



# 18<sup>th</sup> Asia Construct Conference

## Marina Bay Sands

## Singapore

10-11 October 2012





# **18<sup>th</sup> Asia Construct Conference**

## **Sustainable Practices In Construction**

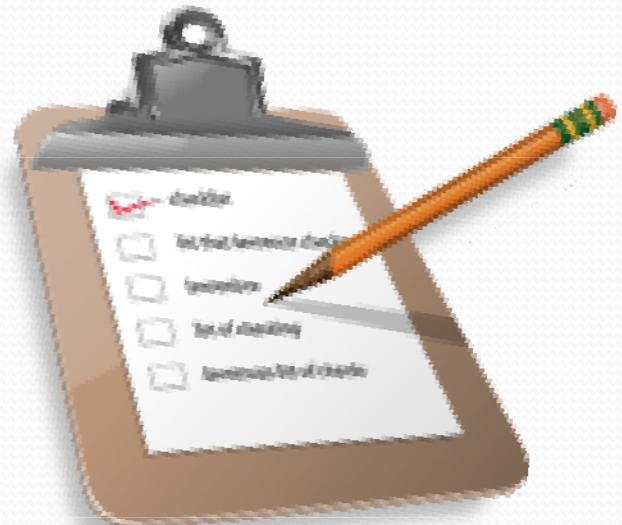
**INITIATIVES TOWARDS SUSTAINABLE CONSTRUCTION  
PRACTICES: MALAYSIA's PERSPECTIVE**

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**Senior Manager**  
**Safety, Health, Environment & Quality Division**

**10-11 October 2012**

# Presentation Outline

- Snapshot of the Malaysian Economy
- Policy Initiatives
- Sustainable construction practices
- GreenPASS
- SHASSIC & QLASSIC
- IBS Roadmap
- Conclusions

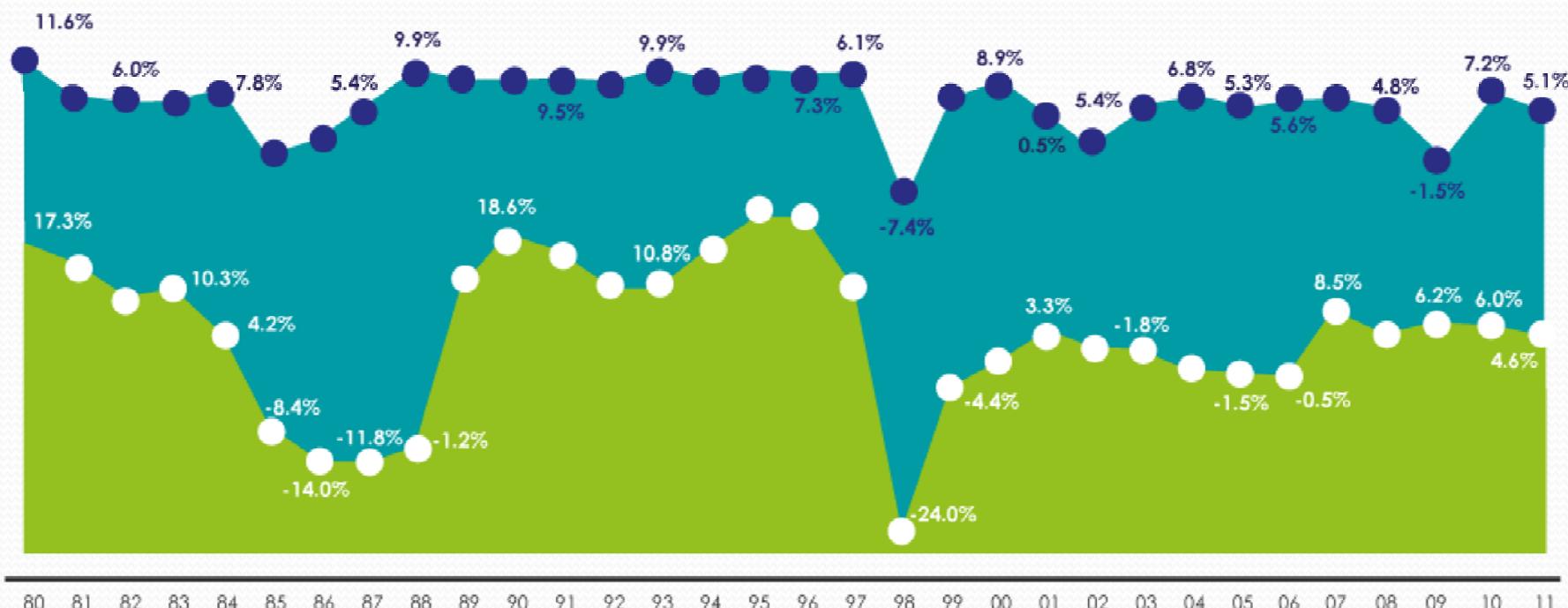


# Snapshot of the Malaysian Economy



Overall GDP  
Construction Sector GDP

	2006	2007	2008	2009	2010	2011	Q1 2012	Q2 2012
Overall GDP	5.6%	6.3%	4.8%	-1.5%	7.2%	5.1%	4.7%	5.4%
Construction Sector GDP	-0.5%	8.5%	4.4%	6.2%	6.0%	4.6%	15.5%	22.2%



# Snapshot of the Malaysian Economy



- 2011: 5.1%: 4.6%
- 2012
  - Q1: 4.7%: 15.5%
  - Q2: 5.5%: 22.2%
- Domestic consumption
  - Strong dependency
  - Main economic growth

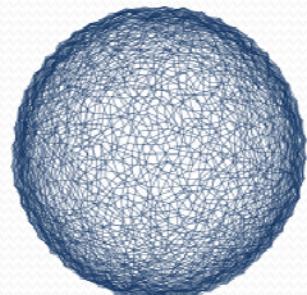


# Policy Initiatives

- International Level
  - Rio Declaration on Environment & Development
  - Stockholm Convention
  - Montreal Protocol
  - Basel Convention
  - Rotterdam Convention
  - Kyoto Protocol
  - Cartagena Protocol
- Regional Level
  - Regional Initiatives on Environment and Health
  - United Nations Environment Program (UNEP)



# Policy Initiatives



COP15  
COPENHAGEN  
UN CLIMATE CHANGE CONFERENCE 2009

United Nations Climate Change Conference 2009, Copenhagen



Speech quotation by Datuk Seri Najib Tun Razak, Prime Minister of Malaysia:

*“...Malaysia is adopting an indicator of a voluntary reduction of up to 40% in terms of emissions intensity of GDP by the year 2020 compared to 2005 levels.”*

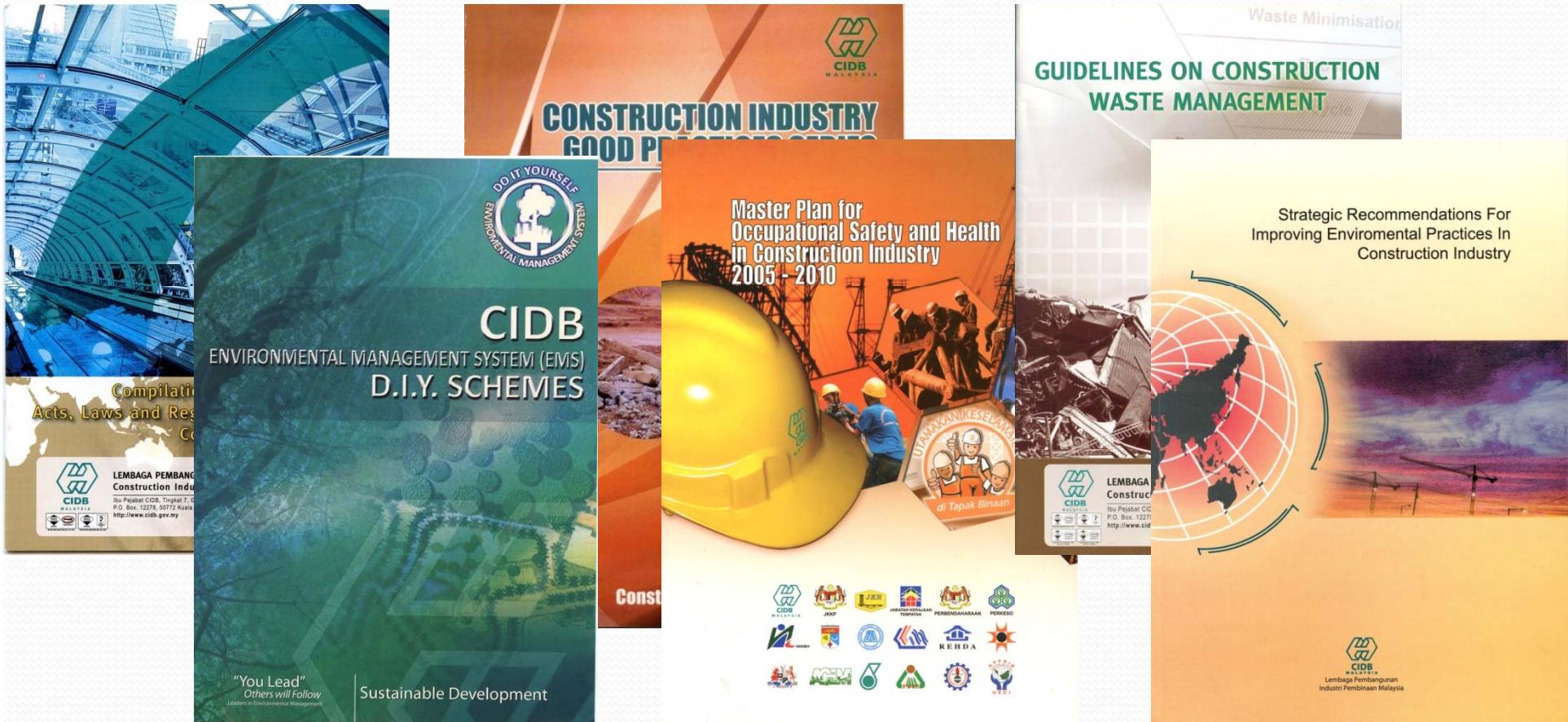
# Sustainable Construction Practices

- Technical Committee on Good Environmental Practices
  - 6 Working Groups (WG)
- Research & Development Projects
  - Estimated at RM 2 Million
- Training
  - CCD
  - CPD
- Resource Centre
  - Knowledge Management



# Sustainable Construction Practices

- Publications of Standards, Guidelines & Manuals

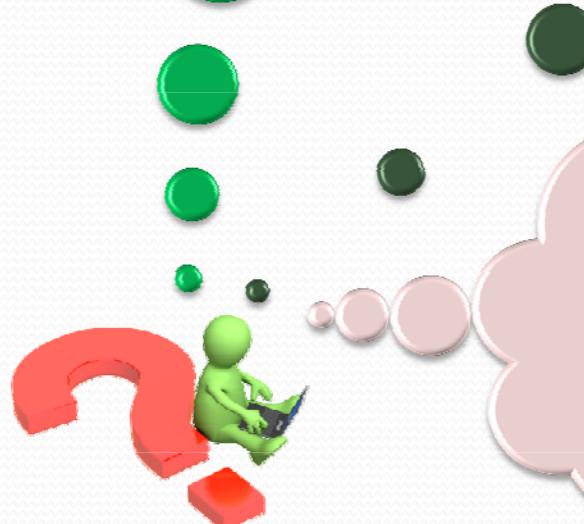


# GreenPASS



- Green PASS  
is a Green  
Building  
Rating Tool

- Green PASS estimate  
the carbon emission  
from building  
construction works  
and building  
operations



The application of  
Green PASS is for:  
1) Building  
Construction; and  
2) Building  
Operations

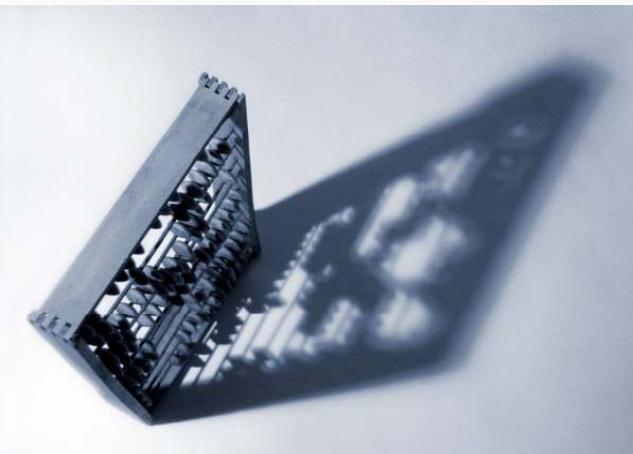


# SHASSIC & QLASSIC



## • SHASSIC

- Benchmark tool
- Standard system
- Assessment system
- Evaluate performance
- Monitoring mechanism
- Data compilation



The image shows two documents side-by-side. On the left is the 'SHASSIC Safety and Health Assessment System In Construction' manual, which includes a green header, a central image of construction workers, and text about enhancing safety. On the right is the 'STANDARD INDUSTRI PEMBINAAN (CONSTRUCTION INDUSTRY STANDARD)' document, specifically CIS 10: 2008, with a large teal header and detailed text about the standard.

**SHASSIC**  
Safety and Health Assessment System In Construction

Sistem Penilaian Keselamatan Dan Kesihatan Dalam Industri Pembinaan  
(CIS 10: 2008 SHASSIC)

**STANDARD INDUSTRI PEMBINAAN**  
(CONSTRUCTION INDUSTRY STANDARD)

Tingkatkan Tahap Keselamatan Dan Keamanan Dalam Pembinaan Melalui SHASSIC

'Enhancing The Level of Safety and Health Assessment System In Construction Through SHASSIC'

CIDB MALAYSIA

Lembaga Pembangunan Industri Pembinaan CONSTRUCTION INDUSTRY DEVELOPMENT BOARD

1bu Pejabat CIDB, Tingkat 7, Grand Sessions Avenue, No.72, Jalan Pahang, 50720 Kuala Lumpur. Tel: 603 - 2617 0200 Fax: 603 - 2617 0201 http://www.cidb.gov.my

CIS 10:2008

SAFETY AND HEALTH ASSESSMENT SYSTEM IN CONSTRUCTION

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Lembaga Pembangunan Industri Pembinaan Malaysia CONSTRUCTION INDUSTRY DEVELOPMENT BOARD MALAYSIA

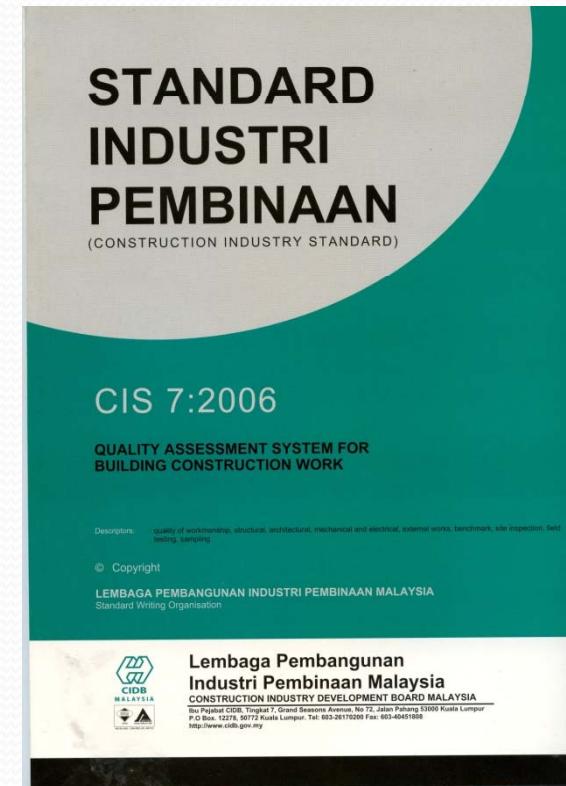
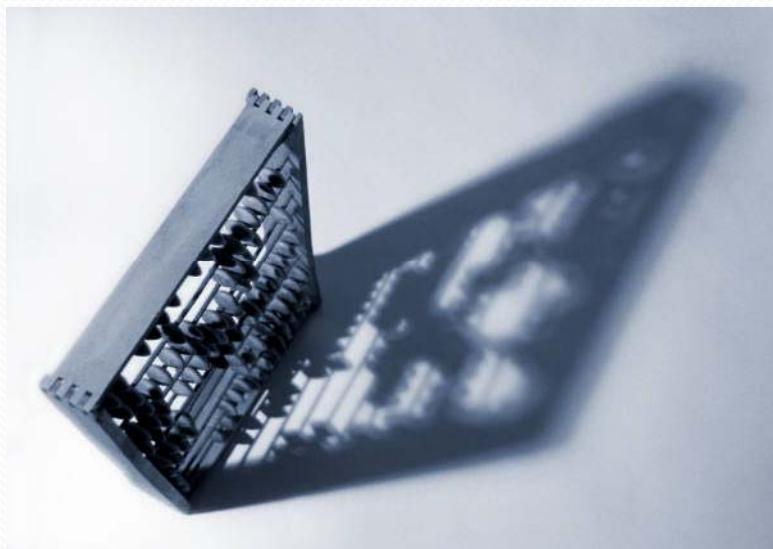
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# SHASSIC & QLASSIC



- QLASSIC

- Benchmarking tool
- Standard system
- Key Performance Indicator
- Data compilation



# IBS Roadmap 2011- 2015



- Quality
- Faster Completion Time
- Fewer Site Workers

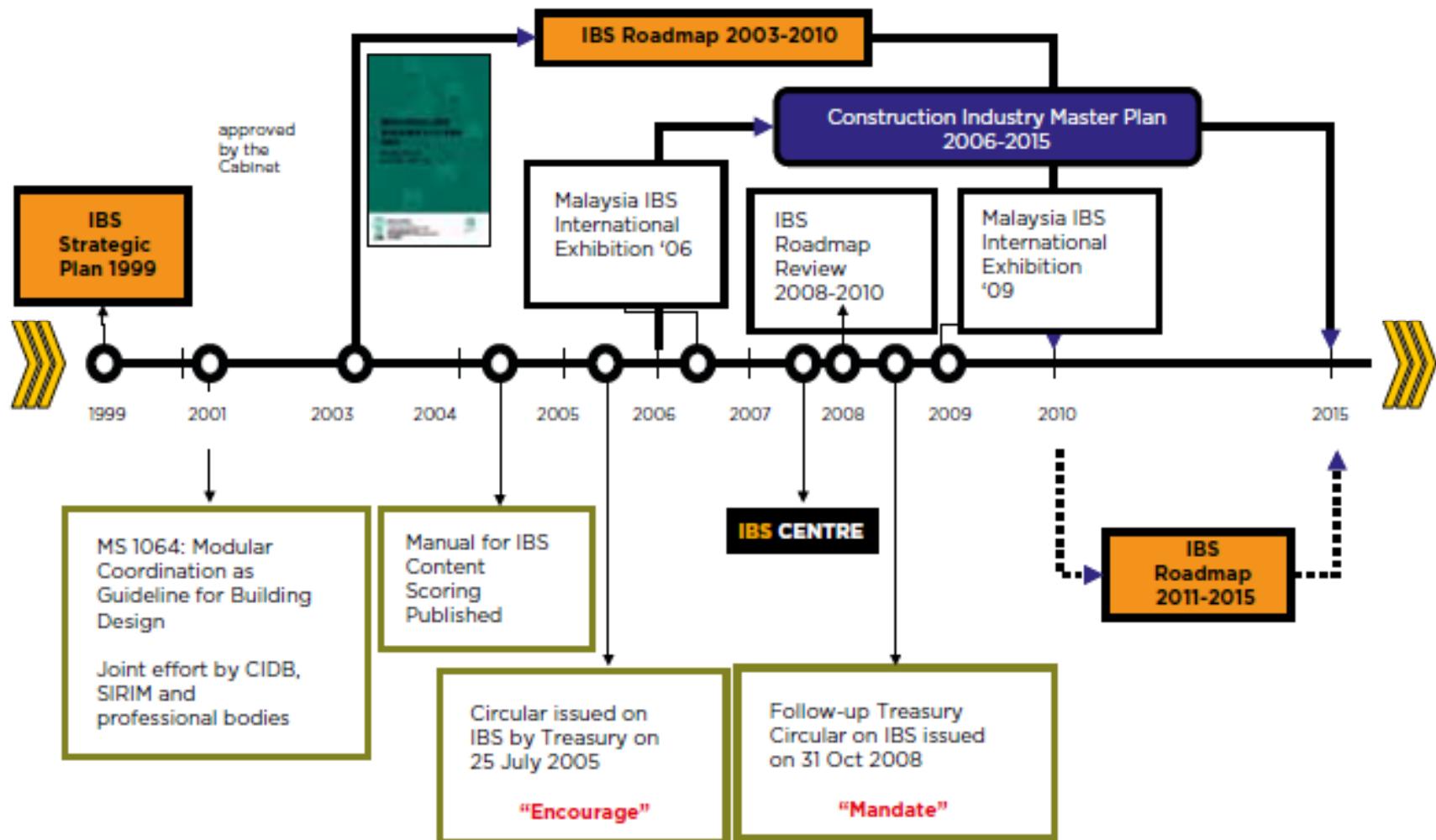


Roadmap for  
Industrialised  
Building  
System  
(IBS)  
in Malaysia 2011-2015



Ministry of Works, Malaysia

# IBS Roadmap 2011- 2015



# IBS Roadmap 2011- 2015



Figure 2.1 Public Sector Projects Using IBS Under the 9<sup>th</sup> Malaysia Plan

## Analysis of Public IBS Construction Projects

	JKR	Non JKR	Total
No.of Projects	115	176	291
Value of Projects (in RM)	5,987,972,657	4,041,748,421	10,029,721,078
Average Size of Projects (in RM)	52,069,327	22,964,480	34,466,395
Share of Total (by number of project)	40%	60%	
Share of Total (by value)	60%	40%	

291

## Breakdown of Public IBS Projects by Ministries (by project value in RM)

Ministries	JKR	Non JKR	Total
1 Kementerian Pelajaran	51,545,185	2,373,558,449	2,425,103,634
2 Jabatan Perdana Menteri	1,552,327,472		1,552,327,472
3 Kementerian Pengajian Tinggi	1,263,816,000	66,717,400	1,330,533,400
4 Kementerian Kesihatan	1,193,760,000		1,193,760,000
5 Kementerian Perumahan & Kerajaan Tempatan		1,154,100,000	1,154,100,000
6 Kementerian Kewangan	481,520,000	20,672,572	502,192,572
7 Kementerian Kerja Raya	482,500,000	4,800,000	487,300,000
8 Kementerian Belia & Sukan	227,000,000	40,000,000	267,000,000
9 Kementerian Pembangunan Wanita Keluarga & Masyarakat	209,500,000		209,500,000
10 Kementerian Pertahanan	60,000,000	129,500,000	189,500,000
11 Kementerian Pertanian & Industri Asas Tanah	57,494,000	130,900,000	188,394,000
12 Kementerian Sains Teknologi & Inovasi	128,300,000		128,300,000
13 Kementerian Wilayah Persekutuan & Kesejahteraan Bandar		121,500,000	121,500,000
14 Kementerian Sumber Manusia	116,210,000		116,210,000
15 Kementerian Pelancongan	85,000,000		85,000,000
16 Kementerian Pengangkutan	49,500,000		49,500,000
17 Kementerian Perusahaan Perladangan & Komoditi	21,500,000		21,500,000
18 Kementerian Kemajuan Luar Bandar & Wilayah	8,000,000		8,000,000
Total	5,987,972,657	4,041,748,421	10,029,721,078

RM 10b

# Conclusion

- Challenging and demanding
- Role of R&D
- Mechanization
- Unlearn and Relearn
- Capacity building
- Impact of the definition “**GREEN**”



**Ponder !**





THANK YOU  
TERIMA KASIH



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