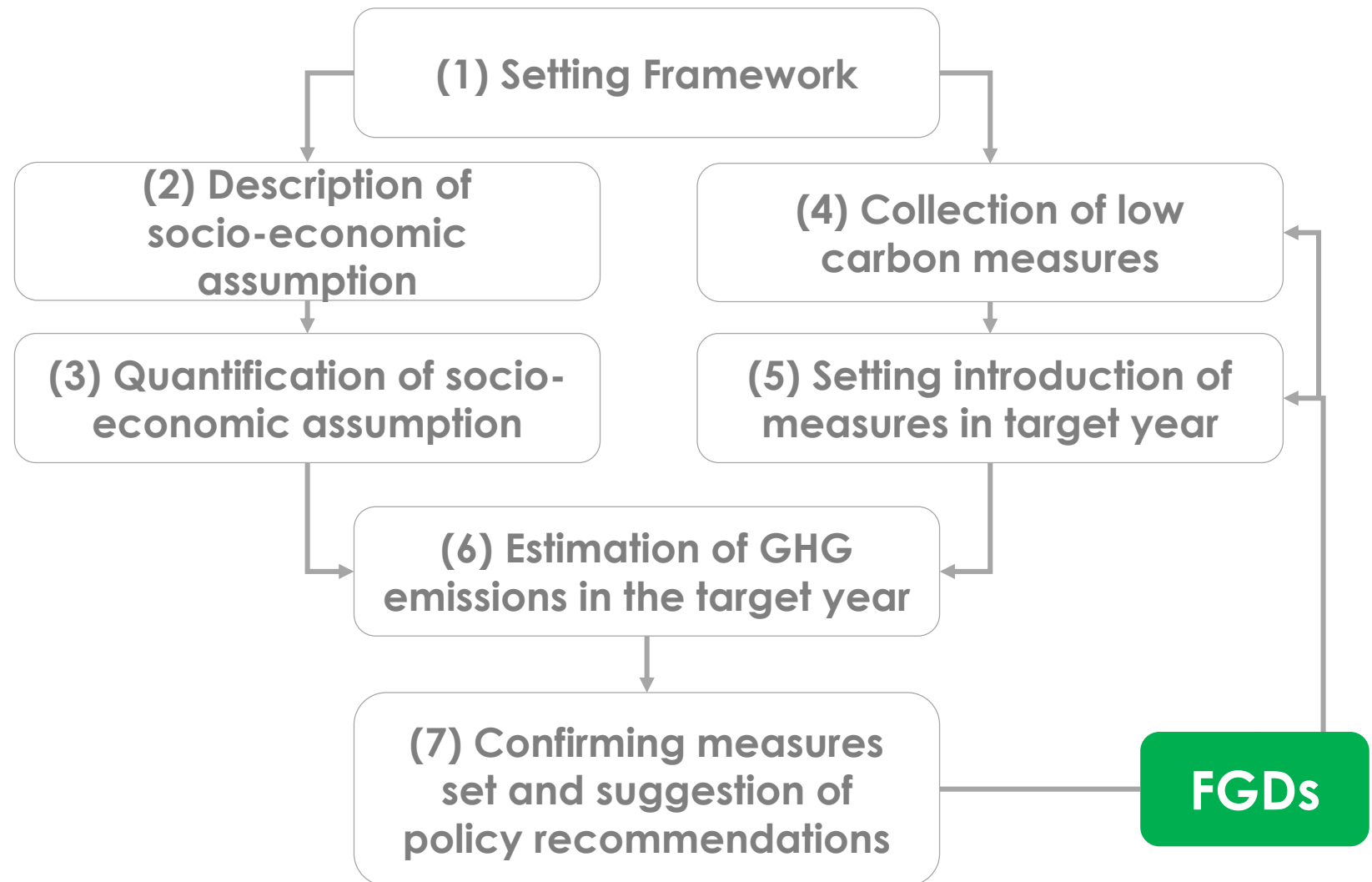
70 x 30

KL can reduce its carbon emission intensity
by as much as 70% by 2030

METHODOLOGY

METHODOLOGY

PROCEDURE TOWARDS KL LCSBP 2030

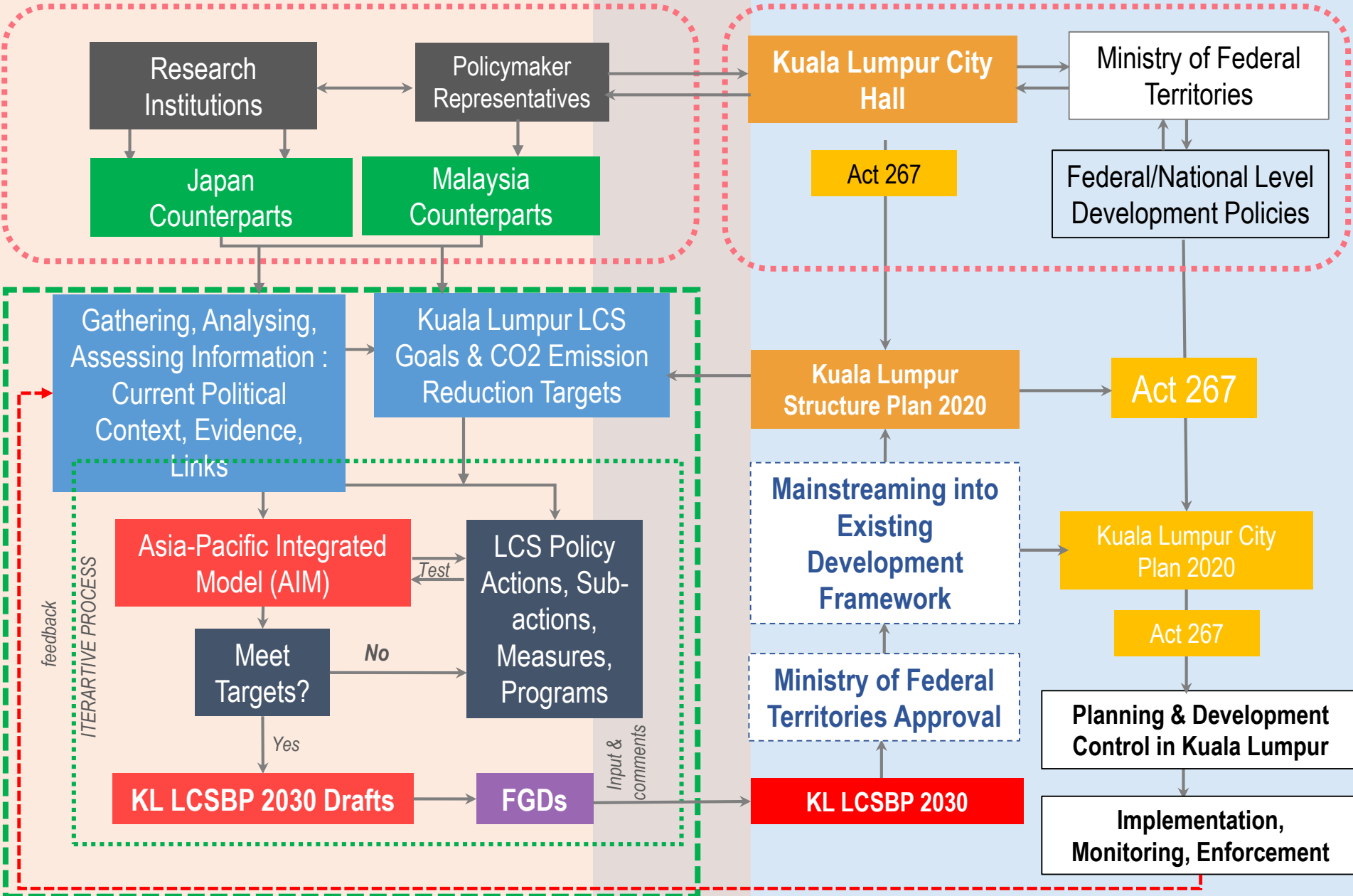


LCS SCIENCE / RESEARCH REALM

LCS ASIA RESEARCH TEAM

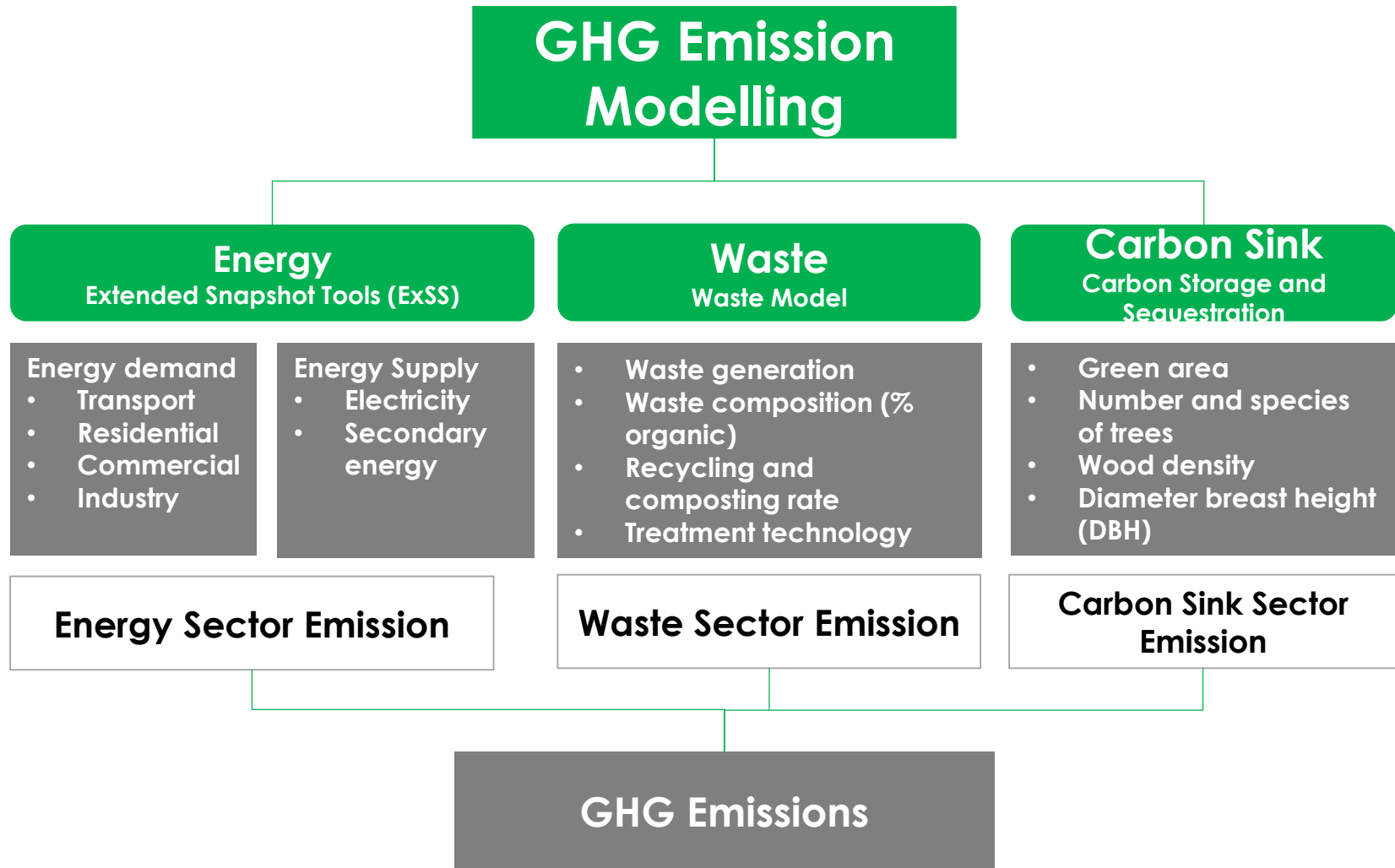
KUALA LUMPUR POLICY REALM

POLICYMAKERS / IMPLEMENTATION AUTHORITIES



Kuala Lumpur Low Carbon Society Blueprint 2030

GHGs Emission Modelling



KL LCSBP 2030

CONTENT OF REPORT

INTRODUCTION

A) Low Carbon Society Blueprint For Kuala Lumpur

B) Low Carbon Society — A Greener Better Kuala Lumpur

C) Kuala Lumpur Socio-economic Scenario

D) Kuala Lumpur Emission Profile

E) Road To Achieving 70 by 30 Goal

Explaining the background of KL LCSBP 2030, Kuala Lumpur current scenario and initial profile



ACTIONS

THRUST 1: PROSPEROUS, ROBUST AND GLOBALLY COMPETITIVE ECONOMY

Action 1: Green Growth (GG)

Action 2: Energy Efficient Spatial Structure (SS)

Action 3: Green Mobility (GM)

Action 4: Sustainable Energy System (SE)

THRUST 2: HEALTHY, CREATIVE, KNOWLEDGABLE AND INCLUSIVE COMMUNITY

Action 5: Community Engagement and Green Lifestyle (CE)

THRUST 3: ECOLOGICALLY FRIENDLY, LIVEABLE AND RESILIENT BUILT ENVIRONMENT

Action 6: Low Carbon Green Building (GB)

Action 7: Blue and Green Network (BG)

Action 8: Sustainable Waste Management (WM)

Action 9: Sustainable Water & Wastewater Management (WW)

KUALA LUMPUR LOW CARBON SOCIETY ENABLER

Action 10: Green Urban Governance

Explaining details on actions and programs in KL LCSBP 2030

KLLCSBP 2030 | INTRODUCTION

A. LOW CARBON SOCIETY BLUEPRINT FOR KUALA LUMPUR 2030

PROJECT BACKGROUND



YAB Prime Minister Dato' Seri Najib Tun Razak has made a commitment to reduce Malaysia's GHG emissions intensity of GDP by up to **40%** at COP15 in Copenhagen, Denmark in December 2009.



The target has been revised upward to **45%** reduction in emission intensity by 2030 at COP21 in Paris in 2015.

Malaysia's **global commitment to reducing 45% CO₂ emission intensity by 2030** (based on 2005)

Climate Change /Low Carbon Initiatives

Kuala Lumpur Low Carbon Society 2030 Blueprint

National Physical Plan(NPP-3),
RMK-11,
NUP,GTP, ETP

Kuala Lumpur
Structure Plan 2020

Kuala Lumpur City
Plan 2020

DBKL Planning
Guidelines

Planning
Control

Spatial
Development
Planning

Sustainable
Development Goal
(SDG) 2030
New Urban
Agenda (NUA)
2036

Greater KL/KV
(NKEA)(2010)

Greater KL Land
Public Transport
Master Plan 2020

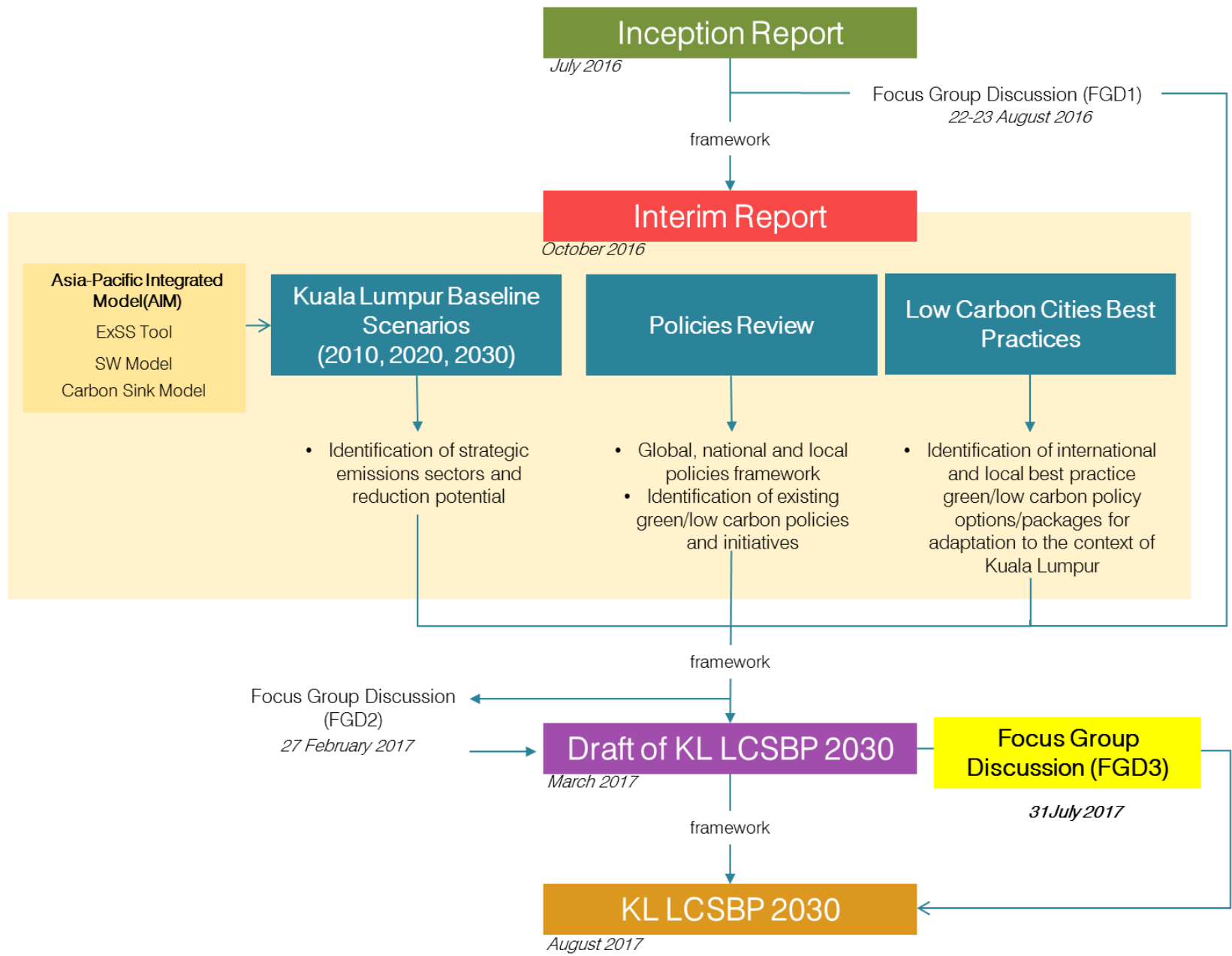
DBKL Strategic Plan
2010 - 2020

ICT Strategic Plan
2015

General
(Non-Spatial)
Development
Policies

A. LOW CARBON SOCIETY BLUEPRINT FOR KUALA LUMPUR 2030

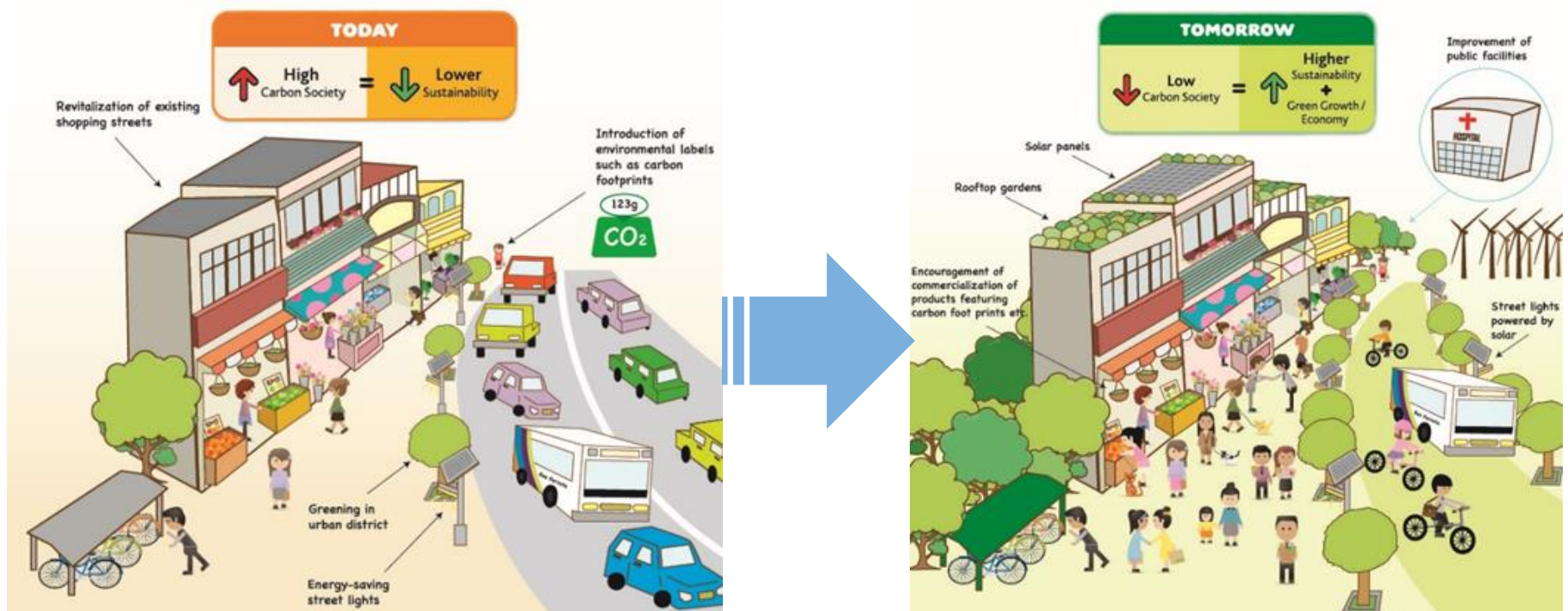
KL LCSBP 2030 FRAMEWORK



B. LOW CARBON SOCIETY- A GREENER BETTER KUALA LUMPUR

CONCEPT OF LOW CARBON SOCIETY

The LCS Blueprint for Kuala Lumpur will provide a **guide for policymakers, investors, businesses, NGOs** and the public to make informed decisions for policies on investments, development, **planning for future growth and managing change.**



C) KUALA LUMPUR SOCIO-ECONOMIC SCENARIO

KUALA LUMPUR POPULATION



1.67 Mill



2.20 Mill



2.49 Mill



2010

GDP

(mil MYR)

84,852

GDP Per
Capita

(MYR/Capita)

50,670



2020

GDP

(mil MYR)

227,621

GDP Per
Capita

(MYR/Capita)

103,460



2030

GDP

(mil MYR)

399,013

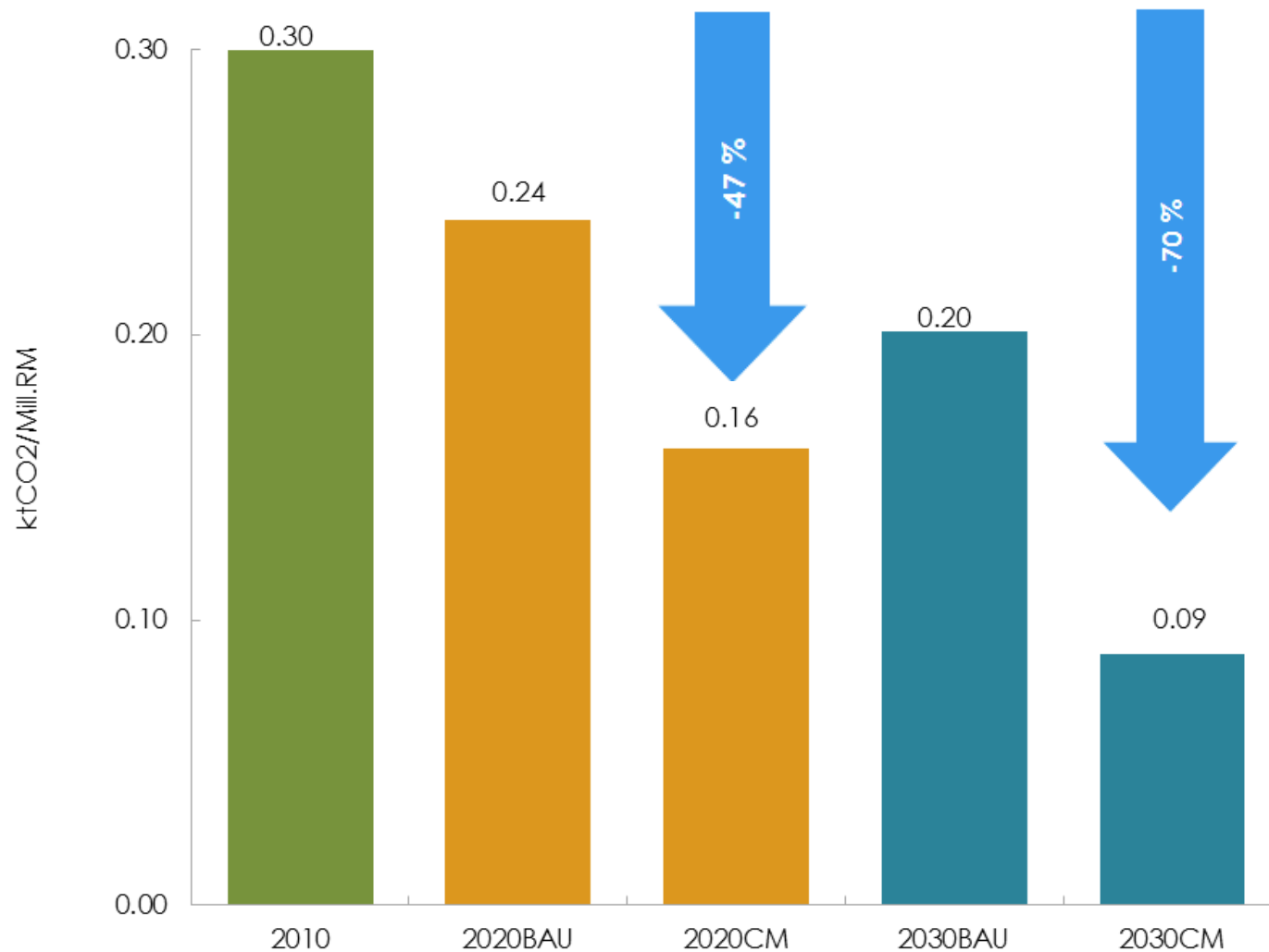
GDP Per
Capita

(MYR/Capita)

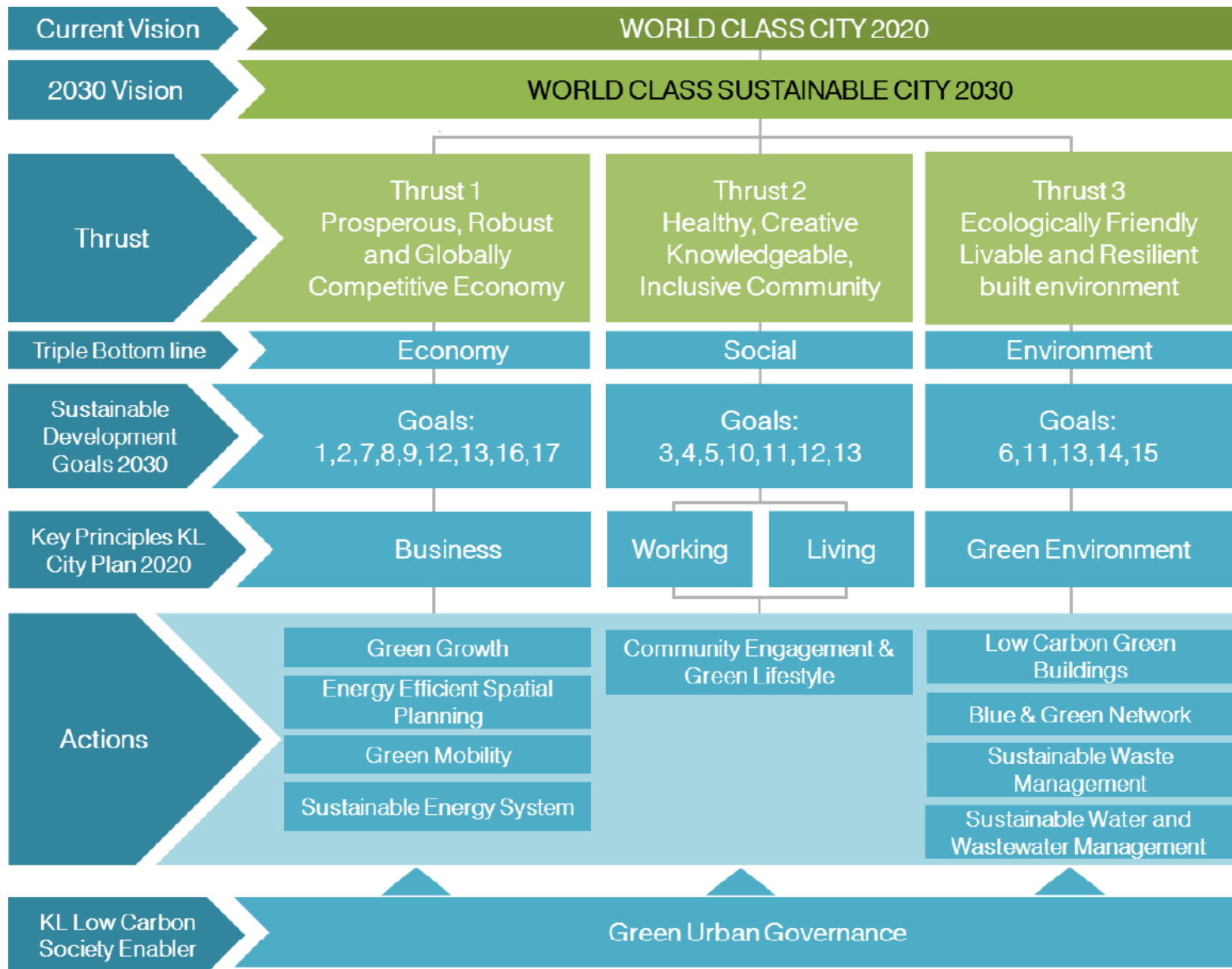
160,350

D) KUALA LUMPUR EMISSION PROFILE

GHG EMISSION INTENSITY OF GDP



E) ROAD TO ACHIEVING 70 by 30



E) ROAD TO ACHIEVING 70X30

Work breakdown structure of Kuala Lumpur's 10 Low Carbon Actions

ACTIONS

Key policy actions needed to achieve the final goal of the plan

SUB-ACTIONS

Sub-actions needed to produce policy outcomes that jointly lead to the achievement of a key policy action

MEASURES

Measures that are more detailed breakdown and interpretation of sub-actions into strategies with a clearer implementation dimension

PROGRAMS

Programs – specific activities, deliverables from which resource requirements, budget, implementation agencies and duration may be identified or estimated

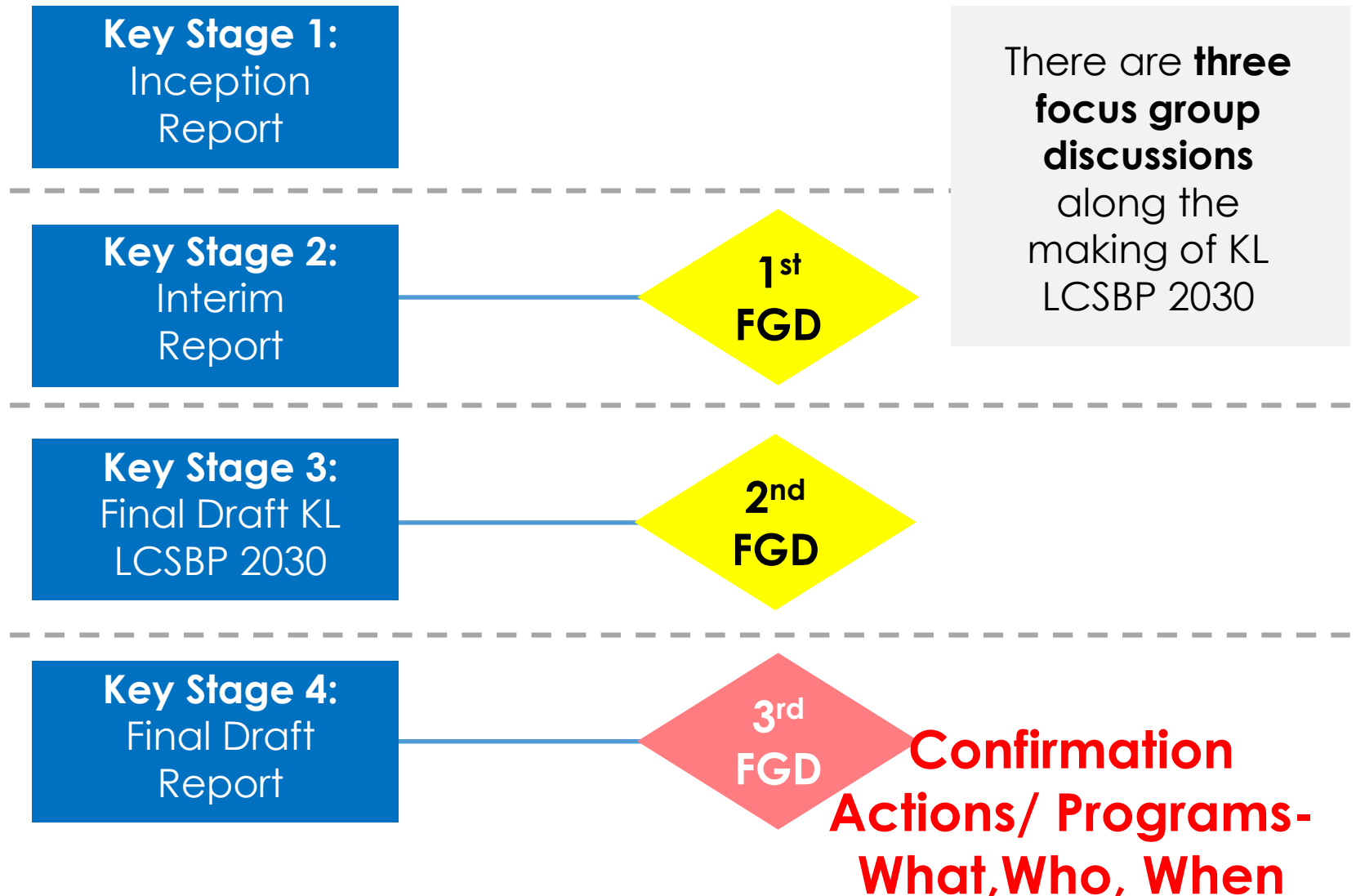
KUALA LUMPUR LOW CARBON SOCIETY 2030

FOCUS GROUP

DISCUSSION 3

Stages of KL LCSBP 2030

TOWARDS GREENER BETTER KUALA LUMPUR



OUTCOMES FROM FGD1 & FGD2

1st FGD

- Introducing *KL LCSBP2030* to stakeholders
- Identification of Sub-actions, Measures & Programs

2nd FGD

- Refinement of Sub-actions, Measures And programs
- **Ranking** of Proposed programs

3rd FGD

- **Identification of potential actors/caretaker** for each program
 - **To determine** the time frame for implementation for each program
-

OUTCOME FROM **FGD2**

PROJECT EVALUATION THROUGH FGD

During **FGD2**, every potential project for the development of LCS for Kuala Lumpur was evaluated based on three (3) main criteria:

- i) **Significance** (Weightage – 40%)
- ii) **Suitability** (Weightage – 20%)
- iii) **Feasibility** (Weightage – 40%)

Programs	Significance Institutional Vision/Policy Direction			Suitability Long Geography setting/socio-cultural context			Feasibility Finance/Human Capital/ Local Technology/Material		
	L	M	H	L	M	H	L	M	H
CE6 Promote the adoption of rainwater harvesting system		●				●	●		
CE7 Promote the adoption of photovoltaic panel			●			●		●	

Criteria	Significance (40%)			Suitability (20%)			Feasibility (40%)		
Level	Low	Medium	High	Low	Medium	High	Low	Medium	High
Score	1	2	3	1	2	3	1	2	3

FOCUS GROUP DISCUSSION 3 (FGD3)

PURPOSE

- To **present, finalise and gain feedback** from stakeholders with respect to the Draft Proposal of KL LCSBP 2030
- To **present & gain feedback** from stakeholders on **KL LCSBP 2030 Roadmap**

FOCUS GROUP DISCUSSION 3

ROADMAP OF KL LCSBP 2030

WHAT?

Action, sub-action, measures and programs in Kuala Lumpur Low Carbon Society Blueprint 2030

WHEN?

To **identify implementation timeline for each programs** based on the result of ranking in the previous FGD (FGD2).

The timeline of implementation are arranged into three; short term (2015-2020), **medium term** (2021-2025) and **long term** (2026-2030)

Based on FGD2 feedbacks, **the result of ranking are use to indicate the scores (high, medium, low)** for each program.

WHO?

To **identify potential actor/ caretaker** for each program and supporting agencies

FOCUS GROUP DISCUSSION 3

ROADMAP OF KL LCSBP 2030

EXAMPLE

SUB-ACTION	MEASURE	PROGRAMS	2015-2020	2021-2025	2026-2030	POTENTIAL ACTORS
1.1 Kuala Lumpur as a Green Business Hub	1.1.1 Promote New Green Sectors and Services	GG 1 Establish Kuala Lumpur as a major global venue for annual exhibitions, conferences and/or workshops on green businesses and investments				KLCH (City Planning Dept., Socioeconomic Dept., Economic and Development Management Dept., Management Dept.), KeTTHA, MIDA
		GG 2 Promote and attract R&D activities in strategic green sectors that are suited to Kuala Lumpur's economic and business ecosystems				KLCH (City Planning Dept., Corporate Planning Dept., Economic and Development Management Dept., Socioeconomic Dept.), KeTTHA, MOSTI

Weighted Scores

High



Medium



Low



FOCUS GROUP DISCUSSION 3

ACTION, SUB-ACTION, MEASURES, PROGRAMS

	Action	No. of Sub-action	No. of Measures	No. of programs
1	Green Growth	4	7	23
2	Energy Efficient Spatial Structure	3	10	36
3	Green Mobility	5	8	30
4	Sustainable Energy System	4	6	14
5	Community Engagement and Green Lifestyle	4	6	29
6	Low Carbon Green Building	3	12	31
7	Blue and Green Network	5	11	27
8	Sustainable Waste Management	3	6	16
9	Sustainable Water & Wastewater Management	3	7	17
10	Green Urban Governance	4	10	30
TOTAL		38	83	253

Together We Can be Low Carbon

Thank you for your attention!

Thank You Terima Kasih 谢谢 धन्यवाद ありがとう