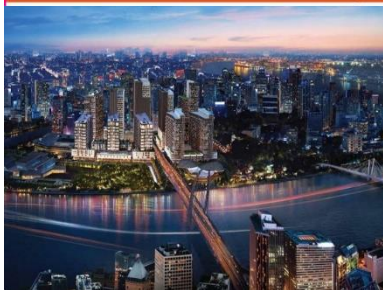


Construction Cost Handbook **VIETNAM 2021**

Arcadis Vietnam Co., Ltd



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3	

Handbook Cover Photos:-

1. The Metropole - HCMC
2. Empire City - HCM
3. Mizuki Park - HCM

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Fourteenth edition 2020

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Unless otherwise stated, costs reflected in this handbook are current as at **4th Quarter 2020**.

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CALENDARS

2021

JANUARY							FEBRUARY							MARCH						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
						1	1	2	3	4	5	6		1	2	3	4	5	6	
3	4	5	6	7	8	9	7	8	9	10	11	12	13	7	8	9	10	11	12	13
10	11	12	13	14	15	16	14	15	16	17	18	19	20	14	15	16	17	18	19	20
17	18	19	20	21	22	23	21	22	23	24	25	26	27	21	22	23	24	25	26	27
24/31	25	26	27	28	29	30	28							28	29	30	31			
APRIL							MAY							JUNE						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
						1	2	3	4	5	6	7	1	1	2	3	4	5		
4	5	6	7	8	9	10	2	3	4	5	6	7	8	6	7	8	9	10	11	12
11	12	13	14	15	16	17	9	10	11	12	13	14	15	13	14	15	16	17	18	19
18	19	20	21	22	23	24	16	17	18	19	20	21	22	20	21	22	23	24	25	26
25	26	27	28	29	30		23/30	24/31	25	26	27	28	29	27	28	29	30			
JULY							AUGUST							SEPTEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
						1	1	2	3	4	5	6	7	5	6	7	8	9	10	11
4	5	6	7	8	9	10	8	9	10	11	12	13	14	12	13	14	15	16	17	18
11	12	13	14	15	16	17	15	16	17	18	19	20	21	19	20	21	22	23	24	25
18	19	20	21	22	23	24	22	23	24	25	26	27	28	26	27	28	29	30		
25	26	27	28	29	30	31	29	30	31					26	27	28	29	30		
OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
						1	1	2	3	4	5	6		1	2	3	4	5		
3	4	5	6	7	8	9	7	8	9	10	11	12	13	5	6	7	8	9	10	11
10	11	12	13	14	15	16	14	15	16	17	18	19	20	12	13	14	15	16	17	18
17	18	19	20	21	22	23	21	22	23	24	25	26	27	19	20	21	22	23	24	25
24/31	25	26	27	28	29	30	28	29	30					26	27	28	29	30	31	

2022

JANUARY							FEBRUARY							MARCH						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
						1	1	2	3	4	5	6		1	2	3	4	5		
2	3	4	5	6	7	8	6	7	8	9	10	11	12	6	7	8	9	10	11	12
9	10	11	12	13	14	15	13	14	15	16	17	18	19	13	14	15	16	17	18	19
16	17	18	19	20	21	22	20	21	22	23	24	25	26	20	21	22	23	24	25	26
23/30	24/31	25	26	27	28	29	27	28						27	28	29	30	31		
APRIL							MAY							JUNE						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
						1	1	2	3	4	5	6	7	1	1	2	3	4		
3	4	5	6	7	8	9	8	9	10	11	12	13	14	5	6	7	8	9	10	11
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17	18	19	20	21	22	23	22	23	24	25	26	27	28	19	20	21	22	23	24	25
24	25	26	27	28	29	30	29	30	31					26	27	28	29	30		
JULY							AUGUST							SEPTEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
						1	1	2	3	4	5	6		1	2	3	4	5		
3	4	5	6	7	8	9	7	8	9	10	11	12	13	4	5	6	7	8	9	10
10	11	12	13	14	15	16	14	15	16	17	18	19	20	11	12	13	14	15	16	17
17	18	19	20	21	22	23	21	22	23	24	25	26	27	18	19	20	21	22	23	24
24/31	25	26	27	28	29	30	28	29	30	31				25	26	27	28	29	30	
OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
						1	1	2	3	4	5	6		1	2	3	4	5		
2	3	4	5	6	7	8	6	7	8	9	10	11	12	4	5	6	7	8	9	10
9	10	11	12	13	14	15	13	14	15	16	17	18	19	11	12	13	14	15	16	17
16	17	18	19	20	21	22	20	21	22	23	24	25	26	18	19	20	21	22	23	24
23/30	24/31	25	26	27	28	29	27	28	29	30				25	26	27	28	29	30	31

This version of Arcadis Handbook- Vietnam 2021, as other future annually published handbooks, focuses on the construction cost profile of Vietnam and those of the major cities in Asia.

The handbook is structured to serve as a general reference guide on construction cost indicators in Asia.

The information contained in this handbook has been compiled by Arcadis Vietnam Co., Ltd. Any further information and/or if advice relating to particular projects in specific region is required, please contact any of the regional offices listed under the Directory of Arcadis Offices at the end of this handbook.

Arcadis Vietnam Co., Ltd.

OUR CORE VALUE



People First

We care for each other and create a safe and respectful working environment where our people can grow, perform, and succeed.



Integrity

We always work to the highest professional and ethical standards and establish trust by being open, honest and responsible.



Client Success

We are passionate about our clients' success and bring insights, agility, and innovation to co-create value.



Collaboration

We value the power of diversity and our global capabilities and deliver excellence by working as One Arcadis.



Sustainability

We base our actions for clients and communities on environmental responsibility and social and economic advancement.



CONSTRUCTION COST DATA

1

Annual Foreign Investment

FDI by Countries

FDI by Sectors

Construction Value

Major Rates for Selected Asian Cities

Construction Cost Specification

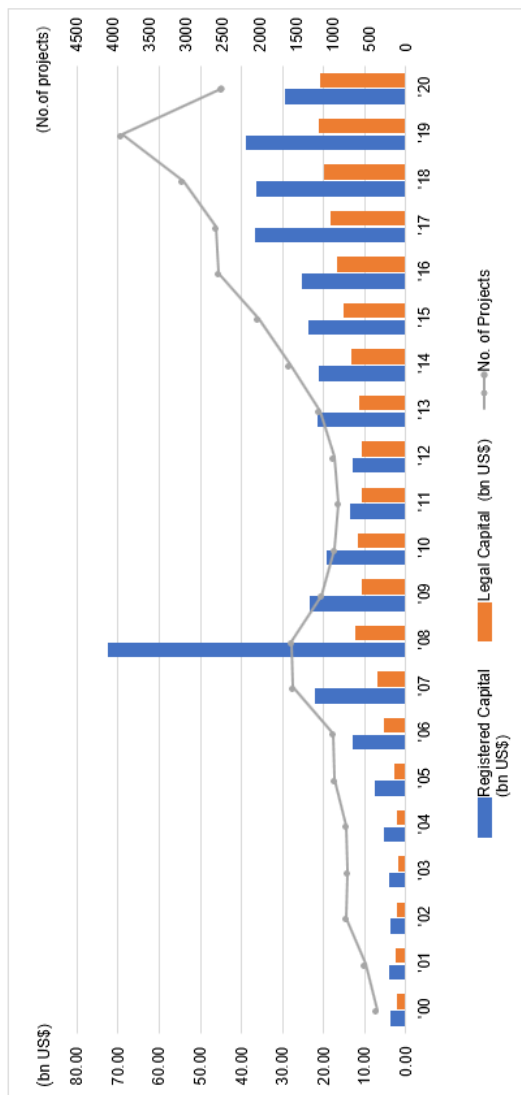
Construction Cost for Selected Asian Cities

M&E Cost for Selected Asian Cities

Utility Cost for Selected Asian Cities

ANNUAL FOREIGN INVESTMENT

ARCADIS VIETNAM CO.,LTD

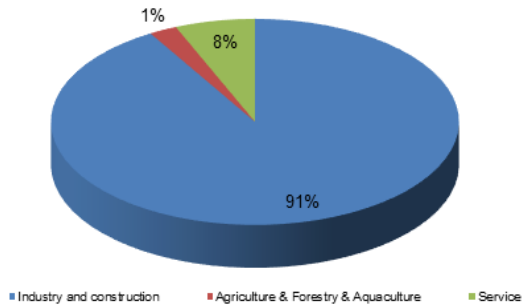


Year	'00	'01	'02	'03	'04	'05	'06	'07	'08	'09	'10	'11	'12	'13	'14	'15	'16	'17	'18	'19	'20
Registered Capital	2.84	3.14	3.00	3.19	4.55	6.84	12.00	21.30	71.73	22.63	18.60	12.70	12.18	20.82	20.23	22.76	24.37	35.88	35.47	38.02	28.50
Legal Capital	1.31	1.71	1.27	1.14	1.22	1.97	4.67	6.04	11.50	10.00	11.00	10.05	10.00	10.55	12.35	14.50	15.80	17.50	19.10	20.38	19.98
No. of Projects	391	555	808	791	811	970	987	1544	1557	1155	969	919	980	1175	1588	2013	2556	2591	3046	3683	2523

FDI BY COUNTRIES

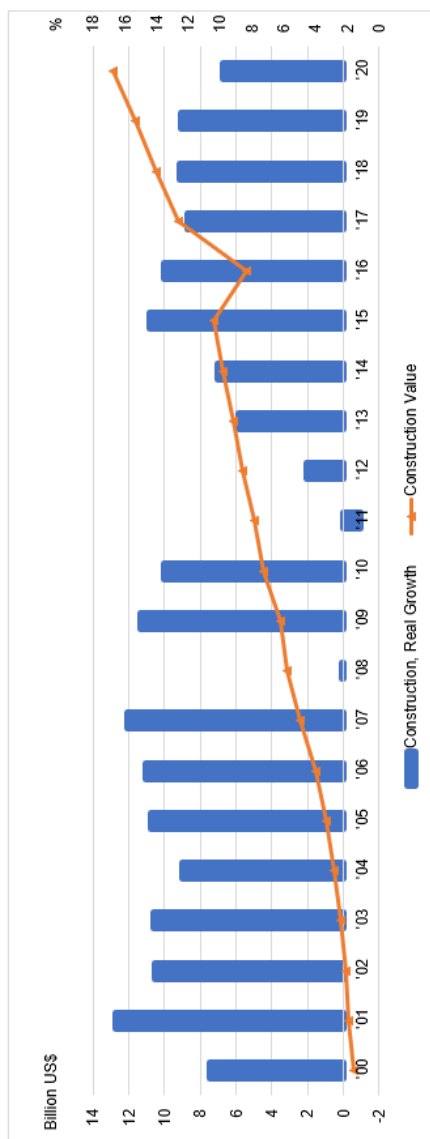


FDI BY SECTORS



	Sector	No. of projects	Registered Capital (mn US\$)
1	Industry and construction	1,941	25,841
	Manufacturing	800	13,601
	Property	70	4,185
	Accommodation	57	341
	Construction	79	560
	Mining	1	6
	Electricity, gas and water production and distribution	20	5,143
	Information and Communication	206	271
	Wholesale & Retail; Repair	704	1,646
	Water supply & Waste treatment	4	88
2	Agriculture & Forestry & Aquaculture	12	211
3	Service	570	2,478
	Art & Entertainment	5	5
	Logistics	59	612
	Finance, Banking & Insurance	6	287
	Health care & Social welfare	9	33
	Science & Technology	376	1,347
	Education and Training	54	108
	Administration & Supporting services	56	40
	Others	5	46
4	Total	2,523	28,530
(Source: Vietnam Investment Review)			

CONSTRUCTION VALUE



Year	'00	'01	'02	'03	'04	'05	'06	'07	'08	'09	'10	'11	'12	'13	'14	'15	'16	'17	'18	'19	'20
Construction, Real Growth	7.51	12.78	10.57	10.59	9.03	10.80	11.05	12.10	0.02	11.36	10.06	(0.97)	2.09	5.83	7.07	10.82	10.00	8.70	9.16	9.10	6.76
Construction Value	1.63	1.94	2.07	2.39	2.82	3.36	4.03	4.95	5.83	6.19	7.26	7.86	8.59	9.14	9.80	10.39	8.33	12.62	14.03	15.39	16.72

MAJOR RATES FOR SELECTED ASIAN CITIES

DESCRIPTION	Unit	HO CHI MINH [#]	MANILA	INDIA ^a	BANGKOK ^{**}	JAKARTA [@]
		VND	PHP	Rs	BAHT	IDR
1. Excavating basement not exceeding 2m deep	m ³	72,400	270	230	120 - 140	65
2. Excavating for footings not exceeding 1.5m deep	m ³	72,400	538	215	120 - 140	100
3. Remove excavated materials off site	m ³	84,700	350	NA	120 - 150	50
4. Hardcore bed blinded with fine materials	m ³	280,900	1,400-1,600	4,570	650 - 750	650
5. Mass concrete grade 15	m ³	1,606,400	4,400	6,180	2,300 - 2,500	950
6. Reinforced concrete grade 30	m ³	1,912,291	4,899	7,735	2,800 - 3,200	1,135
7. Mild steel rod reinforcement	kg	17,864	51-55	67	25 - 28	11
8. High tensile rod reinforcement	kg	17,988	52-55	64	24 - 27	11
9. Sawn formwork to soffits of suspended slabs	m ²	225,750	950-1,200	700	450 - 500	200
10. Sawn formwork to columns and walls	m ²	257,250	1,200	753	450 - 500	195
11. 112.5mm thick brick walls	m ²	312,780	N/A	1,140	650 - 750	250
12. "Kliplok Colorbond" 0.64mm profiled steel sheeting	m ²	401,110 - 597,600	1,500	1,765	1,200	300

DESCRIPTION	Unit	HO CHI MINH [#]	MANILA	INDIA ^{&}	BANGKOK ^{**}	JAKARTA [@]
13. Aluminium casement windows, single glazed	m ²	VND 6,315,000	PHP 12,500	Rs 6,230	BAHT 7,000	IDR 1,650
14. Structural steelwork - beams, stanchions and the like	kg	48,650	180	130	60 - 75	26
15. Steelwork - angles, channels, flats and the like	kg	48,650	160	130	60 - 75	26
16. 25mm Cement and sand (1:3) paving	m ²	94,000	650	493	200 - 240	90
17. 20mm Cement and sand (1:4) plaster to walls	m ²	144,000	500-700	405	220 - 260	100
18. Ceramic tiles bedded to floor screed (m/s)	m ²	674,180	1,800	1,765	1,200	200
19. 12mm fibrous plasterboard ceiling lining	m ²	245,700	1,400-1,645	1,400	750 - 850	215
20. Two coats of emulsion paint to plastered surfaces	m ²	91,000	500-800	220	140 - 180	35
Average expected preliminaries	%	8-12	12-18	9-13	12 - 18	8-10

The above costs are at **4th Quarter 2020** levels and are based on lump sum fixed price contract rates exclusive of preliminaries and contingencies.

Rates are nett of VAT

& All rates above are Supply and Fix, based on projects in Bangalore and are nett of GST. Mumbai costs are generally 8% higher.

The data for India is provided by Arkind LS Private Limited, an Arcadis Alliance Partner.

** Rates are nett of VAT

@ The data for Jakarta is provided by PT Lantera Sejahtera Indonesia

MAJOR RATES FOR SELECTED ASIAN CITIES

DESCRIPTION	Unit	HONG KONG		SINGAPORE*		KUALA LUMPUR		BEIJING	
		HK\$		S\$		RM		RMB	
1. Excavating basement not exceeding 2m deep	m ³	210		20		15 - 26		33	
2. Excavating for footings not exceeding 1.5m deep	m ³	190		20		15 - 26		35	
3. Remove excavated materials off site	m ³	290*		15 - 20		18 - 30		120	
4. Hardcore bed blinded with fine materials	m ³	940		50		72 - 100		190	
5. Mass concrete grade 15	m ³	1,050		177 - 187**		225 - 295		610	
6. Reinforced concrete grade 30	m ³	1,150		117 - 122		250 - 300		650	
7. Mild steel rod reinforcement	kg	9.50		1.25 - 1.35		3.25 - 3.7		5.60	
8. High tensile rod reinforcement	kg	9.50		1.25 - 1.35		3.25 - 3.7		5.60	
9. Sawn formwork to soffits of suspended slabs	m ²	400		40		36 - 46		90	
10. Sawn formwork to columns and walls	m ²	400		40		36 - 46		85	
11. 112.5mm thick brick walls	m ²	390		35 - 40		43 - 50		80	
12. "Kliplok Colorbond" 0.64mm profiled steel sheeting	m ²	1,000		43		70 - 90		N/A	

DESCRIPTION	Unit	HONG KONG	SINGAPORE*	KUALA LUMPUR	BEIJING
		HK\$	S\$	RM	RMB
13. Aluminium casement windows, single glazed	m ²	3,800	290	380 - 600	815**
14. Structural steelwork - beams, stanchions and the like	kg	35.00	4 - 4.5	6.5 - 9.5	11.00
15. Steelwork - angles, channels, flats and the like	kg	42.00	4 - 4.5	6.5 - 9.5	9.50
16. 25mm Cement and sand (1:3) paving	m ²	155	21	17 - 26	32
17. 20mm Cement and sand (1:4) plaster to walls	m ²	160	22	18 - 28	32
18. Ceramic tiles bedded to floor screed (m/s)	m ²	400	74	55 - 80	145
19. 12mm fibrous plasterboard ceiling lining	m ²	570	30	36 - 46	162
20. Two coats of emulsion paint to plastered surfaces	m ²	90	3.5 - 4	3.4 - 5.0	32
Average expected preliminaries	%	10 - 15	12-15	6-15	5-12

The above costs are at **4th Quarter 2020** levels and are based on lump sum fixed price contract rates exclusive of preliminaries and contingencies.

♣ Rates are nett of GST and exclude cost impact arising from COVID-19 pandemic

♣♣ Rate for lean concrete blinding.

* Rates including dumping charges.

** Rates for double glazed window.

MAJOR RATES FOR SELECTED ASIAN CITIES

DESCRIPTION	Unit	SHANGHAI	GUANGZHOU/ SHENZHEN	CHONGQING / CHENGDU	MACAU
		RMB	RMB	RMB	MOP
1. Excavating basement not exceeding 2m deep	m ³	30	40	35	150
2. Excavating for footings not exceeding 1.5m deep	m ³	30	40	35	180
3. Remove excavated materials off site	m ³	190	110	65	150
4. Hardcore bed blinded with fine materials	m ³	190	190	180	1,300
5. Mass concrete grade 15	m ³	660	740	530	1,500
6. Reinforced concrete grade 30	m ³	700	800	560	1,400
7. Mild steel rod reinforcement	kg	5.40	6.00	5.50	7.50
8. High tensile rod reinforcement	kg	5.40	6.00	5.50	7.50
9. Sawn formwork to soffits of suspended slabs	m ²	95	90	65	280
10. Sawn formwork to columns and walls	m ²	90	85	60	280
11. 112.5mm thick brick walls	m ²	100 [®]	100	80	450
12. "Kliplok Colorbond" 0.64mm profiled steel sheeting	m ²	N/A	NA	NA	N/A

DESCRIPTION	Unit	SHANGHAI	GUANGZHOU/ SHENZHEN	CHONGQING / CHENGDU	MACAU
		RMB	RMB	RMB	MOP
13. Aluminium casement windows, single glazed	m ²	700	700	670 [#]	4,000
14. Structural steelwork - beams, stanchions and the like	kg	10.00	12.50	10.00	30.00
15. Steelwork - angles, channels, flats and the like	kg	8.50	11.50	9.00	40.00
16. 25mm Cement and sand (1:3) paving	m ²	35	36	30	120
17. 20mm Cement and sand (1:4) plaster to walls	m ²	35	36	30	150
18. Ceramic tiles bedded to floor screed (m/s)	m ²	160	155	140	450
19. 12mm fibrous plasterboard ceiling lining	m ²	160	165	150	650
20. Two coats of emulsion paint to plastered surfaces	m ²	40	35	35	200
Average expected preliminaries	%	6-12	7-10	6-12	10

The above costs are at **4th Quarter 2020** levels and are based on lump sum fixed price contract rates exclusive of preliminaries and contingencies.

@ Rate for 120mm thick concrete block walls

Rates for double glazed window.

CONSTRUCTION COST DATA

CONSTRUCTION COST SPECIFICATION

BUILDING TYPE	OUTLINE SPECIFICATION
DOMESTIC	
Apartments, high rise, average standard	Apartment units with fit-out, including air-conditioning, kitchen cabinets and home appliances, but excluding decorative light fittings and loose furniture
Apartments, high rise, high end	Apartment units with good quality fit-out, including air-conditioning, kitchen cabinets and home appliances, but excluding decorative light fittings and loose furniture
Terraced houses, average standard	Houses with fit-out, including air-conditioning, kitchen cabinets and home appliances, but excluding decorative light fittings, loose furniture, garden and parking
Detached houses, high end	Houses with good quality fit-out, including air-conditioning, kitchen cabinets and home appliances, but excluding decorative light fittings, loose furniture, garden and parking
OFFICE/COMMERCIAL	
Medium/high rise offices, average standard	RC structure, curtain wall, including public area fit-out, tenant area with raised floor/carpet, painted wall and false ceiling
High rise offices, prestige quality	
Out-of-town shopping centre, average standard	
Retail malls, high end	Including public area fit-out and M&E, but excluding shop fit-out
INDUSTRIAL	
Industrial units, shell only (Conventional single storey framed units)	RC structure with steel roof and M&E to main distribution, but excluding a/c, heating and lighting
Owner operated factories, low rise, light weight industry	RC structure, including small office with simple fit-out and M&E, but excluding a/c and heating

HOTELS	
Budget hotels - 3-star, mid market	1) Interior decoration 2) Furniture (fixed and movable) 3) Special light fittings (chandeliers, etc.) 4) Operating Supplies and Equipment (OS&E) excluded .
Business hotels - 4/5-star	
Luxury hotels - 5-star	
OTHERS	
Underground/basement car parks (<3 levels)	RC structure
Multi storey car parks, above ground (<4 levels)	RC structure, natural ventilation, no facade enclosure
Schools (primary and secondary)	Including fit-out and a/c, but excluding educational equipment
Students' residences	Including fit-out, loose furniture and a/c
Sports clubs, multi purpose sports/leisure centres (dry sports)	Dry sports (no swimming pool) and are for 'leisure centre' type schemes including main sports hall, ancillary sports facilities, changing and showers, restaurant / cafe, bar, etc. Costs include a/c, Furniture, Fittings and Equipment (FF&E).
General hospitals - public sector	Excluding medical and operating equipment

Notes :

1. The costs for the respective categories given above are averages based on fixed price competitive tenders. It must be understood that the actual cost of a building will depend upon the design and many other factors and may vary from the figures shown.
2. The costs per square metre are based on Construction Floor Areas (CFA) measured to the outside face of the external walls / external perimeter including lift shafts, stairwells, balconies, plant rooms, water tanks and the like.
3. All buildings are assumed to have no basements (except otherwise stated) and are built on flat ground, with normal soil and site condition. The cost excludes site formation works, external works, land cost, professional fees, finance and legal expenses.
4. The standard for each category of building varies from region to region and do not necessary follow that of each other.
5. All costs are in US\$/m2 CFA. Fluctuation in exchange rates may lead to changes in construction costs expressed in U.S. dollars.

CONSTRUCTION COST FOR SELECTED ASIAN CITIES

BUILDING TYPE	US\$/m ² CFA			
	HO CHI MINH [±]	MANILA [#]	INDIA [%]	JAKARTA [*]
DOMESTIC				
Apartments, high rise, average standard	641 - 795	1,009 - 1,422	585 - 665	834 - 944
Apartments, high rise, high end	816 - 935	1,363 - 2,590	880 - 1,060	1,149 - 1,297
Terraced houses, average standard	432 - 507	983 - 1,203	405 - 425	443 - 576
Detached houses, high end	493 - 602	1,909 - 3,237	530 - 560	1,202 - 1,343
OFFICE/COMMERCIAL				
Medium/high rise offices, average standard	750 - 868	999 - 1,236	460 - 500	822 - 912
High rise offices, prestige quality	865 - 1,179	1,446 - 1,823	580 - 610	1,295 - 1,434
Out-of-town shopping centre, average standard	N/A	849 - 1,058	450 - 490	708 - 783
Retail malls, high end	700 - 917	1,160 - 1,626	630 - 675	780 - 845
INDUSTRIAL				
Industrial units, shell only (Conventional single storey framed units)	308 - 388	566 - 633	365 - 420	380 - 414
Owner operated factories, low rise, light weight industry	348 - 459	761 - 951	385 - 450	413 - 456

BUILDING TYPE	US\$/m ² CFA			
	HO CHI MINH ^{&}	MANILA [#]	INDIA [%]	BANGKOK ^{**}
HOTELS				
Budget hotels - 3-star, mid market	1,391 - 1,701	1,269 - 1,415	865 - 960	1,249 - 1,378
Business hotels - 4/5-star	N/A	1,430 - 2,389	1,350 - 1,600	1,599 - 1,827
Luxury hotels - 5-star	1,756 - 2,108	1,965 - 3,783	1,705 - 1,870	1,866 - 2,159
OTHERS				
Underground/basement car parks (<3 levels)	636 - 760	594 - 783	295 - 320	600 - 797
Multi storey car parks, above ground (<4 levels)	409 - 449	504 - 725	245 - 265	200 - 325
Schools (primary and secondary)	538 - 587	744 - 1,026	305 - 340	24 - 27
Students' residences	538 - 690	787 - 1,010	335 - 370	N/A
Sports clubs, multi purpose sports/leisure centres (dry sports)	795 - 850	1,259 - 1,831	620 - 650	N/A
General hospitals - public sector	N/A	1,512 - 1,753	675 - 740	N/A
Exchange Rate Used : US\$1 =	VND 23,500	PHP 48.94	INR 74.39	BAHT 30.28
				IDR 14,458

The above costs are at **4th Quarter 2020** levels and are based on lump sum fixed price contract rates exclusive of preliminaries and contingencies.

& Rates are nett of VAT

Rates include 12% VAT.

% Rates are based on projects in Bangalore and are nett of GST.

Mumbai costs are generally 8% higher.

The data for India is provided by

Arkind LS Private Limited, an Arcadis Alliance Partner.

** Rates exclude VAT.

* The data for Jakarta is provided by PT Lantera Sejahtera Indonesia.

CONSTRUCTION COST DATA

CONSTRUCTION COST FOR SELECTED ASIAN CITIES

BUILDING TYPE	US\$/m ² CFA			
	HONG KONG [£]	MACAU [¥]	SINGAPORE [*]	KUALA LUMPUR
DOMESTIC				
Apartments, high rise, average standard	2,990 - 3,460	2,308 - 2,823	1,360 - 1,505	305 - 590*
Apartments, high rise, high end	3,870 - 4,520	3,223 - 4,926	2,095 - 3,090	710 - 1,410
Terraced houses, average standard	4,080 - 4,720	3,934 - 4,694	1,765 - 1,950	220 - 350 [▲]
Detached houses, high end	5,970 up	4,798 - 6,242	2,245 - 2,940	740 - 1,000
OFFICE/COMMERCIAL				
Medium/high rise offices, average standard	2,950 - 3,390	2,657 - 3,430	1,765 - 1,950 [*]	580 - 755 ⁺
High rise offices, prestige quality	3,540 - 4,080	3,430 - 3,753	1,985 - 2,130 [*]	900 - 1,280 [▼]
Out-of-town shopping centre, average standard	2,930 - 3,430	2,502 - 3,753	1,985 - 2,060	545 - 725
Retail malls, high end	3,790 - 4,520	3,934 - 4,746	2,095 - 2,280	680 - 1,015
INDUSTRIAL				
Industrial units, shell only (Conventional single storey - framed units)	N/A	N/A	770 - 940	320 - 440
Owner operated factories, low rise, light weight industry	2,270 - 2,850	N/A	N/A	430 - 530

BUILDING TYPE	US\$/m ² CFA			
	HONG KONG [£]	MACAU [¥]	SINGAPORE [*]	KUALA LUMPUR
HOTELS				
Budget hotels - 3-star, mid market	3,750 - 4,000	3,495 - 3,959	2,205 - 2,390	1,015 - 1,420
Business hotels - 4/5-star	3,880 - 4,530	4,746 - 5,673	2,830 - 3,160	1,340 - 2,210
Luxury hotels - 5-star	4,530 - 5,210	5,673 - 6,706	2,830 - 3,160	1,935 - 2,475
OTHERS				
Underground/basement car parks (<3 levels)	3,200 - 3,830	2,076 - 3,044	955 - 1,270	310 - 540
Multi storey car parks, above ground (<4 levels)	1,910 - 2,270	1,148 - 1,509	660 - 940 [*]	220 - 350
Schools (primary and secondary)	2,490 - 2,680	2,295 - 2,657	N/A	250 - 315 [▼]
Students' residences	2,850 - 3,210	1,818 - 2,115	1,620 - 1,730	295 - 370 [*]
Sports clubs, multi purpose sports/leisure centres (dry sports)	3,740 - 4,270	N/A	2,020 - 2,130	595 - 740
General hospitals - public sector	4,750 - 5,280	N/A	2,830 - 2,940	850 - 1,170
Exchange Rate Used : US\$1 =	HK\$ 7.75	MOP 7.98	S\$ 1.36	RM 4.11

The above costs are at **4th Quarter 2020** levels and are based on lump sum fixed price contract rates exclusive of preliminaries and contingencies.

£. Offices of average standard are built to the following provisions:

- (i) Curtain wall/window wall facade
 - (ii) Tenant areas include screeded floor, painted wall and ceiling
- Schools (primary and secondary) are of public authority standard, no a/c and complete with basic external works.

* 6 - 12 units per floor, 46m² - 83m² per unit, exclude air-conditioning equipment, kitchen cabinets and home appliances.

▲ Terraced houses exclude air-conditioning, kitchen cabinets and home appliances.

+ Offices exclude tenant fitout and raised floor.

▼ Offices exclude tenant fitout.

▲ Schools are standard government provisions.

◆ Student hostels to university standard.

¥ Rates are exclusive of any management contract fee.

◆ Rates are net of GST and exclusive of cost impact arising from COVID-19 pandemic.

◆ Includes raised floor and ceiling to tenanted areas but excludes office carpets (normally under tenant's fit-out).

▼ Open on all sides with parapet..

CONSTRUCTION COST DATA

CONSTRUCTION COST FOR SELECTED ASIAN CITIES

BUILDING TYPE	US\$/m ² CFA			
	BEIJING*	SHANGHAI*	GUANGZHOU/ SHENZHEN*	CHONGQING / CHENGDU*
DOMESTIC				
Apartments, high rise, average standard	652 - 716	740 - 816	627 - 690	603 - 718
Apartments, high rise, high end	1,579 - 1,798	1,672 - 1,822	1,009 - 1,104	976 - 1,231
Terraced houses, average standard	933 - 1,011	1,023 - 1,114	940 - 1,090	833 - 985
Detached houses, high end	1,793 - 1,871	1,799 - 1,908	1,803 - 2,049	1,061 - 1,212
OFFICE/COMMERCIAL				
Medium/high rise offices, average standard	912 - 1,228	941 - 1,243	876 - 976	958 - 1,108
High rise offices, prestige quality	1,482 - 2,017	1,220 - 1,669	1,280 - 1,544	1,210 - 1,629
Out-of-town shopping centre, average standard	695 - 929	N/A	844 - 926	773 - 989
Retail malls, high end	1,257 - 1,730	1,294 - 1,669	1,226 - 1,714	1,152 - 1,613
INDUSTRIAL				
Industrial units, shell only (Conventional single storey framed units)	287 - 350	293 - 358	327 - 390	471 - 593
Owner operated factories, low rise, light weight industry	555 - 636	453 - 566	N/A	N/A

BUILDING TYPE	US\$/m ² CFA			
	BEIJING ⁺	SHANGHAI ⁺	GUANGZHOU/ SHENZHEN ⁺	CHONGQING / CHENGDU ⁺
HOTELS				
Budget hotels - 3-star, mid market	1,028 - 1,267	1,039 - 1,267	1,110 - 1,221	1,038 - 1,281
Business hotels - 4/5-star	1,719 - 2,269	1,674 - 2,267	1,794 - 2,561	1,867 - 2,331
Luxury hotels - 5-star	2,188 - 2,816	2,264 - 2,707	2,439 - 2,688	2,301 - 2,756
OTHERS				
Underground/basement car parks (<3 levels)	794 - 873	776 - 1,082	579 - 924	457 - 642
Multi storey car parks, above ground (<4 levels)	478 - 483	398 - 555	413 - 456	363 - 449
Schools (primary and secondary)	553 - 714	593 - 749	459 - 505	483 - 535
Students' residences	391 - 553	434 - 592	290 - 320	337 - 490
Sports clubs, multi purpose sports/leisure centres (dry sports)	947 - 955	1,001 - 1,229	800 - 880	765 - 842
General hospitals - public sector	1,245 - 1,559	1,529 - 1,972	1,212 - 1,515	1,225 - 1,530
Exchange Rate Used : US\$1 =	RMB 6.60	RMB 6.60	RMB 6.60	RMB 6.60

The above costs are at **4th Quarter 2020** levels and are based on lump sum fixed price contract rates exclusive of preliminaries and contingencies.

- + Schools (primary and secondary) are of public authority standard, no a/c and complete with basic external works.
- Houses of Shanghai and Chongqing/Chengdu are built to shell and core

M&E COST FOR SELECTED ASIAN CITIES

DESCRIPTION	HO CHI MINH	MANILA ^a	INDIA ^{&}	BANGKOK [#]	JAKARTA [@]	
	VND/m² CFA	PHP/m² CFA	INR/m² CFA	BAHT/m² CFA	IDR/m² CFA	
<u>MECHANICAL SERVICES</u>	Offices	2,132,000 - 3,035,000	4,000 - 7,150	5,110 - 6,995	4,400 - 4,800	1,013,000 - 1,166,000
	Industrial*	N/A	800 - 1,600	2,400 - 4,465	1,550 - 1,600	459,000 - 733,000
	Hotels	N/A	3,500 - 11,190	5,920 - 7,000	4,600 - 5,200	1,044,000 - 1,356,000
	Shopping Centres	N/A	2,890 - 7,070	5,215 - 7,130	4,600 - 4,800	892,000 - 1,071,000
	Apartment	1,601,000 - 2,193,000	1,390 - 4,450	2,690 - 3,765	4,300 - 4,500	997,000 - 1,266,000
<u>ELECTRICAL SERVICES</u>	Offices	2,204,000 - 2,641,000	3,500 - 7,690	4,620 - 6,930	3,400 - 3,800	890,000 - 1,092,000
	Industrial**	N/A	2,000 - 3,500	2,720 - 4,925	1,950 - 2,200	580,000 - 722,000
	Hotels	N/A	4,900 - 10,200	5,125 - 7,625	3,800 - 4,500	843,000 - 1,161,000
	Shopping Centres	N/A	3,060 - 6,600	4,405 - 6,430	2,800 - 3,200	712,000 - 897,000
	Apartment	1,938,000- 2,443,000	3,600 - 6,300	2,330 - 3,330	2,800 - 3,350	939,000 - 1,097,000
<u>HYDRAULIC SERVICES</u>	Offices	340,000 - 630,000	1,230 - 2,200	800 - 1,345	780 - 900	216,000 - 311,000
	Industrial	N/A	800 - 1,400	550 - 1,050	750 - 790	137,000 - 211,000
	Hotels	N/A	2,250 - 6,820	4,210 - 6,910	1,400 - 1,650	986,000 - 1,161,000
	Shopping Centres	N/A	1,220 - 1,650	1,200 - 2,365	790 - 950	195,000 - 301,000
	Apartment	660,000 - 770,000	2,250 - 4,100	1,900 - 2,865	1,200 - 1,400	997,000 - 1,181,000

DESCRIPTION	HO CHI MINH	MANILA ^Q	INDIA ^{&}	BANGKOK [#]	JAKARTA [@]
	VND/m ² CFA	PHP/m ² CFA	INR/m ² CFA	BAHT/m ² CFA	IDR/m ² CFA
<u>FIRE SERVICES</u>					
Offices	734,000 - 1,209,000	980 - 1,720	1,290 - 1,835	780 - 850	296,000 - 411,000
Industrial	N/A	1,000 - 2,500	590 - 885	730 - 750	148,000 - 211,000
Hotels	N/A	1,100 - 2,120	1,500 - 2,090	780 - 890	327,000 - 406,000
Shopping Centres	N/A	1,090 - 1,730	1,235 - 1,555	780 - 820	274,000 - 321,000
Apartment	515,000- 646,000	980 - 1,350	690 - 895	750 - 850	311,000 - 338,000
<u>LIFTS/ESCALATORS</u>					
Offices	680,000- 1,300,000	1,800 - 4,930	1,020 - 1,340	1,100 - 1,400	580,000 - 1,171,000
Industrial	N/A	0 - 730	680 - 880	N/A	N/A
Hotels	N/A	1,800 - 3,500	1,530 - 2,225	1,100 - 1,400	697,000 - 1,087,000
Shopping Centres	1,390,000 - 1,960,000	1,600 - 3,010	1,790 - 2,290	300 - 450	321,000 - 865,000
Apartment	770,000- 1,120,000	850 - 3,440	920 - 1,200	600 - 800	707,000 - 881,000

The above costs are at **4th Quarter 2020** levels, exclusive of contingencies.

* Generally without A/C.

** Excludes special power supply.

Ω Transformer, included in Electrical Services.

& Rates are based on projects in Bangalore and are nett of GST.

Mumbai costs are generally 8% higher.

The data for India is provided by Arkind LS Private Limited, an Arcadis Alliance Partner

Based upon nett enclosed area and nett of V/A/T.

@ The data for Jakarta is provided by PT Lantera Sejahtera Indonesia

M&E COST FOR SELECTED ASIAN CITIES

DESCRIPTION	HONG KONG	SINGAPORE*	KUALA LUMPUR	BEIJING
	HK\$/m ² CFA	S\$/m ² CFA	RM/m ² CFA	RMB/m ² CFA
<u>MECHANICAL SERVICES</u>				
Offices	1,900 - 2,600	153 - 249	330 - 495	783 - 1,212
Industrial*	200 - 300	34 - 117	90 - 190	172 - 283
Hotels	2,000 - 2,500	215 - 278	315 - 595	960 - 1,236
Shopping Centres	2,100 - 2,600	147 - 246	310 - 480	814 - 980
Apartment	800 - 2,000up	90 - 170	125 - 210	144 - 464
<u>ELECTRICAL SERVICES</u>				
Offices	1,700 - 2,400	158 - 258	300 - 465	475 - 859
Industrial**	650 - 850	55 - 136	155 - 195	329 - 464
Hotels	1,900 - 2,500	277 - 367	310 - 550	726 - 972
Shopping Centres	1,700 - 2,400	160 - 304	305 - 465	495 - 697
Apartment	1,000 - 2,100up	112 - 236	115 - 215	261 - 410
<u>HYDRAULIC SERVICES</u>				
Offices	700 - 850	26 - 55	45 - 70	98 - 144
Industrial	500 - 650	18 - 36	45 - 55	98 - 144
Hotels	1,800 - 2,700	122 - 172	185 - 275	381 - 495
Shopping Centres	700 - 900	46 - 80	35 - 40	144 - 206
Apartment	1,300 - 2,000	79 - 143	55 - 100	175 - 236

DESCRIPTION	HONG KONG		SINGAPORE*		KUALA LUMPUR		BEIJING	
	HK\$/m ² CFA		S\$/m ² CFA		RM/m ² CFA		RMB/m ² CFA	
<u>FIRE SERVICES</u>								
Offices	550 - 700		33 - 56		65 - 85		186 - 273	
Industrial	400 - 500		23 - 51		55 - 70		155 - 232	
Hotels	600 - 850		28 - 55		65 - 100		226 - 387	
Shopping Centres	550 - 700		37 - 56		60 - 80		226 - 387	
Apartment	100 - 600		24 - 51		20 - 30		72 - 139	
<u>LIFTS/ESCALATORS</u>								
Offices	700 - 1,100		63 - 162		135 - 355		297 - 583	
Industrial	550 - 750		41 - 104		55 - 180		146 - 404	
Hotels	550 - 850		49 - 82		105 - 295		234 - 525	
Shopping Centres	850 - 1,000		56 - 90		100 - 120		330 - 525	
Apartment	450 - 850		41 - 113		70 - 110		177 - 292	

The above costs are at **4th Quarter 2020** levels, exclusive of contingencies.

* Generally without A/C.

** Excludes special power supply.

♣ Rates are nett of GST, excluding BAS and cost impact arising from COVID-19 pandemic

M&E COST FOR SELECTED ASIAN CITIES

DESCRIPTION	SHANGHAI	GUANGZHOU/ SHENZHEN	CHONGQING / CHENGDU	MACAU
	RMB/m ² CFA	RMB/m ² CFA	RMB/m ² CFA	MOP/m ² CFA
<u>MECHANICAL SERVICES</u>				
Offices	822 - 1,045	775 - 1,150	758 - 1,030	N/A
Industrial*	182 - 307	155 - 285	146 - 242	N/A
Hotels	1,040 - 1,356	1,080 - 1,350	970 - 1,333	2,590 - 2,990
Shopping Centres	1,102 - 1,160	715 - 910	929 - 1,050	2,350 - 2,940
Apartment	330 - 436	152 - 410	157 - 313	900 - 1,200
<u>ELECTRICAL SERVICES</u>				
Offices	645 - 728	540 - 795	470 - 687	N/A
Industrial**	323 - 457	320 - 459	273 - 374	N/A
Hotels	703 - 898	715 - 980	606 - 864	2,590 - 3,090
Shopping Centres	561 - 703	500 - 690	530 - 687	2,590 - 2,940
Apartment	272 - 399	285 - 500	237 - 354	1,000 - 1,290
<u>HYDRAULIC SERVICES</u>				
Offices	115 - 171	103 - 184	89 - 126	N/A
Industrial	92 - 135	89 - 124	89 - 126	N/A
Hotels	389 - 535	390 - 500	343 - 470	1,790 - 2,190
Shopping Centres	145 - 195	114 - 168	106 - 157	600 - 790
Apartment	177 - 240	150 - 280	106 - 187	1,490 - 1,990

DESCRIPTION	SHANGHAI	GUANGZHOU/ SHENZHEN	CHONGQING / CHENGDU	MACAU
	RMB/m ² CFA	RMB/m ² CFA	RMB/m ² CFA	MOP/m ² CFA
<u>FIRE SERVICES</u>				
Offices	241 - 338	230 - 350	250 - 303	N/A
Industrial	167 - 278	143 - 272	136 - 242	N/A
Hotels	306 - 412	285 - 425	263 - 364	910 - 1,120
Shopping Centres	273 - 407	248 - 383	263 - 384	610 - 810
Apartment	58 - 108	72 - 185	61 - 116	250 - 300
<u>LIFTS/ESCALATORS</u>				
Offices	294 - 578	295 - 517	313 - 576	N/A
Industrial	142 - 410	150 - 440	157 - 364	N/A
Hotels	230 - 520	250 - 480	261 - 449	610 - 810
Shopping Centres	342 - 520	325 - 470	303 - 460	460 - 710
Apartment	173 - 306	130 - 450	146 - 253	460 - 610

The above costs are at **4th Quarter 2020** levels, exclusive of contingencies.

* Generally without A/C.

** Excludes special power supply.

UTILITY COST FOR SELECTED ASIAN CITIES

CITY	EXCHANGE RATE	ELECTRICITY	
		DOMESTIC	COMMERCIAL/ INDUSTRIAL
	US\$1=	US\$/kwh	US\$/kwh
Ho Chi Minh	VND 23,500	0.12	0.11/0.06
Singapore	S\$ 1.36	0.16	0.16
Kuala Lumpur	RM 4.11	0.053 - 0.139	0.092 - 0.124
Bangkok	BAHT 30.275	0.078 - 0.146	0.103 - 0.105
Manila	PHP 48.94	0.184	0.172
Bangalore	INR 74.39	0.075 - 0.107	0.092 - 0.135
New Delhi*	INR 74.39	0.021 - 0.118	0.107
Jakarta [#]	IDR 14,155	0.102	0.102

The above costs are at 4th Quarter 2020 levels.

* The data is provided by Arkind LS Private Limited, an Arcadis Alliance partner.

The data is provided by PT Lantera Sejahtera Indonesia.

Basis of Charges in Ho Chi Minh, Vietnam (All rates are VAT inclusive).

Basis of Charges in Singapore (All rates are nett of GST)

- Electricity tariff is based on low tension power supply.
- Domestic water tariff effective from 1 July 2018.
Rate includes water conservation tax, water-borne fee, sanitary appliance fee and is an average for the 1st 40m³
- Domestic water tariff effective from 1 July 2018. Rate includes water conservation tax, water borne fee, sanitary appliance fee and is an average for the usage after the 1st 40m³
- Non-domestic water tariff effective from 1 July 2018.
Rate includes water conservation tax, water-borne fee, and sanitary appliance fee
- Diesel fuel = as at 17 November 2020.
- Unleaded Fuel = 98 Unleaded petrol as at 17 November 2020.

Basis of Charges in Kuala Lumpur, Malaysia

- Fuel = Rates for 14-20 November 2020. Unleaded petrol Ron 95.
- Water (Domestic): Rates for residential with individual meter.
- Electricity (Commercial/Industrial): Low voltage

WATER		FUEL		
DOMESTIC	COMMERCIAL/ INDUSTRIAL	DIESEL	LEADED	UNLEADED
US\$/m3	US\$/m3	US\$/litre	US\$/litre	US\$/litre
0.27	0.86/0.49	0.49	N/A	0.64
2.01 nd / 2.71 st	2.01	1.19	N/A	1.82
0.139 - 0.487	0.504 - 0.555	0.423	N/A	0.394
0.281 - 0.477	0.314 - 0.522	0.687	N/A	0.738
0.508 - 0.740	2.15	0.732	N/A	0.992
0.590 - 0.738	1.48	1.061	N/A	1.17
0.37 - 1.11	1.475 - 2.590	1.024	N/A	1.13
0.074 - 0.527	0.483 - 1.035	0.664	N/A	0.636

Basis of Charges in Bangkok, Thailand

- Unleaded Fuel = Gasohol 95
- For normal tariff with consumption not exceeding 150 kWh per month.

Basis of Charges in Manila, Philippines

○ **Electricity**

Domestic : 231kWh - 2,677kWh

Commercial/Industrial : 185,404kWh

○ **Water**

Domestic : 36m3 - 101m3

Commercial/Industrial : 3,750m3

Basis of Charges in Jakarta, Indonesia

- Domestic group in Indonesia covers residence, religious building, non-profit organization building and government hospital
- Commercial group in Indonesia covers luxury residence, apartment, offices, hotel, commercial building and factories.

UTILITY COST FOR SELECTED ASIAN CITIES

CITY	EXCHANGE RATE	ELECTRICITY	
		DOMESTIC	COMMERCIAL/ INDUSTRIAL
	US\$1=	US\$/kwh	US\$/kwh
Hong Kong	HK\$ 7.75	0.11	0.13
Macau	MOP7.98	0.17	0.17
Shanghai	RMB 6.60	0.093(peak) / 0.047(normal)	5.155 (Basic Tariff)/ 0.089 (Summer)/ 0.085 (Non-Summer)
Beijing	RMB 6.60	0.066 - 0.107	0.184 - 0.186 (peak)/ 0.114 - 0.116 (normal)
Guangzhou	RMB 6.60	0.084 - 0.143	0.086 - 0.157
Chongqing	RMB 6.60	0.077 - 0.124	0.084 - 0.099

The above costs are at 4th Quarter 2020 levels.

Basis of Charges in Hong Kong, China

- **Electricity** (Based on tariff scheme of CLP Holdings Limited)

Domestic (bi-monthly consumption) :

0 - 400kWh = US\$ 0.11/kWh; 400 - 1,000kWh = US\$ 0.13/kWh;
1,000 - 1,800kWh = US\$ 0.15/kWh; 1,800 - 2,600kWh = US\$ 0.19/kWh;
2,600 - 3,400kWh = US\$ 0.22/kWh; 3,400 - 4,200kWh = US\$ 0.23/kWh;
Above 4,200kWh = US\$ 0.23/kWh

- **Water - Domestic** :

0 - 12m³ = Free of charge; 12 - 43m³ = US\$ 0.54/m³;
43 - 62m³ = US\$ 0.83/m³; Above 62m³ = US\$ 1.17/m³

Basis of Charges in Macau, China

- **Electricity**

Electricity tariffs are a composition of demand charges, consumption charges, fuel clause adjustment and government tax.

- **Water - Domestic** :

Consumption charge = US\$ 0.56/m³ for 28m³ or below; US\$0.64/m³ for 29m³ to 60m³; US\$0.75/m³ for 61m³ to 79m³ and US\$0.90/m³ for 80m³ or above.

Other charges (Depending on meter size 15mm - 200mm) :

Meter rental = US\$0.34 - 57.64/month

- **Water - Commercial/Industrial** :

Charges for ordinary users (e.g. Business, government buildings, schools, associations, hospitals and others) only. Special users (e.g. gaming industries, hotels, saunas, golf courses, construction, public infrastructure and other temporary consumption) are excluded.

WATER		FUEL		
DOMESTIC	COMMERCIAL/ INDUSTRIAL	DIESEL	LEADED	UNLEADED
US\$/m3	US\$/m3	US\$/litre	US\$/litre	US\$/litre
0.83	0.59	1.89	N/A	2.28
0.56 - 0.91	0.76	1.45	N/A	1.28
0.523 - 0.883	0.76	0.78	N/A	0.89
0.673 - 1.213	1.213 - 1.279	0.77	N/A	0.88
0.283 - 0.566	0.49	0.79	N/A	0.85
0.504 - 0.850	0.66	0.76	N/A	0.859

Basis of Charges in Chongqing, China

- **Unleaded Fuel** 92# = US\$0.813/litre; 95# = US\$0.859/litre

Basis of Charges in Shanghai, China

- **Electricity** - Domestic (Charge on yearly consumption) :
0 - 3,120kWh = US\$ 0.093/kWh (peak) / US\$ 0.047/kWh (normal);
3,120 - 4,800kWh = US\$ 0.103/kWh (peak) / US\$ 0.051/kWh (normal);
Above 4,800kWh = US\$ 0.148/kWh (peak) / US\$ 0.074/kWh (normal)
- **Electricity** - Commercial/Industrial (Charge on yearly consumption): In dual tariff system;
and in rate of 10 kVa
- **Water** - Domestic :
0 - 220m3 = US\$ 0.523/m3; 220 - 300m3 = US\$ 0.732/m3;
Above 300m3 = US\$ 0.883/m3
- **Unleaded Fuel** = Unleaded fuel rate is for Unleaded 95#

Basis of Charges in Beijing, China

- **Electricity** - Domestic (below 1kV) :
1 - 240kWh = US\$0.066/kWh; 241 - 400 kWh = US\$0.073/kWh; Above 400kWh = US\$0.107 / kWh
- **Electricity** - Commercial/Industrial (1-10kV) :
Central Districts: US\$0.186/kWh(peak); US\$0.116/kWh(normal) Other Districts= US\$0.184/kWh(peak); US\$0.114/kWh(normal)
- **Water** - Domestic: (Charge on yearly consumption) :
1 - 180m3 = US\$0.673/m3; 181 - 260m3 = US\$0.943/m3
Above 261m3 = US\$1.213/m3
- **Water** - Commercial/Industrial :
Central Districts: US\$1.279/m3; Other Districts= US\$1.213/m3

Basis of Charges in Guangzhou, China

- **Unleaded Fuel** = Unleaded fuel rate is for Unleaded gasoline 97#



GENERAL CONSTRUCTION DATA

2

Material Price Indices

Import Duties

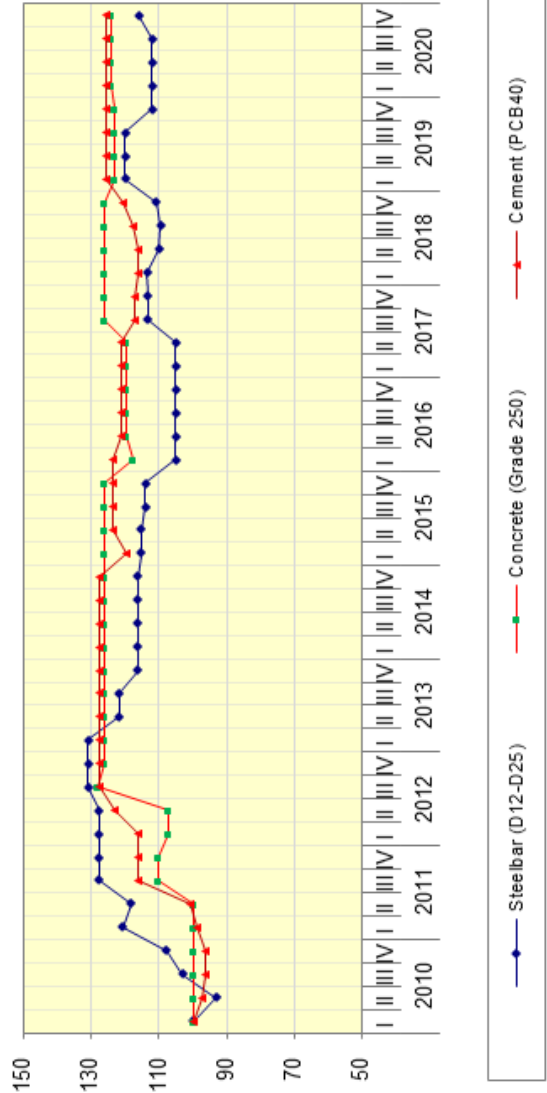
Progress Payments

Estimating Rules of Thumb

MATERIAL PRICE INDICES

Year	Quarter	Steelbar (D12-D25)			Concrete (Grade 250)			Cement (PCB40)		
		VND/T	Index (Base Q1/2010)	Inflation	\$VND/m ³	Index (Base Q1/2010)	Inflation	VND/kg	Index (Base Q1/2010)	Inflation
2010	I	12,452,500	100.00	0.00%	879,819	100.00	0.00%	1,255	100.00	0.00%
	II	11,590,000	93.07	-6.93%	879,819	100.00	0.00%	1,218	97.05	-2.95%
	III	12,830,000	103.03	10.70%	879,819	100.00	0.00%	1,209	96.33	-0.74%
	IV	13,440,000	107.93	4.75%	879,819	100.00	0.00%	1,209	96.33	0.00%
2011	I	15,030,000	120.70	11.83%	879,819	100.00	0.00%	1,241	98.88	2.65%
	II	14,730,000	118.29	-2.00%	879,819	100.00	0.00%	1,263	100.64	1.77%
	III	15,925,000	127.89	8.11%	970,000	110.25	10.25%	1,459	116.25	15.52%
	IV	15,925,000	127.89	0.00%	970,000	110.25	0.00%	1,459	116.25	0.00%
2012	I	15,925,000	127.89	0.00%	945,000	107.41	-2.58%	1,459	116.25	0.00%
	II	15,925,000	127.89	0.00%	945,000	107.41	0.00%	1,546	123.19	5.96%
	III	16,320,000	131.06	2.48%	1,127,272	128.13	19.29%	1,600	127.49	3.49%
	IV	16,320,000	131.06	0.00%	1,109,090	126.05	-1.62%	1,600	127.49	0.00%
2013	I	16,320,000	131.06	0.00%	1,109,090	126.06	0.01%	1,600	127.49	0.00%
	II	15,170,000	121.82	-7.05%	1,109,090	126.06	0.00%	1,600	127.49	0.00%
	III	15,170,000	121.82	0.00%	1,109,090	126.06	0.00%	1,600	127.49	0.00%
	IV	14,470,000	116.20	-4.61%	1,109,090	126.06	0.00%	1,600	127.49	0.00%
2014	I	14,470,000	116.20	0.00%	1,109,090	126.06	0.00%	1,600	127.49	0.00%
	II	14,470,000	116.20	0.00%	1,109,090	126.06	0.00%	1,600	127.49	0.00%
	III	14,470,000	116.20	0.00%	1,109,090	126.06	0.00%	1,600	127.49	0.00%
	IV	14,470,000	116.20	0.00%	1,109,090	126.06	0.00%	1,600	127.49	0.00%
2015	I	14,350,000	115.24	-0.83%	1,109,090	126.06	0.00%	1,504	119.84	-6.00%
	II	14,350,000	115.24	0.00%	1,109,090	126.06	0.00%	1,550	123.51	3.06%
	III	14,200,000	114.03	-1.05%	1,109,090	126.06	0.00%	1,550	123.51	0.00%
	IV	14,200,000	114.03	0.00%	1,109,090	126.06	0.00%	1,550	123.51	0.00%
2016	I	13,100,000	105.20	-7.75%	1,036,000	117.75	-6.59%	1,550	123.51	0.00%
	II	13,100,000	105.20	0.00%	1,055,000	119.91	1.83%	1,523	121.35	-1.74%
	III	13,100,000	105.20	0.00%	1,055,000	119.91	0.00%	1,523	121.35	0.00%
	IV	13,100,000	105.20	0.00%	1,055,000	119.91	0.00%	1,523	121.35	0.00%

2017	I	13,100,000	105.20	0.00%	1,054,545	119.86	-0.04%	1,523	121.35	0.00%
	II	13,100,000	105.20	0.00%	1,054,545	119.86	0.00%	1,523	121.35	0.00%
	III	14,100,000	113.23	7.63%	1,109,091	126.06	5.17%	1,468	116.97	-3.61%
	IV	14,100,000	113.23	0.00%	1,109,091	126.06	0.00%	1,468	116.97	0.00%
2018	I	14,150,000	113.63	0.35%	1,109,091	126.06	0.00%	1,460	116.33	-0.54%
	II	13,700,000	110.02	-3.18%	1,109,091	126.06	0.00%	1,460	116.33	0.00%
	III	13,650,000	109.62	-0.36%	1,109,091	126.06	0.00%	1,476	117.61	1.10%
	IV	13,800,000	110.82	1.10%	1,109,091	126.06	0.00%	1,512	120.48	2.44%
2019	I	14,950,000	120.06	8.33%	1,081,818	122.96	-2.46%	1,580	125.90	4.50%
	II	14,950,000	120.06	0.00%	1,081,818	122.96	0.00%	1,580	125.90	0.00%
	III	14,950,000	120.06	0.00%	1,081,818	122.96	0.00%	1,580	125.90	0.00%
	IV	13,950,000	112.03	-6.69%	1,081,818	122.96	0.00%	1,580	125.90	0.00%
2020	I	13,950,000	112.03	0.00%	1,091,000	124.00	0.85%	1,580	125.90	0.00%
	II	13,950,000	112.03	0.00%	1,091,000	124.00	0.00%	1,580	125.90	0.00%
	III	13,950,000	112.03	0.00%	1,091,000	124.00	0.00%	1,580	125.90	0.00%
	IV	14,450,000	116.04	3.58%	1,091,000	124.00	0.00%	1,580	125.90	0.00%



IMPORT DUTIES

DESCRIPTION (all figures)	Unit	Special Tariff												VAT tariff
		ATIGA	VCFTA	ACFTA	Non-ACFTA	AKFTA	Non-AKFTA	VKFTA	AJCEP	VJEP A	AANZFTA	AIFTA	VN-EA E UFTA	
Marble	kg/m3	0	6	0	(1)	0	(2)	0	3	5	0	0	0	10
Granite	kg/m3	0	6	0	(3)	0	(2)	0	3	5	0	0	0	10
Carpentry of Wood	kg	0	0	0	-	0	-	0	0	0	0	0	0	10
Portland cement	kg	0	10	5	-	32	-	32	*	*	0	*	12.7	10
Ceramic building bricks, flooring blocks	kg/m2/1000 unit	0	10	5	-	0	-	0	5	7.5	0	10	12.7	10
Ceramic roofing tiles	kg/m2/1000 unit	0	46	5	-	0	-	0	6	9	0	10	16.4	10
Ceramic floor, hearth, wall tiles	m2	0	48	50	-	0	(4)	0	6	9	0	10	16.4	10
Ceramic sanitary fixtures of porcelain	Unit	0	22	15	(5)	0	(4)	0	9	12	0	10	0	10
Multiple-walled insulating units of glass	kg/m2/unit	0	7	0	-	5	-	5	30	30	0	*	0	10
Glass mirror (unframed)	kg / unit	0	13	50	-	5	-	5	30	30	0	*	0	10
Concrete steel	kg	0	*	15	(6)	32	-	-	0	0	7	*	5.5	10
U,I or H section of steel (height under 80mm)	kg	0	37	15	-	32	-	10	0	0	*	*	3.6	10
Alluminium doors, windows, frames and thresholds	m2	0	4	0	-	0	-	0	0	0	0	7.5	0	10
Air conditioner (window or wall mounted) not exceeding 26,38 kW	unit	0	10	15	(7)	40	-	9	5	7.5	0	24	0	10
Passenger lifts	unit	0	3	0	(8)	0	(8)	0	0	0	0	0	0	10
Water pump	unit	0	7	0	-	5	-	5	4	6	0	0	7.3	10
Electric genset	unit	0	7	5	(1)	5	-	5	30	30	0	*	*	10

ATIGA:

ASEAN Trade In Goods Agreement/ ASEAN free trade area

VCFTA:

Vietnam-Chile Free Trade Agreement

ACFTA:

ASEAN-China Free Trade Agreement

AKFTA:

ASEAN-Korea Free Trade Agreement

VKFTA:

Viet Nam-Korea Free Trade Agreement

AJCEP:

ASEAN-Japan Comprehensive Economic Partnership

VJEPA:

Vietnam-Japan Economic Partnership Agreement

AANZFTA:

Australia-ASEAN-New Zealand Free Trade Agreement

AIFTA:

ASEAN-India Free Trade Agreement

VN-EAEUFTA:

Vietnam-Eurasian Economic Union Free Trade Agreement

(1): Cambodia, Thailand

(2): Thailand

(3): Cambodia, Indonesia, Thailand

(4): Myanmar

(5): Cambodia, Indonesia, Malaysia

(6): Cambodia, Lao, Malaysia, Thailand

(7): Brunei, Cambodia, Philippines, Thailand

(8): Malaysia, Thailand

(*) When the MFN duty rate of a goods item specified in the preferential import table of rates is lower than the particularly preferential tax rate specified in Vietnam's particularly preferential import table of rates applicable to each trade agreement promulgated under the Finance Minister's decision, the import duty rate applicable to this goods item is the MFN tax rate.

(*) Symbol in AKFTA column: Goods made in Khai Thanh Industrial Zone of North Korea (GIC items).

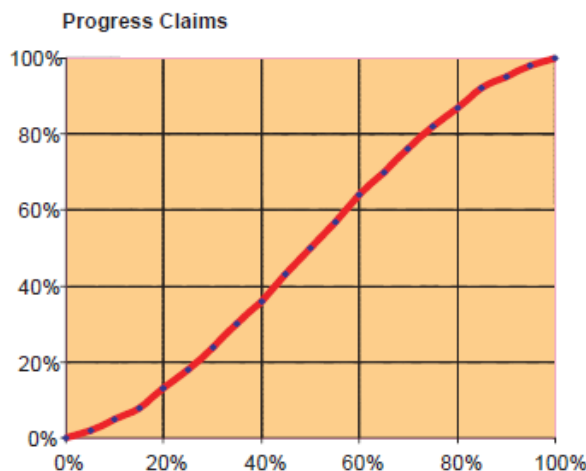
(*) Imported goods are not received special preferential tariffs at the corresponding time.

PROGRESS PAYMENTS

The following graph and table are an indication of the rate of expenditure for construction projects.

The rate of expenditure is an average rate and will vary from project to project when specific project circumstances are taken into account.

No account has been made for retention.



Project Period

CONTRACT	CUMMULATIVE PROGRESS CLAIMS	CONTRACT PERIOD	CUMMULATIVE PROGRESS CLAIMS
5%	2%	55%	57%
10%	5%	60%	64%
15%	8%	65%	70%
20%	13%	70%	76%
25%	18%	75%	82%
30%	24%	80%	87%
35%	30%	85%	92%
40%	36%	90%	95%
45%	43%	95%	98%
50%	50%	100%	100%

ESTIMATING RULES OF THUMB

Structural Design - Concrete Ratios

The following is a range of concrete ratios for building superstructure design in Viet Nam.

Concrete/floor area	0.4 m ³ /m ²	to	0.5 m ³ /m ²
Formwork/floor area	2.2 m ² /m ²	to	3.0 m ² /m ²
Reinforcement	160 kg/m ³	to	250 kg/m ³

Average External Wall/Floor Ratio

Residential Apartments	1.0 m ² /m ²
Office	0.4 m ² /m ²
Hotel	0.4 m ² /m ²

Average Internal Wall/Floor Ratio

Residential Apartments	1.0 m ² /m ²
Office	0.5 m ² /m ²
Hotel	1.5 m ² /m ²

Air - Conditioning

Average	0.065	RT/m ² of floor area
---------	-------	---------------------------------

Average Lighting Level

Building Type	Lux
Residential	300
Office	500
Retail	400-500
Hotel	250-300
School	300-450

Average Power Density

Building Type	VA/m ² CFA
Residential	80-100
Office	120-150
Retail	150-200
Hotel - Accommodation	120
Hotel - F&B Area	150
School	45-60

Average Cooling Load

Building Type	m ² Cooling Area/ RT
Residential	20-25
Office	12-15
Retail	10-15
Hotel	22-25
School	25

The above ratios are indicative and for reference purposes only. They do not account for buildings with special shapes, configurations or particularly small footprints.

Indicative Dimensions for Sports Grounds

	Length	Width
Tennis Court	40 m	20 m
Squash Court	13 m	6 m
Basketball Court	38 m	23 m
Volleyball Court	30 m	20 m
Badminton Court	20 m	10 m
Ice Rink	61 m	26 m
Soccer Pitch	110-120 m	70-80 m

The above dimensions are for a single court with appropriate clearance. No Spectator seating or support area has been allowed.

Densities of Common Materials

Concrete	2,400 kg/m ³	Water	1,000 kg/m ³
Cement	1,441 kg/m ³	Softwood	700 kg/m ³
Sand	1,600 kg/m ³	Hardwood	1,100 kg/m ³
Gravel	1,350 kg/m ³	Aluminum	2,750 kg/m ³
Steel	7,850 kg/m ³	Soil (compact)	2,100 kg/m ³

ESTIMATING RULES OF THUMB

Concrete Strength (in accordance with TCVN 3118 - 1993)

CYLINDER 15cm x 30cm		CUBIC 15cm x 15cm	CYLINDER 15cm x 30cm		CUBIC 15cm x 15cm
Psi	Mpa	Mpa	Mpa	Psi	Mpa
8,000	55	66	60	8,700	50
7,000	48	58	50	7,300	42
6,000	41	49	40	5,800	33
5,000	34	41	35	5,000	29
4,000	28	34	30	4,400	25
3,000	21	25	25	3,600	21
8,000	55	66	20	2,900	17
			15	2,200	13

1.00 MPa = 145.04 Psi

1.00 MPa (Cylinder 15cmx30cm) - 1.20 MPa (Cubic 15cmx30cm)

Reinforcement

Bar Dia. (mm)	Weight/m (kg/m)	Perimeter (m/m)	Area (mm ²)
6	0.222	18.85	28.27
8	0.395	25.13	50.26
10	0.616	31.42	78.54
12	0.888	37.70	113.10
16	1.579	50.27	201.06
20	2.466	62.83	314.16
25	3.854	78.54	490.88
32	6.313	100.53	804.25
40	9.864	125.66	1,256.64

Composition of Concrete (per m³)

Mix	Cement	Sand	Aggregate
1:3:6	216 kg	0.45 m ³	0.90 m ³
1:2:4	308 kg	0.43 m ³	0.86 m ³
1:1:2	540 kg	0.38 m ³	0.75 m ³

Average Loads

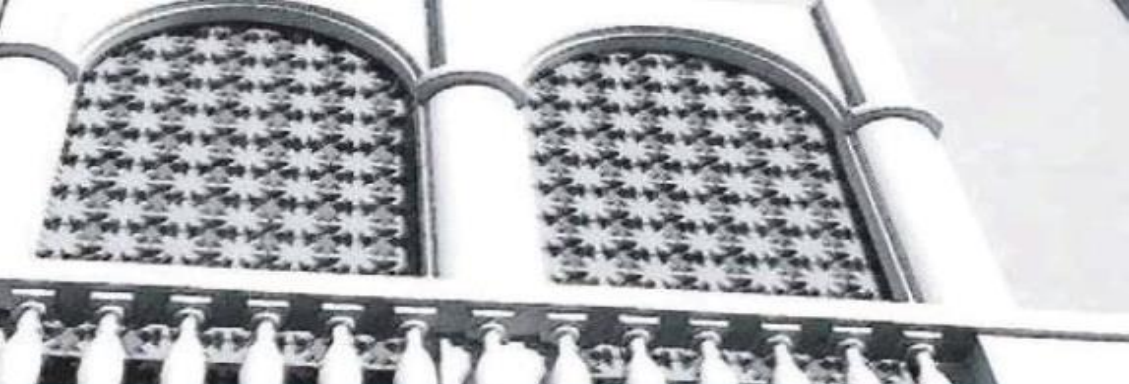
Volume

Lorry (24 ton)	10.0 m ³
Concrete truck (24 ton)	5.5 m ³
Barge	200 - 1,450 m ³

Dimensions for Standard Parking Space, Loading / Unloading Bays and Lay - bys

	Length	Width	Minimum Headroom
Private Cars, Taxis and Light Vans	5 m	2.5 m	2.4 m
Coaches and Buses	12 m	3.0 m	3.8 m
Lorries	11 m	3.5 m	4.1 m
Container Vehicles	16 m	3.5 m	3.5 m

Minimum headroom means the clearance between the floor and the lower most projection from the ceiling including any lighting units, ventilation ducts, conduits or similar.



PROPERTY INVESTMENT

3

Building Control and Procedures

Project Closed Out Procedures

Typical Submission Flowchart

Key Planning Parameter

Building Areas Definitions

Procurement Strategies

Contractor Selection Strategies

Property Overview

BUILDING CONTROL AND PROCEDURES

Project Classification

Projects are categorized based on the scale, nature and source of fund in accordance with Appendix 01 of the Decree 59/2015/ NDCP dated 18 June 2015. Special projects under the jurisdiction of the Prime Minister's Office encompass the most national important project and or top security project. Projects classified as Group A under the jurisdiction of the Ministers of Ministries encompass infrastructure and ports (sea-ports and airports), oil and gas, cultural and sensitive projects to national defense and all projects over VND 2,300 billion, or equivalent to approx. USD 100 million. Group B projects encompass all other projects and fall under the jurisdiction of Provincial People's Committees and require registration only for investment licenses and applies to projects with a manufacturing and export earnings component. A full assessment for investment licenses is required for all other projects.

Project Investment Appraisal

Developers must carry out the project investment report (feasibility study report) and the basic design for project investment appraisal including the Planning Certificate applied to the People's Committee of the relevant province. The information of basic design to be included encompasses address and description of land plot, function of land plot, red-line boundary and exit and connection with the existing transportation and infrastructure including power, water, storm water drainage , waste water treatment, overall dimension and existing level, construction boundary, construction density, plot ratio, schedule of land use area and schedule of floor area, maximum floor height and building height, parking lot ratios, principle of architectural, structure and infrastructure design, environmental impact plan, fire protection plan, design standards and building codes. The project investment appraisal is in accordance with the Circulation 03/2009/ TT-BXD dated 26 March 2009.

Technical Design and Detailed Design

Developers using foreign design consultancies must ensure their projects undergo a Design Evaluation Assessment to the Ministry of Construction or the Chairman of the Peoples Committee of relevant province who will delegate to the Ministry of Construction or provincial Construction Department. The Technical Design and Detailed Design must be in line with the previous approved basic design including the compliance of design standards and building codes, the integrity of project, the well protection of environment and the safety in the event of fire circumstances. The appraisal and approval of technical and detailed design are in accordance with the Decree 06/2021/NDCP dated 26 January 2021 and Circulation 18/2016/TT-BXD dated 30 June 2016.

Construction Permit

Under the Law on Construction investors must first obtain a construction permit issued by the Provincial People's Committee Construction Department prior to construction can commence.

The investor of residential development projects shall submit an application dossier of all the mentioned inclusion plus the certificate of EIA (Environment Impact Assessment) and Fire Protection, which are issued by the Provincial Department of Natural Resources and Environment and Provincial Fire Police Department respectively. An application dossier shall contain design implementation drawings and land-use right certificates and land rental contracts. The basic inclusions are mandatory and they are location and description of works, storey height and height above sea-level, site boundary demarcation, overall site plan, major cross sections, main elevations, structural framing plans and foundation designs, environmental and safety technical details, principle of materials, schematic line diagrams of infrastructure connection of power, telecommunication, water supply, storm and waste water drainage system, and quantities for key components.

(Cont'd)

BUILDING CONTROL AND PROCEDURES

Construction Permit applications will be checked against various compliances in respect of boundaries and interference with neighboring properties and approved planning (site coverage, plot ratio and car-parking). The issuing body should provide timely notice to the investor of any non-compliance for their remedy and resubmission to allow the implementation stage to commence. The content of application, procedures of construction permit are in accordance with the Decree 59/2015/ NDCP dated 5 August 2015 and Circulation 15/2016/TT-BXD dated 30 June 2016.

Site Clearance

A plan for site clearance and/or resettlement shall be submitted at the same time as the application for the investment license and resettlement carried out prior to site clearance taking place for construction. The time limit for site clearance should comply with the project implementation schedule. Resettlement is based on the principle of providing similar or better conditions and governmental regulations on principles, methods and a price framework shall be adopted by the People's Committee for determination of compensation levels. This is a matter for great uncertainty and foreign investors are advised to seek vacant possession prior to transfer of land use right to the joint venture.

Supervision of Construction

Independent Supervision of construction works by a competent and registered firm is a mandatory requirement. The supervisory role encompasses quality control and compliance checking, schedule control, quantification control, safety and environmental hygiene control during construction. The safety and environment control are conducted regularly and continuously during the implementation phase. The Supervisor is also responsible for arranging independent inspections witnessing of testing and commissioning data and assistance in compilation of the dossier for putting the building into operation and receipt of the Occupation Permit.

Commencement of Construction

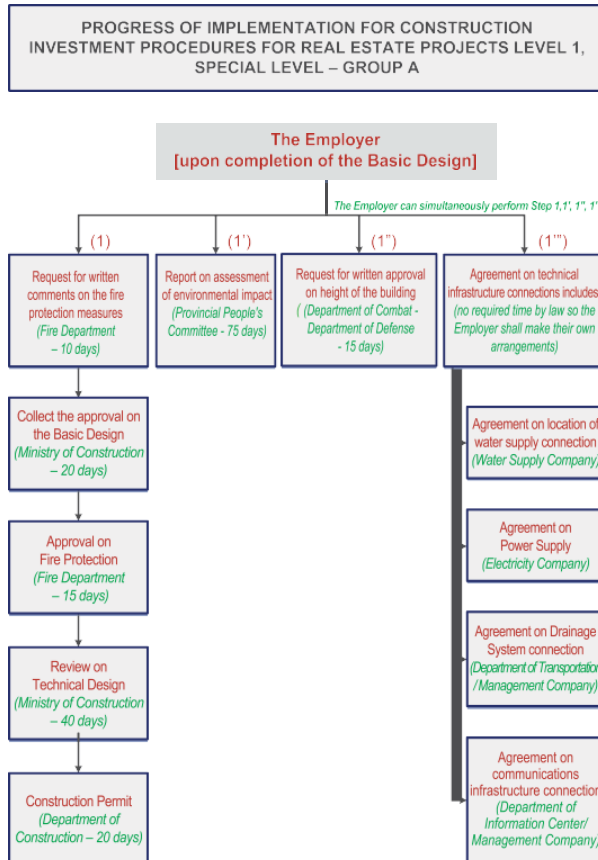
Construction of works may only commence after satisfying the following conditions: the site area being ready to be handed over, either in whole or in section and free of encumbrances; a construction permit; approved design drawings for execution of building; a construction contract; sufficient capital funds to ensure the building schedule in accordance with the approved building schedule in the investment license; measures to ensure safety and minimum environmental impact during the construction process. Construction All Risks and Third Party Liability Insurances as well as all required insurances in accordance with conditions of contract are recommended to be effected prior to commencement of any physical construction works on Site.

PROJECT CLOSED OUT PROCEDURES

Before an investor can receive rental income and occupy the premises for its intended use, the receipt of approval must be received by the provincial Construction Department or the Ministry of Construction depending on the category and size of the project.

The Construction Department will receive a dossier complete with independent testing and commissioning data (prepared by an independent party not the original designer) for piling, structure, electricity and earthing, environmental impact with regard to water and waste disposal, final checking and approval of fire protection requirement. The dossier needs to have Minutes to put the Building into Operation signed by the Investor, Testing Body, Contractor and Designer including the Project or Construction Manager if appointed. The project close out procedure is in accordance with Decree 06/2021 –NDCP dated 26 January 2021.

TYPICAL SUBMISSION FLOWCHART



Note:

1. "Date" as above mentioned is considered as working days from the date of receipt of sufficient and valid documents.
2. The Employer can implement procedures for collecting of the agreements on technical infrastructure connections after receipt of approval on the basic design. However, if after the basic design approved by the Ministry of Construction that the technical infrastructure management agency does not agree with the Employer's plan, then the Employer must change the plan for technical infrastructure connections, leading to change in the basic design and to request the Ministry of Construction to approve again on the basis design dossier. Therefore, the Ministry of Construction recommends that the Employer should have in advance the written agreement on the provision of electricity, water and drainage connections, transportation system connection for the project, infrastructure communication connection before submitting documents to the Ministry of Construction for approval on the basic design.

KEY PLANNING PARAMETER

MAXIMUM SITE COVERAGE

Maximum site coverage of linked houses and villa houses

Land plot area (m ² /house)	≤50	75	100	200	300	500	≥1,000
Maximum site coverage (%)	100	90	80	70	60	50	40

Maximum site coverage of condominium buildings

Building height measured from ground level (m)	Maximum site coverage (%) according to land plot area			
	≤3,000 m ²	10,000 m ²	18,000 m ²	≥35,000 m ²
≤16	75	65	63	60
19	75	60	58	55
22	75	57	55	52
25	75	53	51	48
28	75	50	48	45
31	75	48	46	43
34	75	46	44	41
37	75	44	42	39
40	75	43	41	38
43	75	42	40	37
46	75	41	39	36
>46	75	40	38	35

The maximum site coverage of urban public building such as educational, healthcare, cultural buildings, sport centres and market in the new urban development area is 40%.

For the other types of urban public buildings and mixed-use buildings built on a land plot of area ≥3.000m², depending on its location in urban areas and specific planning solution for land plot, the maximum site coverage can be as specified in the table below as long as the requirement of the minimum distance between buildings, the set-back areas and parking lot must be complied with the current regulation.

Building height measured from ground level (m)	Maximum site coverage (%) according to land plot area			
	3,000 m ²	10,000 m ²	18,000 m ²	≥35,000 m ²
≤16	80	70	68	65
19	80	65	63	60
22	80	62	60	57
25	80	58	56	53
28	80	55	53	50
31	80	53	51	48
34	80	51	49	46
37	80	49	47	44
40	80	48	46	43
43	80	47	45	42
46	80	46	44	41
>46	80	45	43	40

For those built on a land plot of area <3.000m², the site coverage of the remaining land lot after building set-back area can be 100% but the requirement of the minimum distance between buildings, the set-back areas and parking lot must be complied with the current regulation.

MAXIMUM LANDSCAPING RATIO FOR CONSTRUCTION LAND LOTS

Type of building	Minimum of ratio for landscape (%)
1. Dwelling House	
- Detached house (garden house, villa)	20
- Condominium	20
2. Public building	
- Kindergarten, School	30
- Hospital	30
- Culture house	30
3. Factory	
- Scattered construction	20
- Combined block	20

(Cont'd)

KEY PLANNING PARAMETER

MINIMUM OF CAR PARKING LOT

Type of building	Minimum car parking lot
- Hotel from 3 star standard upward	4 bedrooms / 1 lot
- High-grade office, foreign affairs offices	100m ² floor area / 1 lot
- Super market, shopping mall, conference centre, exhibition, show room and display center	100m ² floor area / 1 lot
- High-grade/luxury condominium	1 apartment / 1.5 lot

MINIMUM OF PARKING SPACE

Type of vehicle	Minimum area of parking space
- Car parking space	25 m ²
- Motorcycle parking space	3 m ²
- Bicycle parking space	0.9 m ²
- Bus parking space	40 m ²
- Truck parking space	30 m ²

For the hotel grade of below three-star, public administration office and public service buildings, the numbers of parking lot must be at least 50o/o of the parking lots specified in the table above .

ROAD FOR FIRE PROTECTION

Width of road > 3.5 (m)

Clearance height > 4.25 (m)

Area for making U-turn > 15x5 (m) .

CONTRACTOR SELECTION STRATEGIES

There are four tiers of contractor available for tendering foreign investment projects, these tiers are not official classifications.

Tier 1	Foreign contractor from Japan, Korea, Singapore, Hong Kong, Europe, Australia
Tier 2	Foreign contractor from China, Russia, Taiwan and Malaysia
Tier 3	Local private and Joint Stock contractors
Tier 4	State contractors

There is a considerable diversity between these tiers in terms of general expertise, technological know-how, human-resource skills and training which leads to a different risk profile for delivery of buildings to time, quality and cost targets. The lowest tiers use less modern equipment, machinery and system formwork and have much lower human resource costs. This is inevitably leading to higher tender returns. A rigorous pre-qualification procedure is recommended with weighted scoring in line with project objectives eg. lowest cost objective will have an inevitable impact on quality and time.

A typical pre-qualification assessment might cover (indicative weighting for Vietnam 1 through 10, 10 highest)

Vietnam experience (if foreign) 8

Project type experience (local and foreign) 7

Financial capacity (particularly local) 8

Plant and equipment inventory (particularly local) 7

Direct labour strength (local and foreign) 6

Proposed joint venture / sub-contracting arrangements (local and foreign) 7

Planning and programming capability (particularly local) 8

Cognizance of international procedures, codes and specifications (local) 8

(Cont'd)

CONTRACTOR SELECTION STRATEGIES

Financial capacity (local)

Local contractors now have access to bank funding but should not be expected to finance projects by punitive cash-flow arrangements. Most contracts are let with investors paying 10-15% advance payments which is re-couped from subsequent milestone or interim payments. Deductions for defective works and liquidated damages may compound problems so careful diplomacy is often more productive. Claims for additional costs due to prevailing market conditions are more common in today's climate but also for misinterpretation of contract obligations making the need for good quality contract documentation essential.

Plant and Equipment Inventory (local)

State firms tend to share or pool plant and equipment for example tower-cranes and piling rigs. It is often impossible to determine the true owner of plant and equipment on-site in the event of premature demobilization.

It is essential that the pre-qualification process determines that a contractor owns plant of sufficient size, capacity and suitable state of repair as contractors may not have full control of leased equipment suddenly required on other job-sites.

Direct labour strength (local)

The source of labour supply, also being verified as labour strength, may be "topped-up" by importing unskilled and untrained workers from remote provinces, who often are not legally resident at their working destination.

Contractors should be asked to prove their direct labour records and declare any labour only sub-contracting arrangements. The tier 1 contractors will not have any full-time dedicated labour on their payroll. Tier 2 contractors often import workers from their home country for the project duration and shall be responsible for all associated costs and taxes.

Labour is not usually permitted to reside on site. Contractors shall provide details of training curriculums for each trade discipline when tendering as well as health and safety programmes.

Proposed sub-contracting arrangements (local)

Sub-contracting is prevalent in Vietnam so it is essential to check the percentage of work subcontracted out to ensure quality control issues are minimized. It is highly unlikely that any one firm will possess the required human resource and plant and equipment to complete a project using in-house resources. Foreign contractors largely act as management function providing only project engineers, site supervisors, health and safety officers and planners. Both foreign and local contractors rarely directly employ foremen, gang-leaders or indeed skilled and unskilled operatives. These arrangements are perfectly normal and accepted but it is preferable to know in advance the exact arrangements being proposed to ensure no conflicts of interests with other projects and to understand fully the amount of “control” the appointed contractor has on the works he is engaged to undertake.

Planning and programming capability (local)

This capability needs careful verification from the lowest tier contractors. The use of first principle time resourced planning is rarely used. The approach adopted is often “rule of thumb” whereby planners determine critical activity durations using their knowledge of other projects. Floor/structure cycle times are often inconsistent and the lack of recording and reutilization of historical data means the planning process can be crude at best.

Time or delay is a perennial problem in Vietnam sometimes due to employer delays such as site clearance or permit issues or neutral delays such as weather but contractor culpable delays should not be of any surprise. The use of critical path analysis, planned impacted analysis, window analysis and collapsed as-built are not widely known in Vietnam. This means time recovery analysis and the implementation of acceleration measures are not readily adopted and time for completion can become unpredictable. The input of experienced Project Management might be invaluable in reducing delays and formulating time recovery plans. (Cont'd)

CONTRACTOR SELECTION STRATEGIES

International experience (local)

The influx of foreign invested projects has brought with it an influx of different standards and procedures normally from the source country. It is essential to determine the degree of exposure local contractors have had to international standards, procedures and indeed expectations. The Vietnamese Codes and Standards whilst detailed need to be used concurrently with international standards such as American, Australian, British or Japanese standards and specifications as they are not comprehensive enough to “stand-alone” on an international standard project. There is no uniform and widely accepted standard or specification. The nett result is a hybrid where every project has a unique and bespoke set of standards depending on the investor and his consultant source country. The appointed design team will naturally look to use their familiar “off the shelf” specifications and tendering contractors should be asked to list the standards they have successfully built for the key trades and building elements. There is a move to produce a set of consolidated Vietnamese standards but this is some way off and the hybrid approach will continue for some time to come.

However, no international standard shall over-ride any mandatory Vietnam building code or standard. Design consultants should provide a translated bi-lingual version of their specifications and locally registered design firms shall provide “localization” of the design to obtain local approvals. The contractors should also be asked to list investments such as system formwork and their use of recent technology and list previous employers and consultants whom they have worked with.

BUILDING AREAS DEFINITIONS

The following guidelines are derived from the RICS 'Code of Measuring Practice: A Guide for Surveyors and Valuers. 5th Edition' and the RICS 'Standard Form of Cost Analysis, Principles, Instructions and Definitions'.

Gross External Area (GEA)

Gross External Area is the area of a building measured externally at each floor level.

Includes:

- Perimeter wall thicknesses and external projections
- Areas occupied by internal walls and partitions
- Columns, piers, chimney breasts, stairwells, liftwells, and the like
- Atria with clear height above, measured at base level only
- Internal balconies
- Structural, raked or stepped floors are to be treated as a level floor measured horizontally
- Horizontal floors, whether accessible or not, below structural, raked or stepped floors
- Mezzanine areas intended for use with permanent access
- Lift rooms, plant rooms, fuel stores, tank rooms which are housed in a covered structure of a permanent nature, whether or not above main roof level
- Outbuildings which share at least one wall with the main building
- Loading bays
- Areas with a headroom of less than 1.5m
- Pavement vaults
- Garages
- Conservatories

Excludes:

- External open-sided balconies, covered ways and fire escapes
- Canopies
- Open vehicle parking areas, roof terraces, and the like
- Voids over or under structural, raked or stepped floors
- Greenhouses, garden stores, and the like in residential property.

Gross Internal Area (GIA)

Gross Internal Area is the area of a building measured to the internal face of the perimeter walls at each floor level.

Includes:

- Areas occupied by internal walls and partitions
- Columns, piers, chimney breasts, stairwells, lift-wells, other internal projections, vertical ducts, and the like
- Atria with clear height above, measured at base level only
- Internal open-sided balconies and the like
- Structural, raked or stepped floors are to be treated as a level floor measured
- Horizontal floors, with permanent access, below structural, raked or stepped floors
- Corridors of a permanent essential nature (e.g. fire corridors, smoke lobbies, etc.)
- Mezzanine areas intended for use with permanent access
- Lift rooms, plant rooms, fuel stores, tank rooms which are housed in a covered structure of a permanent nature, whether or not above main roof level.
- Service accommodation such as toilets, toilet lobbies, bathrooms, showers, changing rooms, cleaners' rooms, and the like
- Projection rooms
- Voids over stairwells and lift shafts on upper floors
- Loading bays
- Areas with a headroom of less than 1.5m
- Pavement vaults
- Garages
- Conservatories
- Excludes:
 - Perimeter wall thicknesses and external projections
 - External open-sided balconies, covered ways and fire escapes
 - Canopies
 - Voids over or under structural, raked or stepped floors
 - Greenhouses, garden stores, fuel stores, and the like in residential property.

Gross Floor Area (GFA)

Gross Floor Area is the total of all enclosed spaces fulfilling the functional requirements of the building measured to the internal structural face of the enclosing walls.

Includes:

- Areas occupied by partitions, columns, chimney breasts, internal structural or party walls, lift-well, and the like
- Lift, plant, tank rooms and the like above main roof slab.

Note:

- Sloping surfaces such as staircases, galleries, tiered terraces and the like should be measured flat on plan.

Excludes:

Any spaces fulfilling the functional requirements of the building which are not enclosed spaces (e.g. open ground floors, open covered ways and the like). These should each be shown separately
Private balconies and private verandahs which should be shown separately.

BUILDING AREAS DEFINITIONS

Net Internal Area (NIA)

Net Internal Area is the usable area within a building measured to the internal face of the perimeter walls at each floor level.

Includes:

- Atria with clear height above, measured at base level only
- Entrance halls
- Notional lift lobbies
- Kitchens
- Built-in units, cupboards, and the like occupying usable areas
- Ramps of lightweight construction to false floors
- Area occupied by ventilation/heating grills
- Area occupied by skirting and perimeter trunking
- Areas severed by internal non-structural walls, demountable partitions, whether or not permanent, and the like, where the purpose of the division is partition of use, not support, provided the area beyond is not used in common
- Pavement vaults.

Excludes:

- Those parts of entrance halls, atria, landings and balconies used in common
- Toilets, toilet lobbies, bathrooms, cleaners' rooms, and the like
- Lift rooms, plant rooms, tank rooms (other than those of a trade process nature), fuel stores, and the like
- Stairwells, lift-wells and permanent lift lobbies
- Corridors and other circulation areas where used in common with other occupiers or of a permanent essential nature (e.g. fire corridors, smoke lobbies, etc.)
- Areas under the control of service or other external authorities including meter cupboards and statutory service supply points
- Internal structural walls, walls enclosing excluded areas, columns, piers, chimney breasts, other projections, vertical ducts, and the like

- The space occupied by permanent and continuous air-conditioning heating or cooling apparatus, and ducting in so far as the space it occupies is rendered substantially unusable
- Areas with headroom of less than 1.5m
- Areas rendered substantially unusable by virtue having a dimension between opposite faces of less than 0.25m
- Vehicle parking areas (the number and type of spaces noted).

Building Footprint

Building Footprint' is not a term defined by the RICS, but is generally understood to mean the area of the land upon which the building sits (excluding all basements), measured to the outside face of external walls.

PROCUREMENT STRATEGIES

Overview

The primary consideration in the choice of procurement strategy is the need to obtain overall value for money during the entire life of the facility and each method has a different risk profile for the employer and contractor. In Vietnam the following is currently prevalent.

Traditional Lump Sum	- high extent
Management Contracting	- low extent
Construction Management	- medium to high extent
Design and Construct	- low extent
Prime Contracting	- low extent
Framework Agreements	- rising extent
Public Private Partnership (PPP)	- new and promoted extent

Most if not all projects in Vietnam are tendered in competition. The new Law on Bidding passed in 2013 replaces the earlier legislation promulgated in 2006 and is intended primarily for state projects defined as over 30% total investment capital by a state entity and for Vietnamese Private firms. Foreign Investors do not need to follow the Bidding Law although it is advisable. The law recognizes open tendering, limited tendering and competitive tendering. For state projects tenders are normally sought using a “two-envelope system” i.e. technical and financial the former being opened first to check for compliances.

Most foreign entities short-list tendering contractors by having a robust pre-qualification procedure for checking financial and technical competencies. Tenders are usually open for 90 days.

The FIDIC suite of contracts is widely used for Vietnam construction contracts with the 1999 Red Book being the most commonly used. There are official translations of some of the FIDIC forms and the Vietnam Engineering Consultant Association (VECAS) is an official member of FIDIC. Most Official Development Aid (ODA) projects in Vietnam adopt FIDIC also.

a) Traditional Lump Sum

Most contracts are let in Vietnam on a lump sum basis using a modified FIDIC Red Book Contract which in its unamended form is a measure and value contract. This method requires appointment of independent design consultants by the employer and a sufficiently developed design preferably “frozen” prior to tender. Bills of Quantities are usually provided for “information only” to the contractor who normally provide their own quantities with their tender for comparison purposes only and only the rates are contract rates with any “errors and omissions” not being subject to remeasurement after the lump sum is finalized. Prime costs sums for nominated subcontracts for mechanical and electrical and lift sub-contracts are widely used.

b) Construction Management

This form of procurement is often portrayed as “fast-track” as tender packages are often let successively throughout the design process with no need to wait until detail design is complete. A construction management consultant is engaged normally for a fixed percentage fee to procure and manage the individual trade contracts which are placed by the employer. This necessitates effective cost management as the total construction budget is not finalized until the final packages are let. The employer bears not an insignificant risk in terms of price certainty, delays, disruption, design and coordination problems. Clients adopting this approach need to be conversant with the local environment and have the requisite in-house skills to deal with issues as they arise. This method of procurement, combined with traditional lump sum packages, is popular with high rise buildings.

c) Framework Agreements

Framework agreements referred sometimes as “call-off” contracts between investors with a “pipe-line” of projects and contractors can result in significant savings to both parties using any of the procurement options above. The advantages are time reduced for tendering and negotiations, improved processes and knowledge transfer, bulk order costs savings, reduced confrontation and economies of scale due to continuity of workflow. All these advantages are extremely important in the Vietnam context because it is of paramount importance to maintain healthy relationships between employers and contractors as unforeseen events are prevalent during the design and procurement stages in Vietnam.

d) Public Private Partnership (PPP)

PPP is the generic term for the relationships formed between the private sector and public bodies often with the aim of introducing private sector resources and / or expertise in order to help provide and deliver public sector assets and services. The term PPP is used to describe a wide variety of working arrangement from loose, informal and strategic partnerships to design, build, finance and operate type services contract and formal points of joint venture companies. The PPP mechanisms would help attract commercial capital and other sources of capital that private investors will seek for PPP projects. In that way, investment efficiency will be improved while public debts controlled at safe levels. Investors of projects will be chosen via competitive bidding in order to maximize benefits and create equal opportunities for domestic and foreign investors. On 9 November 2010 the Prime Minister of Vietnam authorized the issue of detailed regulations covering the piloting of investment in the form of Public Private Partnerships (PPPs) in Vietnam. The PPP Regulations became effective on 15 January 2011 and will continue to be implemented over the next three to five years. The Vietnamese Government intends to carry out PPP programme according to a list of defined projects to ensure that investors are provided with carefully prepared projects with a view to creating a real PPP commercial market in Vietnam. In the coming years the government will carry out some pilot projects. The PPP projects in the country will concentrate on core technical infrastructure that requires much capital, and furthermore, mechanisms to mobilize private investment: (i) Roads, Road bridges, road tunnels, ferry road stations; (ii) Railway, railway bridges, railway tunnels; (iii) Airports, sea ports and river ports; (iv) Clean water supply systems; water drainage systems; liquid and solid waste collection and treatment systems; (v) Power plants, electricity transmission cables; (vi) Hospitals; (vii) Other infrastructure projects.

The decrees on PPP Investment Form has been official effective since 14 Feb 2015 to create solid legal frame work for preparation and implementation of PPP projects. There are subsequent circulars issued in 2016 for further guidance on how to preliminary project selection for implementation, establishment, submission, appraisal and approval of Feasibility Study Report (Circular 02); procedure of obtaining the Investment Registration Certificate and the project contract for implementation of the Project which shall be entered by the investor and the competent authority being the party to the contract (Circular 06).

Table A – Procurement Strategy

Project Criteria		Appropriateness of Contract Strategy						
Parameter	Objectives	PPP	Traditional	Management Contracting	Construction Management	Design and Construct	Prime Contracting	Framework Agreements
Timing	Early Completion	x	x	✓	✓	✓	x	✓
Cost	Pre construction price certainty	✓	✓	x	x	✓	x	✓
Quality	Design prestige	x	✓	✓	✓	x	x	x
Variations	Avoid prohibitive cost of change	x	✓	✓	✓	x	x	x
Complexity	Technically advanced or highly complex building	✓	x	✓	✓	x	✓	x
Responsibility	Single contractual link	✓	x	x	x	✓	✓	✓
Professional Responsibility	Need for design team to report to sponsor	x	✓	✓	✓	x	x	✓
Risk Avoidance	Desire to transfer complete risk	✓	x	x	x	✓	✓	✓
Damage Recovery	Facility to recover cost direct from construction	✓	✓	✓	x	✓	✓	✓
Build ability	Contractor input to economic construction	✓	x	✓	✓	x	✓	✓

Table B – Risk Allocation

Contract Strategy	INDICATIVE RISK ALLOCATION	
	Client	Contractor
Public Private Partnerships		
Design and Construct		
Prime Contracting		
Traditional		
Framework Agreements		
Management Contracting		
Construction Management		

PROPERTY OVERVIEW

VIETNAM'S ECONOMIC BACKDROP

Vietnam continues to record a positive GDP growth in 4Q20: Vietnam's GDP was estimated to grow 4.48% y-o-y in 4Q20. This positive economic growth was bolstered by the strong containment of Covid-19 which coupled with the EVFTA effective from 01/08/2020, supported economic activities to return to normal.

In full year 2020, GDP grew 2.91% y-o-y. Although this was the lowest growth rate in 2011-20 period, it is considered Vietnam's great success given the outbreak of Covid-19 globally. With this growth, Vietnam was among the world's best performers in 2020.

Of the growth, the industrial and construction sectors rose the most with 3.98% y-o-y, followed by the agriculture, forestry and fishery sector with 2.34%. The services sector recorded the lowest increase with 2.34%, which was also the most modest rise in the 2011-20 period as Covid-19 has dealt a heavy blow to commercial activities and services.

Figure 1: Real GDP Growth (y-o-y)



Retail sales keep recovering while international arrivals continue to plummet: While Covid-19 was spreading rapidly around the world, it was well contained in Vietnam, leading to good performance of trade and consuming services in the last few months of the year.

Domestic transportation activities were gradually recovering, although overseas transportation and tourism remained challenged. The total retail sales of consumer goods and services were estimated to rise by 6.4% q-o-q and 8% yo-y. For the whole of 2020, total sales of goods and services ticked up by 2.6% yo-y.

On the other hand, international visitors to Vietnam remained largely foreign experts and skilled labour as Vietnam's borders remained closed to

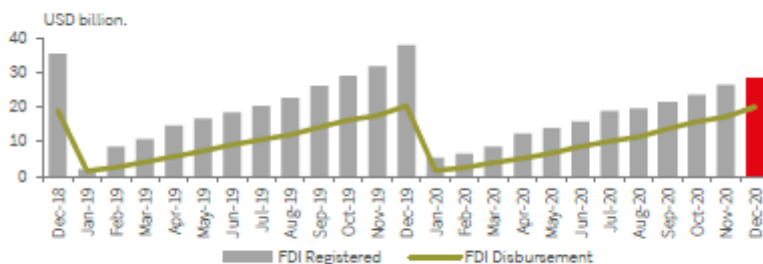
international tourists. There were a total of more than 3.8 million international visitors to Vietnam in 2020, down 78.7% y-o-y.

Figure 2: Retail Sales vs. International Arrivals Growth (year-to-date, y-o-y)



Vietnam's FDI falls: Although thousands of experts and investors have been supported to enter Vietnam, a large number have yet to make it, creating constraints for the investment and business expansion in Vietnam. Total foreign investment amounted USD 28.5 billion in 2020, down 25% y-o-y. Also, Covid-19 hit many production and business activities, leading to a slight decline in FDI disbursement this year compared to 2019. Specifically, FDI disbursement totalled USD 19.98 billion, down 2% y-o-y. Of the 19 sectors invested in 2020, the manufacturing industry took the lead at nearly USD13.6 billion, accounting for 47.7% of the total registered investment. Electricity production with USD 4.3 billion ranked in second place, equivalent to 18% of the total. This was followed by real estate investment and retail sales with USD 4.2 billion and above USD 1.6 billion respectively. In terms of investment partners, Singapore took the lead in 2020 with nearly USD 9 billion, accounting for 31.5% of the total investment. This was followed by South Korea and China with USD 3.9 billion and USD 2.46 billion respectively.

Figure 3: FDI (year-to-date)



Source: General Statistics Office

CPI stabilises: Average CPI increased 0.22% q-o-q and 1.38% y-o-y in 4Q20. On average, CPI rose 3.23% y-o-y in 2020, well below the 4% target set by the National Assembly.

The CPI increased in 2020 since (1) food prices climbed over the same period during the year. Particularly, pork prices jumped by 57.23% y-o-y in 2020. The rice price also hiked 5.14% y-o-y as the export price and domestic consumption demand rose. (2) Prices of pharmaceuticals and medical equipment were also up since the Covid-19 epidemic has raised demand for these items. (3) Also, the price of educational services rose by 4.32% y-o-y due to tuition fees increasing as set out in the Decree No. 86/2015 / ND-CP.

In the opposite direction, a number of factors contributed to curbing CPI growth in 2020, including the prices of essential commodities such as gasoline, oil, and gas. In addition, the demand for travel and tourism fell amid the epidemic, resulting in a drop in travel package prices, as well as transportation costs. Besides, the Government also rolled out packages such as electricity price cuts to cope with Covid-19, helping to control CPI.

Figure 4: CPI – Overall

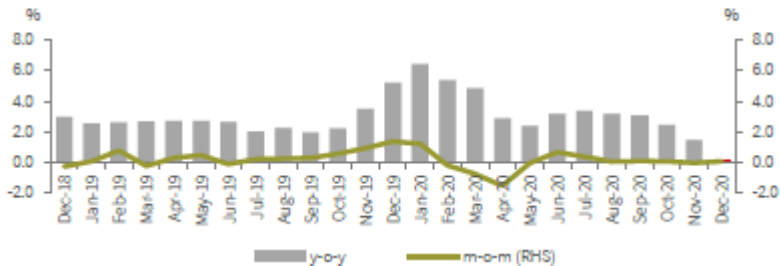
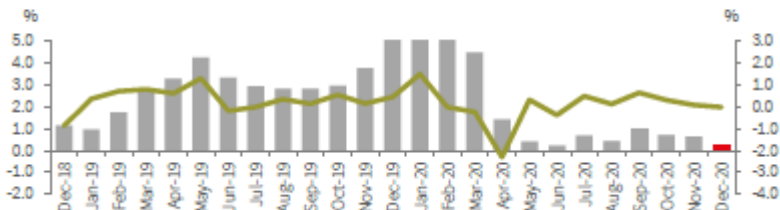
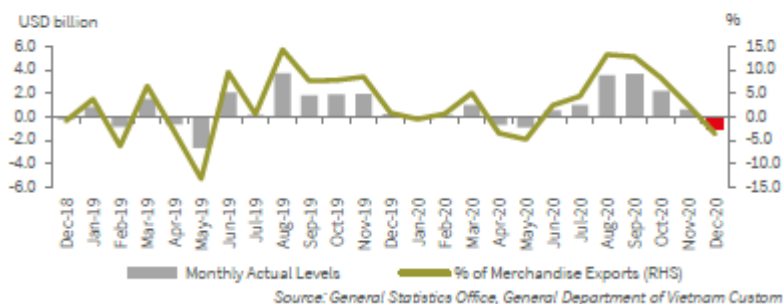


Figure 5: CPI – Housing & Construction Materials



Total export-import turnover rises in 2020: 2020 marked a strong performance of export and import activities while Covid-19 was disrupting trade services around the world. Total export-import turnover amounted to USD 543.9 billion, up 5.1% y-o-y. Of the total, export values were estimated at USD 281.5 billion in 2020, up 6.5% y-o-y, while imports were USD 262.4 billion, up 3.6% y-o-y in 2020. The country remained in trade surplus territory at USD 19.1 billion in 2020, reaching a new high over the last five years since 2016. While the United States and China were the two largest export markets of Vietnam, China and South Korea were the two major import markets.

Figure 6: Merchandise Trade Balance



Business registration has positive results: In 2020 as a whole, Vietnam has 134.9 thousand newly registered enterprises with a total registered capital of more than VND 2,235.6 trillion, down 2.3% y-o-y in the quantity of enterprises but up 29.2 % y-o-y in registered capital. The average registered capital of a newly established enterprise reached VND 16.6 billion, up 32.3% y-o-y.

By economic sector, those industries like agriculture, forestry, fishery and the production of electricity, water and gas, mining industry, science, technology, consulting, services, design and advertising posted annual increases in newly established enterprises in 2020. Meanwhile, all remaining industries saw decreases in the number of newly established enterprises over the same period.

Particularly, in real estate business alone, there were 6,694 newly established businesses, down 15.5% y-o-y, and 978 businesses completing dissolution procedures.

HCMC

Office Market

Rents^[1]**USD 30.5**per sqm per month,
net on NLA

Rent Change y-o-y

+4.9%

Stage in Rent Cycle

Stable**With new completions, vacancy rises in 4Q20**

Two new Grade B office buildings were completed in 4Q20, providing more than 44,000 sqm to the market. Both were located in the non-CBD area, namely APC building in Binh Thanh district and UOA building in District 7. As of 4Q20, the total supply of Grade A & B reached nearly 1.5 million sqm, up more than 155,000 sqm from the same period last year. With the new completions and softening demand, the average vacancy in Grade A & B increased by 1.34% q-o-q and 4.42% y-o-y to 11.2%.

Negative net absorption recorded across the segment

The negative impact of Covid-19 and the uncertainty of the economy have weighed on occupier demand for HCMC offices, especially in the Grade A segment which recorded the first negative net absorption since 2013. The occupancy rate for the Grade A market was down by 1.36% q-o-q to 90.5% in 4Q20. Meanwhile, Grade B, with negative net absorption across existing buildings coupled with the new completions, witnessed a drop in the occupancy rate to 88.4% in 4Q20.

Rents stabilise in 4Q20

The average rents of Grade A&B market remained stable at USD 30.5 per sqm per month in 4Q20, down 1% q-o-q and up 4.9% y-o-y. Rents of Grade A&B in the CBD appeared more stable than those in non-CBD given the better location and higher tenant profile. In the CBD, rents in Grade A office inched down by 0.3% q-o-q, while that of Grade B continued to record a positive growth of nearly 0.4% q-o-q. On the other hand, rents of Grade B in non-CBD fell approximately 0.9% q-o-q to USD 21.5 per sqm per month. Generally, most landlords have kept rents stable q-o-q regardless of Covid-19 as they seemed to remain confident with the current tight market and expected limited future supply. However, some newly completed buildings have been under pressure to lease space and consequently supported tenants as much as possible with rental concessions and flexible negotiation terms.

Outlook

In 2021, the market will welcome more than 65,000 sqm of new Grade B office space, mainly in the Non-CBD area. Meanwhile, the Grade A market will remain tight next year as there are no new completions and existing buildings are already sitting with high occupancy. The demand is expected to slow down until the virus is globally contained. Therefore, buildings with large vacancy will likely reconsider their asking rents and leasing strategies to maintain the required occupancy.

Figure 7: Office Total Stock

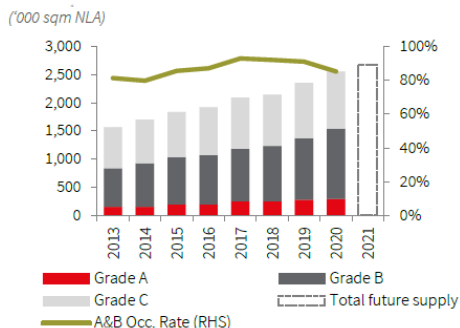
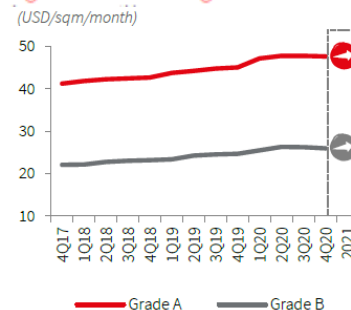


Figure 8: Office Average Rents



Note:

[1] Rent value refers to average net rent of the Grade A and B office markets, excluding VAT and service charges.

[2] Flexible space represents a variety of workspaces used by occupiers to increase their portfolio flexibility through short- to medium-term leases.

[3] CBD area refers to District 1. Non-CBD area refers to the rest of the city.

Source: JLL Research

HCMC

Retail Market

Rents [4]

USD 45.6per sqm per month,
gross on GLA

Rent Change y-o-y

-0.7%

Stage in Rent Cycle

Stable

New supply comes from renovated department stores

In 4Q20, HCMC Retail market welcomed more than 10,000 sqm NLA from Menas Mall which was the renovation of Parkson CT Plaza. Besides, Parkson Saigontourist Plaza released approximately 3,800 NLA in the second and third floor after a long period of renovation. The reopening of these two projects brought up the total retail space in HCMC to 1.8 mil sqm GFA, equivalent to 1.2 mil sqm NLA at end-2020.

Occupancy rate varies across Prime and Non-Prime malls

Occupancy rate varied across the malls, depending on the development quality rather than the location only. Out of the current 40 malls in HCMC, 12 malls were categorised as Prime, based on JLL's set of criteria [3]. The average occupancy rate of Prime malls increased by 0.5% q-o-q to 96.1% in 4Q20, and the net absorption also returned to a positive level of 2,447 sqm this quarter. This was attributable to the recovering market sentiment. On the other hand, Non-Prime malls were struggling to find tenants and occupancy rates remained low, at 70% on average. Most of the malls attracted an increasing footprint this quarter, supported by many events and promotion programs during the holiday seasons. Therefore, most big brands also appeared confident to expand this quarter.

Rents remain stable

Average gross rents of shopping malls were recorded at USD 45.6 per sqm per month in 4Q20, stabilising y-o-y. As the market developed, the mutual relationship between landlords and tenants also improved, though a collaborative approach to Covid-19. Therefore, the model of revenue sharing and marketing costs sharing, depending on the specific industry, will continue to remain the main focus of both landlords and tenants in the future.

Outlook

Socar Mall – the first mall in Thu Thiem NUA is set to open in 2021 and expected to bring 38,000 sqm NLA to the market. Meanwhile, the retail podium of some completed mixed-use developments are still looking for tenants and have yet to define the grand opening date. Healthy occupancy and stable rents are expected to continue in Prime malls in near term.

The retail space per capita in HCMC will remain the lowest in SEA at 0.12 sqm which paving ways for further development in the long run. This may encourage many malls to restructure the concepts and tenant profiles to adapt to the increasingly sophisticated demand in the market.

Figure 9: Retail Total Stock

('000 sqm GLA)

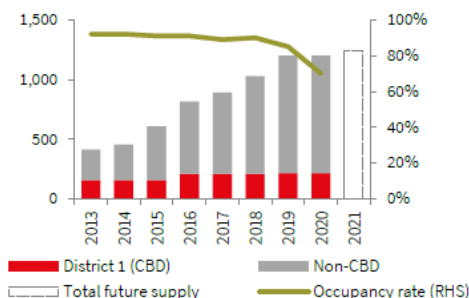
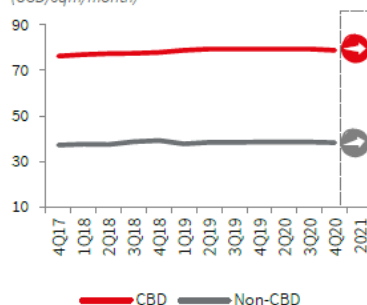


Figure 10: Retail Average Rents

(USD/sqm/month)



Note:

[1] Rent value refers to average gross rent across the city, including service charges but excluding VAT.

[2] CBD area refers to District 1. Non-CBD area refers to the rest of the city.

[3] [3] Prime shopping mall: refer to terminology for more explanation.

Source: JLL Research

HCMC

Apartment for Sale Market

Primary Price ^[1]**USD 2,475**

per sqm NFA



Price Change y-o-y

-14.3%

Stage in Price Cycle

Prices Rising

Limited new supply continues, yet signs of improvement are clearer

Limited supply continued in 4Q20 with only 3,600 units launched officially[2], down 26% q-o-q and stabilising y-o-y. This brought total launches for the full year 2020 to 14,700 units, down 50% y-o-y, mostly due to unresolved legal issues. The mid-end segment continued to lead the supply. In particular, Vinhomes Origami contributed 60% of total launch this quarter. Although the official launches remained almost unchanged, supply sentiment has shown more signs of improvement. In fact, this was considered the most dynamic quarter with many soft launches gathering pace, attracting a large number of homebuyers. The improved sentiment was a result of positive news around Covid-19 vaccines, and the establishment of Thu Duc City where most of the newly launched projects were located.

Thu Duc City now becomes the market spotlight

In line with the improving supply sentiment, the demand was also stronger, supported by both owner-occupiers and investors. Sales totalled 3,488 units in 4Q20, nearly 55% of which was contributed by Vinhomes Origami. The investment sentiment was extremely strong and concentrated in Thu Duc City-the newly established city. From Masteri Centre Point in the Mid-end segment to The River, Thu Thiem and Metropole in the Luxury segment, they all were well-received.

Most developers remain confident in their pricing

Most developers remained confident in their pricing given the limited supply and better sentiment. Many projects were launched with the record-high prices in the areas they were located, although a series of attractive sales policies continued in the quarter. However, the overall market was still less active than 4Q19 when two luxury projects were released with prices over USD 9,000 per sqm. Transactions at both have now however, paused for now.

In addition, two large-scale projects in 2020 Vinhomes Origami and AkariCity, although each being one of the most expensive projects in their areas, were priced lower than the average seen in 4Q19. Therefore, the overall primary prices declined 14.3% from 4Q19 to USD 2,475 per sqm in 4Q20.

Outlook

With the Party Congress Meeting in January, many projects are expected to have their legal issues resolved, bringing the total launches to more than 20,000 units in 2021. Developers will remain confident in their project pricing, supported by the pent-up demand during the limited supply period over the past two years.

Figure 11: Apartment Total Launches^[2]
(*'000 units)

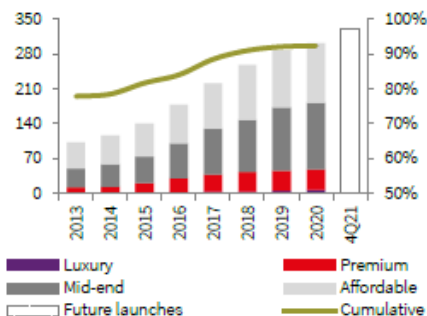
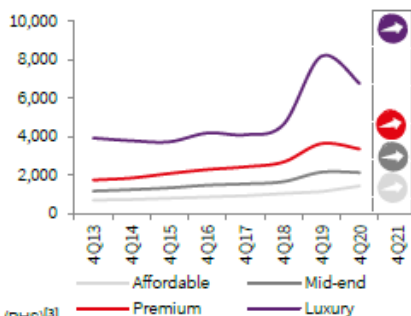


Figure 12: Average Primary Prices
(USD/sqm)



Note:

[1] Prices exclude VAT and sinking fund.

[2] Official launch figures. Projects are considered as officially launched when the Sale Purchase Agreements are signed, typically upon foundation completion.

[3] Sale rate is end-of-period figure.

Source: JLL Research

HCMC

Ready-built Landed property (RBL) Market

Primary Price ^[1]**USD 5,158**

per sqm land



Price Change y-o-y

+12.8%

Stage in Price Cycle

Prices Rising**New Supply volumes return to a low level**

After witnessing significant launches of more than 1,000 units in 3Q20, new supply volumes returned to a low level of 131 units in 4Q20. Only two projects were officially launched in the quarter, one of which was a final phase of a 20-ha Lovera Park project in the south of HCMC, while the other was the second phase of a small project in the west side. They both brought the total new launches to about 2,200 units for the full year 2020, 50% lower than the peak of 2016-18 period due to the continued legal issues and limited land bank for landed properties in the city.

Buyers' sentiment shows strong in the quarter

Positive news around Covid-19 vaccines and the good containment of the virus in Vietnam has boosted buyers' sentiment further. More than 80% of the total units available in the quarter were taken up, most of which were in large-scale integrated projects. This development model continued to prove attractive to both owner-occupiers and investors. The majority of owner-occupiers appreciated a better quality of life as those projects brought in greenery, amenities and facilities whilst privacy was still ensured; whereas, investors looked to the potential price growth or the possibility of leasing in the future.

Primary Prices remain at a high level

Primary prices continued to record double-digit growth annually with 12.8% in 4Q20. This was mainly driven by the higher-than-average price in the new integrated projects launched this year. Yet, compared to 3Q20, the basket has changed when a few high-priced schemes last quarter sold out, leading to a slight q-o-q decline in 4Q20. On a project basis, many developers were seen to keep on rising prices, given the good sentiment resulted from positive news around Covid-19 and the continued supply constraints. The average primary prices remained at a high level of USD 5,158 per sqm land, although the attractive sales policies observed for many quarters were becoming even more widespread in 4Q20.

Outlook

2021 new launches are set to double this year, reaching more than 4,000 units, since many projects are expected to have their legal issues resolved after the Party Congress Meeting in January. With healthy demand, developers will remain confident in pricing, although many attractive sales policies will continue into 2021.

Figure 13: RBL Total Launches ^[2]

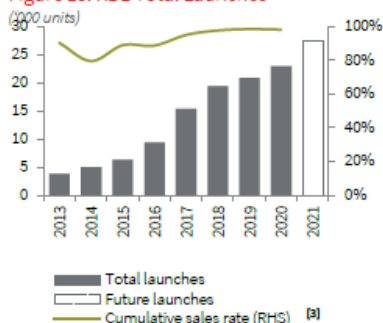
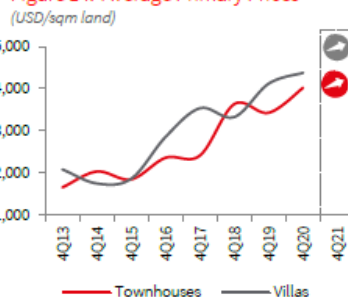


Figure 14: Average Primary Prices



Note:

[1] Prices exclude VAT and sinking fund. Price per sqm land = total unit value / size of the land plot on which the property is built.

[2] Official launch figures. Projects are considered as officially launched when the Sale Purchase Agreements are signed, typically upon infrastructure completion.

[3] Sale rate is end-of-period figure.

Source: JLL Research

Southern^[1]

Industrial Market

Land Price

USD 109per sqm per lease term^[1]

Price Change y-o-y

+7.9%

Stage in Price Cycle

Price Rising

Most of the recent land transactions take place via online platforms

Demand sentiment for industrial land remained strong, driven by Vietnam's robust industrial fundamentals as the world's next promising industrial hub. Yet, potential investors still had challenging times entering Vietnam for site inspections, notwithstanding the fact the virus has been well under control in Vietnam. Thus, the recent successful transactions mostly took place via online platforms beside other domestic acquisitions, bringing up occupancy rate by 0.9% h-o-h to 85% in 4Q20.

Southern supply still takes the lead in Vietnam

No new IP was launched into the market in the review quarter. With large existing land banks, Binh Duong and Dong Nai were leading industrial land supply in the South. While a few available land sites in HCMC's existing IPs were still facing difficulties in compensation or site clearance. In response to upcoming investment waves, Southern provinces are oriented to operate new IPs and expand the existing ones. Among those localities, Long An and Dong Nai are the most active in new IP developments. Overall, the supply for industrial land in the South is expected to rise further in the next five years to capitalise the increasing demand in the region.

Land price reaches a new peak

Although the Covid-19's impacts were still lingering and may temporarily make the upcoming investment plans difficult, industrial properties in Vietnam remained attractive to investors given their huge potential. Therefore, most IP developers in Southern markets maintained strong bargaining powers and raised their land prices to a new peak of USD 109 per sqm per lease term in the Southern region, up 7.9% y-o-y in 4Q20. RBFs rents also rose slightly to USD 3.5-5.1 per sqm per month, backed by healthy demand from SMEs sector.

Outlook

The pandemic may temporarily make it difficult to invest in Vietnam; however, as the new regional industrial powerhouse, the country will remain attractive to investors and manufacturers, supporting both demand and supply for industrial properties in future.

Moreover, with the escalating pandemic around the world, virtual applications and online marketing platforms are now evolving with many innovations. These will become useful tools for investors to weather through this challenging time.

Figure 15: Total Stock and Occupancy Rate

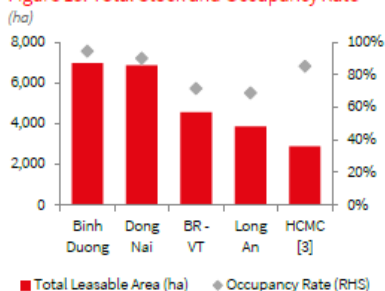
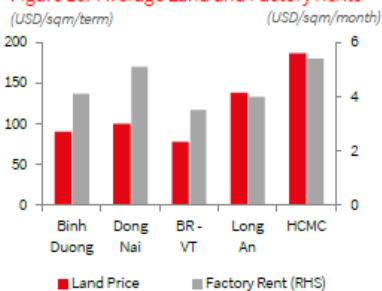


Figure 16: Average Land and Factory Rents^[2]



Note:

[1] In this report, Southern industrial market refers to HCMC, Binh Duong, Dong Nai, Ba Ria – Vung Tau and Long An markets only.

[2] Infrastructure maintenance, service fees and VAT are not included in the average land rent. Leasing term is the remaining years.

[3] HCMC total supply excluding Saigon High-tech Park and Quang Trung Software Park owing to their special characteristics.

Source: JLL Research

Hanoi

Office Market

Rents^[1]**USD 19.0**per sqm per month,
net on NLA

Rent Change y-o-y

+6.4%

Stage in Rent Cycle

Stable

Two Grade B buildings enter the market

In 4Q20, two Grade B office buildings were completed in non-CBD area, namely Century Tower in Hai Ba Trung District Tower and IDMC Duy Tan in Cau Giay District, adding 33,350 sqm to the existing stock, pushing the total stock up to 2.34 million sqm.

More weakening demand in Grade A than Grade B

Occupancy rate of Hanoi Grade A&B market was recorded at 86.5% in 4Q20, up 1.08% q-o-q, yet down 4.95% y-o-y. This was due to the continued weakening demand, which was more prevailing in Grade A market where the occupancy rate dipped by 14.4% y-o-y to around 78.7% in 4Q20.

Meanwhile Grade B appeared to stabilise with occupancy rate up by 1.32% y-o-y to 90.8% in 4Q20. In terms of net absorption, Grade A&B recorded a negative number of around 2,400 sqm this quarter, most of which were attributable to Grade A which saw many tenants' relocation to Grade B in a move to cut cost. Whereas, nearly 60% of buildings in Grade B still recorded a positive net absorption, due to their more affordable rents.

Rents decrease slightly across the buildings

Most existing buildings either kept their asking rents constant or slightly decreased. The average net rent of Grade A declined by 1.1% q-o-q to USD 26.7 per sqm per month due to the weakening demand. Meanwhile, Grade B rents remained largely constant at USD 15.4 per sqm per month, although some with large vacancy had their rent cut down slightly. Across the market, most landlords were willing to offer flexible leasing terms to support tenants during this challenging period.

However, the average net rent increased by 6.4 % y-o-y to USD 19.0 per sqm per month, since the projects that were completed this quarter were of high-quality, in good location and commanded higher-than-average rents.

Outlook

In 2021, Hanoi will welcome over 36,000 sqm from two projects, therein, BRG Grand Plaza in Dong Da District constitutes 84.5% of the total new supply.

As tenants are likely to tighten their budget until the pandemic is globally contained, JLL predicts Hanoi market rent will continue to stabilise or even decrease in 2021.

Figure 17: Office Total Stock

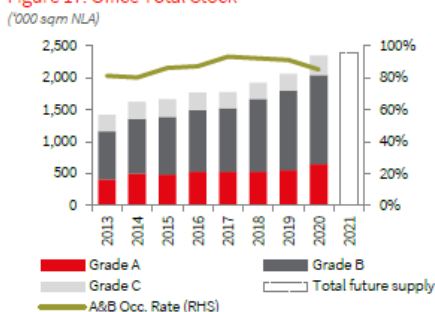
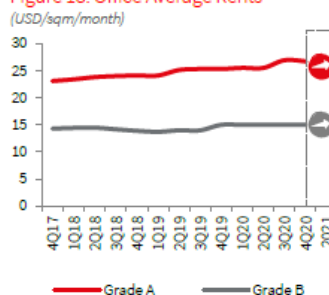


Figure 18: Office Average Rents



Note:

[1] Rent refers to average net rent of Grade A and B office markets, excluding VAT and service charges.

[2] CBD area consists of Hoan Kiem (core CBD), Dong Da, Ba Dinh and Hai Ba Trung. Non-CBD area refers to the rest of the city.

[3] Prime Shopping Mall: refers to Terminology section for more explanation.

Source: JLL Research

Hanoi

Retail Market

Rents^[1]

USD 29.6

per sqm per month,
gross on GLA



Rent Change y-o-y

+0.34%



Stage in Rent Cycle

Stable



One new completion enters the market

After a long period of no new launch, Hanoi retail market became more active this quarter with the grand new opening of Vincom Mega Mall Ocean Park in mid-December, adding around 30,600 sqm NLA to the supply. Despite being located in Gia Lam District, which was 19 kilometres from the City Center, the mall has managed to attract many tenants, achieving an occupancy rate of over 90% in the opening day. This was mostly supported by the success of the residential project Vinhomes Ocean Park within the integrated project.

Demand shows sign of recovery with positive net absorption

As the Covid-19 has been well contained in Vietnam, most of the Prime[3] shopping malls showed a sign of recovery with positive net absorption and multiple new take-up transactions. This led to an increase of over 4.04% q-o-q in occupancy rate, reaching 90.2% this quarter. Notably, all landlords continued to reshuffle the tenant mix, carefully selecting tenant profiles in accordance with the malls' images. Therein, F&B and entertainment categories remained the main focus.

Rents remain largely stable in 4Q20

Although the market showed some signs of improvement, most landlords still kept rents stable or cut down slightly as the market remains largely challenging to attract tenants. However, with the entry of the higher rent from Vincom Ocean Park, the new completion, the average rents inched up slightly by 0.34% y-o-y to USD 29.6 per sqm per month in 4Q20. Among Prime malls, those in the CBD was stable, at USD 61.2 per sqm per month while those in Non-CBD was registered at USD 28.5 per sqm per month, up 1.82% y-o-y, supported by the higher-than-average rents from Vincom Ocean Park. It was noticed that all those supports from landlords during the pandemic period has been completely lifted in all shopping malls.

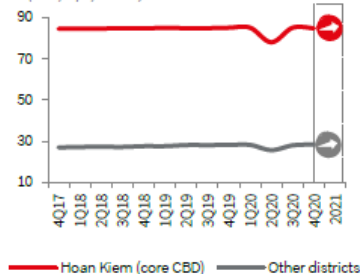
Outlook

In near term, supply will remain unchanged in CBD, while Non-CBD will continue to see more shopping malls. VincomMega Mall Smart City will be the next mall to enter Hanoi market in 2021, which will provide approximately 40,800 sqm to the Non-CBD submarket. This will be the largest shopping centre in Nam Tu Liem District and is expected to become a new destination for residents in the area. Most developers will keep focusing on providing superlative experiences and value-added services to attract customers. Therefore, more shopping malls are expected to get rejuvenated with better tenant mix and added services in upcoming time.

Figure 19: Retail Total Stock
('000 sqm GLA)



Figure 20: Retail Average Rents
(USD/sqm/month)



Note:

[1] Average gross rent across the city, including service charges but excluding VAT.

[2] CBD area consists of Hoan Kiem (core CBD), Dong Da, Ba Dinh and Hai Ba Trung. Non-CBD area refers to the rest of the city.

[3] Prime shopping mall: refer to terminology for more explanation.

Source: JLL Research

Hanoi

Apartment for Sale Market

Primary Price ^[1]**USD 1,531**

per sqm NFA



Price Change y-o-y

+2.8 %

Stage in Price Cycle

Growth Slowing

Supply additions drop in 4Q20, following the surge last quarter

After an outstanding quarter with more than 5,000 units from the latter phase of Vinhomes Smart City project launched in 3Q20, the market returned to a dry period with only around 2,680 units officially launched in 4Q20, as the tight policy remained in place. For full year 2020, official launches totaled 15,400 units, less than half of the amount seen in 2019.

Affordable and Mid-end continued to lead the supply this quarter with more than 70% market share. The remaining 28% was from Premium segment, coming from two projects namely BRG Park Residence and Masteri Waterfront.

Affordable and Mid-end segments continue to lead the sales

In tandem with the supply slump, sales transaction volumes totaled 3,667 units in 4Q20, down 29% q-o-q and 47% y-o-y. The top performers remained Affordable and Mid-end segments, contributing 72% of the total units sold, and most of which were from existing projects as there were no major first-time launches during the quarter.

For the full 2020, nearly 65% of total units available were taken up, similar to previous years, showing a stable demand. Moreover, the lower bank interest rate has helped more homebuyers to afford a new property.

Price increment in suburban market records a new high

The primary price reached USD 1.531 per sqm in 4Q20, up 1.4% q-o-q and 2.8% y-o-y. Notably, it was observed that price growth in suburban areas including Nam Tu Liem and Gia Lam outpaced that in the inner-city districts, narrowing the price gap between the two submarkets. This was attributable to the improvement of infrastructure network across the city and the prevailing trend of township developments in the outskirts.

Specifically, Gia Lam submarket for the first time recorded a new launch with selling price over USD 1,900 USD per sqm.

Outlook

Approximate 25,000 – 30,000 units are anticipated to enter the market in 2021 as many projects are expected to have their legal issues resolved when the new local government is settled. Although the main contributor remained Vingroup with Vinhomes townships, many experienced developers from HCMC are expected to continue their expansion to the North for more opportunities.

Figure 21: Apartment Total Launches ^[2]

('000 units)

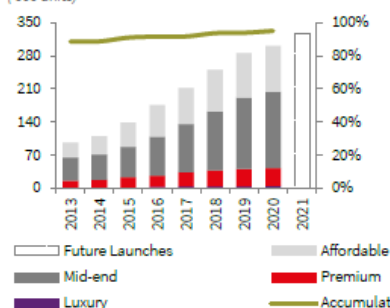
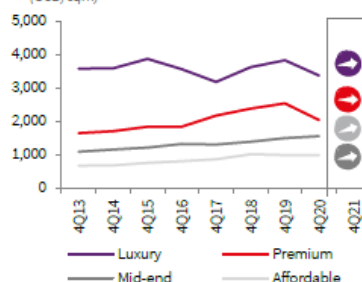


Figure 22: Average Primary Prices

(USD/sqm)



Note:

[1] Prices exclude VAT and sinking fund.

[2] Official launch figures. Projects are considered as officially launched when the Sale Purchase Agreements are signed, typically upon foundation completion.

[3] Sale rate is end-of-period figure.

Source: JLL Research

General Terminology

Chain-linked change

The quarter-on-quarter change in the chain-linked basis illustrates the change in rents or prices in properties that existed in the basket during two consecutive quarters. This is different from the Standard spot change series, which is a weighted average of all buildings in the market at that given moment.

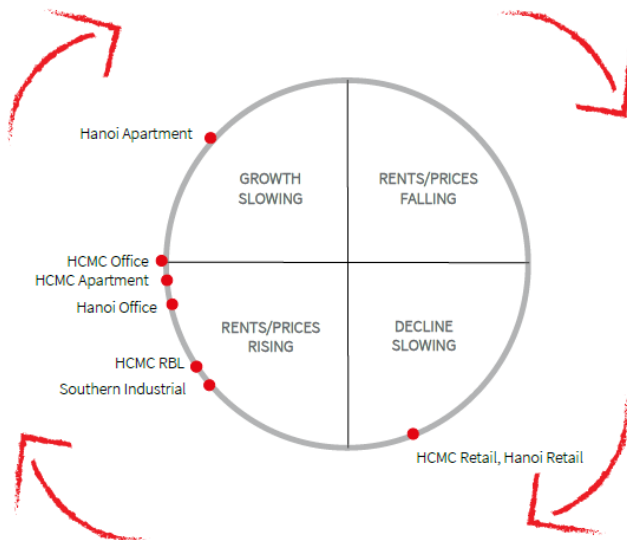
The chain-linked change can be used across time to show more accurately the level of rent growth achieved in a stabilised asset that is acquired and held over that time period.

Property Clock

The clock diagram illustrates where JLL estimates the stage of each property market within its individual rent/price cycle as at the end of the review quarter. Markets can move around the clock at different speeds and directions.

The diagram is a convenient method of comparing the relative position of markets in their rent/price cycle. Their position is not necessarily representative of the investment or development market prospects. Their position refers to the prevailing rent or price trend and its expected movement in the next quarter.

Figure 23: Vietnam Property Clock, 2Q20



Source: JLL Research

Current supply

The total amount of cumulative office space (in NFA terms) that has been completed at a given time.

Future supply

The total amount of office space slated for completion in the future at a given time.

Vacant space

The total amount of available office space that remains to be leased by the property owner(s) at a given time. This excludes space available for sub-lease by tenants (i.e. shadow space), space physically empty but already pre-leased or reserved, and space to be available for lease in the future.

Occupied space

Current supply less vacant space. "Net absorption" refers to the change in the occupied space from quarter to quarter.

Gross floor area (GFA)

The total amount of all covered areas including columns, walls, common passageways, lift, lobbies and toilets.

Net floor area (NFA)

The amount of usable floor areas excluding columns, walls, common passageways, lifts, lobbies and toilets. Net lettable area or net leasable area (NLA) refers to the amount of NFA that is available for lease.

Net rent

The amount of market rent receivable by landlords after deducting outgoings.

Market practices: Net rents may be quoted on an NLA or a GFA basis.

Outgoings

The estimated costs set aside by landlords for building maintenance that are passed on to tenants in the form of service charges or management fees.

Market practices: Service charges/management fees may or may not be quoted separately from net rents.

3 PROPERTY INVESTMENT

Gross rent

The total achievable rent to be borne by tenants, including Service charges/management fees. Gross rents equal net rents plus outgoings.

Market practices: Gross rents may be quoted on an NLA or a GFA basis.

Capital value

The market value or probable price of a property at a given time from a valuation point of view.

Yield

The percentage return on property investment at a given time from a valuation point of view. It is based on current market rents assuming full occupancy.

Grade A

A Grade A property meets all of the factors in a set of criteria regarding its offerings to a typical sophisticated occupier. These criteria are broadly concerned with the property's overall profile, location, amenities, management standards and technical specification.

Grade B

A Grade B property meets some of the factors in a set of criteria regarding its offerings to a typical sophisticated occupier. These criteria are broadly concerned with the property's overall profile, location, amenities, management standards and technical specification.

Current supply

The total amount of cumulative *modern* (as opposed to traditional) retail space (in GFA terms) that has been completed at a given time. This includes department stores, shopping centres and prime Retail space.

Future supply

The total amount of *modern* retail space slated for completion in the future at a given time.

Vacant space

The total amount of available *modern* retail space that remains to be leased by the property owner(s) at a given time. This excludes space available for sub-lease by tenants (i.e. shadow space), space physically empty but already pre-leased or reserved, and space to be available for lease in the future.

Occupied space

Current supply less vacant space. "Net absorption" refers to the change in the occupied space from quarter to quarter.

Gross leasable area (GLA)

The total amount of leasable floor areas on which rents and Service charges are based, which may include common areas used for foot traffic.

Gross rent

The total achievable rent to be borne by tenants including Service charges/management fees but excluding VAT. Rents are calculated by the average rents of leasable area for single tenants in department stores, shopping centres and prime Retail space in HCMC.

Market practices: Gross rents in the Retail market are usually quoted on NFA basis.

Shopping centre

A shopping centre is a property housing commercial multi-branded rental units/stores/establishments and common areas. It is planned, developed and operated. The property is classified in the hierarchy by function and/or size and by the area served.

Department store

Usually, a multi-level Retail property varying in size from one selling a variety of goods to one selling a full range of different lines. A distinctive feature of a department store is that 90% of the space is under a centralised payment system and it stocks a significant amount of cosmetics, fashion and house hold goods.

Prime Grade

Represent the High-quality Retail space meeting various rigorous criteria for an excellent location & accessibility, developer reputation, layout & ambience, management quality, and tenant mix.

Non-Prime Grade

The term represents Retail centres that do not meet our Prime Grade standards in terms of location & accessibility, developer reputation, layout & ambience, management quality, tenant mix, or a combination.

Commercial apartment for sale or Apartment for sale

The developer-built apartments that are available for sale widely on the market without any restriction on target buyers according to the market mechanism.

According to JLL in-house classification, the Vietnam apartment for sale market is categorised as Luxury, Premium, mid-end and Affordable segments. The detailed classifications are provided on the following page.

Ready-built landed property for sale or Ready-built landed property

The developer-built landed properties that are available for sale widely on the market without any restriction on target buyers according to the market mechanism, where the products comprise the houses on their own grounds. The developers provide a land plot with the necessary infrastructure, and the houses built based on the master plan and the design of the developer.

As per market practices, there are three types of Ready-built landed property, namely villa, townhouse and shophouse. The detailed classifications are provided on the following page.

Current supply

The total amount of supply available for sale, either through the primary market or the secondary market, regardless of construction status.

Future supply

The total amount of supply to be launched for sale in the future.

Completed supply

The total amount of supply that has been physically completed and handed over for occupation. Also known as existing supply.

Uncompleted supply

The total amount of supply that has not been physically completed and handed over for occupation. Includes supply under construction and supply planned for construction. Also known as supply in the pipeline.

Primary market

That part of the market comprising first-hand supply available for sale from developers.

Secondary market

That part of the market comprising second-hand supply available for resale from previous buyers.

Launches (Official launches)

The estimated amount of new supply (in units) officially launched for sale during a period. Projects are only considered as officially launched when the Sale Purchase Agreements are signed, typically upon the completion of foundations for the apartment sector and the completion of internal infrastructure according to the project schedule for Ready-built landed property.

Market practices: Many developers choose to launch their projects in phases which may or may not be publicly announced.

Take-up

The estimated amount of supply (in units) sold during a period. Includes sold units from new supply in the period and supply in previous periods.

Market practices: Take-up may comprise units sold via capital contributions or sale and purchase agreements.

Total inventory

The total amount of *unsold* supply that has been launched for sale.

Cumulative sales rate

The percentage between cumulative units sold and cumulative units launched up to the specific time.

Primary asking price

The stock-weighted average asking price in the primary market.

Secondary asking price

The stock-weighted average asking price in the secondary market.

Non-chain-link changes

Q-o-Q and Y-o-Y changes include the effect of supply additions/removals.

Chain-link changes

Q-o-Q and Y-o-Y changes are adjusted to remove the effects of supply additions/removals.

Luxury apartment

A *luxury* property meets *all* of the factors in a set of criteria regarding its offerings to a typical local wealthy household. These criteria are broadly concerned with the property's overall profile, location, facilities, amenities and management standards. A majority of luxury properties are located in or near the CBD of the city under review.

Typical price range: >USD 3,500 per sqm, excluding VAT and sinking fund

Premium apartment

A *premium* property meets some of the factors in a set of criteria regarding its offerings to a typical local wealthy household. These criteria are broadly concerned with the property's overall profile, location, facilities, amenities and management standards. A majority of Premium properties are located in new urban areas outside the CBD of the city under review.

Typical price range: USD2,500–USD3,500 per sqm, excluding VAT and sinking fund

Mid-end apartment

A *mid-end* property meets *all* of the factors in a set of criteria regarding its offerings to a typical local middle-class household. These criteria are broadly concerned with the property's overall profile, location, facilities, amenities and management standards. A majority of mid-end properties are located within the inner districts of the city under review.

Typical price range: USD1,200–USD2,500 per sqm, excluding VAT and sinking fund

Affordable apartment

An *affordable* property meets some of the factors in a set of criteria regarding its offerings to a typical local middle-class household. These criteria are broadly concerned with the property's overall profile, location, facilities, amenities and management standards. A majority of affordable properties are located in the outer districts of the city under review.

Typical price range: <USD1,200 per sqm, excluding VAT and sinking fund

Note: The price ranges provided above should not be understood as the sole and utmost criterion based on which projects are assigned grades.

High-end apartment: including Luxury and Premium segments

Low-end apartment: including mid-end and Affordable segments

Villa

A large and luxurious country house on its own grounds, generally having a maximum of three floors. The plot ratio is usually less than 70%, with a focus on a green area.

- Most popular villas are located on 200-300 sqm land plots. Some luxury villa plot areas may reach 500-1,000 sqm.
 - The popular construction area/Gross Floor Area (GFA) is about 250-350 sqm while the land plot is large. For that reason, all things equal, the selling price per square metre of land is lower than that of townhouses.
 - Typically, there are two types of villa, as shown below:
 - Detached villa: a single villa built on private land
 - Semi-detached villa: a single villa built as one of a pair that shares one common wall; often, each house layout is a mirror image of the other
-

Townhouse

A tall, narrow terraced house, generally having three or more floors. The plot ratio is usually more than 70% and is focused on the construction floor area.

- Most popular townhouses have plot areas of 60-100 sqm
 - The popular construction area/Gross Floor Area (GFA) is about 150-250 sqm.
-

Shophouse

A townhouse opening on to the pavement for commercial purposes.

- The construction and design are similar to those of townhouses. The popular construction area/Gross Floor Area (GFA) of shophouse is about 250-400 sqm, with the upper 3-4 floors for living purposes and the ground floor (or middle floor, if applicable) for commercial purposes. It is larger than a townhouse.
 - In one project, all things equal, the selling price per square metre of land is higher compared to townhouses because usually, in one project, shophouses have better locations and wider street frontage compared to other landed property units, for commercial purposes.
-

Note: The product classification provided above should not be understood as the sole and utmost criterion based on which projects are assigned types.

Operating Ips or Existing IPs

Industrial parks and processing zones that are officially offered for lease at a given time.

Total leasable land area

The total land area for lease according to the master plan of the whole IP regardless its development status. Total leasable land of an IP at a given time can comprise three types as below:

- **Infra-developed land:** The leasable land area which has been cleared and implemented internal infrastructures (including internal road, electricity, etc.) by the developer and ready for tenants to occupy.
- **Non-infrastructure land:** The leasable land area which have been cleared but not yet have internal infrastructures developed. Non-infrastructure land can still be offered for lease yet tenants may have to wait for a while (typically 3-6 months) to be able to occupy.
- **Uncompensated land:** The leasable land area which has not been compensated at a given time.

Market practices: The developer usually develops an IP in batches, depending on the expected demand on the market which is typically reflected by the number of enquiries the developer received, not the total leasable land area at once.

Total leasable warehouse/ready-built factory area

The total area of leasable warehouse/ready-built factory at a given time.

Vacant space

The total amount of available industrial land area that remains to be leased to tenants at a given time. This excludes space available for sub-lease by tenants (i.e. shadow space), space physically empty but already pre-leased or reserved, and space to be available for lease in the future.

Occupied space

Total leasable area less vacant space. "Net absorption" refers to the change in occupied space from period to period.

Net rent–land area

The amount of market rent applied for leasable land area that is receivable by landlords after deducting outgoings.

Market practices: Net land rent is normally quoted per square metre per lease term.

Lease term

Lease term is the remaining years of the industrial park or the property. In Vietnam, the maximum lease term can be up to 50 years.

Net rent-warehouse/ready-built factory

The amount of market rent applied for leasable warehouse/ready-built factory area that is receivable by landlords after deducting outgoings.

Market practices: Net warehouse rent may be quoted per square metre per month.

Future supply

The total area of future industrial parks and processing zones according to the master plans of provincial authorities.

North Key Economic Zone (NKEZ)

North Key Economic Zone is made up of seven cities/provinces, namely Hanoi, Hai Phong, Bac Ninh, Hai Duong, Hung Yen, Vinh Phuc and Quang Ninh.

In this Property Market Brief, Northern Industrial market refers to Hanoi, Hai Phong, Bac Ninh, Hung Yen and Hai Duong markets only.

Central Key Economic Zone (CKEZ)

Central Key Economic Zone comprises five provinces: Thua Thien Hue, Danang, Quang Nam, Quang Ngai and Binh Dinh provinces.

South Key Economic Zone (SKEZ)

South Key Economic Zone is made up of eight cities/provinces, namely HCMC, Binh Duong, Dong Nai, Long An, Ba Ria-Vung Tau, Binh Phuoc, Tay Ninh and Tien Giang.

In this Property Market Brief, Southern Industrial market refers to HCMC, Binh Duong, Dong Nai, Long An and Ba Ria-Vung Tau markets only.



VIETNAM BUSINESS ENVIRONMENT

4

Language

Accounting System

Banks

Government Administration

Taxation

Insurance

Workforce

LANGUAGE

Vietnamese was declared the official language of Vietnam in 1945, as much as 70% of the vocabulary is borrowed from Chinese and the intonation is similar to Cantonese. It is spoken by approximately 90% of the Vietnamese population and ranked as the world's 15th most spoken language. English, however, is widely used in the business community.

ACCOUNTING SYSTEM

Accounting records are required to be maintained in VND. Foreign-invested business entities can select a foreign currency to be used for their accounting records and financial statements provided that they meet all requirements specified in Circular 244/2009/TT-BTC issued by the Ministry of Finance ("MoF"). Accounting records are required in Vietnamese language, but this can be combined with a commonly-used foreign language. At the end of a financial year, the entity must perform a physical count of its fixed assets, cash and inventory.

Companies operating in Vietnam are required to comply with the Vietnam Accounting System ("VAS"). It is possible to diverge from the standard VAS, but this is subject to specific approval from the MoF. The tax authorities treat VAS non compliance as a basis for tax reassessment and imposition of penalties, including withdrawal of CIT incentives, disallowance of expense deductions for CIT purposes and disallowance of input VAT credits/refunds.

The annual financial statements of all foreign-invested business entities must be audited by an independent auditing company operating in Vietnam. Audited annual financial statements must be completed within 90 days from the end of the financial year. These financial statements should be filed with the applicable licensing body, MoF, local tax authority, Department of Statistics, and other local authorities if required by law.

BANKS

Banking industry of Vietnam is considered as young in terms of integration to worldwide, until in 1990, it was only restructured to separate the State Bank of Vietnam from commercial banks. The State Bank of Vietnam acts as a central bank and a supervisory institution and is also a main share holder in state-owned commercial banks (SOCB). Later, more forms of commercial banks are established especially after 2006 when Vietnam joined WTO. With less than 5% of the population regularly using banking service, and 10%-20% holding bank accounts, it has provided good opportunities for growth, however, competition in banking sector is considered as very harsh. Besides Vietcombank, Vietinbank, Agriculture Bank, BIDV as top of SOCB, top joint stock banks can be named as ACB, Sacombank, Techcombank, Indovina Bank as top of joint venture bank. Nowadays, in the banking sector, we can see a variety range of plenty commercial banks including 4 biggest SOCB, around 40 joint stock banks, and 40 foreign invested banks or branches of foreign banks, representative offices, 4 joint venture banks in playground. Although all the big names of foreign banks such as Citibank, HSBC, Standard Chartered Bank, ANZ are all presence in Vietnam, the banking system is still characterized by the strong dominance of market share by SOCB.

Official currency in Vietnam is VND, however, laws allow local and foreign entities and individuals to hold foreign currency at bank accounts as deposit/savings and funds received/transferred from foreign countries in freely. Nevertheless, domestic payment, usage or cross border outward transfer of foreign currency is prohibited or limited to certain kinds of transactions and it requires supporting documents.

BANKS

Banks can provide customers with all kinds of services, however, it is more characterized by commercial banking market rather than having a clear division on investment banking and commercial banking. Commercial banking services are such as deposits, loans, trade finance, bank guarantees. Deposit can be made in both VND or foreign currencies and deposit is including current account, saving accounts and fixed deposit from 1 month to 24 months. Interest rate for VND is always higher than foreign currencies (currently average VND interest rate is 5%-7%p.a. compared to USD interest rate at 0.75%p.a). Loan services comprises of short term loan (under 1 year), medium term loan (from 1 to 5 years) and long term loan (over 5 years). Loans in foreign currencies (popular USD) are restricted to companies who have the proceeds in foreign currency. Getting loans in USD is also always cheaper than loans in VND especially for those who having source of fund from their export. Banks always offer a Credit line to their customers to finance all their need in short term working capital or long time investment in machineries or factories. Credit line may be used for loan disbursement, trade finance or bank guarantee service. Trade finance can be listed as L/C Service (sight or usance L/C), bills for collection D/P or D/A, L/C negotiation, shipping guarantee, factoring. The most popular trade finance service in Vietnam is L/C, D/P and D/A, while factoring service is rarely used. Bank guarantee services are comprised of many types, some commonly used in the economy are such as bid bond, performance bond, warranty guarantee, payment guarantee or advance payment guarantee... Fee for issuance of bank guarantee is 2% p.a. of the guarantee value plus a small amount charge on documentation. Customers can request banks to issue for them a bank guarantee by deposit fund to bank or from a credit line offered by bank.

GOVERNMENT ADMINISTRATION

The National Assembly is the highest representative organ of the people and the highest organ of the state power of the Socialist Republic of Vietnam. Members are elected for a five year tenure through nation wide elections. Sitzings of the National Assembly are held twice a year and have full constitutional and legislative powers. The standing committee of the National Assembly is responsible for enforcement of laws. Its functions are carried out through the Ministries, State Committees and General Departments by promulgating and explaining the Constitution, law and decree-laws.

The Country's President is the head of state, elected by the National Assembly from among its members to represent the Socialist Republic of Vietnam in internal and foreign affairs. The Vice President is proposed by the President and elected by the National Assembly from the representatives. The National Defense and Security Council has the duty to mobilize all forces and potentials of the country to defend the Homeland.

The Government is the executive organ of the National Assembly and shall report to the National Assembly, the National Assembly standing committees and the Country's President. The Government consists of the Prime Minister, Deputy Prime Minister, Ministers and Heads at ministerial level. The Prime Minister is presented by the President and elected by the National Assembly and has the term of 5 years. The Deputy Prime Ministers are the assistants of the Prime Minister and may be delegated by the Prime Minister during his absence. The Ministers and Heads at ministerial levels take on the State management of allotted branches or fields.

The People's Supreme Court is the highest judicial organ of the Socialist Republic of Vietnam. The court consists of the Tribunal President, Vice Tribunal President, judges, the juror and the secretary of the court. Moreover, the court is composed of the judge Council, judge Committee, the Military court and criminal court, civilian court, the court of appeal and the assistant apparatus.

TAXATION

TAXATION IN THE REAL ESTATE INDUSTRY

I. Corporate Income Tax (“CIT”)

Organizations established in Vietnam deriving income from transferring or leasing property are subject to Corporate Income Tax (“CIT”) at the standard tax rate of 20% from 1 January 2016.

Generally, real estate developers are not given preferential tax rates, tax holidays or other tax reductions except for special cases such as projects located in poor and remote areas or social housing projects (i.e. construction of residential houses for the poor or workers).

In principle, the time of formal revenue recognition should be when the properties are handed over to the buyer.

However, in the case where an advance payment is received for properties under development, real estate developers are required to pay provisional CIT at 20% on provisional income in the case where corresponding expenses can be determined and matched with the revenue; where the expenses cannot be determined, the provisional CIT is at 1% on the advance payments which are not recorded as revenue for CIT purposes in the tax year.

Where the enterprise sub-leases out a property, if the lessee pays a lump sum for a number of years and certain conditions are met then the lessor is able to recognise revenue by one of two methods

- (i) allocation on a year-by-year basis or
- (ii) lump-sum basis.

Losses incurred in a given year can be carried forward for 5 years. With effect from 1 January 2014, losses from real estate transfer activities can be offset against the taxable income of other business activities of the relevant tax year.

However, the gain from transfer of real estate is still required to be recorded and taxed separately without offsetting losses derived from other activities.

Land use rights (“LURs”) with indefinite terms may not be depreciated for tax purposes. However, LURs with a definite term used for production or business activities can be amortized over the prescribed land use duration.

Any gains from the revaluation of a LUR for capital contribution purposes shall be determined as follows:

- (i) For capital contribution for residential housing for sale: the whole gain is recognized as other income in the tax period the capital contribution is made.
- (ii) For capital contribution for production or business activities, if the company receiving LUR is allowed to depreciate such LUR, the whole gain is recognized as other income in the tax period the capital contribution is made or the gains may be allocated to other income over a period up to ten years.

II. Value Added Tax (“VAT”)

The transfer of a LUR without any related infrastructure is not subject to VAT. Conversely, the transfer of LUR with an infrastructure and building component is generally subject to VAT at 10%. However, the land value can be excluded from the revenue subject to VAT. The determination of deductible land price for VAT purpose varies depending on how the land was acquired for the project. It is proposed in the draft amended tax law that taxable price for VAT purposes with regard to real estate transfer is calculated as the selling price of the real estate exclusive of VAT minus (-) the land use fee or lump-sum land rental fee paid to the State Budget.

Input VAT incurred for construction costs can generally be claimed as an input VAT credit. Output VAT will also be applied to the payment collection on schedule and the deductible land value for VAT purpose is also allocated accordingly.

The VAT rate of 5% is applicable to contracts for selling/leasing/financial leasing for social housing which satisfy the stipulated conditions.

III. Stamp Duty

Stamp duty is payable on the transfer of title of real estate property by the buyer. Some specific transfers may be exempted from the stamp duty. Stamp duty is imposed at 0.5% on the value of the property up to VND 500 million (approx. USD 22,000) per asset per transaction.

IV. Foreign Contractor Tax (“FCT”)

Foreign companies, with or without a permanent establishment (“PE”) in Vietnam, carrying out business activities in Vietnam and/or deriving income in Vietnam under a contract or agreement signed with a Vietnamese organization or individual, are referred to as a foreign contractor (“FC”) and subject to Vietnamese FCT.

VAT and CIT are the two components of the FCT.

Currently there are three tax filing and payment options:

- (i) full registration method with maintenance of books and accounts in Vietnam under Vietnam Accounting System;
- (ii) deemed withholding method; and
- (iii) the hybrid method, which consists of paying VAT on the conventional deduction method like a Vietnamese company but paying CIT on a deemed withholding method basis.

The Deemed Withholding method is the most common one in practice by which the contracting Vietnamese party is responsible for registering, withholding, filing and paying the FCT due on each payment made to the FC. The applicable rates vary depending on the nature of goods and services provided. For projects having a substantial portion of local purchases, the Hybrid method is often applied so that the FCs can claim credit on the input VAT incurred on local purchases but can still pay the CIT on a deemed basis. Note that it is being proposed under the draft amended tax law that conventional deduction method would be the compulsory VAT declaration method for foreign contractors..

V. Personal Income Tax (“PIT”)

Generally, real estate (other than a property used as a sole residential property and some other specific exempt transactions) transferred by an individual is subject to PIT. Property transactions subject to PIT include the transfer of “the right to buy” and the transfer of “the right to lease”.

PIT exemption for transfer of sole residential property is not applicable for:

- (i) transfer within 182 days from the date of having the right of ownership/LUR; and
- (ii) transfer of house/apartment/construction work yet to be completed.

Typically, a Vietnam tax resident has to pay PIT for the property transactions at 2% on the transfer price.

No PIT declaration and payment are required in the case where individuals/households are leasing a property for an annual rental of VND100 million or less (approx. USD4,500 per year).

VI. Non-agricultural land-use tax

Non-agricultural land-use tax (“NALUT”) is generally applicable to the following types of land: non-agricultural land used for residential, production or business purposes.

The calculation of the tax liability is generally based on the land area, price of land (normally set by the provincial-level People Committee and remains unchanged within 5 years from 1 January 2017) and tax rate. For residential land holding a multi-floor building or non-agricultural land holding a production or business establishment, the applicable tax rate is 0.03%.

Organizations granted with LUR and existing land users are required to submit NALUT declaration on a yearly basis at the tax office of the relevant district no later than 31 March of the following year. However, no further declaration in subsequent years is required if there is no change in tax payer or tax liability. If there is any change, the tax payer is required to submit an amended declaration within 30 days following the date on which the change takes effect.

The tax payer may opt to pay the NALUT on one-off basis a year no later than 31 May each year or twice a year no later than 31 May and 31 October each year. If the tax payer requests to pay the NALUT on one-off basis for multiple years up to 5-year period, the payment of tax is not later than 31 December of the year in which the request is made.

NALUT exemption and reduction can be granted for certain types of land including land related to investment projects in the sectors eligible for special investment incentives, investment projects in geographical areas with qualifying socio-economic difficulties and other specific cases.

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OTHER INFORMATION

5

Vietnam Map

Domestic Routes

Vietnam Key Data

Relevant Website

Public Holidays

Financial Formulae

IDD Codes and Time Differences

Conversion Factors

Arcadis Asia Leadership Team

Arcadis Asia Sectors

Arcadis Asia Services

Directory of Office

Acknowledgement

VIETNAM MAP



DOMESTIC ROUTES

Route	Distance (km)	Duration
<u>From Hanoi to:</u>		
Buon Ma Thuot (Dak Lak)	960	01h40'
Cam Ranh (Khanh Hoa)	1039	01h45'
Can Tho	1221	02h10'
Chu Lai (Quang Nam)	770	01h55'
Da Lat (Lam Dong)	1065	01h50'
Da Nang	606	01h15'
Dien Bien Phu (Dien Bien)	301	01h05'
Dong Hoi (Quang Binh)	399	01h25'
Ho Chi Minh City	1138	02h05'
Hue	549	01h10'
Phu Quoc (Kien Giang)	1575	02h10'
Pleiku (Gia Lai)	814	02h20'
Quy Nhon (Binh Dinh)	882	01h35'
Tuy Hoa (Phu Yen)	956	02h35'
Vinh (Nghe An)	254	01h00'
<u>From Ho Chi Minh City to:</u>		
Buon Ma Thuot (Dak Lak)	260	01h00'
Ca Mau	248	01h00'
Cam Ranh (Khanh Hoa)	318	01h00'
Chu Lai (Quang Nam)	557	01h15'
Con Dao (Ba Ria - Vung Tau)	248	01h00'
Da Lat (Lam Dong)	214	00h50'
Danang	603	01h15'
Dong Hoi (Quang Binh)	745	01h35'
Hai Phong	1111	02h00'
Hanoi	1138	02h05'
Hue	630	01h20'
Phu Quoc (Kien Giang)	300	01h05'
Pleiku (Gia Lai)	384	01h20'
Quy Nhon (Binh Dinh)	431	01h10'
Rach Gia (Kien Giang)	194	00h55'
Tuy Hoa (Phu Yen)	381	01h00'
Vinh (Nghe An)	883	01h45'
<u>From Da Nang to:</u>		
Buon Ma Thuot (Dak Lak)	374	01h15'
Cam Ranh (Khanh Hoa)	436	01h05'
Da Lat (Lam Dong)	480	01h25'
Hai Phong	709	01h15'
Hanoi	606	01h15'
Ho Chi Minh City	603	01h15'
Pleiku (Gia Lai)	227	00h55'
Vinh (Nghe An)	452	01h15'

VIETNAM KEY DATA

Government

Country Name	: The Socialist Republic of Vietnam
Head of State	: President
Government Type	: Socialist Republic
Head of Government	: Prime Minister
Capital City	: Hanoi
Administrative Divisions	: 58 provinces and 5 municipalities
Independence	: 2nd September 1945
Legal System	: Based on Constitution of Vietnam
Official Language	: Vietnamese
National Language	: Vietnamese

Geography

Geographic Coordinates	: 16 10 N, 107 50 E
Location	: South East Asia
Border Countries	: Cambodia 1,158 km, China 1,297 km, Laos 2,161 km
Total Area	: 331,210 sq km
Land Area	: 310,070 sq km
Water	: 21,140 sq km
Land use	: agricultural land: 34.8% (2011 est.) arable land: 20.6% (2011 est.) / permanent crops: 12.1% (2011 est.) / permanent pasture: 2.1% (2011 est.) forest: 45% (2011 est.) other: 20.2% (2011 est.)
Irrigated Land	: 46,000 sq km (2012)
Coastline	: 3,444 km (excludes islands)
Land boundaries	: 4,616 km
Natural Resources	: phosphates, coal, manganese, rare earth elements, bauxite, chromate, offshore oil and gas deposits, timber, hydropower
Climate type	: tropical in south; monsoonal in north with hot, rainy season (May to September) and warm, dry season (October to March)
Natural hazards	: occasional typhoons (May to January) with extensive flooding, especially in the Mekong River delta

People

Total Population	: 97.58 million (2020 est.)
Age structure	: Urban: 36.8% Rural: 63.2% Male: 49.8% Female: 50.2%
Population Growth Rate	: 1.14% (est. 2020)
Median Age	: total: 31.9 (est. 2020)
Life Expectancy	: average age: 73.7 years old male: 71 years old female: 76.3 years old
Urban Population	
Hanoi	: 8.2 million (est. 2020)
Ho Chi Minh City	: 9.2 million (est. 2020)
Ethnic Groups	: 54 Ethnic Groups Kinh (Viet) 85.3%; others 14.7% (2019)
Languages	: Vietnamese (official), English (increasingly favored as a second language), some French, Chinese, and Khmer; mountain area languages (Mon-Khmer and Malayo-Polynesian)
Literacy (definition: age 15 and over can read and write)	: total population: 98.92% (2020 est.) male: 98.85% (2020 est.) female: 97.87% (2020 est.)
Population below poverty line	: 8% (2017 est.)
Labor Force	: 55.1 million (est. 2020)
Labor Force by occupation	: Agriculture: 32.8% (est. 2020) Industry: 30.9% (est. 2020) Services: 36.3% (est. 2020)
Unemployment Rate	: 2.48% (est. 2020)

Economy

Monetary Unit	: Vietnamese Dong
Currency Code	: VND
Exchange rate to USD	: dong (VND) per 23,322 (est. 2020)
Euro	: 27,169 (est. 2020)
British Pound	: 30,220 (est. 2020)
Average Consumer Price Index (CPI)	3.23% (est. 2020)

VIETNAM KEY DATA

Fiscal Year	: 1 January to 31 December
GDP (Official Exchange Rate)	: US\$ 266,5 billion (est. 2019)
GDP Growth Rate	: 2.91% (est. 2020)
GDP composition by sectors	: Agriculture: 14.85% (est. 2020) Industry: 33.72% (est. 2020) Services: 41.63% (est. 2020) Other: 9.8% (est. 2020)

Trade

Total Exports	: US\$ 282,65 billion (est. 2020)
Major Exports Commodities	: 1- Telephones, mobile phones and parts thereof 2- Textiles and garments 3- Computers, electrical products, spare-parts and components thereof 4- Foot-wear 5- Fishery products 6- Crude oil 7- Machine, equipment, tools and instruments 8- Wood and wooden products 9- Other means of transportation, parts and accessories thereof 10- Rice
Export Partners	: EU 15.8%, US 27.3%, Asean 49.6%, Japan 6.8%, Korea 6.8%, China 17.3%
Total Imports (USD billion)	: US\$ 262.7 billion (est. 2020)
Major Imports Commodities	: 1- Machine, equipment, tools and instruments 2- Computers, electrical products, spare-parts and components thereof 3- Textile, leather and foot-wears materials and auxiliaries group 4- Telephones, mobile phones and parts thereof 5- Petroleum products 6- Iron and steel 7- Plastics 8- Animal fodders and animal fodders materials 9- Chemical 10- Other means of transportation, parts and auxiliaries thereof
Import Partners	: China 32%, Asea 81%, Korea 17.9%, EU 7.3%, Japan 7.7%, US 5.2%

International Airports	: Tan Son Nhat International Airport (Ho Chi Minh City), Da Nang International Airport (Da Nang), Hanoi Noi Bai International Airport (Hanoi), Nha Trang Cam Ranh International Airport (Nha Trang), Can Tho International Airport (Can Tho)
Major Seaports	: Cam Pha Port (Quang Ninh), Hai Phong Port (Hai Phong), Nghi Son Port (Thanh Hoa), Cua Lo Port (Nghe An), Vung Ang Port (Ha Tinh), Chan May Port (Thua Thien Hue), Da Nang Port (Da Nang), Dung Quoc Port (Quang Ngai), Quy Nhon Port (Binh Dinh), Van Phong Port (Khanh Hoa), Saigon Port (Ho Chi Minh City), Vung Tau Port (Vung Tau), Dong Nai Port (Dong Nai), Can Tho Port (Can Tho)

SOME INTERESTING FACTS

Vietnam's history can roughly be divided into the following periods:

- Pre-history: from circa 400,000 years (Palaeolithic to 4,000 years (Neolithic) ago, cultures in the area included Son Vi, Hoa Binh, Bae Son, Ha Long, and Hoa Loc.
- Proto-history: According to legends, Vietnam originated in the seventh century BC when the Hung Kings founded Van Lang. In the third century BC, King An Duong Vuong named founded Au Lac and ruled until 179 B.C.
- Chinese Occupation: Vietnam was occupied by China from the first to the tenth century A. D.
- Monarchy: Kings rules the area from 968 to 1945.
- Independence: The Socialist Republic of Vietnam was founded after the 1945 revolution, when President Ho Chi Minh declared independence.
- French War: Vietnam battled French colonialism from 1858 to the August Revolution in 1945, and from 1946 to the victory at Bien Bien Phu in 1954.
- American War: Vietnam fought America from 1954 to Ho Chi Minh's victory on April 30, 1975.
- From 1975 until now: Vietnam has been working towards development and success and has been member of International Organizations
- 1976: Non-Aligned Movement (NAM)
- 1976, Jun: World Intellectual Property Organization (WIPO)
- 1976, Oct: Member of UNESCO
- 1977, Sep: Vietnam became the member of The United Nations (UN)
- 1995, Jul: Vietnam became the seventh member of Association of Southeast Asian Nations (ASEAN)
- 1995, Jul: ASEAN Free Trade Area (AFTA)
- 1996: The Asia-Europe Meeting (ASEM)
- 1998, Nov: Asia-Pacific Economic Cooperation (APEC)
- 2000, Jul: signed the Bilateral Trade Agreement (BTA) with the United States
- 2007, Jan: Vietnam became the 150th member of the World Trade Organization (WTO)

- 2013, Jul: Vietnam maintains diplomatic relationships with 182 nations throughout the world, including permanent members of United Nations Security Council
- 2015, May: Free Trade Agreement (FTA), South Korea and Vietnam sign Free-Trade Agreement
- 2015, May: The Free Trade Agreement between the Socialist Republic of Viet Nam and the Eurasian Economic Union and its Members States, of the other part (VN-EAEU FTA)
- 2015, Oct: The Trans-Pacific Partnership ("TPP") was concluded on 5 October 2015 in Atlanta, Georgia, USA.
- 2015, Nov: ASEAN Economic Community (AEC)
- 2015, Dec: Free Trade Agreement between EU and Vietnam (EVFTA)

RELEVANT WEBSITE

Government Office

Ministry of Public Security

Ministry of Home Affairs

Ministry of Justice

Ministry of Planning and Investment

Ministry of Finance

Ministry of Industry and Trade

Ministry of Agriculture and Rural Development

Ministry of Transport

Ministry of Construction

Ministry of Natural Resources and Environment

Ministry of Information and Communication

Ministry of Labor, War Invalid and Social Affairs

Ministry of Culture, Sports and Tourism

Ministry of Science and Technology

Ministry of Health Portal

Ministry of Education and Training

Ministry of Foreign Affairs

The State Bank of Vietnam

General Statistics Office of Vietnam

Directorate for Standards, Metrology and Quality

Vietnam National Administration of Tourism

Vietnam Customs

Vietnam Register

<http://www.chinhphu.vn>
<http://www.mps.gov.vn>
<http://www.moha.gov.vn>
<http://www.moj.gov.vn>
<http://www.mpi.gov.vn>
<http://www.mof.gov.vn>
<http://www.moit.gov.vn>
<http://www.mard.gov.vn>
<http://www.mt.gov.vn>
<http://www.moc.gov.vn>
<http://www.monre.gov.vn>
<http://mic.gov.vn>
<http://www.molisa.gov.vn>
<http://www.ci.net.gov.vn>
<http://www.most.gov.vn>
<http://www.moh.gov.vn>
<http://www.moet.gov.vn>
<http://www.mofa.gov.vn>
<http://www.sbv.gov.vn>
<http://www.gso.gov.vn>
<http://www.tcvn.gov.vn>
<http://www.vietnamtourism.com>
<http://www.customs.gov.vn>
<http://www.vr.org.vn>

PUBLIC HOLIDAY

	2021
VIETNAM	
New Year's Day	01 Jan
Lunar New Year	10-14 Feb 15-16 Feb [#]
Hung Vuong King Celeration	21 Apr
Liberation Day of Saigon	30 Apr
International Labour Day	1 May
National Day	2 Sep
Christmas Day	24,25 Dec
[#] <i>Substitute</i>	
SINGAPORE	
New Year's Day	01 Jan
Chinese New Year	12 Feb 13 Feb
Good Friday	02 Apr
Labor Day	01 May
Vesak Day	26 May
Hari Raya Puasa	13 May
National Day	09 Aug
Hari Raya Haji	20 Jul
Deepavali	04 Nov
Christmas Day	25 Dec

	2021
MALAYSIA	
New Year's Day *	01 Jan
Chinese New Year	12 Feb 13 Feb [#]
Labour Day	01 May
Hari Raya Aidilfitri**	13 May 14 May
Wesak Day	26 May
King/Agong's Birthday	07 Jun
Hari Raya Qurban**	20 Jul
Awal Muharam (Islamic New Year)	10 Aug
National Day	31 Aug
Malaysia Day	16 Sep
Prophet Muhammad's Birthday	19 Oct
Deepavali**	4 Nov ^{##}
Christmas Day	25 Dec
* Except Johor, Kelantan, Kedah, Perlis & Terengganu ** Subject to change # Except Kelantan & Terengganu ## Except Sarawak	

PUBLIC HOLIDAY

	2021
INDIA	
New Year's Day	01 Jan
Chandrama Ugadi	13 Apr
May day	01 May
Ramzan	14 May
Ganesh Chaturthi	10 Sep
Gandhi Jayanti	02 Oct
Vijay Dashmi	15 Oct
Diwali	04 Nov
Christmas Day	25 Dec
CHINA	
New Year's Day	01- 03 Jan
Chinese New Year's Eve	11 Feb
Chinese New Year ^{\$}	12 Feb 17 Feb
Ching Ming Festival	03-05 Apr
Labour Day*	01 May 05 May
Tuen Ng / Dragon Boat Festival	12-14 Jun
Mid-Autumn Festival	19-21 Sep
National Day [#]	01 Oct 07 Oct
\$ 12-17 February 2021 are holidays * 01-05 May 2021 are holidays # 01-07 October 2021 are holidays	

	2021
HONG KONG	
New Year's Day	01 Jan
Lunar New Year (Day 1)	12 Feb
Lunar New Year (Day 2)	13 Feb
Lunar New Year (Day 4)	15 Feb*
Good Friday	02 Apr
The day following Good Friday	03 Apr
The day following Ching Ming Festival	05 Apr*
The day following Easter Monday	06 Apr*
Labour Day	01 May
Birthday of the Buddha	19 May
Tuen Ng / Dragon Boat Festival	14 Jun
HKSAR Establishment Day	01 Jul
The day following Chinese Mid-Autumn Festival	22 Sep
National Day	01 Oct
Chung Yeung Festival	14 Oct
Christmas Day	25 Dec
The 1st weekday after Christmas Day	27 Dec*
*As the festivals in 2021 falls on Sunday, the day following it is designated as a general holiday in substitution	

PUBLIC HOLIDAY

	2021
MACAU	
New Year's Day	01 Jan
Lunar New Year's Eve (Afternoon)	11 Feb*
Lunar New Year's Day	12 Feb
The 2nd day of Lunar New Year	13 Feb
The 3rd day of Lunar New Year	14 Feb
The rest day for 2nd day of Lunar New Year	15 Feb@
The rest day for 3rd day of Lunar New Year	16 Feb@
Good Friday	02 Apr
The day before Easter	03 Apr
Ching Ming Festival	04 Apr
The rest day for The day before Easter	05 Apr@
The rest day for Ching Ming Festival	06 Apr@
Labour Day	01 May
The rest day for Labour Day	03 May@
Birthday of the Buddha	19 May
Tuen Ng / Dragon Boat Festival	14 Jun
The day following Chinese Mid-Autumn Festival	22 Sep
National Day	01 Oct
The rest day for National Day	04 Oct
Chung Yeung Festival	14 Oct
All Soul's Day	02 Nov
Feast of Immaculate Conception	08 Dec
Macao S.A.R. Establishment Day	20 Dec
Winter Solstice	21 Dec
Christmas Eve	24 Dec
Christmas Day	25 Dec
The rest day of Christmas Day	27 Dec@
New Year's Eve (Afternoon)	31 Dec*
*Special Holiday Granted by Chief Executive for staff in Public Administration @As the festivals in 2021 falls on Saturday / Sunday, the day following it is designated as a general holiday in substitution	

	2021
THAILAND	
New Year	01 Jan
Makha Bucha Day	26 Feb
Chakri Memorial Day	06 Apr
Songkran Festival	13 Apr
Songkran Festival	14 Apr
Songkran Festival	15 Apr
Labour Day	03 May ¹
Coronation Day	04 May
Wisakha Bucha Day	26 May
H.M. Queen Suthida Bajrasudhabimalalakshana's Birthday	03 June
H.M. King Maha Vajiralongkorn's Birthday	26 Jul ²
H.M. Queen Sirikit The Queen Mother's Birthday / Mother's Day	12 Aug
H. M. King Bhumibol Adulyadej Memorial Day	13 Oct
Chulalongkorn Day	25 Oct ³
H.M. King Bhumibol Adulyadej's Birthday / Father's Day	06 Dec ⁴
Constitution Day	10 Dec
New Year's Eve	31 Dec
1 - As National Labour Day falls on Saturday (01 May) , Monday is designated as a general holiday in substitution 2 - As H.M. King Maha Vajiralongkorn's Birthday falls on Saturday (24 July) ; Monday is designated as a general holidays in substitution 3 - As Chulalongkorn Day falls on Saturday (23 October) ; Monday is designated as a general holidays in substitution 4 - As H.M. King Bhumibol Adulyadej's Birthday falls on Sunday (5 Dec) , Monday is designated as a general holiday in substitution	

PUBLIC HOLIDAY

	2021
PHILIPPINES	
New Year's Day	01 Jan*
Chinese New Year	25 Jan [#]
EDSA People Power Revolution	25 Feb [#]
Araw ng Kagitingan	01 Apr*
Maundy Thursday	02 Apr*
Good Friday	03 Apr [#]
Black Saturday	09 Apr*
Labor Day	01 May*
End of Eid-ul-Fitre (Feast of Ramadhan)	12 / 13 May*
Independence Day	12 Jun*
Eid-ul-Adha	19 / 20 Jul*
Ninoy Aquino Day	21 Aug [#]
National Heroes Day	30 Aug*
All Saint's Day	01 Nov [#]
All Souls Day	02 Nov [#]
Bonifacio Day	30 Nov*
Feast of the Immaculate Conception of Mary	08 Dec [#]
Christmas Eve	24 Dec [#]
Christmas Day	25 Dec*
Rizal Day	30 Dec*
Last Day of the Year	31 Dec [#]
* Regular Holidays	
# Special Non-Working Holidays	

	2021
INDONESIA	
New Year's Day	01-Jan
Chinese New Year's (Imlek)	12-Feb
Ascension of Prophet Muhammad	11-Mar
Hindu Day of Quiet (Nyepi)	14-Mar
International Labour Day	1-May
Good Friday	2-May
Ascension Day of Jesus Christ	13-May
Idul Fitri	15-May
	16-May
Waisak Day	26-May
Pancasila Day	1-Jun
Idul Adha Day	20-Jul
Hijriyah New Year	10-Aug
National Independence Day	17-Aug
Prophet Muhammad's Birthday	18-Oct
Christmas Day	25-Dec

PRIME RATES

Indicative prime rates as at 4th Quarter 2020

COUNTRY	RATE (% pa)
Vietnam ^{##}	4.50
China [*]	4.50
Hong Kong	5.00
India ^{\$}	8.75
Jakarta ^{\$\$}	4.50
Macau	5.25
Malaysia [^]	5.51
Philippines	6.03
Singapore	5.25
Thailand [#]	6.15
United Kingdom ^{**}	0.10
United States of America	3.25

Note: Depending on the circumstances, prime rates may vary from time to time

China^{*} = 5-Year Benchmark Lending Rate

India^{\$} = The data is provided by Arkind LS Private Limited, an Arcadis Alliance Partner

Jakarta^{\$\$} = The data for Jakarta is provided by PT Lantera Sejahtera Indonesia

Malaysia[^] = Base Lending Rate (Average based on 16 financial institutions)

Thailand[#] = Minimum Loan Rate % per annum (Average based on local bank)

United Kingdom^{**} = Bank Rate (Bank of England base rate)

Vietnam^{##} = Minimum and in VND per year

FINANCIAL FORMULAE

Future value of \$1	$FV = PV (1 + i)^n$
Future value of \$1 per period	$FV = PMT [((1+i)^n - 1) \div i]$
Sinking fund (the amount required to be put away periodically to realise some future sum)	$PMT = FV [i \div ((1 + i)^n - 1)]$
Present value of \$1	$PV = FV [1 \div (1+i)^n]$
Present value of \$1 per period	$PV = PMT [((1+i)^n - 1) \div (i(1+i)^n)]$
Annuity with a PV of \$1 (mortgage bond formula)	$PMT = PV [i(1+i)^n \div ((1+i)^n - 1)]$

PV = present value

FV = future value

PMT = payment amount

n = period (e.g. 10 years with monthly payments, $n = 10 \times 12 = 120$)

i = interest rate per period

(e.g. 12% p.a. compounded monthly;

$i = 12\% \div 12 \text{ months} = 1\% \text{ per period}$)

IDD CODES AND TIME DIFFERENCES

LOCATION	IDD COUNTRY CODE	TIME DIFFERENCE (Hours)*
Australia:		
Melbourne	61	+3
Perth	61	+1
Sydney	61	+3
Bahrain	973	-5
Brunei:		
Bandar Seri Begawan	673	+1
Kuala Belait	673	+1
Cambodia (Phnom Penh)	855	0
Canada:		
Toronto (Metropolitan)	1	-11
Vancouver	1	-14
China	86	+1
France (Paris)	33	-5
Germany (Berlin)	49	-5
Hong Kong	852	+1
India (New Delhi)	91	-1.3
Indonesia (Jakarta)	62	0
Ireland (Dublin)	353	-6
Italy (Rome)	39	-5
Japan (Tokyo)	81	+2
Korea (North)	850	+2
Korea (South)	82	+2
Laos (Vientiane)	856	0

LOCATION	IDD COUNTRY CODE	TIME DIFFERENCE (Hours)*
Malaysia (Kuala Lumpur)	60	+1
Myanmar (Yangon)	95	-0.3
Nepal (Kathmandu)	977	-1.15
Netherlands (Amsterdam)	31	-5
New Zealand (Auckland)	64	+5
Philippines (Manila)	63	+1
Singapore	65	+1
Sri Lanka (Colombo)	94	-1.3
Russia (Moscow)	7	-4
Taiwan (Taipei)	886	+1
Thailand (Bangkok)	66	0
United Arab Emirates (Abu Dhabi)	971	-3
United Kingdom (London)	44	-6
United States of America:		
Los Angeles	1	-14
New York	1	-11

* Allowance should be made for seasonal time variations.

CONVERSION FACTORS

UNIT	
LENGTH	
10mm = 1 cm	12 in = 1 ft
100cm = 1 m	3ft = 1 yd
1,000m = 1 km	1,760 yd = 1 mile
AREA	
10,000 m ² = 1 ha	9 ft ² = 1 yd ²
100 ha = 1 km ²	4,840 yd ² = 1 acre
	638 acre = 1 miles ²
VOLUME	
1,000 ml = 1 l	(UK) 8 pt = 1 gal
	(US) 8 pt = 1 gal
MASS	
1,000 g = 1 kg	16 oz = 1 lb
1,000kg = 1 tonne	2,240 lb = 1 ton
16 tael = 1 catty	
PRESSURE	
1 N/m ² = 1 Pa	0.068 atm = 1 Psi
10.197 kgf/cm ² = 1 MPa	0.491 Psi = 1 inHg
10 bar = 1 MPa	
POWER	
TEMPERATURE	

TO METRIC (Approx)		TO IMPERIAL (Approx)	
1 in	= 25.400 mm	1 cm	= 0.394 in
1 ft	= 30.480 cm	1 m	= 3.281 ft
1 yd	= 0.914 m	1 m	= 1.094 yd
1 mile	= 1.609 km	1 km	= 0.621 mile
1 ft ²	= 0.093 m ²	1 m ²	= 10.764 ft ²
1 yd ²	= 0.836 m ²	1 m ²	= 1.196 yd ²
1 acre	= 0.405 ha	1 ha	= 2.471 acres
1 miles ²	= 2.590 km ²	1 km ²	= 0.386 miles ²
(UK) 1 pt	= 0.568 l	(UK) 1 l	= 1.760 pt
(US) 1 pt	= 0.473 l	(US) 1 l	= 2.113 pt
(UK) 1 gal	= 4.546 l	(UK) 1 l	= 0.220 gal
(US) 1 gal	= 3.785 l	(US) 1 l	= 0.264 gal
1 oz	= 28.350 g	1 gram	= 0.035 oz
1 lb	= 0.454 kg	1 kg	= 2.205 lb
1 ton	= 1.016 tonne	1 tonne	= 0.984 ton
1 catty	= 0.605 kg		
1 psi	= 6.89 kPa	1 kPa	= 0.145 psi
1 atm	= 101 kPa	1 MPa	= 9.87 atm
1 ton/in ²	= 15.4 Mpa	1 MPa	= 0.647 ton/in ²
1 inHg	= 33.9 mb	1 mb	= 0.0295 inHg
1hp	= 0.746 kw	1 kw	= 1.340 hp
°C	= (°F-32)x5/9	°F	= (°Cx9/5)+32

ARCADIS ASIA SERVICES

BUSINESS ADVISORY

From rapid urbanization and pressure on natural resources, to tighter regulation and market consolidation, we live in an increasingly complex world. We understand your business challenges and have first-hand experience of the assets you own and operate. We partner with you and bring unique insights to support you in getting better results, with more certainty from strategy, optimizing performance, enhancing resiliency or transformation of your asset- Arcadis has helped clients globally deliver success.

COST MANAGEMENT

Be it a high-rise office building, a state-of-the-art rail station or a large scale industrial development, the need to achieve value for money is central to every investment strategy. Our people understand the need to accurately advise on costs and procurement at planning stage, ensuring a development or program is both economically and environmentally viable for many years to come.

DESIGN & ENGINEERING

From tall buildings to the busy airports; from underground tunnels to iconic bridges, engineering feats help to improve the quality of life for us all. Our specialist engineers use their expertise and knowledge to deliver exceptional and sustainable outcomes for clients through working on some of the world's most impressive and well-known buildings and structures.

ENVIRONMENT

We all deserve a clean, safe environment in which to live. Now more than ever, businesses and governments recognize the need to incorporate environmental concerns into their decision making. Arcadis is a global leader in inventive technical and financial approaches, helping some of the world's leading corporates and governments understand their impact on the natural world.

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Organizing the creation of the world's largest, most complex and iconic programs of work in the built and natural environment today is no easy task. Budgets, supply chains, health and safety, time-frames and the large number of parties involved can be daunting. We work alongside our clients to create the right strategy, manage and mitigate risk, and assure the outcomes to meet our clients' business objectives and create exceptional value. As construction programs grow more complex, often with multi-geography delivery and faster paced schedules, the risks are getting.

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From source to tap and then back to nature, the planet's most precious resource should be cherished. Thanks to over a century of experience in the water sector, Arcadis' specialist teams around the globe are uniquely positioned to provide safe and secure water technology that is built to withstand the demands of a rapidly changing world.

DIRECTORY OF OFFICES

VIETNAM

HO CHI MINH CITY
 L12-03, Level 12, Vincom Center B
 72 Le Thanh Ton Street
 Ben Nghe ward,
 District 01, Ho Chi Minh City, Vietnam
 GPS : 10.778068, 106.702063
 Tel : (84 28) 3823 8297
 Fax : (84 28) 3823 8197
 Email : info-vn@arcadis.com
 Contact : Truong Minh Tri

PHILIPPINES

MANILA

ARCADIS PHILIPPINES INC
 12th Floor Quadrants B&C, 8 Rockwell Hidalgo Drive, Rockwell
 Center, Brgy. Poblacion,
 Makati City 1210
 Philippines
 GPS : 14.56357, 121.03680
 Tel : (00 63 2) 7908 2888
 Email : info-ph@arcadis.com
 Contact : Ross McKenzie / Darnell Perez / Brian Parsons /
 Nam Le / Monina Munsayac / Carla Cruz /
 Paul Magbanua

CEBU

12Floor, 2Quad Building, Cardinal Rosales Avenue, corner Sum-
 ilon Road, Cebu Business Park, Cebu City 6000
 Philippines
 GPS : 10.3142574, 123.9053502
 Tel : (00 63 32) 2322 200
 Fax : (00 63 32) 2603 699
 Email : info-ph@arcadis.com
 Contact : Ross McKenzie / Darnell Perez / Brian Parsons /
 Nam Le / Monina Munsayac / Carla Cruz /
 Paul Magbanua / Philip Balingit

THAILAND

BANGKOK

ARCADIS (THAILAND) LTD
6th Floor, Kian Gwan II Building
140/1 Wireless Road, Lumpini, Pratumwan
Bangkok 10330, Thailand
GPS : 13.734969, 100.545448
Tel : (66 2) 123 3400
Fax : (66 2) 253 4977
Email : info-th@arcadis.com
Contact : Seth W.W. Leong

SINGAPORE

ARCADIS SINGAPORE PTE LTD
1 Magazine Road,
#05-01 Central Mall
Singapore 059567
GPS : 1.288526, 103.842085
Tel : (65) 6222 3888
Fax : (65) 6224 7089
Email : ArcadisSG@arcadis.com
Contact : Josephine Lee / Jenny Ku

ARCADIS PTE LTD
1 Magazine Road, #05-01 Central Mall
Singapore 059567
GPS : 1.288526, 103.842085
Tel : (65) 6222 3888
Fax : (65) 6224 7089
Email : ArcadisSG@arcadis.com
Contact : Amos Cheong

DIRECTORY OF OFFICES

CHINA

HONG KONG

ARCADIS HONG KONG LIMITED

17/F, Two Harbour Square,
180 Wai Yip Street, Kwun Tong,
Kowloon, Hong Kong

GPS : 22.310065, 114.221216
Tel : (852) 2911 2000
Fax : (852) 2911 2002
Email : info-hk@arcadis.com
Contact : Francis Au / MO Lai

BAODING

BEIJING ARCADIS CONSTRUCTION CONSULTANTS CO. LTD.

BAODING BRANCH

Suite 808-811,
Tower B, Shanggu Plaza Huibo,
No. 2238 Chaoyang North Street,
Baoding, Hebei Province 071000, China

GPS : 38.918742, 115.467576
Tel : (86 312) 588 1301
Fax : -
Email : info-cn@arcadis.com
Contact : Kenn Ng / Hu Ping

BEIJING

BEIJING ARCADIS CONSTRUCTION CONSULTANTS CO.
LTD.

Suite 1225 - 1240, South Wing
Central Tower, Junefield Plaza,
10 Xuan Wu Men Wai Street
Beijing 100052, China

GPS : 39.896738, 116.375676
Tel : (86 10) 6310 1136
Fax : -
Email : info-cn@arcadis.com
Contact : Kenn Ng / Hu Ping

CHANGSHA

ARCADIS CONSULTANCY (SHANGHAI) CO. LTD. CHANGSHA BRANCH

Room 2307, 2315-2317,
HUAYUAN International Center,
No.36 Section 2, Xiangjiang Middle Road,
Tianxin District,
Changsha, Hunan Province,
410002, China

GPS : 28.195233,112.976893
Tel : (86 731) 8277 2500
Fax : -
Email : info-cn@arcadis.com
Contact : Wong Chin Ying / Chen Yong

CHENGDU

ARCADIS CONSULTANCY (CHENGDU) CO., LTD

Room11-11, Block2,
West Financial International Center,
258 Lower East Street East Street,
Jinjiang District, Chengdu 610011, China

GPS : 30.652994, 104.078937
Tel : (86 28) 8671 8373
Fax : (86 28) 8671 8535
Email : info-cn@arcadis.com
Contact : Marco Foo

CHONGQING

ARCADIS CONSULTANCY (CHENGDU) CO., LTD. CHONGQING BRANCH

Room 3409-3410, International Trade Centre
38 Qing Nian Road, Central District
Chongqing 400010, China

GPS : 29.556331,106.574332
Tel : (86 23) 8655 1333
Fax : (86 23) 8655 1616
Email : info-cn@arcadis.com
Contact : Gary Lin

DIRECTORY OF OFFICES

CHINA

DALIAN

BEIJING ARCADIS CONSTRUCTION CONSULTANTS CO.
LTD. DALIAN BRANCH

Room 3401A, ETON International Tower, 280 Changjiang
Road, Zhongshan District,
Dalian, Liaoning Province
116001, China

GPS : 38.918263, 121.630256
Tel : (86 411) 8800 8018
Fax : -
Email : info-cn@arcadis.com
Contact : Kenn Ng / Pan Jing

FOSHAN

ARCADIS CONSULTANCY (SHENZHEN) CO.,
LTD. FOSHAN BRANCH

RM. 1002-1004, 10/F, Lingnan Tiandi,
Zu Miao Road, Foshan
Guangdong Province
528000, China

GPS : 23.031224, 113.11278
Tel : (86 757) 8203 0028
Fax : (86 757) 8203 0029
Email : info-cn@arcadis.com
Contact : Stanley Wan / Brandon Wan

GUANGZHOU

ARCADIS CONSULTANCY (SHENZHEN) CO.,
LTD. GUANGZHOU BRANCH

3A10-18 Unit, 3A/F
Bank of America Plaza
555 Ren Min Zhong Road
Guangzhou, Guangdong Province, 510 145, China

GPS : 23.123148, 113.253628
Tel : (86 20) 8130 3813
Fax : (86 20) 8130 3812
Email : info-cn@arcadis.com
Contact : Xu Wei Bin / Stanley Wan

HAIKOU

ARCADIS CONSULTANCY (SHENZHEN) CO.,
LTD. HAIKOU BRANCH
Unit C 10/F Times Square
2 Guomao Road, Haikou
Hainan Province
570100, China

GPS : 20.029509,110.326235
Tel : (86 898) 6652 7808
Fax : (86 898) 6652 7809
Email : info-cn@arcadis.com
Contact : Kenneth Lo / Yi Zheng Gang

HANGZHOU

ARCADIS CONSULTANCY (SHANGHAI) CO. LTD. HANG-
ZHOU BRANCH
Room 1306 WinNing International
100 Min Xin Road
Hangzhou, Zhejiang Province
310016, China

GPS : 30.251755,120.218913
Tel : (86 571) 2829 7766
Fax : -
Email : info-cn@arcadis.com
Contact : Alex Zou / Lu Wei

HENGQIN

ARCADIS CONSULTANCY ZHUHAI HENGQIN
CO., LTD.
7/F, 156 Nan Shan Ju Road,
Hengqin, Zhuhai,
Guangdong Province 519031, China

GPS : 22.142774, 113.544438
Tel : (86 756) 868 8986
Fax : (86 756) 868 8969
Email : info-cn@arcadis.com
Contact : Stanley Wan

MACAU

ARCADIS MACAU LIMITED
Avenida da Praia Grande, No. 594
Edifício BCM, 12th Floor,
Macau

GPS : 22.192210,113.541252
Tel : (853) 2833 1710
Fax : (853) 2833 1532
Email : info-mo@arcadis.com
Contact : Winnie Wong

DIRECTORY OF OFFICES

CHINA

NANJING

ARCADIS CONSULTANCY (SHANGHAI) CO. LTD. NANJING
BRANCH

1104 South Tower Jinmao Plaza,
201 Zhong Yang Road, Nanjing
Jiangsu Province 210009, China
GPS : 32.071984, 118.783443
Tel : (86 25) 57911860
Fax : (86 25) 6698 1860
Email : info-cn@arcadis.com
Contact : Wu Tao/Jia Xiao E

QINGDAO

ARCADIS CONSULTANCY (SHANGHAI) CO. LTD. QINGDAO
BRANCH

Room 2701, Office Tower, Shangri-la Centre, No.9 Xianggang
Middle Road, Shinan District,
Qingdao, Shangdong Province
266071, China
GPS : 36.064884, 120.378583
Tel : (86 532) 8280 1818
Fax : -
Email : info-cn@arcadis.com
Contact : Lu Mei Hua / Andy Feng

SHANGHAI

ARCADIS CONSULTANCY (SHANGHAI) CO. LTD.

11th Floor, Building C, The Place,
No. 150 Zunyi Road
Changning District
Shanghai 200051 China
GPS : 31.207363, 121.407984
Tel : (86 21) 6026 1300
Fax : -
Email : info-cn@arcadis.com
Contact : Joe Chan / David Choy

SHENYANG

**BEIJING ARCADIS CONSTRUCTION CONSULTANTS CO.
LTD. SHENYANG BRANCH**

Room 3013-3015, Office Tower 1,
Forum66, 1-1 Qingnian Avenue,
Shenhe District, Shenyang 110063
Liaoning, China

GPS : 41.799603, 123.433787
Tel : (86 24) 3195 8880
Fax : -
Email : info-cn@arcadis.com
Contact : Kenn Ng / Simon Chow

SHENZHEN

ARCADIS CONSULTANCY (SHENZHEN) CO. LTD.

Room 1001, AVIC Centre,
1018 Huafu Road, Shenzhen
Guangdong Province 518031, China

GPS : 22.543241, 114.082051
Tel : (86 755) 3635 0688
Fax : (86 755) 2598 1854
Email : info-cn@arcadis.com
Contact : Kenneth Lo / Ricky Ho

SUZHOU

**ARCADIS CONSULTANCY (SHANGHAI) CO. LTD. SUZHOU
BRANCH**

Room 906 The Summit,
118 Suzhou Avenue West,
Suzhou, Jiangsu Province
215021 China

GPS : 31.315966, 120.669099
Tel : (86 512) 8777 5599
Fax : (86 512) 8777 5600
Email : info-cn@arcadis.com
Contact : David Choy / Zhang Rui

DIRECTORY OF OFFICES

CHINA

TIANJIN

BEIJING ARCADIS CONSTRUCTION CONSULTANTS CO.
LTD. TIANJIN BRANCH
4003, 40/F

Tianjin World Financial Centre Office Tower

2 Dagubei Road,

He Ping District, Tianjin 300020, China

GPS : 39.129619, 117.202758

Tel : (86 22) 2329 8611

Fax : -

Email : info-cn@arcadis.com

Contact : Kenn Ng / Sun Ying

WUHAN

ARCADIS CONSULTANCY (SHANGHAI) CO. LTD. WUHAN
BRANCH

RM.1703, Citic Pacific Mansion,

No.1627 Zhongshan Avenue, Jiangnan District,

Wuhan, Hubei Province 430010, China

GPS : 30.616813, 114.317276

Tel : (86 27) 5920 9299

Fax : (86 27) 5920 9298

Email : info-cn@arcadis.com

Contact : Gary Lin / Guang Rong

XI'AN

ARCADIS CONSULTANCY (SHENZHEN) CO., LTD. XI'AN
BRANCH

Room 1606, CapitaMall Office Building

64 South Second Ring Western

Xi'an, Shaanxi Province

710065, China

GPS : 34.230397, 108.934893

Tel : (86 29) 8866 9711

Fax : (86 29) 8866 9760

Email : info-cn@arcadis.com

Contact : Gary Lin / Wang Zhu Zhu

INDIA

BANGALORE

ARCADIS INDIA PRIVATE LIMITED
135, 4th Floor, RMZ Titanium
Old Airport Road, Kodihalli
Bangalore 560 017, India
GPS : 12.9591527 / 77.6481456
Tel : (00 91 80) 4123 9141
Email : IndiaBD@arcadis.com
Contact : Mainak Hazra

DELHI

ARCADIS INDIA PRIVATE LIMITED
3rd Floor, Tower B,
Logix Techno Park,
Plot No.5, Sector 127,
Noida 201 304, Uttar Pradesh
GPS : 28.5359691 / 77.34585591
Tel : (00 91 120) 436 8400
Fax : (00 91 120) 436 8401
Email : IndiaBD@arcadis.com
Contact : Mainak Hazra

MUMBAI

ARCADIS INDIA PRIVATE LIMITED
#1001, 10th Floor, Vishwaroop Infotech Park
Plot No. 34, 35, 38, Sector 30A,
Vashi, Navi Mumbai – 400 705
Maharashtra
GPS : 19.0644562 / 72.9965259
Tel : (00 91 22) 4125 6060
Fax : (00 91 22) 4125 6050
Email : IndiaBD@arcadis.com
Contact : Mainak Hazra

BANGALORE

ARKIND LS PRIVATE LIMITED*
91Springboard, 5th Floor, Trifecta Adatto,
21 ITPL Main Road, Mahadevapura,
Bengaluru, India 560048
GPS : 12.994070 / 77.699310
Tel : (00 91) 98453 40499
Email : BD@arkindls.com
Contact : Pradeep Menon

**Arcadis affiliate to provide Cost Management Services in India*

DIRECTORY OF OFFICES

MALAYSIA

SELANGOR

JUBM SDN BHD

ARCADIS (MALAYSIA) SDN BHD

ARCADIS PROJEKS SDN BHD

Level 5, Menara TSR

12 Jalan PJU 7/3, Mutiara Damansara

47810 Petaling Jaya

Selangor Darul Ehsan, Malaysia

GPS : 3.1616, 101.6129

Tel : (60 3) 2106 8000

Fax : (60 3) 2106 9090

Email : info-my@arcadis.com

Contact : Justin Teh / Syed Mahadzir Syed Ahmad /
Rozila Abdul Rahman / Yap Sai Hoe / Jeffrey Lim

JOHOR

47, Jalan Setia Tropika 1/30

Taman Setia Tropika

81200 Johor Bahru

Johor Darul Takzim, Malaysia

GPS : 1.5422, 103.7111

Tel : (60 7) 232 8300

Fax : (60 7) 232 8232

Email : info-my@arcadis.com

Contact : Syed Mahadzir Syed Ahmad /
Tan Pei Ling

PENANG

Suite 3A-3, Level 3A

Wisma Great Eastern

No.25, Lebuh Light

10200 Penang, Malaysia

GPS : 5.4201, 100.3408

Tel : (60 4) 264 2071 / 264 2072 / 264 2073

Fax : (60 4) 264 2068

Email : info-my@arcadis.com

Contact : Yap Sai Hoe

SABAH

Lot No. H-06-07 & H-06-08, Level 6, Block H
 Aeropod Commercial Square, Tanjung Aru
 Jalan Aeropod Off Jalan Kepayan
 88100 Kota Kinabalu, Sabah, Malaysia
 GPS : 5.9492, 116.0596
 Tel : (60 88) 215 530 / 215 531
 Fax : (60 88) 215 570
 Email : info-my@arcadis.com
 Contact : Jeffrey Lim / VK Wong

SARAWAK

JUBM SDN BHD
 No.2 (3rdFloor), Jalan Song Thian Cheok
 93100 Kuching
 Sarawak, Malaysia
 GPS : 1.5532, 110.3532
 Tel : (60 82) 232 212
 Fax : (60 82) 232 198
 Email : info-my@arcadis.com
 Contact : Nor Azman Bin Baharum

DIRECTORY OF OFFICES

ARCADIS ASIA HEADQUARTERS

HONG KONG

ARCADIS ASIA LIMITED

ARCADIS ASIA REGIONAL HEADQUARTERS LIMITED

17/F, Two Harbour Square,

180 Wai Yip Street, Kwun Tong,

Kowloon, Hong Kong

GPS : 22.310065, 114.221216

Tel : (852) 2911 2000

Fax : (852) 2911 2002

Email : asiainfo@arcadis.com

Contact : Glenn Lutz, CEO, Asia

ARCADIS HEADQUARTERS

AMSTERDAM

ARCADIS NV

"Symphony"

Gustav Mahlerplein 97-103

1082 MS Amsterdam

P.O. Box 7895

1008 AB Amsterdam

The Netherlands

Tel : (31 20) 201 1011

Fax : (31 20) 201 1002

Email : info@arcadis.com

Website : www.arcadis.com

Contact : Greg Steele, Group Executive - Asia Pacific

ACKNOWLEDGEMENT

Arcadis Vietnam Co., Ltd would like to acknowledge the invaluable support and advice from the following organisations:

- Jones Lang Lasalle

<https://www.joneslanglasalle.com.vn/>



- KPMG Vietnam

<https://home.kpmg/vn/en/home.html>





ARCADIS VIETNAM CO., LTD

HO CHI MINH CITY

L 12-03, Level 12, VINCOM Center B

72 Le Thanh Ton Street

Ben Nghe ward, District 01

Ho Chi Minh City, Vietnam

Tel: (84 28) 3823 8297

Fax: (84 28) 3823 8197

Email: info-vn@arcadis.com



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www.arcadis.com