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Country Report

MALAYSIA

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EXECUTIVE SUMMARY

The Malaysian economy expanded by 4.7% in 2013. The construction sector expanded strongly at 10.9% in 2013 (2012: 18.1%), owing to robust activity in the residential and civil engineering sub-sectors. The private sector continued its domination, obtaining projects awarded in 2013 worth RM98.0 billion (USD29.9 billion) or 81.5% of the total value of projects for the year. The public sector took a back seat with only RM22.3 billion (USD6.8 billion) or 18.5% of construction projects awarded for the same period. The main building material prices in 2013 increased marginally compared to 2012. Wages of construction personnel too were showing the same upward trend. The number of registered construction workers, as in previous years, increased. Malaysian economy is expected to grow moderately in 2014 by 4.5% - 5.5%. CIDB estimated that the value of construction projects awarded may reach RM120.0 billion (USD36.6 billion) in 2014 and RM136.0 billion in 2015 (USD41.4 billion).

MACROECONOMIC REVIEW

Overview of the National Economy

Overview of the Malaysian Economy in 2013

The Malaysia economy expanded by 4.7% (2012: 5.6%). The growth was driven by the continued strong growth in domestic market by 7.6% (2012: 10.6%). The domestic market remained resilient led by the robust private consumption and investment. Private consumption registered a firm growth of 7.6% in 2013 (2012: 7.7%) underpinned by favourable employment condition and wage growth. Private investment continued to register a double-digit growth rate of 13.6% (2012: 21.9%) driven by capital spending by both the domestic and foreign investors in the mining, services and manufacturing sector. In the public sector, public consumption recorded a higher growth of 6.3% (2012: 5.1%) due mainly to higher expenditure in supplies and services, while public investment recorded a small positive growth of 0.7% (2012: 17.1%) following the decline in the Federal Government's development expenditure.

On the supply side, all economic sectors continued to expand in 2013. The construction sector growth remained strong by 10.9% (2012: 18.1%) benefited from the strong expansion in investment activity especially in the residential and civil engineering sub-sectors. The service sector expand by 5.9% (2012:6.4%), manufacturing sector at 3.4% (2012: 4.8%), agriculture sector at 2.1% (2012: 1.0%) and the mining sector at 0.5% (2012: 1.4%).

Expansion in Malaysia economic activity across all sector in 2013 supported the demand for labour. Employment recorded a strong growth with an addition of 4.8% (2012: 3.6%) with a net addition of 613,000 jobs. The employment rate remained low at 3.1% (2012: 3.0%).

The inflation rate remained modest at 2.1% 2013 (2012: 1.6%). The main contributor to inflation were food and non-alcoholic beverages; transport; house, water, electricity gas and other fuel categories. The Monetary Policy Committee (MPC) maintained the Overnight Policy Rate (OPR) at 3.0% throughout 2013 and base lending rate (BLR) of commercial banks remained at 6.5%. The Ringgit ended the year at RM3.28 against the US Dollar, depreciated by 6.8%. Ringgit depreciated amid increased global financial market volatility

Table 2.1 Malaysian Macroeconomic Overview

	2011	2012	2013
GDP growth by economic activity at 2005 chained price (RM million)			
Agriculture	54,253	54,782	55,913
Mining	62,565	63,432	63,767
Manufacturing	178,237	186,748	193,006
Construction	22,464	26,531	29,422
Services	385,179	409,976	433,998
Real GDP	711,351	751,471	786,696
GDP growth by economic activity at 2005 chained price (%)			
Agriculture	5.8	1.0	2.1
Mining	-5.5	1.4	0.5
Manufacturing	4.7	4.8	3.4
Construction	4.7	18.1	10.9
Services	7.0	6.4	5.9
Real GDP Growth	5.1	5.6	4.7
Demographic Indicator			
Population (million persons)	29.1	29.5	29.9
Labour force (million persons)	12.7	13.1	13.8
Unemployment rate (%)	3.1	3.0	3.1
Financial Indicator			
Inflation rate (%)	3.2	1.6	2.1
Short term interest rate - 3 months (%)	2.99	2.97	3.97
Long term interest rate - 12 months (%)	3.22	3.15	4.15
Exchange rate at end of period (<i>RM against USD</i>)	RM3.18	RM3.06	RM3.28

Source: Central Bank of Malaysia Annual Report 2013.

Review of the Malaysian Economy in the First Half of 2014

The Malaysian economy grew stronger by 6.3% in the first half of 2014 (1Q 2014: 6.2%; 2Q 2014: 6.4%). Overall, growth was supported by higher exports and continued strength in private domestic demand. On the supply side, growth for major economic sectors remained strong. The construction sector's growth was strong at 14.3% in the first half of 2014 after the exceptionally strong growth in the first quarter at 18.9% (2Q 2014: 9.9%). The services sector registered a growth of 6.3% in the first half of 2014 (1Q 2014: 6.6%; 2Q 2014: 6.0%), the manufacturing sector expanded at 7.1% (1Q 2014: 6.8%; 2Q 2014: 7.3%), the agriculture sector grew at 4.6% (1Q 2014: 2.3%; 2Q 2014: 7.1%) and the mining sector grew slightly at 0.6% (1Q 2014: -0.8%; 2Q 2014: 2.1%).

OVERVIEW OF THE CONSTRUCTION INDUSTRY

Construction Project Review in 2013

The Construction Industry Development Board (CIDB) Malaysia recorded 7,621 projects worth RM120.4 billion (USD36.7 billion) (2012: 7,781 projects; RM125.2 billion, USD40.9 billion) of new construction projects awarded in 2013. This figure is likely to increase as more projects awarded in 2013 get reported to CIDB. The private and public sectors contributed 81.5% and 18.5% respectively from the total value. Private sector projects value showed a decrease by 8.1% to RM98.0 billion (USD29.9 billion) and the public sector projects showed a rise by 20.6% to RM22.3 billion (USD6.8 billion). As the economy continued to grow, more private investment activities took place and developers embarked on new construction projects. This is in line with the government's aim to push the private sector as the main driver of the economy. In terms of numbers, the private sector secured 5,795 projects compared to 1,826 public sector projects.

Major contribution to Malaysian construction projects came from the implementation of 4 mega non-residential and infrastructure projects each costing more than RM1.0 billion amounting to RM11.4 billion as follows:

1. Liquefied natural gas (LNG) plant in Sarawak worth RM5.7 billion (USD1.7 billion)
Award date : 7 March 2013; Expected completion date : 7 December 2015
2. Onshore Gas Terminal in Terengganu worth RM2.3 billion (USD698 million)
Award date : 15 January 2013; Expected completion date: 31 July 2016

3. 1071.43MW Gas Fired Independent Power Plant in Pulau Pinang worth RM2.2 billion (USD686 million)
Award date : 3 April 2013; Expected completion date: 1 January 2016
4. Duta Ulu Kelang Expressway (DUKE) Phase 2 in Kuala Lumpur worth RM1.4 billion (USD427 million)
Award date : 14 May 2013; Expected completion date : 15 May 2016

In 2013, non-residential projects registered a value of RM50.4 billion (USD165.4 billion), followed by residential projects at RM35.9 billion (USD11.0 billion), infrastructure projects at RM25.1 billion (USD8.2 billion), and social amenity projects at RM8.9 billion (USD2.7 billion). The project value had clearly been boosted by the non-residential projects (41.9%) and led by the private sector with a share of 39.1% due to the high-value projects awarded under the sub-category of industrial and commercial. Meanwhile, infrastructure projects tendered decreased by 43.3% in 2013, mainly because of reduction in infrastructure projects by the private sector.

Table 3.1 Value and Number of Construction Projects by Sector and Type

Sector and Type of Project	Value (RM million)			
	2011	2012	2013	1H 2014
Total Private Sector	78,045.66	106,684.10	98,049.82	30,946.68
Residential	23,701.16	31,424.18	33,870.25	12,181.65
Non-Residential	34,537.51	37,172.02	47,110.24	12,390.70
Social Amenity	2,765.78	3,636.14	3,199.39	1,255.69
Infrastructure	17,041.21	34,451.76	13,869.94	5,118.64
Total Public Sector	23,492.22	18,506.18	22,326.89	8,071.62
Residential	908.83	1,647.26	2,049.04	1,001.61
Non-Residential	2,780.02	3,363.56	3,318.78	1,257.98
Social Amenity	4,207.12	3,660.94	5,706.12	972.51
Infrastructure	15,596.25	9,834.42	11,252.95	4,839.52
Grand Total	101,537.88	125,190.28	120,376.71	39,018.30

Sector and Type of Project	Number			
	2011	2012	2013	1H 2014
Total Private Sector	5,747	5,822	5,795	1,814
Residential	2,116	2,044	2,028	640
Non-Residential	2,352	2,419	2,537	738
Social Amenity	264	236	211	76
Infrastructure	1,015	1,123	1,019	360
Total Public Sector	1,948	1,959	1,826	389
Residential	141	202	131	51
Non-Residential	260	316	322	92
Social Amenity	580	677	450	100
Infrastructure	967	764	923	146
Grand Total	7,695	7,781	7,621	2,203

Note : As at 30 June 2014

Source: CIDB Malaysia

Contractor Registration

The number of contractors registered in CIDB in 2013 decrease by 4.0% to 67,028 (2012: 69,799 contractors). Total registration of low grade contractors G1 to G3 in 2013 registered at 78.4% (2012: 79.4%) was greater than the high grade contractors due to less restrictive conditions of registration and lesser capacity requirement. The number of registered low grade contractors decreased by 5.1% in 2013. The number of medium grade contractors of G4 and G5 accounted for 12.9% of total registered contractors in 2013. The number of high grade contractors of G6 and G7 was 10.3% of the total registered contractors in 2013. Their registration increased by 1.3% in 2013 compared to 2012. This was due to the contractors' growing

capability and increased opportunities in construction. The number of registered foreign contractors in 2013 showed a significant change compared to 2012.

Table 3.2 Contractors Registered by Registration Grade

Grade	Bidding Limit	2011	2012	2013	1H 2014
G1	Not exceeding RM200,000	32,752	36,399	34,485	34,292
G2	Not exceeding RM500,000	8,187	8,665	9,269	9,782
G3	Not exceeding RM1,000,000	10,437	10,351	8,825	8,726
G4	Not exceeding RM3,000,000	2,686	2,922	3,038	2,997
G5	Not exceeding RM5,000,000	3,817	4,317	4,130	4,048
G6	Not exceeding RM10,000,000	1,398	1,692	1,594	1,522
G7	Unlimited	4,573	5,144	5,332	5,331
Foreign	Unlimited	244	309	355	346
Total		64,094	69,799	67,028	67,044

Source: CIDB Malaysia

Construction Personnel

A total of 1,858 architects and 975 quantity surveyors were registered as a professional consultant. As in the previous years, the registration of consultants was balanced and did not greatly vary. However, a total of 321,870 construction personnel were registered in 2013, an increase about 87.4% compared to 2012. This strong increment in the registration of personnel is a result of CIDB's enforcement activity both at site and through reminder letters.

Table 3.3 Local Professional Consultants Registered by Type

Type of Professional Consultant	2011	2012	2013
Architect ¹	1,782	1,844	1,858
Quantity Surveyor ²	888	930	975
Engineer ²	6,841	N.A	N.A

Source:¹ Board of Architects Malaysia

² Board of Quantity Surveyors Malaysia

Note : N.A – Not Available

Table 3.4 Registered Construction Personnel by Type

Category of Worker	2012		2013	
	Local	Foreign	Local	Foreign
General worker	59,614	29,390	76,354	71,607
Construction worker	26,960	1,356	53,611	4,050
Skilled construction worker	13,685	566	18,857	426
Manager and site assistant manager	14,083	484	19,509	838
Construction supervisor	16,424	304	21,547	178
Administrative personnel	38,141	791	53,788	1,105
Total	168,907	32,891	243,666	78,204

Source: CIDB Malaysia

Construction Productivity

Value-added per employee in the construction sector rose by 2.5% (2012: 15.0%) to RM23,373.00 per worker in 2013. The decline in productivity growth compared to 2012 indicates that some on-site construction practices and tasks still require a high degree of labour input and that the sector has been relatively slow at adopting mechanisation, automation and other advanced methods of construction.

Table 3.5 Value-Added Per Employee

	2011	2012	2013
Construction Sector Value- Added (RM million)	22,464	26,531	29,422
Construction Sector Employee ('000 persons)	1,133.6	1,163.7	1,258.8
Value-Added Per Employee (RM)	19,817	22,799	23,373

Source: Central Bank of Malaysia Annual Report 2013

Construction Cost

Tender Price Index

Building construction tender price indices showed an overall increase compared to the base year in 1980. In 1H 2013, tender price index showed a decrease of 3.3% compared to 2H 2012 (429.3 point). In 2H 2013, the index added 22.1 points to make the tender price index rose to 437.4 points. The tender price index will continue to rise in line with the rising prices of building materials.

Table 3.6 Building Construction Tender Price Indices (1980 = 100)

Period		Tender Price Indices
2011	1H	408.49
	2H	411.36
2012	1H	420.49
	2H	429.32
2013	1H	415.24
	2H	437.35

Source: Average Cost per Square Meter for Building Works by Public Works Department

Average Price of Major Construction Material

Overall, the average price for major building materials in 2013 slightly increase compared to 2012 prices. The price of cement, aggregate, sand and brick increase of about 0.3% to 3.3%. In contrast, prices for other building materials such steel bars (mild steel round bars and high tensile deformed bars), ready mixed concrete and BRC 10A declines by 4.8% to 1.1% compared to year 2012.

Table 3.7 Average Prices of Major Construction Materials (RM)

Category of Material	Unit	2011	2012	2013
Cement	5 kg Bag	16.46	16.75	17.19
Aggregate	Tonne	36.65	37.71	39.14
Sand	Tonne	26.83	28.55	28.79
Steel Bar	Tonne	2,579.14	2,572.18	2,549.13
Ready Mixed Concrete	m ³	268.86	268.61	252.27
BRC A10	m ²	19.51	18.45	17.57
Brick	Unit	0.36	0.35	0.37

Source: CIDB Malaysia

Construction Industry Wage Rates

Construction General Worker Wage Rates

Average daily wage rates for all categories of local skilled construction workers increases ranging from 0.1% to 16.0%. The highest wage rate earn by local skilled worker who works as a plumber-reticulation (RM126.33 per day, USD38.52 per day), carpenter – joinery (RM121.17 per day, USD39.74 per day) and roofer (RM1,117.75 per day, USD386.22 per day). Average daily wage rates for most categories of foreign skilled construction workers increases ranging from 0.1% to 9.4%. The

highest wage rate earn by foreign skilled worker who works as a plumber-reticulation (RM109.67 per day, USD33.44 per day), steel structure fabricator (RM107.75 per day, USD32.85 per day) and general welder (RM105.06 per day, USD32.03 per day).

Table 3.8 Average Daily Wage Rate for Construction Worker (RM per day)

Category of Worker	Minimum / Maximum Wage	Local Worker				Foreign Worker			
		Skilled		Semi-Skilled		Skilled		Semi-Skilled	
		2012	2013	2012	2013	2012	2013	2012	2013
General Construction Worker - Building	Minimum	42.23	46.00	-	-	36.38	39.80	-	-
	Maximum	71.39	73.53	-	-	59.75	61.97	-	-
Concreter	Minimum	64.28	72.65	61.75	59.28	58.87	61.20	48.38	51.55
	Maximum	95.80	107.10	97.30	88.02	92.43	94.15	75.00	76.89
Barbender	Minimum	71.31	79.81	64.57	60.18	60.95	64.56	46.05	49.39
	Maximum	95.36	106.75	93.72	85.28	85.61	89.33	71.19	74.58
Carpenter-Formwork	Minimum	71.91	82.69	72.03	65.46	66.10	69.12	56.13	59.71
	Maximum	101.28	112.67	100.06	91.61	91.89	94.86	81.19	84.42
Bricklayer	Minimum	67.20	74.14	54.89	53.89	56.49	56.78	42.62	44.82
	Maximum	93.69	105.41	88.78	83.83	85.57	88.03	66.46	70.09
Roofer	Minimum	76.51	83.84	71.93	68.77	69.89	71.62	53.85	55.60
	Maximum	107.78	117.75	100.19	91.92	98.08	100.89	80.56	82.11
Carpenter - Joinery	Minimum	80.25	88.19	76.32	70.99	73.59	74.25	56.91	59.24
	Maximum	111.61	121.17	108.31	100.11	103.72	105.53	87.14	89.44
Steel Structure Fabricator	Minimum	74.33	86.24	78.12	73.37	73.07	77.32	58.52	61.69
	Maximum	110.78	120.31	107.78	101.00	106.11	107.75	85.93	88.49
General Welder	Minimum	68.81	78.85	74.28	68.46	69.37	72.69	57.38	59.66
	Maximum	104.81	116.28	106.01	96.82	104.17	105.06	85.76	88.44
Plumber - Building & Sanitary	Minimum	72.11	81.51	67.04	63.91	64.53	66.86	49.09	51.89
	Maximum	103.25	116.64	98.44	92.67	95.22	99.94	78.86	81.92
Plumber - Reticulation	Minimum	75.54	84.86	77.56	74.88	70.51	74.66	60.35	63.54
	Maximum	113.36	126.33	116.92	107.31	108.58	109.67	91.81	92.95
Building Wiring Installer	Minimum	-	-	82.16	83.74	-	-	69.23	72.01
	Maximum	-	-	115.75	114.22	-	-	105.97	107.28
Electrical Wireman PW2 (RM Monthly)	Minimum	1,797.06	1,836.89	-	-	1,343.63	1,370.13	-	-
	Maximum	3,005.73	3,009.62	-	-	2,432.39	2,433.78	-	-
Electrical Wireman PW4 (RM Monthly)	Minimum	2,441.89	2,487.56	-	-	1,759.71	1,843.71	-	-
	Maximum	3,609.61	3,619.33	-	-	2,909.74	2,948.63	-	-
Scaffolder - Prefabricated	Minimum	71.88	80.51	65.12	61.37	62.38	65.31	51.68	54.07
	Maximum	101.03	109.50	101.73	92.53	97.34	97.31	83.97	85.36
Scaffolder - Tubular	Minimum	68.06	78.91	64.57	63.66	63.72	67.27	50.88	52.69
	Maximum	94.92	109.11	95.58	88.31	95.53	95.50	78.47	78.61
Plasterer	Minimum	70.88	80.84	66.72	62.33	58.83	64.13	44.55	47.99
	Maximum	98.16	108.13	97.47	91.28	91.89	91.75	80.86	82.92
Tiller	Minimum	76.66	87.81	69.42	65.24	67.42	70.56	50.83	54.10
	Maximum	106.42	117.73	104.06	94.69	96.97	99.86	84.11	84.67
Painter - Building	Minimum	65.91	73.30	60.82	57.40	59.39	60.67	46.43	48.57
	Maximum	97.54	106.76	93.31	85.44	89.56	90.78	72.08	74.31

Category of Worker	Minimum / Maximum Wage	Local Worker				Foreign Worker			
		Skilled		Semi-Skilled		Skilled		Semi-Skilled	
		2012	2013	2012	2013	2012	2013	2012	2013
General Construction Worker - Civil	Minimum	52.03	57.52	-	-	44.97	47.86	-	-
	Maximum	80.11	84.56	-	-	71.06	71.78	-	-

Source: CIDB Malaysia

Construction Machine Operator Wage Rates

Average daily wage rates for most categories of local skilled machine operator increases ranging from 0.3% to 5.7%. The highest wage rate earn by local machine operator who operates tower crane (RM141.05 per day, USD43.00 per day), mobile crane (RM127.24 per day, USD38.79 per day) and crawler crane (RM126.50 per day, USD38.57 per day). Average daily wage rates for most categories of foreign skilled machine operator increases ranging from 0.2% to 6.0%. The highest wage rate earn by foreign machine operator who operates tower crane (RM114.46 per day, USD34.90 per day), mobile crane (RM106.42 per day, USD32.45 per day) and crawler crane (RM104.56 per day, USD31.88 per day).

Table 3.10 Average Daily Wage Rates for Construction Machinery Operator (RM per day)

Category of Operator	Minimum / Maximum Wage	Local Worker				Foreign Worker			
		Skilled		Semi-Skilled		Skilled		Semi-Skilled	
		2012	2013	2012	2013	2012	2013	2012	2013
Excavator	Minimum	72.22	72.67	-	-	53.03	55.17	-	-
	Maximum	106.94	110.25	-	-	90.56	92.69	-	-
Pile Rigger	Minimum	67.93	70.82	49.81	52.06	54.65	56.71	42.16	43.43
	Maximum	103.31	104.11	81.44	82.92	87.07	91.62	69.58	71.75
Off Road Truck	Minimum	65.88	68.47	49.44	50.86	53.35	55.60	40.13	42.48
	Maximum	97.72	98.00	77.03	82.00	83.16	86.63	67.36	71.92
Backhoe Loader	Minimum	66.36	68.00	-	-	50.39	51.36	-	-
	Maximum	100.13	103.44	-	-	81.53	86.42	-	-
Roller	Minimum	59.90	61.65	48.72	50.14	51.56	53.65	38.43	44.11
	Maximum	104.39	105.36	76.94	77.92	85.25	85.39	65.91	73.46
Roller / Compactor	Minimum	64.58	65.55	48.34	51.42	53.01	55.32	40.60	46.65
	Maximum	102.07	102.52	79.31	81.44	86.42	89.72	70.77	76.69
Scraper	Minimum	68.02	69.36	50.92	55.81	57.67	59.50	44.20	49.64
	Maximum	101.81	101.78	78.25	81.33	87.06	88.11	73.89	79.25
Motor Grader	Minimum	66.39	68.12	-	-	52.87	54.93	-	-
	Maximum	104.31	107.94	-	-	90.30	90.77	-	-
Wheel Loader	Minimum	62.84	64.72	48.11	51.00	53.36	55.67	41.53	43.89
	Maximum	106.64	107.28	82.11	83.14	87.82	91.67	70.62	71.93
Paver	Minimum	68.04	70.98	53.39	55.13	58.27	59.74	43.63	46.16
	Maximum	105.42	106.39	81.10	84.94	87.65	91.33	72.11	75.75
Mobile Crane	Minimum	84.12	86.87	61.52	65.23	71.05	72.27	50.55	52.69
	Maximum	128.68	127.24	96.47	98.03	104.70	106.42	78.61	79.75
Crawler Crane	Minimum	84.53	89.31	63.44	64.57	69.85	73.22	52.02	53.33
	Maximum	125.20	126.50	90.83	94.92	101.50	104.56	78.25	80.33
Tower Crane	Minimum	88.97	91.36	67.56	68.95	72.99	74.83	52.96	54.63
	Maximum	140.66	141.05	101.03	102.67	113.48	114.46	84.03	87.17
Forklift	Minimum	66.47	68.22	48.99	50.21	52.08	53.47	38.94	41.08
	Maximum	94.65	96.79	75.17	75.97	80.55	82.14	64.64	66.19
Slinger / Dogger	Minimum	61.53	64.08	47.61	48.61	50.81	52.22	37.95	41.84
	Maximum	100.50	99.63	76.22	77.36	82.06	84.61	66.92	69.14

Source: CIDB Malaysia

IBS Installer Wage Rates

IBS installer in Malaysia comprises of only local workers. In 2013, average daily wage rates for most categories of IBS installer decrease ranging from 4.1% to 0.2%. The highest wage rate earn by skilled worker who install IBS precast concrete (RM150.67 per day) and IBS lightweight panel (RM137.00 per day, 41.77 per day). Average daily wage rates for most categories of semi-skilled IBS installer increases ranging from 0.8% to 14.1%. The highest wage rate earn by semi-skilled worker who install IBS lightweight panel (RM110.00 per day, USD33.54 per day) and IBS precast concrete (RM109.67 per day, USD33.45 per day).

Table 3.9 Average Daily Wage Rate for Local IBS Installer (RM per day)

Category of IBS Installer	Minimum / Maximum Wage	Skilled		Semi-Skilled	
		2012	2013	2012	2013
IBS Precast Concrete	Minimum	85.17	81.67	65.17	65.67
	Maximum	151.17	150.67	100.50	109.67
IBS Lightweight Panel	Minimum	80.33	78.33	63.33	64.00
	Maximum	130.67	137.00	97.67	110.00
Lightweight Block wall	Minimum	71.00	69.67	55.00	57.33
	Maximum	98.17	111.67	74.50	85.00
System Formwork	Minimum	68.50	67.33	54.33	54.00
	Maximum	107.83	113.33	87.33	94.00
Roof Truss (Timber)	Minimum	69.33	66.67	54.33	55.00
	Maximum	97.33	107.33	76.67	82.00
Roof Truss (Light Gauge Steel)	Minimum	69.17	69.00	53.17	54.67
	Maximum	105.67	115.33	76.67	87.33

Source: CIDB Malaysia

Export and Import of Construction Work

In 2013, Malaysian contractors managed to secure 16 foreign projects worth RM2.7 billion (USD823 million) and most of the projects came from Middle East countries. The largest construction projects undertaken by Malaysian companies in foreign countries were the Bahrain Affordable Housing Project (RM1.2 billion, USD380.0 million) and Submarine Mains (Stage 4 Phase 2) and Submarine Pipelines in Hong Kong (RM848.8 million, USD265.8 million).

Comparatively, a total of 66 foreign contractors from 16 countries secured 124 construction projects in Malaysia worth RM14.8 billion (USD4.5 billion). Contractors from Singapore (16 contractors, 33 projects) and Japan (12 contractors, 27 projects) are the most involved. Among the largest construction projects awarded to foreign contractors in 2013 are The Liquefied Natural Gas (LNG) Plant in Sarawak (RM5.7

billion, USD1.7 billion) awarded to Japanese contractor and Onshore Gas Terminal in Terengganu (RM2.3 billion, USD701 million) awarded to Korean contractor.

Table 3.11 Value and Number of Export of Construction Services

Value (RM million)				
Sector and Type of Project	2011	2012	2013	1H 2014
Total Private Sector	8,536.2	5,529.2	2,744.1	200.1
Residential	86.5		1,213.0	
Non-Residential		438.1	592.3	
Social Amenity				
Infrastructure	8,449.7	5,091.1	938.7	200.1

Number				
Sector and Type of Project	2011	2012	2013	1H 2014
Total Private Sector	9	14	16	5
Residential	2		1	
Non-Residential		6	10	
Social Amenity				
Infrastructure	7	8	5	5

Note : As at 30 June 2014

Source : CIDB Malaysia

Table 3.12 Value and Number of Import of Construction Services

Value (RM million)				
Sector and Type of Project	2011	2012	2013	1H 2014
Total Private Sector	16,446.3	15,070.6	14,769.8	2,363.9
Residential	701.6	524.1	279.4	343.8
Non-Residential	7,759.4	5,814.2	11,674.4	1,439.2
Social Amenity	9.3	26.9	178.4	4.2
Infrastructure	7,976.1	8,705.4	2,637.6	576.7
Total Public Sector	1,610.7	144.9	0.0	306.7
Residential				
Non-Residential		144.9		306.7
Social Amenity				
Infrastructure	1,610.7			
Grand Total	18,057.1	15,215.4	14,769.8	2,670.6

Sector and Type of Project	Number			
	2011	2012	2013	1H 2014
Total Private Sector	118	148	124	31
Residential	7	12	15	5
Non-Residential	88	103	77	21
Social Amenity	3	5	2	1
Infrastructure	20	28	30	4
Total Public Sector	6	1	0	1
Residential				
Non-Residential		1		1
Social Amenity				
Infrastructure	6			
Grand Total	124	149	124	32

Note : As at 30 June 2014

Source: CIDB Malaysia

Table 3.13 5 Major Project Secured by Malaysian Contractors in Foreign Market in 2013

Country		Type of Project	Value (RM million)
1.	Bahrain	Residential	1,213.0
2.	Hong Kong	Infrastructure	848.9
3.	UAE	Non-Residential	325.0
4.	Sri Lanka	Infrastructure	56.9
5.	Singapore	Non-Residential	49.6

Note : As at 30 June 2014

Source: CIDB Malaysia

Table 3.14 5 Major Projects Secured by Foreign Contractors in Malaysia in 2013

Country		Type of Project	Value (RM million)
1.	Japan	Non-Residential	5,739.9
2.	Korea	Non-Residential	2,291.2
3.	China	Non-Residential	880.3
4.	China	Infrastructure	739.4
5.	Korea	Non-Residential	399.0

Note : As at 30 June 2014

Source: CIDB Malaysia

CONSTRUCTION INDUSTRY OUTLOOK FOR 2014

In 2014, the Malaysia economy is expected to remain on a steady growth by 4.5% to 5.5% and the construction sector at 10.0%. Construction sector will continue to benefit from the development of sustainable economy and high physical projects in preparation to achieve Vision 2020, which left about 6 years. Malaysia has a strong economic fundamentals and political stability aims to become the center of business, investment, tourism and location of the world's major livable cities. To achieve this, Malaysia needs more quality economic infrastructure development. Implementation of Entry Point Project (EPP), 10MP and the development of economic corridors provinces will be more vibrant and revitalise the real estate market. Development of government projects will be driven by the implementation of communications services, utilities and high value of transportation projects. Thus, value for new construction projects for 2014 is expected to be at RM120.0 billion (USD36.6 billion) and in 2015, the value will reach RM136.0 billion (USD41.5 billion).

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Theme Paper

Meeting Construction Industry Resources Requirements

THE MALAYSIA WAY

Jointly prepared by

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CASH FLOW IN CONSTRUCTION

SUMMARY

INTRODUCTION

The Malaysia economy registered a growth of 4.7% in 2013 (2012: 5.6%), driven by the continued strong growth in the domestic demand. All economic sectors are seen to register positive growth with construction sector's growth remaining strong at 10.9% (2012: 18.1%). Construction output in 2013 rose by 13% to RM90.9 billion (USD27.7 billion) (2012: RM80.7 billion, USD26.4 billion). All types of construction activity showed a positive increase in output compared to 2012 anchored mainly by the implementation of civil engineering projects in 2013 (36%; RM32.3 billion, USD9.9 billion) followed by non-residential sub-sector (32%; RM29.3 billion, USD8.9 billion), residential sub-sector (28%; RM25.0 billion, USD7.6 billion), and special trade sub-sector (5%; RM4.3 billion, USD1.3 billion).

Eventhough the construction sector contribution to the GDP in Malaysia is relatively small, averaging 3.5% (2011 untill 2013), the construction sector has always played an important role in creating downstream demand through backward linkages and upstream demand through forward linkages. Any investment by other economic sectors will create demand for construction works as construction is a demand driven sector.

In terms of the number and value of new construction projects awarded in 2013, the Construction Industry Development Board (CIDB) Malaysia recorded 7,621 projects worth RM120.4 billion (USD36.7 billion) (2012: 7,781 projects; RM125.2 billion, USD40.9 billion). This figure is likely to increase as more projects awarded in 2013 gets reported to CIDB. The private sector has been the main engine of growth for construction with value of projects awarded ranging from 55% in 2009 to 85% in 2012. Similarly in terms of value, 82% of new projects in 2013 were private sector projects.

For the first half of 2014, the Malaysia economy registered a growth of 6.3%, underpinned by higher exports and continued strength in private domestic demand. All economic sectors are seen to register positive growth with construction sector's growth remaining strong at 14.3%.

Table 1 Malaysia Gross Domestic Product by Key Economic Sectors

Sector	GDP Growth (%)			Contribution (%)		
	2012	2013	1H2014	2012	2013	1H2014
Agriculture	1.0	2.1	4.6	7.3	7.1	6.8
Mining and Quarrying	1.4	0.5	0.6	8.4	8.1	8.0
Services	6.4	5.9	6.3	54.6	55.2	54.9
Manufacturing	4.8	3.4	7.1	24.9	24.5	24.8
Construction	18.1	10.9	14.3	3.5	3.7	4.0
GDP	5.6	4.7	6.3	-	-	-

Note : At Constant 2005 Price

Source : Monthly Bulletin Statistics, Central Bank of Malaysia

Going forward, the Malaysia construction sector is expected to continue to benefit from the sustainable growth of the country's economy and the high contribution of the private sector in the implementation of many new construction projects. More construction projects mean a higher demand on key construction resources such as

construction workers; construction materials; construction machinery and equipment, in particular at the construction stage of the value chain. In order to continue leveraging on domestic opportunities, there is a need to adopt a holistic approach in reviewing those factors that impact the resource requirements for construction such as availability of construction materials at competitive prices and availability of sufficient and skilled workforce.

Under the Construction Industry Development Board (CIDB) Act 1994, Act 520 (Amended 2011), the CIDB Malaysia, a statutory body, is to undertake 14 functions related to the construction industry. Out of these, 8 functions under Section 4 (1) are concerned with meeting resources requirements for the Malaysian construction industry in terms of business environment, quality assurance, standards, training, registration, accreditation and technologies as follows:

- (a) To promote and stimulate the development, improvement and expansion of the construction industry;
- (f) To promote and encourage quality assurance in the construction industry;
- (g) To regulate the conformance of standards for construction workmanship and materials;
- (i) To provide, promote, review and coordinate training in the construction industry;
- (j) To register and accredit contractors, to impose any conditions of registration and accreditation of the contractors and to revoke, suspend or reinstate the registration and accreditation;
- (k) To register, accredit and certify construction personnel and to revoke, suspend or reinstate the registration, accreditation and certification of such construction personnel;
- (l) To regulate the implementation of quality and safe construction works;
- (m) To regulate the implementation of Industrialised Building System in the construction industry.

According to a research undertaken by CIDB in 2012, it was found that typically construction costs is contributed by the cost of 3 major resources that are construction materials (64%), construction worker (20%) and machineries and equipment (3%) assuming overheads and profit margin of 13%. Thus this report is a review of the challenges faced by the Malaysia construction industry and the various approaches taken by CIDB through the powers under the relevant 8 functions of Act 520 Section 4 (1) in meeting the construction resources requirements for the 3 major resources according to their importance in terms of their contribution to construction costs.

CONSTRUCTION MATERIALS

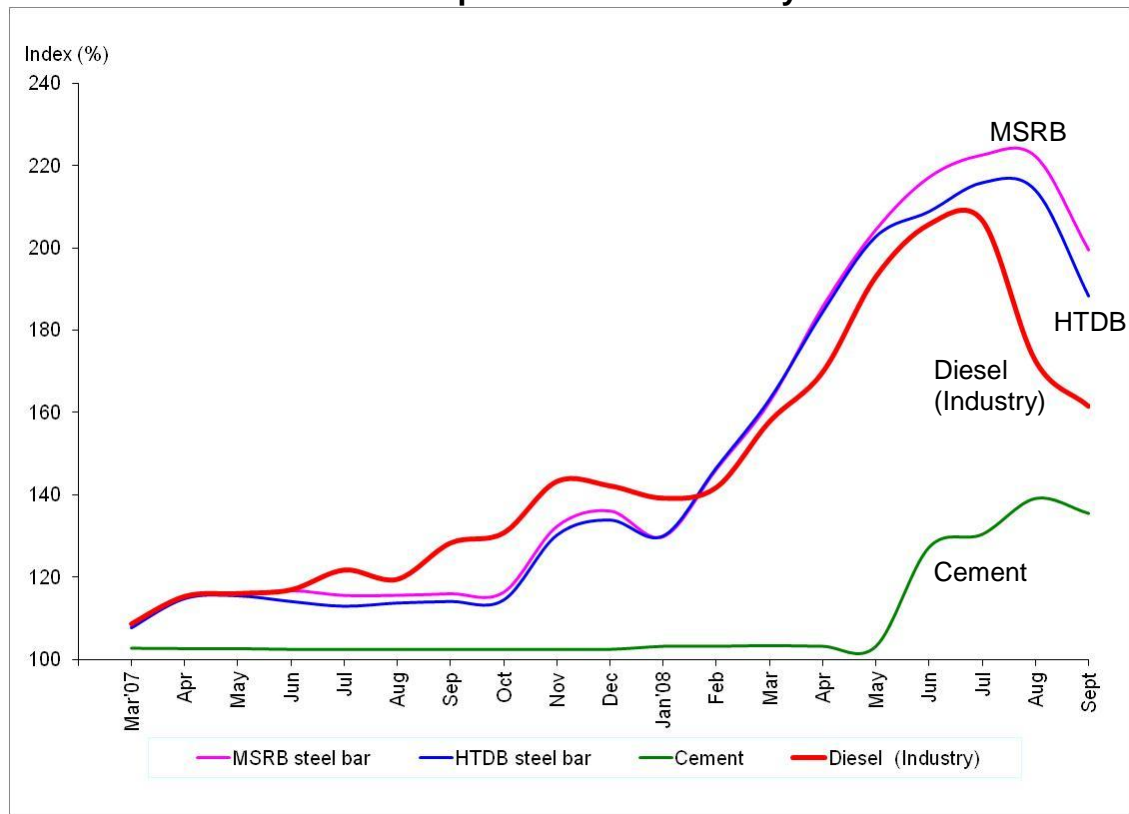
It is a matter of fact that construction materials represent a major expense in implementing construction projects. In Malaysia, ensuring material prices stability; equilibrium between demand and supply of materials; and conformance of materials to quality standards are among the biggest challenges faced by the Malaysian construction industry pertaining to material resources.

Material Prices

In many cases, sudden and unexpected increases in construction material prices can have a dire effect on the implementation of construction projects particularly during the construction phase. In ensuring material prices stability, Malaysia had implemented some measures like controlling the price for steel bars and cement under the Price Control Act 1946. Nevertheless, due to world demand for cement and steel, the industry could not sustain selling at the controlled ceiling prices and there was a price hike in steel and cement prices in early 2007. For steel, the price hike then was further compounded by the difficulty in obtaining smaller sizes steel bars. Chart 1 shows the average price increases of both these materials indicating the highest prices recorded was in July 2008 when steel prices had increased by about 103% (from average of RM1,938.00 to RM3,942.00 per tonne, USD560.00 to USD1,211.00 per tonne) and prices of cement bags had increased by 35% (from RM11.00 to RM15.00 per bag, USD3.20 to USD4.60 per bag). Prices of other materials only increased at marginal rate.

There were 2 main factors that led to the price increase. Firstly, the steel price increase was mainly due to the increase in the price of crude oil in the international market that led to the increase in the cost of raw materials (scrap metal) worldwide. Secondly, the high demand of steel bars and cement both domestically and globally. Domestically, the high demand was due to many construction projects being implemented concurrently has also led to a price increase of these materials.

Chart 1 **Trend of Steel and Cement Price Indices**
March 2007 to September 2008 in Malaysia



Note : Base year January 2007

Source : CIDB Malaysia

This has led to the increase in construction costs above the agreed contract price, eroding profit margins of contractors. The margin erosion had caused contractors to reject contract offers, and many contractors at that time in 2008 were either unable to complete their construction works or severe delays in completion were seen.

Revision of Construction Material Ceiling Price

In mitigating the erratic movement of steel and cement prices, the government reacted in progressively increasing the ceiling price of steel thrice by as much as 45% (16 April, 9 June and 1 December 2007) and cement price twice by as much as 10% (16 December 2006 and 13 April 2007). The last ceiling price of steel which took effect on 1 December 2007, was RM2,225.00 to RM2,569.00 per tonne (USD655.00 to USD757.00 per tonne) depending on size and grade. The last ceiling price of cement stood at RM197.50 to RM352.00 per tonne (USD57.00 to USD102.00 per tonne).

However, the government's approach in stabilising the prices of steel and cement price through this approach was ineffective as both materials continued to be sold above the ceiling price resulting in the industry requesting for the steel and cement market to be fully liberalised to allow prices to be determined by market forces.

Liberalisation of Steel and Cement Market

Responding to the industry request, the government decided to remove the price control for steel in May 2008 and cement in June 2008 followed by liberalising the industry for both materials. The first stage of liberalisation involved giving exemption of import duty on steel products and removal of approved permits provided the imported steel complies to both domestic and international quality standard recognised by CIDB. As for cement, the government reduced the import duty from 50% to 10% for non-ASEAN countries and maintaining 5% for ASEAN countries.

The second stage of liberalisation took place in November 2008. The steel and cement market was fully liberalised with full duty exemption to all importers. For steel, the number of steel products liberalised expanded from 3 to 57 of the Customs Tariff Code. Out of 57, only 15 products were identified for use in the construction industry. In ensuring quality assurance, the CIDB Certificate of Approval is a prerequisite for the importation of steel and cement. Hence, under ASEAN Free Trade Area (AFTA), full liberalisation for these two materials achieved in 2008 is much earlier than initially scheduled in 2015.

At the time of writing this report in 2014, the prices of steel and cement in Malaysia is continuously determined by market forces.

Strengthening the Mechanism for Price Fluctuation Reimbursement

In complementing other mitigating measures to cushion the impact of the materials price increase in 2007, the government also took measures to review the special provisions on reimbursing contractors for material price fluctuations for government projects. For building works, price variation calculation is allowed for 14 types of materials based on the changes of cost indices and steel unit price. For civil

engineering works, the price calculation is allowed over 11 types of material, an increase from 5 previously. For the first time ever, reimbursement for materials price fluctuation is allowed for mechanical and electrical (M&E) works and design & build contracts.

The government's revised mechanism for the reimbursement of price fluctuation was applied retrospectively from 1 January 2008, for both conventional contracts and design & build contracts. This move was much welcomed by the industry in ensuring timely completion of government projects.

Materials Demand and Supply

Many observations from past trends show that the erratic movement of material prices could be brought about by insufficient supply of construction materials created by the sudden surge in construction material demand (Chart 2). Therefore, it is important to be able to pre-empt materials demand through a near accurate projection system for projecting construction demand.

Chart 2 Trends of Projects Awarded in Malaysia



Source : CIDB Malaysia

Note : As of June 2014

Projection of Demand for Construction Materials

Realising the importance of having a credible system to project construction material demand, CIDB is now establishing a forecasting model to reasonably foresee the demand for major construction materials. The CIDB uses the rich source of information in its own integrated database on construction projects awarded in the country for projecting major material demand. The system known as myPROJEXIS is expected to be completed by early 2015. Once completed, myPROJEXIS will enable CIDB to produce 3 major forecasts: construction sector growth; demand for major construction materials; and demand for construction workers in major trades.

Materials Quality

Ensuring the conformance to quality standards of construction materials is another big challenge pertaining to material resources in Malaysia. In assuring the quality of locally manufactured materials used in construction projects, CIDB is empowered under Section 4(1)(g) Act 520, to regulate the conformance of standards for selected construction materials listed under the relevant schedule. In assuring the quality of imported construction materials used in the country, conformance to the relevant Malaysia Standards (MS) is a compulsory requirement. The power in executing this is derived from the Customs Act 1967.

Controlling Quality for Locally Manufactured Materials

For locally manufactured construction materials, CIDB is empowered under Act 520 (Amended 2011) to issue the Product Certification Licence (PCL) to manufacturers that comply with the requirements of the relevant MS in the manufacturing of building materials. Initially 18 types of construction materials is proposed to be regulated under this requirement. The implementation of this regulatory power is expected to come into force in 2014.

Controlling Quality for Imported Materials

In enforcing the requirements of the relevant MS on imported construction materials, CIDB is the agency responsible under the Customs Directive (Prohibited Imports) of the Customs Act 1967 to issue the Certificate of Approval (COA) to importers. The COA will only be issued by CIDB for imported materials that conform to stringent quality requirements under the relevant MS. The CIDB's role in regulating imported construction material was further expanded in 2013 to include products related to both the construction industry and the oil & gas industry which was previously regulated by the Standard and Industrial Research Institute of Malaysia (SIRIM). The latest development in 2014 requires all building materials to obtain the Product Certification or positive Full Type Test Report (FTTR) from the country of origin before the products are exported into Malaysia.

CONSTRUCTION WORKER

Construction worker is a very important resource in the implementation of construction projects. The various categories of workers includes general worker; skilled worker; site supervisor and workers in the managerial level such as safety managers and project managers. From a research undertaken by CIDB in 2012, the costs of employing construction workers contributes about 20% of total construction cost. Issues and challenges faced pertaining to construction workers such as over dependency on foreign workers; lack of skills; workers safety; and equilibrium between demand and supply of workers will impact the productivity of the construction industry and the quality of workmanship of construction works.

Foreign Workers

In Malaysia, the construction sector is over dependent on foreign workers. This is evident by their high number at construction sites representing about 55% of the total number of workers (CIDB study in 2010). In Peninsular Malaysia, about 434,300 foreign construction workers from various nationalities such as Indonesia, Bangladesh, Myanmar, Pakistan and Nepal are registered with the Immigration Department of Malaysia (Table 2) recording the second highest compared to the other sectors at 19.3%. The actual number of foreign workers engaged in construction could possibly be higher if illegal foreign workers are taken into account.

**Table 2 Number of Foreign Workers Registered with
Malaysia Immigration Department in Peninsular Malaysia
untill 31 December 2013**

Nationality	Construction	Domestic Help	Manufacturing	Services	Plantation	Agriculture	Total
Bangladesh	113,322	91	127,855	44,891	18,541	18,150	322,750
India	9,210	877	5,859	60,634	23,130	24,307	124,017
Indonesia	244,144	121,107	147,940	53,028	357,076	98,360	1,021,655
Myanmar	22,938	108	102,869	24,831	3,689	7,012	161,447
Nepal	11,533	84	296,997	52,456	7,355	17,041	385,466
Pakistan	16,142	56	4,152	4,623	8,398	17,291	50,662
Philipina	5,958	35,945	4,824	4,798	10,981	6,620	69,126
Thailand	1,085	348	378	11,590	693	2,950	17,044
Vietnam	4,881	1,028	44,477	1,877	168	559	52,990
Others	2,029	10,292	16,421	10,593	1,580	1,192	45,165
Total	434,300	169,936	751,772	269,321	431,611	193,482	2,250,322

Source : Immigration Department of Malaysia

Note : Others country include China, Cambodia, Laos and Sri Lanka

Contractors resort to foreign workers due to their resilience, mobility and willingness to accept lower wages. Moreover, contractor's preference to use conventional method of construction involving wet trades like bricklaying and plastering is not attractive to the local workforce due to the 3D (Dirty, Difficult, Dangerous) syndrome thus causing contractors to resort to foreign workers.

Continued dependence on foreign workers especially the illegal workers has brought about social, economic and security issues in the country. Therefore, the government has devised strategies in preventing the continuous inflow of illegal foreign workers by placing stringent criteria for the importation of foreign workers and implementing the Comprehensive Settlement Program on Illegal Immigrants (6P Program).

Importation of Foreign Construction Workers

Acknowledging the dependency of the construction industry towards foreign construction workers, the government had established the Construction Labour Exchange Centre Berhad (CLAB). CLAB is a non-profit oriented organisation

established by the CIDB in 2003. Its main function is to manage the distribution of foreign construction workers to contractors in a quick and efficient manner by accepting foreign workers with valid permit from contractors who no longer need them; distributing the foreign workers to contractors who are in need of them; and managing the flow of foreign workers from source countries in meeting the demand of foreign workers in the country.

The construction company has an option whether to use the CLAB service or otherwise in sourcing foreign construction workers. Initially in 2006, CLAB's role in managing the application of foreign workers was limited to 50 workers per company. In 2009, this figure was later increased to 100 workers per company. Between 31 March 2005 and 31 December 2013, CLAB had re-distributed about 41,953 construction foreign workers to 4,062 construction companies.

The government continues to tighten the procedure for importing foreign construction workers. Effective 1 January 2014, all applications for foreign workers must first have prior approval from the OSC of MOHA (One Stop Centre of Ministry of Home Affairs). In assisting the OSC, an officer from CIDB is positioned at MOHA to help filter and identify the appropriate number of foreign construction workers to be approved.

Comprehensive Settlement Program on Illegal Immigrants

In 2011, the government implemented a new strategy in cutting down the number of illegal immigrants through the Comprehensive Settlement Program on Illegal Immigrants or for short, 6P Amnesty Program. This program is aimed at strengthening the management of foreign nationals within the country, controlling the entry of new foreign workers into the country, facilitating the management of economic activity involving foreign workers and controlling the growth of crime in Malaysia. The 6P program comprises registration, legalisation, amnesty, supervision, enforcement and deportation.

The 6P program had shown a positive result when more than 2.3 million foreign nationals voluntarily registered. Of these, 1.3 million are illegal workers and the remaining 1.0 million are legal workers. This total does not include those who did not sign up, domestic helper and refugees in Sabah and Sarawak. From this registration process (11 July to 31 August 2011), it was found that for several countries the number of illegal workers exceeds that of legal workers. The highest number of illegal workers was from Indonesia with a total of 640,609 compared to 405,312 legal workers, followed by Bangladesh with 267,803 illegal workers compared to 132,897 legal workers. However, the number of legal foreign workers from Nepal is high at 221,617 compared to 33,437 illegal workers.

Skilled Worker

The implementation of construction projects using skilled construction workers would certainly enhance the productivity of the construction industry and the quality of workmanship. However in Malaysia, foreign construction workers that enter the country are mostly unskilled workers. In order to migrate to more productive technologies and efficient method of construction, the CIDB is empowered to firstly accredit the skills of foreign workers and secondly, to enhance the skill of local

construction workers through training, accreditation and certification under Section 4(1)(k) Act 520.

Training for Construction Worker

In fulfilling the objective of enhancing skills of construction workers, CIDB has established 6 training centres known as the Malaysia Construction Academy or *Akademi Binaan Malaysia* (ABM). Over and above this, CIDB has also accredited 40 private training centres. All these training centres provide skills training to both existing construction personnel and new workers. Besides providing training, these training centres also undertake the exercise of accreditation and certification of construction workers. Over time with training, accreditation and certification, it is expected that the overall quality of workmanship and productivity of the construction industry will be enhanced, site accidents reduced and most importantly the supply of skilled construction workers improved.

Offering construction training modules in 60 trades, in 2013 the ABM produces 22,864 trained construction workers; 21,879 in skill trades; 842 in supervisory and; 143 in management (Table 3). The number of construction workers trained increases annually. Training at ABM focuses on high end specialised trades that is market driven such as scaffold erection; welding; wireman; chargeman; fitting/insulation; blasting and painting; non destructive testing; crane operation and; plant operation which has the potential to raise the trainees' employability towards earning high income. In enhancing the quality of training, CIDB continuously upgrades its training facilities by providing it with the latest equipment and machineries such as simulator machines for welding and crane operations. At the same time, CIDB continues to collaborate with the industry and selected training institutes to plan and implement new training schemes.

Table 3 Number of Trained Construction Personnel

Training Area	Year	
	2012	2013
Skill	15,330	21,879
Supervisor	525	842
Management	145	143
Total	16,000	22,864

Source : CIDB Malaysia

A recent Memorandum of Understanding (MoU) between Malaysia (CIDB) and Indonesia (Indonesian Construction Development Authority) signed on 31 March 2014 was for Malaysia to provide skills training programs and certification to Indonesian construction workers who are legally employed in the Malaysia construction sector. Initially, Indonesian construction workers will be trained in 4 skill trades (bricklaying and plastering; plastering and tiling; carpentry, barbending and concreting; and building decorative painting). By the end of 2014, 700 Indonesia construction workers are expected to be trained in these skill trades.

Accreditation of Skilled Workers

Quality issues in construction workmanship are known to be caused by workers who are unskilled and incompetent. Prior to the amendment of the CIDB Act, the number of accredited and certified skilled local and foreign construction workers is not encouraging. Realising that accreditation can be an important tool in improving the number of skilled and competent construction workers, the CIDB Act 520 (Amended 2011) has incorporated requirements for mandatory accreditation and certification of construction personnel covering semi and skilled workers, site supervisors and project managers both local and foreign. 62 trades have been identified for the accreditation and certification of skilled construction workers and construction site supervisors. Gradually, only skilled construction workers will be allowed to perform skilled works at construction sites, thus fulfilling the government's aspiration to raise the quality of workmanship in construction projects.

Apart from the 62 trades that have been identified, the CIDB encourages skilled workers in other trades to be accredited. For this exercise, the Certificate of Skill Competency or *Sijil Kecekapan Kemahiran* (SKK) will be issued to local workers and the Testimonial of Skilled Foreign Worker or *Perakuan Kemahiran Pekerja Asing* (PKPA) will be issued if they are foreign workers. In 2013, a total of 9,961 construction workers were accredited by the CIDB (Table 4). Of these, 95% were local workers while the rest were foreign workers.

Table 4 Number of Accredited Construction Workers

Construction Workers	Year	
	2012	2013
Local	9,434	9,486
Foreign	1,365	475
Total	10,799	9,961

Source : CIDB Malaysia

Worker's Safety

Under Section 4(1)(k) Act 520, it is mandatory for all construction personnel in the country to be registered with CIDB. In order to be registered as a construction personnel, they are firstly required under the CIDB Green Card Program to undergo the course on Safety Induction for Construction Workers (SICW). This course is part of CIDB's effort to inculcate awareness among the workers on the safety and health aspects at work. Secondly, after completing the SICW course, the construction personnel is eligible to apply to register as a construction worker. Once the application is approved, the said worker is given a green card.

Green Card Holders

It is compulsory for contractors to only engage registered construction workers who hold a green card. All registered construction personnel who hold a green card is automatically covered by a special Insurance Scheme that insures the construction personnel against hospital charges due to accident; permanent disability due to

illness and accident; death due to illness and accident; and funeral expenses. While inculcating safety practice at construction sites is forefront under the Green Card Program, through the registration process, CIDB is able to monitor the number of workers employed in the construction sector. For local construction personnel, the green card is valid up to 5 years. For foreign construction personnel, the green card validity is according to their respective work permit validity.

In 2013, the number of local worker with valid registration was 243,666 (2012: 168,906). This number includes 96,745 new registration and 146,921 renewal (Table 5). The number of new registration and renewal showed a significant increase by 32% and 54% respectively. Foreign workers registration in 2013 increased significantly by 138% to 78,204 (2012: 32,891). Out of this number, new registration increased by 127% and renewal increased by 155%. This strong increment in the registration through the Green Card Program is a result of CIDB's enforcement activity both at site and through reminder letters.

Compared to registration of foreign construction workers under the Immigration Department of Malaysia (434,300 persons), the number of foreign construction worker registered with the CIDB remained low (78,204 persons) (Table 6). This difference could be attributed to the unwillingness of employers to register their foreign workers under the Green Card Program in view of the mobility of those foreign workers to move from one employer to another.

**Table 5 Number of LOCAL Construction Personel Registered
in 2012 and 2013**

No	Category	2012			2013		
		Total Registered	New Registration	Registration Renewal	Total Registered	New Registration	Registration Renewal
1	General worker	59,614	33,702	25,912	76,354	41,010	35,344
2	Construction worker	26,960	14,017	12,943	53,611	27,722	25,889
3	Skilled construction worker	13,685	659	13,026	18,857	594	18,263
4	Manager and site assistant manager	14,083	3,119	10,964	19,509	2,608	16,901
5	Construction supervisor	16,424	3,054	13,370	21,547	2,081	19,466
6	Administrative personel	38,141	18,668	19,473	53,788	22,730	31,058
Total		168,906	73,218	95,688	243,666	96,745	146,921

Source : CIDB Malaysia

**Table 6 Number of FOREIGN Construction Personnel Registered
in 2012 and 2013**

No	Category	2012			2013		
		Total Registered	New Registration	Registration Renewal	Total Registered	New Registration	Registration Renewal
1	General worker	29,390	17,556	11,834	71,607	41,033	30,571
2	Construction worker	1,356	1,036	320	4,050	2,380	1,670
3	Skilled construction worker	566	68	498	426	100	326
4	Manager and site assistant manager	484	319	165	838	497	341
5	Construction supervisor	304	235	69	178	91	87
6	Administrative personnel	791	605	186	1,105	818	287
Total		32,891	19,819	13,072	78,204	44,919	33,285

Source : CIDB Malaysia

Workers Demand and Supply

The Malaysia construction industry has often had to deal with the shortage of construction workers mainly due to the sudden increase in construction demand. Currently, the CIDB is not able to assist the construction industry in projecting the demand for workers. Therefore a reliable system that enables the projection of construction demand would help the construction industry plan ahead in ensuring the supply of construction workers.

In the pipeline, is a forecasting system known as myPROJEXIS, currently being developed by CIDB. Once completed, myPROJEXIS is able to provide forecast on construction workers demand in major trades. With the availability of information on workers demand, CLAB would be in a better position to manage the supply of foreign workers in the country more effectively.

CONSTRUCTION TECHNOLOGY, MACHINERIES AND EQUIPMENT

The productivity of the construction sector in Malaysia is relatively low as it is heavily dependent on labour (Table 7). Compounding this is the adoption of conventional construction method that does not encourage utilisation of modern machinery and equipment which is estimated at only 3% of the total construction cost. Increasing productivity calls for enhancing the skills of construction workers and improving the use of machineries and equipments. In Malaysia, most of the machineries and equipments are imported from abroad. Many contractors do not purchase the heavy machineries and equipments due its high price, uncertainties in securing new construction projects, maintenance and storage costs. They prefer to rent the heavy machineries and equipments from suppliers based on a contractually agreed

duration. Nevertheless, contractors are more likely to purchase cheaper and smaller machineries and equipments that are easily stored and maintained.

Table 7 Value-Added Per Employee

Economic Sector	2012		2013	
	RM	USD	RM	USD
Agriculture	34,202	11,184	32,625	9,983
Mining and Quarrying	786,998	257,348	725,449	221,988
Services	53,597	17,526	53,944	16,507
Manufacturing	83,822	27,410	86,538	26,481
Construction	22,799	7,455	23,373	7,152

Source: Central Bank of Malaysia Annual Report 2013

A key factor that limits the enhancement of productivity is the limited technology adoption, both in terms of technology used in advanced construction methods and modern machineries and equipment used throughout the construction process. Therefore, the government is aggressively encouraging the practice of using modern technique such as IBS with intensive machinery and heavy equipment utilisation.

Industrialised Building System (IBS)

IBS is a construction technique in which components are manufactured in a controlled environment (on or off site), transported, positioned and assembled on site. Migrating to IBS is expected to improve the overall performance of the industry in terms of faster completion and better quality of works through mechanisation, automation and modernisation. With higher utilisation of machineries and equipments and lesser dependency on workers, productivity will be increased. Furthermore, manufacturing the components under controlled condition will ensure higher quality of construction and reduction of waste materials. In addition, it will enhance safety level in the construction sector.

The major challenge in the adoption of IBS is the resistance to change by the industry and the abundance of cheap workers. Industry's reluctance also stems from the high capital cost, high transport cost and the assumption by designers that IBS limits their design creativity. A study conducted in 2012 in identifying utilisation of IBS found that only 46% of the 400 private projects in Klang Valley has adopted IBS. The adoption of IBS for projects outside the Klang Valley is believed to be lower than this. In encouraging the adoption of IBS, the government has formulated policies and introduced incentive schemes.

Incentives, Policies And Regulations on Industrialised Building System (IBS)

Adoption of IBS which has been introduced since the beginning of 2000 improved significantly when the government issued Treasury Circular Year 2008, which mandates the use of IBS for government projects and IBS score of not less than 70% effective on 31 October 2008. Exceptions are given to only for projects worth less than RM10 million and are located in remote areas and renovation works not

involving the construction of new buildings. As a result, between October 2008 and September 2013, a total of 1,422 government projects with a value of RM36.1 billion had adopted IBS. Based on a study conducted by CIDB in 2010, 85 completed projects using IBS showed a decrease by 47% in the number of foreign workers at construction sites.

In encouraging the manufacture of IBS components, CIDB had taken the initiative to register IBS products, manufacturers, contractors, installers and consultants. As of April 2014, CIDB has registered 429 IBS products, 170 IBS manufacturers and 8,298 IBS specialised contractor and accredit 7,473 Lightweight Blockwall Installer, 7,363 Roof Truss Installer, 1,501 Precast Concrete Installer, 187 Panel Lightweight Installer, 176 in Steel Structure Erection & Fabrication and 62 in Aluminium Fabrication Framework as well as 37 IBS consultants.

Various measures have been taken and will continue to be taken to enhance the uptake of IBS effectively. Among the measures that have been implemented are:

- i. Establishment of IBS Roadmap (2003 – 2010) as a blueprint to industrialise the construction sector which was reviewed to IBS Roadmap (2011 – 2015) to emphasize on commercial issues.
- ii. Formation of IBS Centre in 2007 as a referral centre.
- iii. Exemption from levy payment through the federal budget 2005 on housing projects with a minimum IBS score of 50%.
- iv. Introducing refund incentives for purchasing IBS components mould through the federal budget 2006.
- v. Enhancing awareness on IBS in highlighting the advantages of modern technology, and introduction to newer and more sophisticated machineries and construction equipment through 3 international conference and exhibition, 179 national seminars and road shows throughout the country.
- vi. Introducing IBS Catalogue System in June 2013 as a reference for designing and preparing more efficient and cost-effective building plans.
- vii. Implementing 7 types of training based on ABM modules on IBS such as aluminium framework fabrication; steel structure erection and fabrication; precast concrete installer; lightweight panel installer; lightweight block wall installer; roof truss installer (steel); and roof truss installer (timber). Between January 2007 and September 2013, a total of 81,184 participants have attended the course.

Machineries and Equipments

In Malaysia, the government imposes import duty and sales tax on machineries and equipments that are imported from abroad such as bulldozers, rollers, piling and special purpose truck. The import duty and sales tax are considered relatively high, ranging from 10% to 30% when compared to that imposed by other ASEAN countries such as Thailand, Indonesia, Philippines, Vietnam and Singapore.

Reduction of Import Duties and Sales Tax

At the end of 2012, CIDB had suggested that the government reduce the import duty and sales tax on heavy machineries used in construction. Following that, at the end of 2013, CIDB submitted a proposal to the government on the implementation of IBS stressing on the importance of using heavy machineries. In this proposal, the same earlier suggestion was again brought up that is to reduce the rate of import duty and sales tax on heavy machineries in the construction industry as an incentive to encourage the use of IBS.

In the short term, reduction in duties and taxes on heavy machineries will promote the use of newer and modern machineries that is safer and more productive; accelerating the construction process; ensuring the quality of construction; and reducing dependency on foreign workers. In the long term, the positive outcome of the reduction in duties and taxes can be felt when more local machine operators are trained and the machinery maintenance industry becomes mature. It could also lead to ancillary industries such as services business and after sales support to be established.

CASH FLOW IN CONSTRUCTION

Getting cash to flow during the implementation of construction projects is crucial in ensuring that the contractors are always in a healthy position to finance the project. Cash flow problems if left unaddressed can impede national growth as construction is the key sector which supports all other economic sectors. This is through the provision of physical building and infrastructure in meeting the private sector business objectives and the government's socio economic activities. Any problems that affect the smooth implementation of construction projects including payment problems will impact wealth creation hence the enhancement of quality of life and standard of living of the people. On a larger scale, such problems will also affect the industry's economic contribution to the nation. As such, a new Act of Parliament, the Construction Industry Payment and Adjudication Act (CIPAA) was enacted in 2012. In ensuring the smooth implementation of CIPAA, 2 specialist construction courts have also been established.

Construction Industry Payment and Adjudication Act (CIPAA) (Act 746)

CIPAA introduces statutory adjudication as a dispute resolution mechanism that provides for the recovery of payment to an aggrieved party, upon the conclusion of the adjudication process. An aggrieved party may be accorded a host of other remedies such as a right to reduce the rate of work progress or to suspend work or even to secure direct payment from the principal. Besides construction contracts, the CIPAA also applies to supplies contracts and professional consultancy services.

Much of construction works is subcontracted and the complexity of this multilayered sub-contracting is compounded by the fact that most appointments of these sub contractors are done using incomplete terms of payment or orally, without terms of payment. It is a known fact that all construction participants, as long as they are on the receiving end of the payment spectrum, may have experienced payment problems such as non-payment, late payment or under payment. Therefore,

Malaysia enacted the CIPAA to address payment related disputes towards enhancing cash flow during project implementation. CIPAA came into force on 15 April 2014.

Establishment of Specialist Construction Court

In getting construction justice delivered effectively and efficiently including under CIPAA, 2 specialist construction courts were established by the Malaysia Judiciary in April 2013 one each in Kuala Lumpur and Shah Alam. The establishment of the construction courts completes the 3 main pillars of construction justice that includes arbitration, adjudication and litigation.

The 2 construction courts deal with cases involving building and construction disputes; engineering disputes; claims by and against engineers, architects, surveyors, accountants and other specialist advisers; claims relating to the quality of goods sold or hired and work done, materials supplied or services rendered; claims relating to the environment including pollution cases.

As of June 2014, 164 cases have been filed in the Construction Court located in the Kuala Lumpur Court while 41 cases have been filed in Shah Alam. Of the 41 cases in Shah Alam, 20 cases are still pending, while 60 cases are pending in the Construction Court in Kuala Lumpur.

Moving forward, the CIDB is now tracking and analysing cases brought to the construction courts to establish the common causes of disputes within the construction industry. This would form the basis in formulating future policies for improving the construction industry.

SUMMARY

As Malaysia continues to progress towards a developed economy, the construction industry continues to be an integral part of the Malaysian economy. Moreover, the construction industry benefits a wide range of stakeholders that stand to gain from a robust and healthy construction industry. The government has taken significant approach in meeting the Malaysian construction resource requirements towards institutionalising a more productive industry and ensuring that spending on construction is geared towards productivity and quality through greater use of technology; access to highly skill workers and quality materials; and conducive business environment.

In line with the effort to further drive industry changes, CIDB has amended the Act 520 to broaden its mandate to include the setting of standards; registration of construction personnel; training; accreditation and certification; company quality assessment; and health, safety and environment. Next in the pipeline, is the Construction Industry Master Plan II (CIMP) 2016 – 2020 which is being developed by CIDB in collaboration with key ministries, government agencies and various organisations representing the construction industry. The CIMP attempts a significant leap to deliver a step change in industry performance and truly transform the Malaysia construction industry.

Meeting Construction Industry Resource Requirements

MALAYSIA'S EXPERIENCE

20th AsiaConstruct Conference
13 – 14 November 2014
Hong Kong

Che Saliza Che Soh

Business Division
Construction Industry Development Board
CIDB Malaysia

Construction Resources

Materials

Manpower

Methods

Machinery

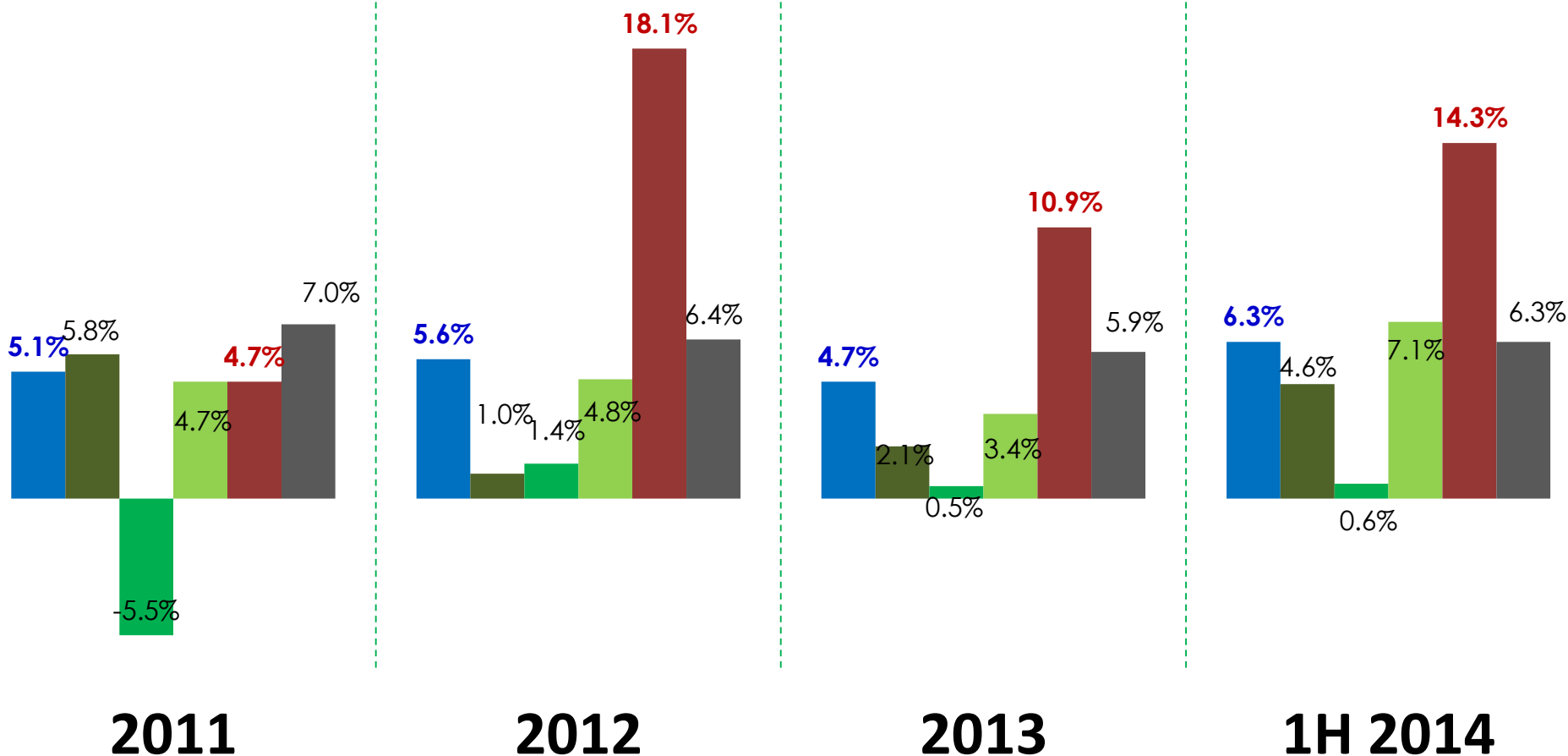
Money

Construction Scenario



GDP Growth by Major Economic Activity

■ National GDP ■ Agriculture ■ Mining ■ Manufacturing ■ Construction ■ Services

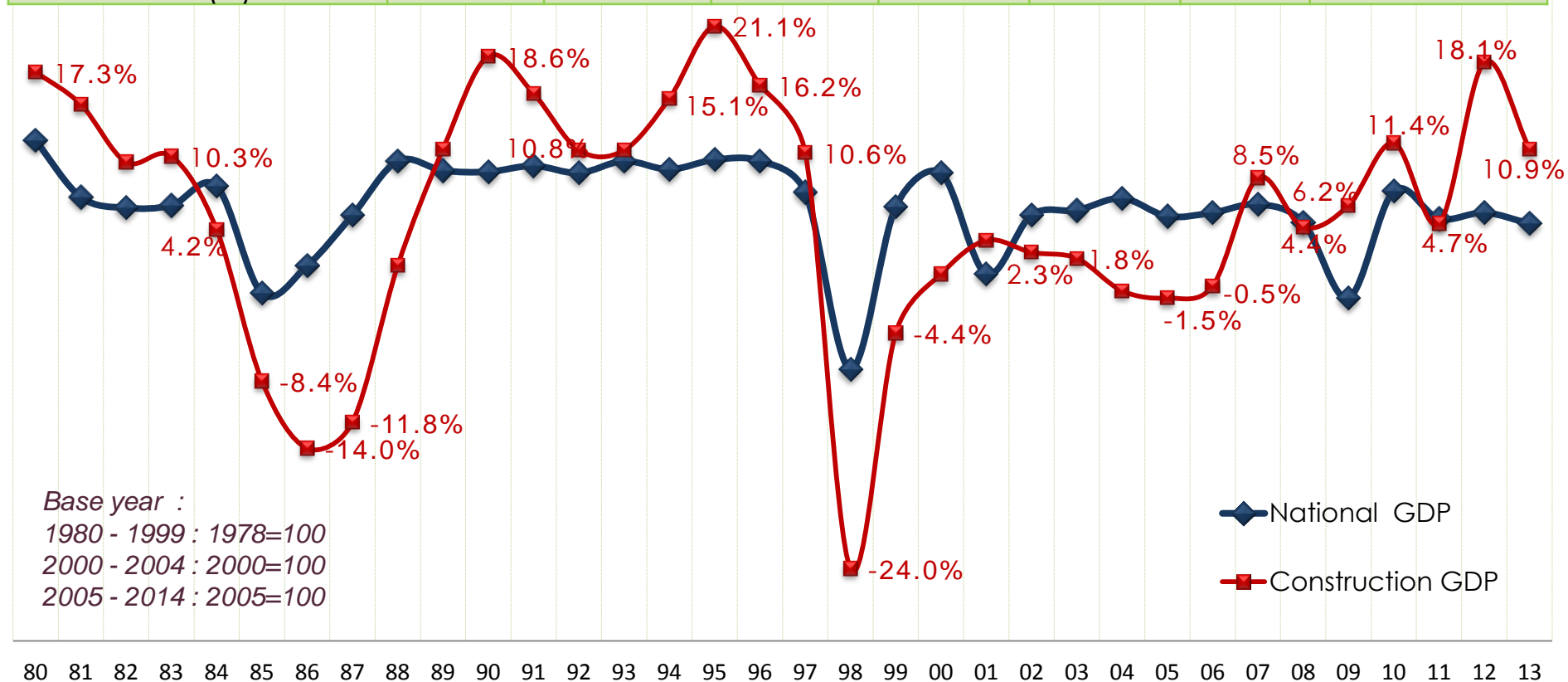


Note : At constant price 2005

Source : Central Bank of Malaysia

GDP Growth

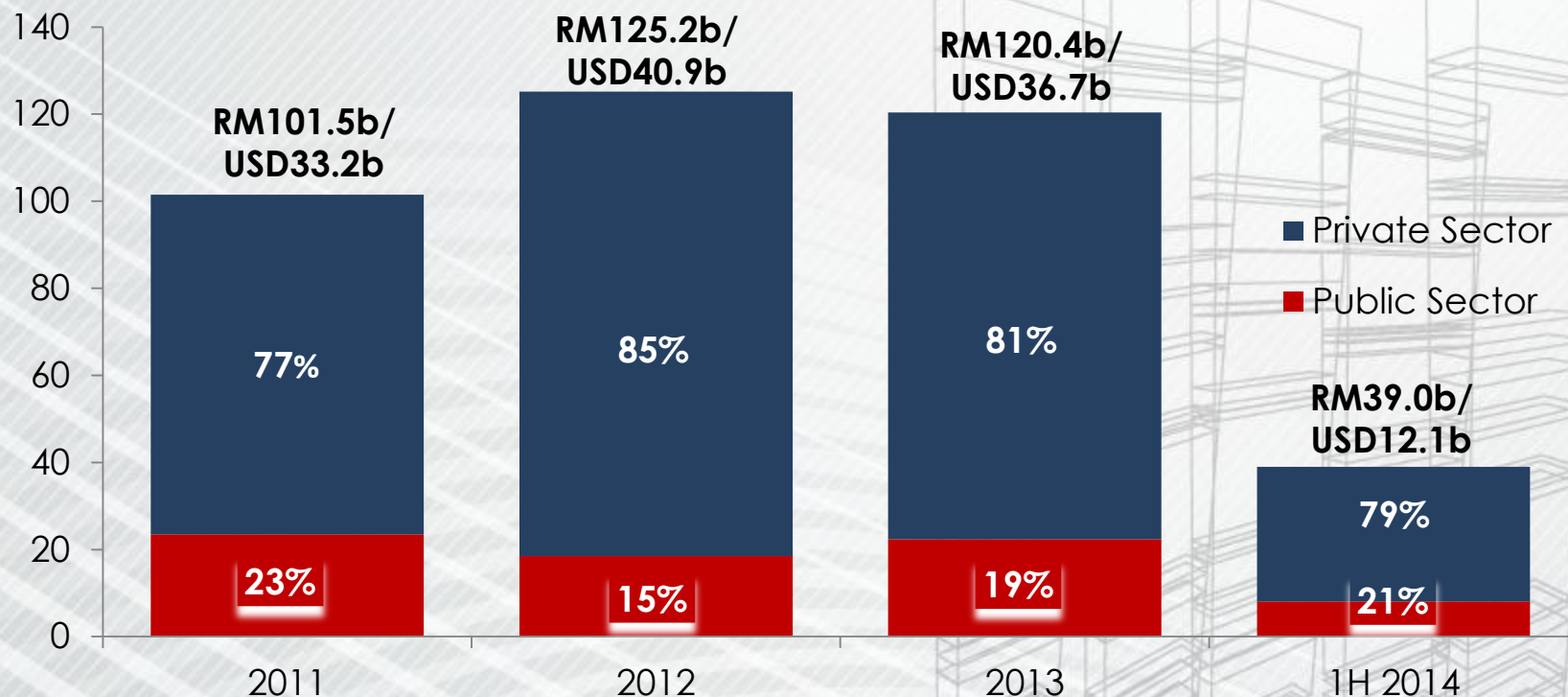
	2011	2012	2013	2014			
				Q1	Q2	1H	Annual (f)
National GDP (%)	5.1%	5.6%	4.7%	6.2%	6.4%	6.3%	5.5% -6.0%
Construction Sector GDP (%)	4.7%	18.1%	10.9%	18.9%	9.9%	14.3%	12.7%



Projects by Public Private Sector

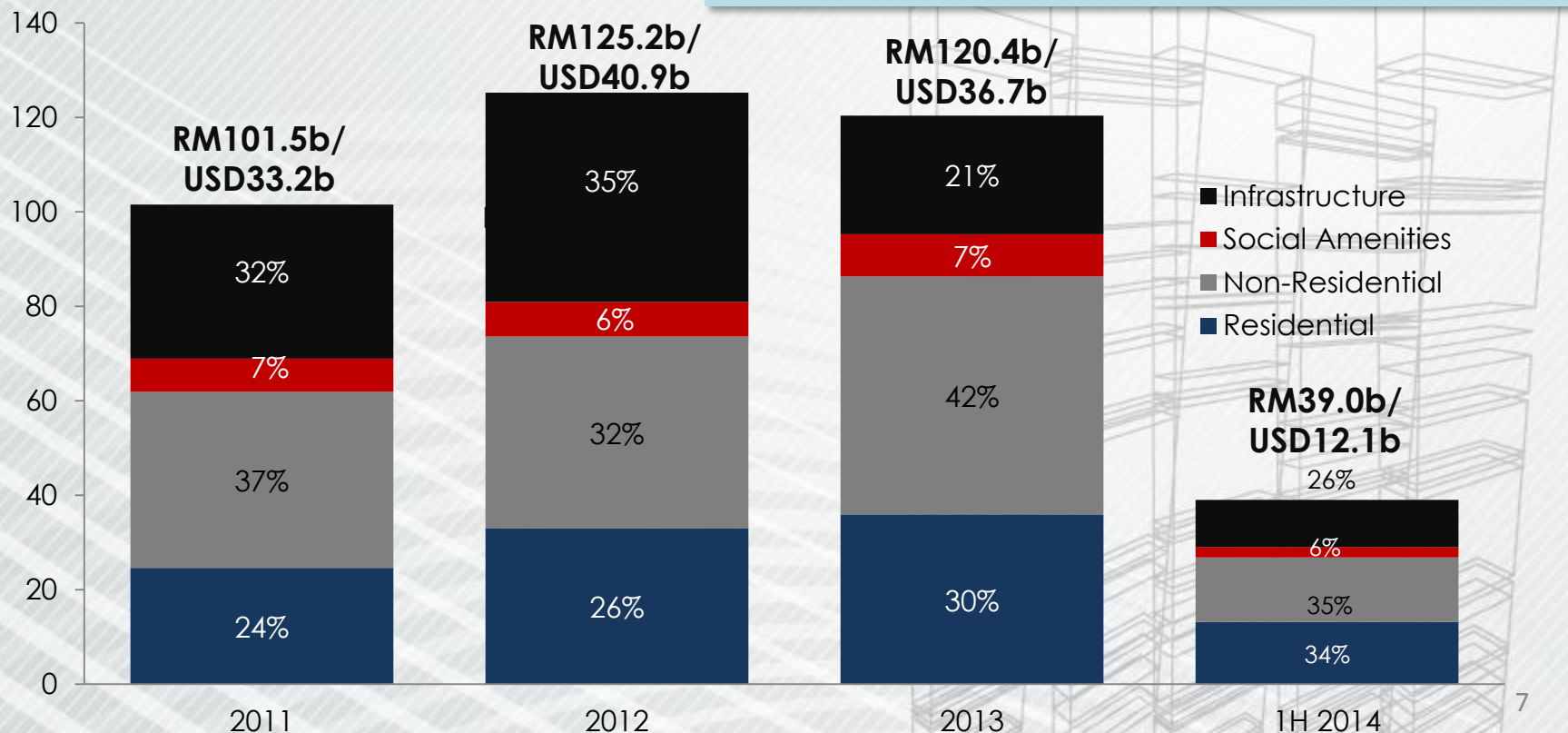
Number of Projects				
Sector	2011	2012	2013	1H 2014
Public	1,948	1,959	1,826	389
Private	5,747	5,822	5,795	1,814
Total	7,695	7,781	7,621	2,203

Project Value
(RM billion)

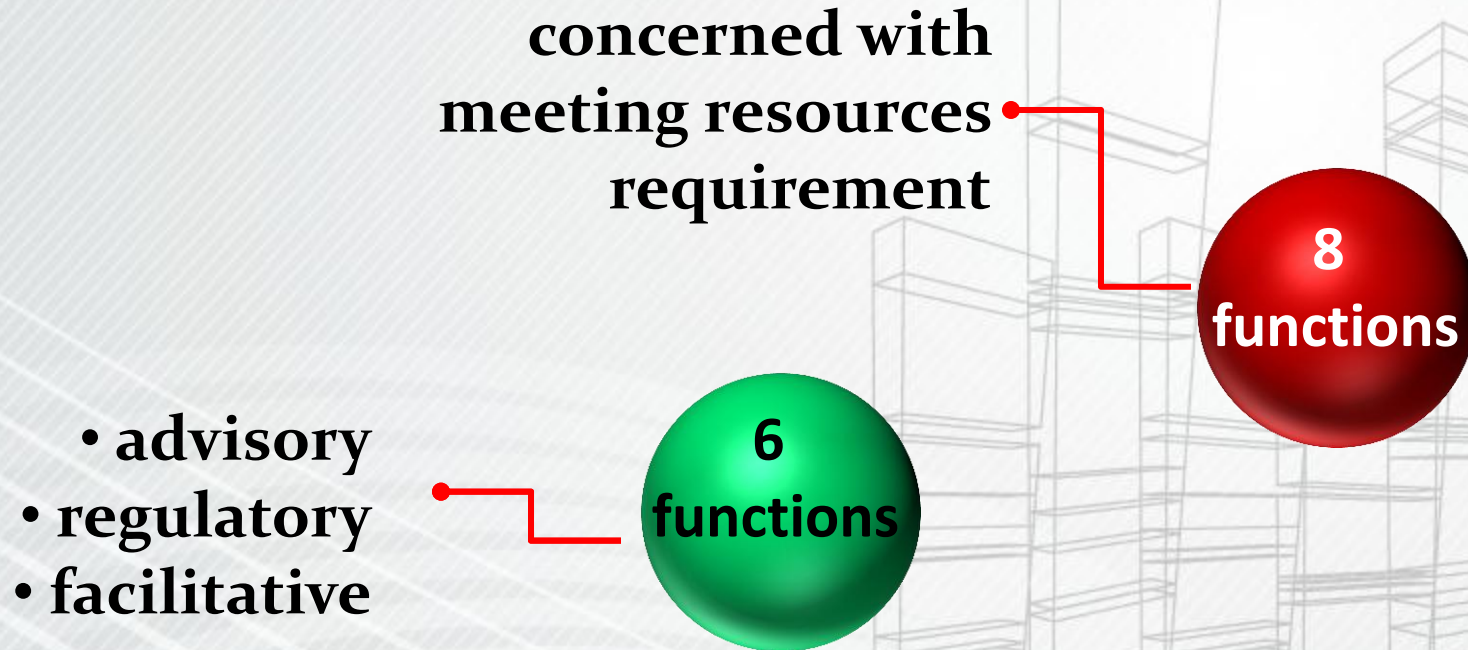


Projects by Category

Project Value
[RM billion]



CIDB Act 1994, ACT 520 (Amended 2011)



Materials, Manpower and Machinery Contribution

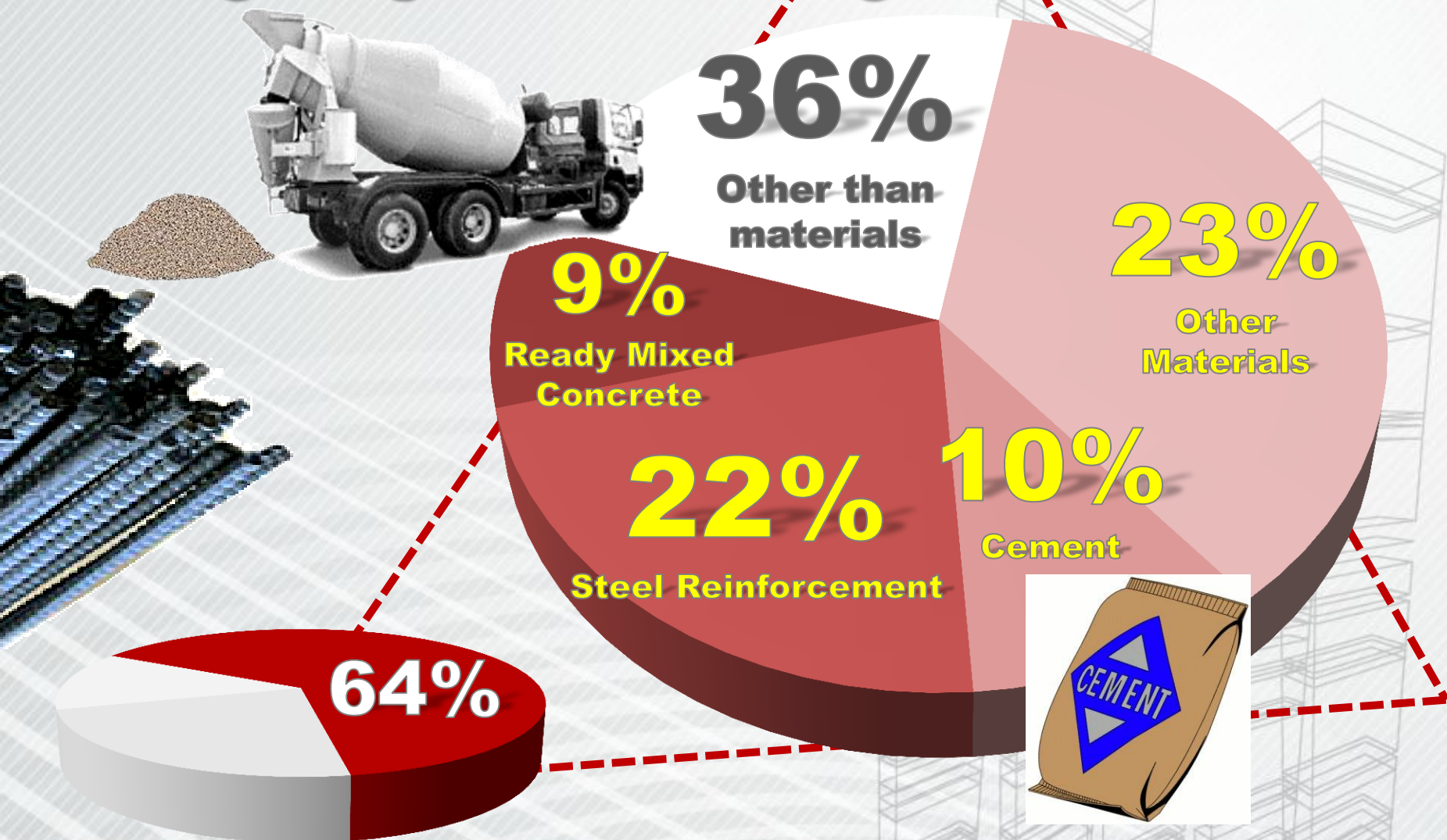


Construction Materials

The background of the slide features a light gray architectural wireframe of several tall, multi-story buildings. The wireframe is composed of thin, light gray lines that define the structural elements of the buildings, including columns, beams, and floor slabs. The buildings are arranged in a cluster, with some taller than others, creating a sense of depth and perspective. The overall style is modern and technical, typical of architectural drawings.

-
- Material Prices
 - Materials Demand And Supply
 - Materials Quality

Construction Materials Weightage for Building Works



Note : Based on CIDB's study in 2012.

Excludes the overhead and profit margin from the cost of goods and construction workers.

Trend of Materials Price Indices

Factors

Crude oil price hike in the international market (Q2)

Sub-prime and credit crisis in US (Q3)

Materials high demand

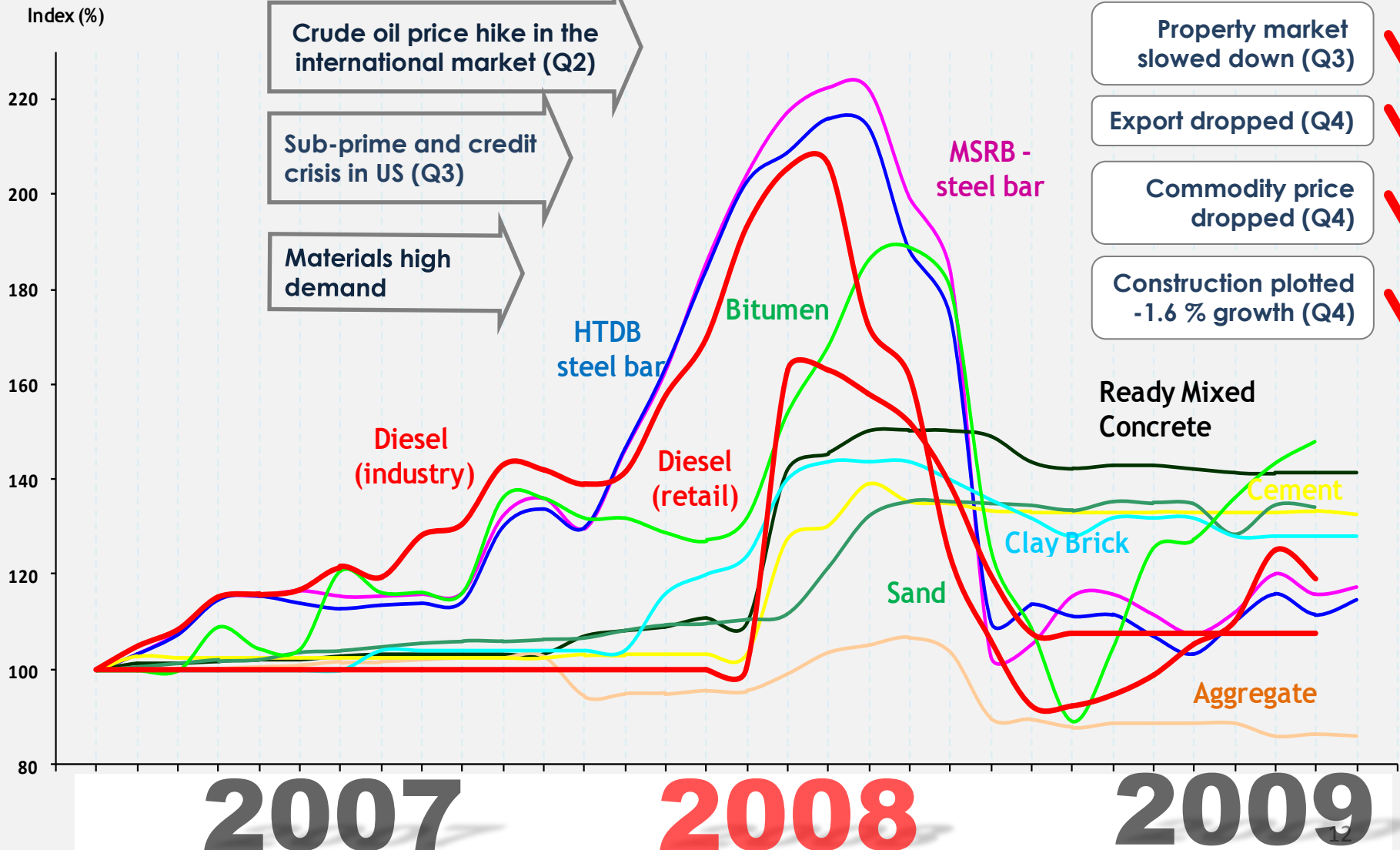
Effects

Property market slowed down (Q3)

Export dropped (Q4)

Commodity price dropped (Q4)

Construction plotted -1.6 % growth (Q4)



Measures to Mitigate Materials Price Increase in 2008



Ceiling Price Revision

Stabilising the prices of steel and cement by progressively increased the ceiling price

2007



Liberalisation

The steel and cement market fully liberalised with full duty exemption to all importers

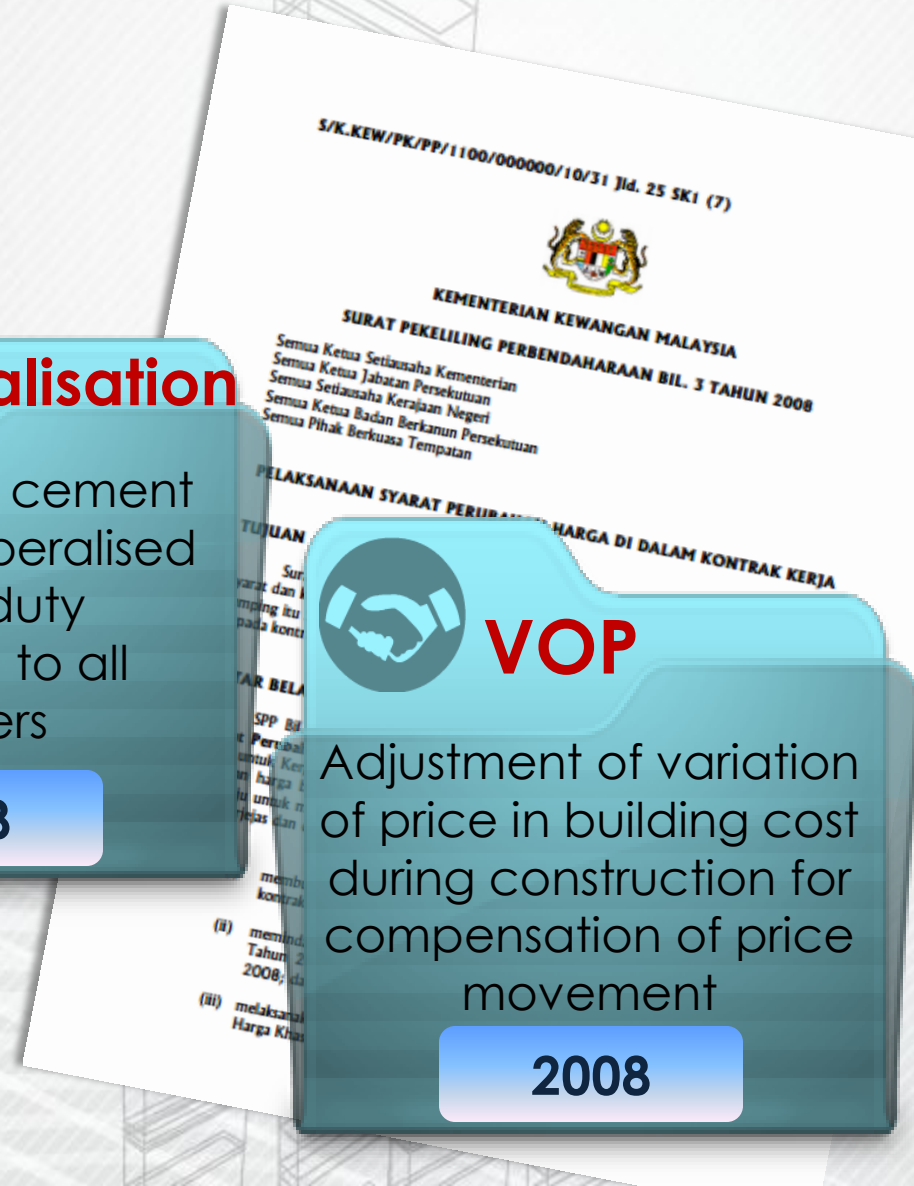
2008



VOP

Adjustment of variation of price in building cost during construction for compensation of price movement

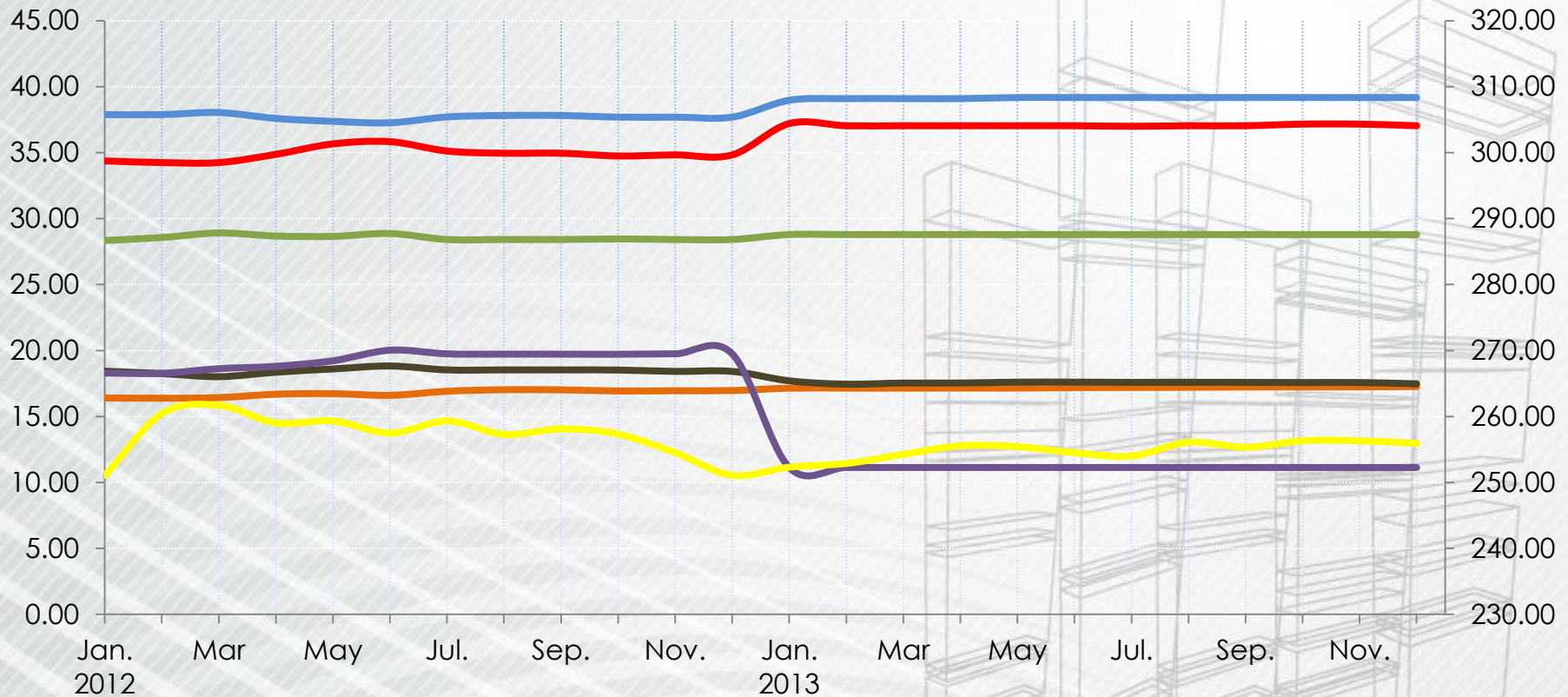
2008



Trends of Current Materials Price

Price for Cement, BRC
A10, Aggregate, Bricks
and Sand
(RM)

Price for Round Bar and
Ready-mixed Concrete
(RM)



— Cement/bag
— BRC A10/m²
— Round bars/100kg

— Aggregate/tonne
— Bricks/100 unit

— Sand/tonne
— Ready-mixed Concrete/m³

Projection of Materials Demand

myPROJEXIS system is a tool that enable CIDB to forecast:

- the value of work done/construction sector growth;
- the demand for major construction materials consumed in construction; and
- demand for construction workers in major trades

myPROJEXIS
PROJECTION OF CONSTRUCTION DEMAND
(Work Done, GDP Contribution, Material Demand and Worker Demand)

Login

Username:

Password:

Remember Password: ☒

myPROJEXIS is a tool that enable CIDB to forecast the value of work done and its contribution to the overall GDP, the demand for 8 major building materials consumed in construction and the demand for 7 categories of construction workers for building works.

The record of construction projects in the CIDB integrated database provides a rich source of information crucial in the projection of construction demand. These projects are those awarded in the entire country valued at more than RM500,000 each covering projects from both private and public sector investment. Apart from this, myPROJEXIS also caters for projects that are in the pipeline.

Developed By :
CIDB
MALAYSIA

Business Division
CONSTRUCTION INDUSTRY DEVELOPMENT BOARD MALAYSIA (CIDB)
Tingkat 10, Menara Dato' Onn, Putra World Trade Centre (PWTC),
No 45 Jalan Tun Ismail, 50480 Kuala Lumpur.
forecast@cidb.gov.my

* Best viewed with Google Chrome and Mozilla Firefox

Control Measures on Quality of Locally Manufactured Materials



Product Certification Licence (PCL)

Given to manufacturer who comply with the requirements of the relevant Malaysia Standard in the manufacturing of building materials

18 types of construction materials regulated

Control Measures on Quality of Imported Materials

CERTIFICATE OF APPROVAL

Serial No. : 20133969
Permit No. : CID141C11003752013

Application ID. : CID1412013004464
Date of Issuance : 21 November 2013

GUOCERA MARKETING SDN. BHD.
5TH FLOOR, KOMPLEKS KEMAJUAN
NO. 2, JALAN 19/1B
46300 P.J., SELANGOR, MALAYSIA

This Certificate Valid Until : 05 December 2013

It is hereby certified that the goods detailed below have conformed to the said Malaysian Standards (MS)

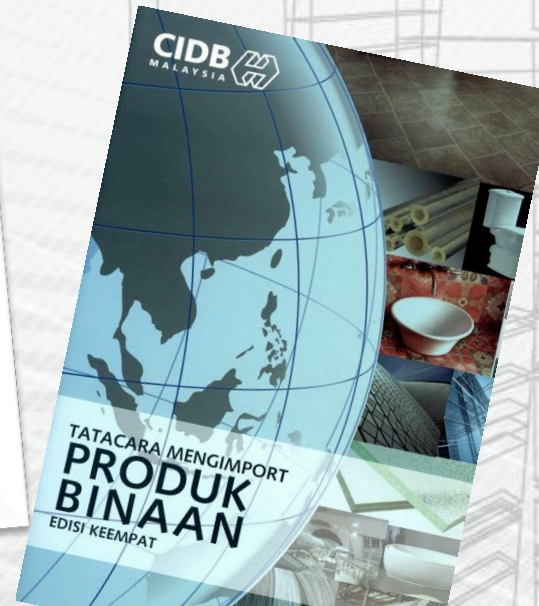
No.	Description of Goods	Quantity / Meter Square (m2) Packaging and Brand	MS Applicable (No. & Year)
1.	Unglazed Ceramic Tiles Group Tiles B1a UGL (80X80CM)	5600 Cartons / 10752 MTK GUOCERA GRES	MS ISO 13006 : 2003

- Country of Origin : CN - CHINA
- Point of Entry in Malaysia : PORT KLANG
- Bill of Lading No. & Date : FSNPKL13110008A/
FSNPKL13110008B (9/11/2013)
- No. of Container : 10 (Ten)
- Packing List / Invoice No. & Date : 2013PH278 /
2013PH277-1 (07/11/2013)
- CIDB Reference No. : CID1412013004464C
- OGA Remarks : Lulus seperti disyorkan

(Mohd Zaid Zakaria)
for Chief Executive
Construction Industry Development Board (CIDB)
Malaysia

Certificate of Approval (COA)

Issued to imported materials that conform to stringent quality requirements under the relevant Malaysia Standards

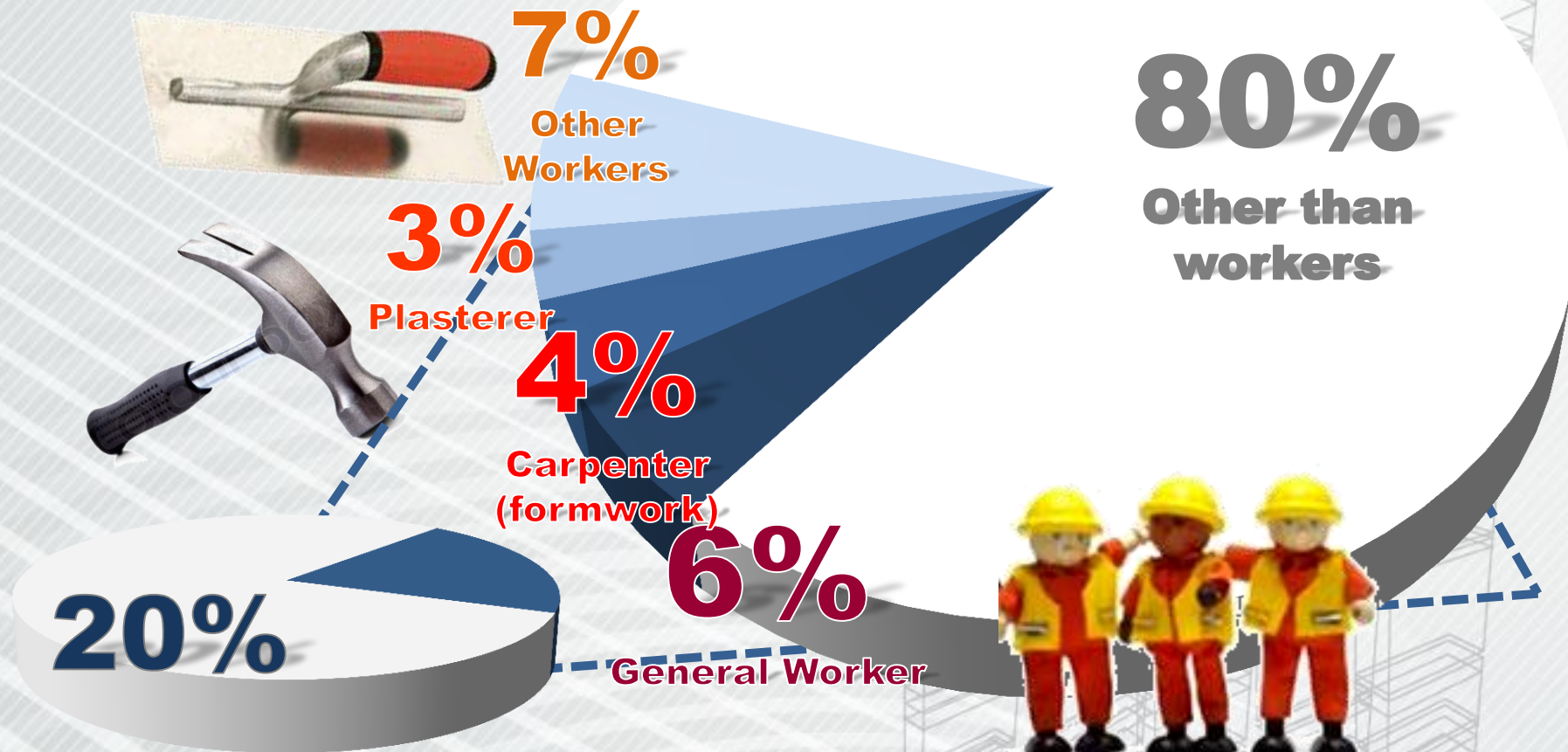


Procedure to Import Construction Products

Construction Worker

- Foreign Workers
- Skilled Workers
- Safety & Health

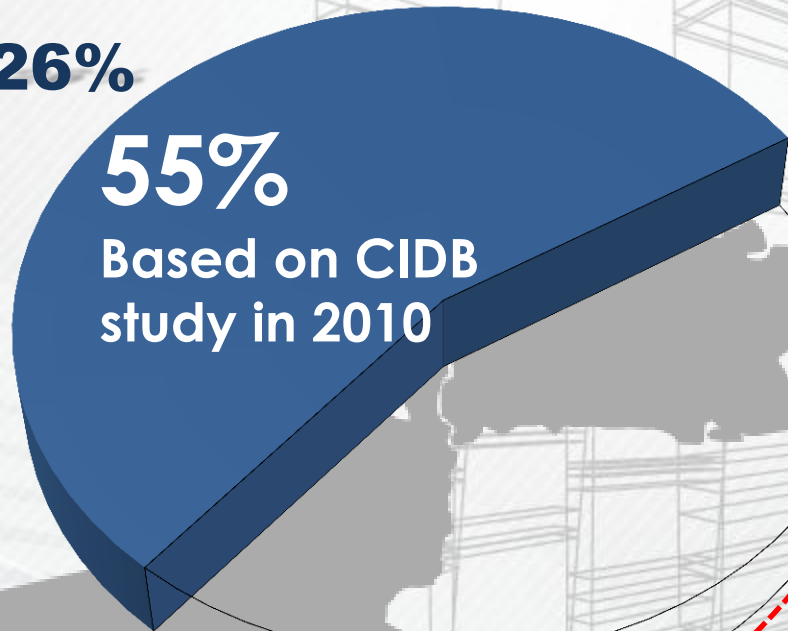
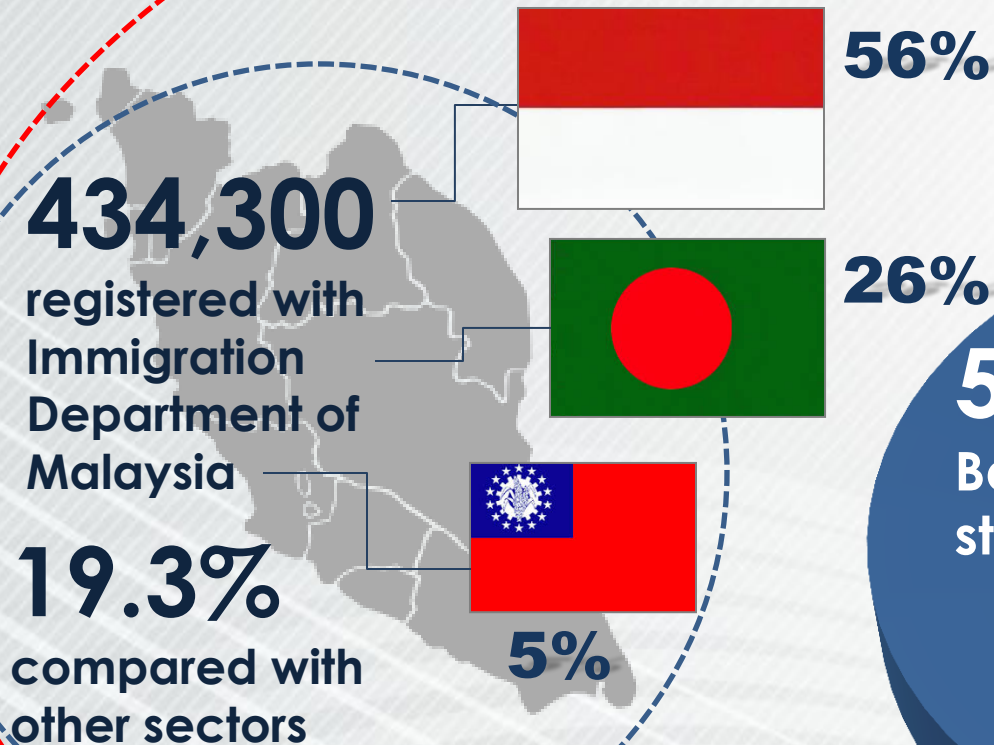
Construction Workers Weightage for Building Works



Note : Based on CIDB's study in 2012.

Excludes the overhead and profit margin from the cost of goods and construction workers.

Foreign Construction Workers



Importation and Distribution of Foreign Workers



Construction
Labour
Exchange
Centre Berhad



**FOREIGN
WORKERS
IDENTITY CARD**

Solutions to your manpower needs

1

Manage the distribution of foreign construction workers to contractors in a quick and efficient manner

2

Redistribute workers to construction companies that require them for their projects.

3

Managing the flow of foreign construction workers from source countries to furnish the needs of the construction industry

Skilled Workers Training Centers

Terengganu



Centre of Excellence for Oil & Gas Services Training
- East Region

Sabah



Centre of Excellence for Oil And Gas Services Training
- East Malaysia

Kuala Lumpur



Centre of Excellence for Latest Technology in Construction
- Central Region

Centre of Excellence for Mechanical and Electrical Services Training
- North Region

Johor



Sarawak



Centre of Excellence for Infrastructure Sustainable Development
- East Malaysia

Training for Construction Worker



60 trades:

- Scaffold Erection
- Welding
- Wireman
- Chargeman
- Fitting/ Insulation
- Blasting/ Painting
- Non-Destructive Testing (NDT)
- Crane Operation
- Plant Operation

Training Area	Nos. Trained	
	2012	2013
Skill	15,330	21,879
Supervisor	525	842
Management	145	143
Total	16,000	22,864

MOU with Indonesian Construction Development Authority

MOU on 31 March 2014 to provide skills training programs and certification to Indonesian construction worker who are legally employed in Malaysia



Indonesian
Construction
Development
Authority

Trades 1

**Bricklaying
and Plastering**

2 days

Trades 2

**Plastering and
Tiling**

2 days

Trades 3

**Carpentry,
Barbending
and
Concreting**

2 days

Trades 4

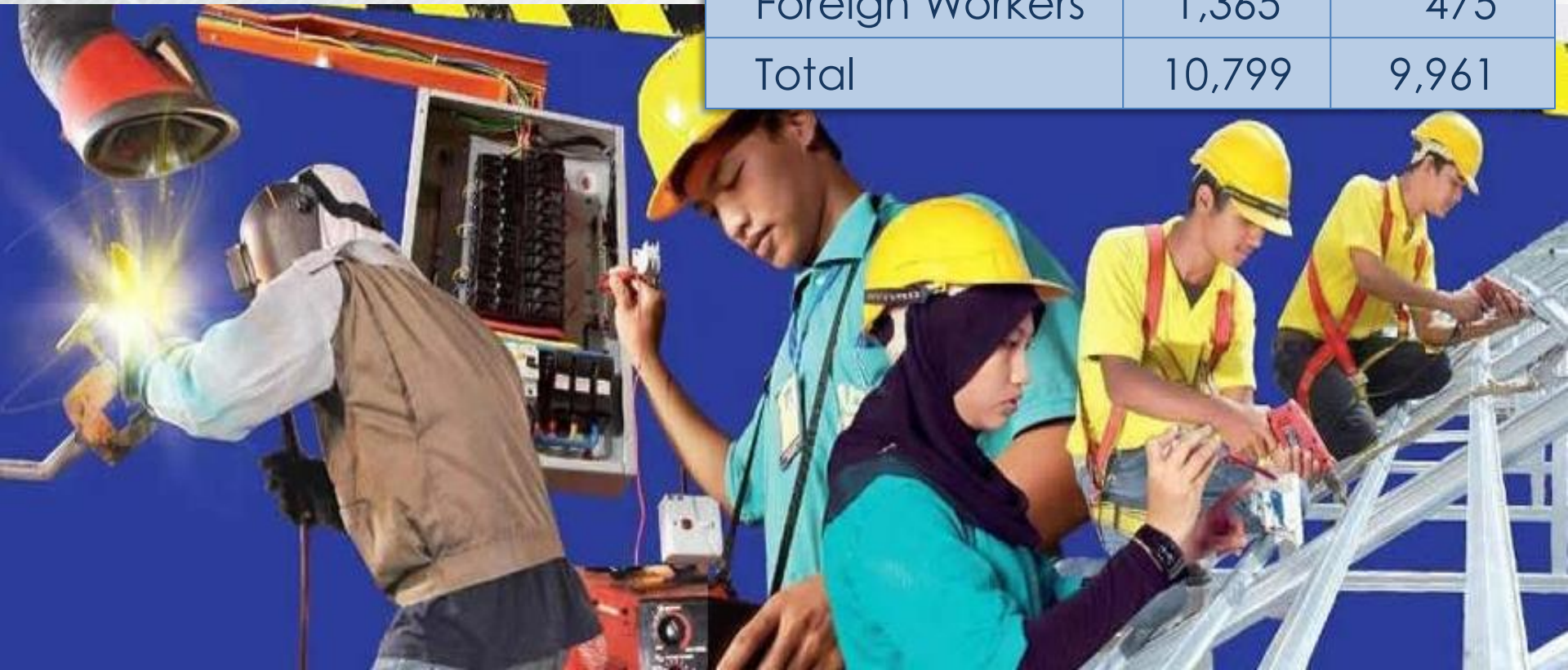
**Building
Decorative
Painting**

2 days

Accreditation of Skilled Workers

62 trades identified for accreditation and certification

Construction Workers	Nos. Accredited	
	2012	2013
Local Workers	9,434	9,486
Foreign Workers	1,365	475
Total	10,799	9,961



Green Card Program



- Prepared by the Certified Training Provider
- Prerequisite to the new personnel

Safety Induction for Construction Workers (SICW) Course

Construction Personnel Registration (Green Card)

- Construction site personnel are required to register and hold a green card

- Insurance coverage for valid green card holder

Insurance Scheme

Identity Card/
Passport Number

Nationality

Validity Date

Construction
Trade



Name and
Construction
Trade



Projection of Worker's Demand

myPROJEXIS
PROJECTION OF CONSTRUCTION DEMAND
(Work Done, GDP Contribution, Material Demand and Worker Demand)

Login

Username:

Password:

Remember Password: ☒

Submit

myPROJEXIS is a tool that enable CIDB to forecast the value of work done and its contribution to the overall GDP, the demand for 8 major building materials consumed in construction and the demand for 7 categories of construction workers for building works.

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Developed By :



Business Division

CONSTRUCTION INDUSTRY DEVELOPMENT BOARD MALAYSIA (CIDB)

Tingkat 10, Menara Dato' Onn, Putra World Trade Centre (PWTC),

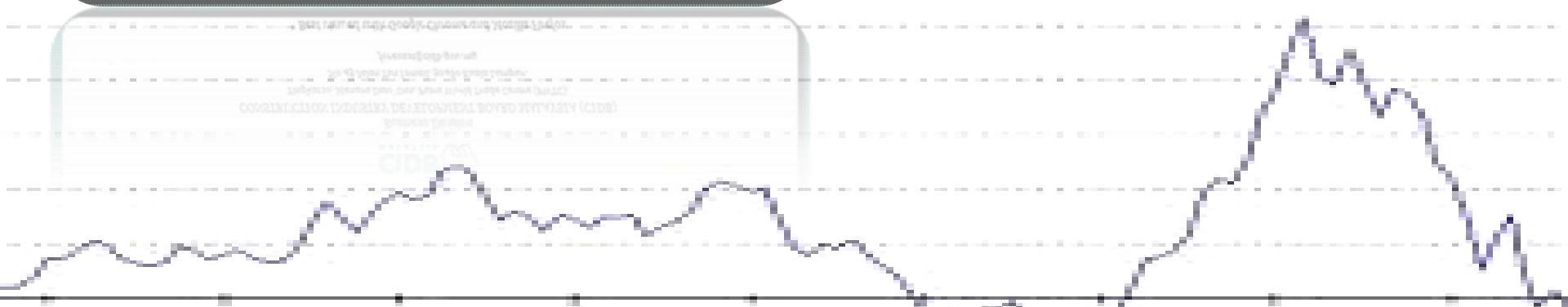
No 45 Jalan Tun Ismail, 50480 Kuala Lumpur.

forecast@cidb.gov.my

* Best viewed with Google Chrome and Mozilla Firefox

myPROJEXIS system is a tool that enable CIDB to forecast:

- the value of work done/construction sector growth;
- the demand for major construction materials consumed in construction; and
- demand for construction workers in major trades



Method and Machinery

The background of the slide features a faint, light grey architectural line drawing of a multi-story building structure, showing various levels and columns. This drawing is overlaid on a background of diagonal lines that create a sense of depth and perspective.

- Industrialised Building Systems (IBS)
- Heavy Machineries & Equipment

Construction Machineries Weightage for Building Works



0.3%
Excavator/
Backhoe

0.7%
Mobile Crane

2%
Others

97%
Other than
machineries

3%



Note : Based on CIDB's study.
Excludes the overhead and profit margin from the cost of goods and construction workers.

Industrialised Building System (IBS)

“A system/method of construction where the components are manufactured in a **CONTROLLED ENVIRONMENT** (on or off site), **TRANSPORTED**, **POSITIONED** and **ASSEMBLED** on the construction site with minimum workers”



Manufactured



Transported



Positioned and Assembled

Incentives, Policies, Regulation and Measures on IBS

IBS Centre

**Registration IBS Products, Manufactures,
Contractors, Installers & Consultants**

IBS Roadmaps

Treasury Circular 2008

Exemption On Levy Payment

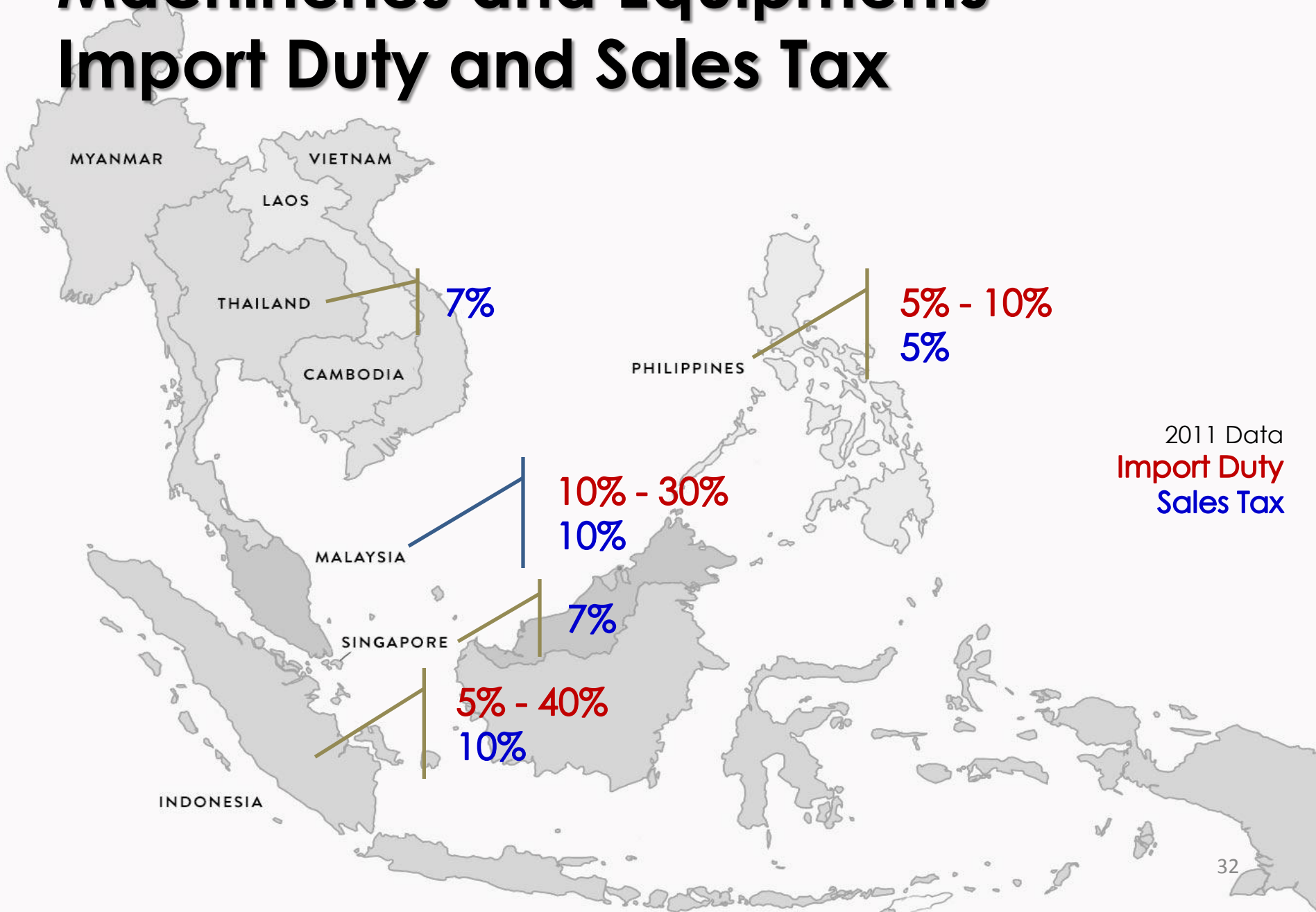
**Incentives For Purchasing IBS
Components Mould To Manufacturer**

IBS Catalogue System

Training Module

**International Conference, Exhibition,
Seminars & Road Shows**

Machineries and Equipments Import Duty and Sales Tax



Machineries and Equipments Import Duty & Sales Tax Reduction



Year 2012

Proposal.....

Proposal to reduce the import duty and sales tax on heavy machineries used in construction

Year 2013

Proposal

Addressing the implementation of IBS and stressing the importance of using heavy machineries



Money @ Cash Flow



Essential Element in Project Implementation



Cash flow
is the **LIFE BLOOD** of the construction industry

Purpose of Construction Industry Payment and Adjudication Act (CIPAA) Act 746

1

To facilitate regular and timely payment

2

To provide a mechanism for speedy dispute resolution through adjudication

3

To provide remedies for the recovery of payment in the construction industry

The CIPAA Journey



Specialist Construction Court



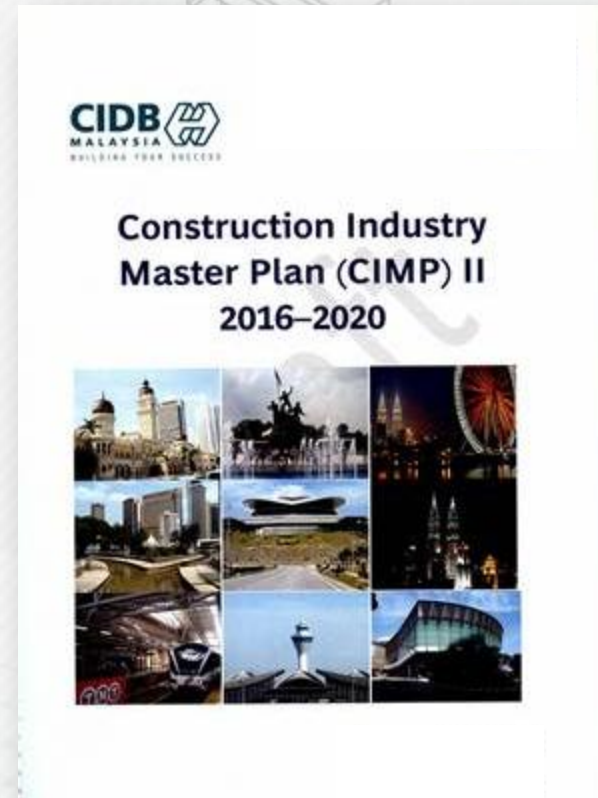
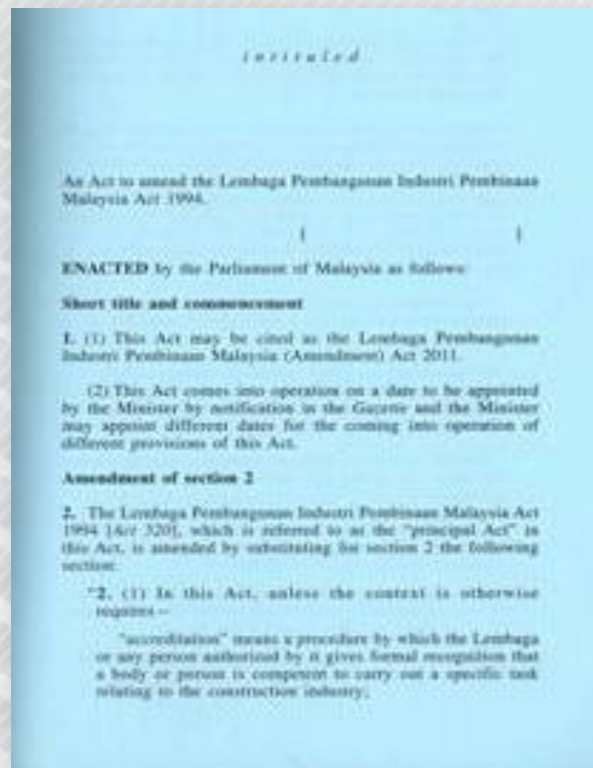
Kuala Lumpur

Shah Alam



Way Forward

CIDB Act 1994 ACT 520 (Amended 2011)



Construction Industry Master Plan II (2016-2020)



THANK YOU

www.cidb.gov.my