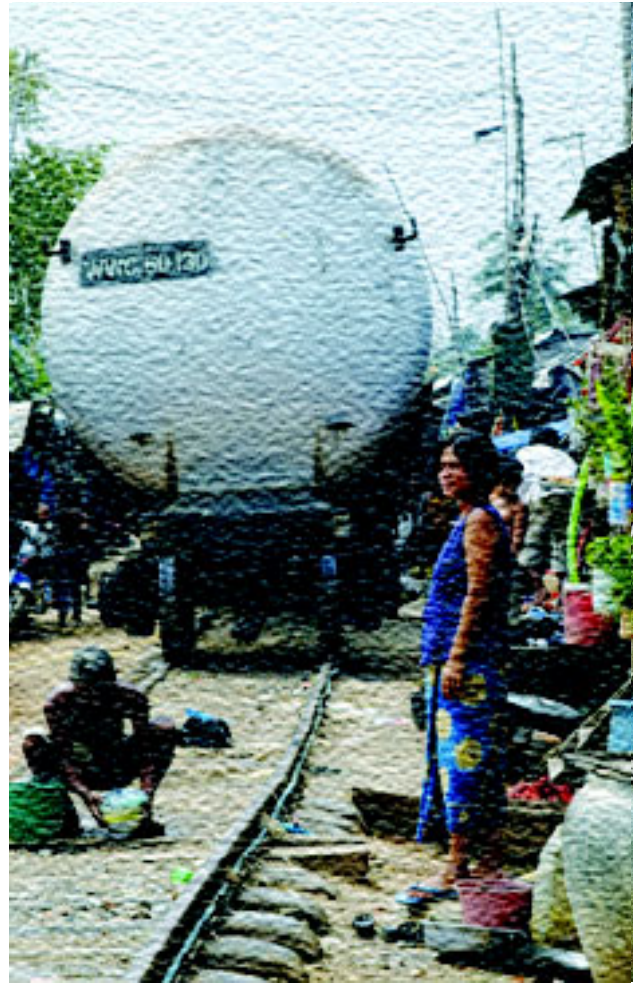


# 2



## Regional Profiles ■

Table 2: NAMES AND LOCATIONS OF UTILITIES

City	Country	Population <sup>1</sup>	Year <sup>2</sup>	Name of Utility
Chengdu	China, People's Rep. of	2,891,100	2001	Chengdu Municipal Water Supply General Company
Colombo	Sri Lanka	642,163	2001	National Water Supply and Drainage Board
Delhi	India	13,782,976	2001	Delhi Jal Board
Dhaka	Bangladesh	10,358,000	2001	Dhaka Water Supply and Sewerage Authority
Ho Chi Minh	Viet Nam, Soc. Rep. of	2,749,941	2001	Ho Chi Minh City Water Supply Company
Hong Kong	Hong Kong, China	6,865,600	2001	Water Supplies Department
Jakarta	Indonesia	9,695,600	2001	Jakarta Water Supply Enterprise (Pam Jaya)
Karachi	Pakistan	10,947,000	2001	Karachi Water and Sewerage Board
Kathmandu	Nepal	1,519,410	2001	Nepal Water Supply Corporation
Kuala Lumpur	Malaysia	1,420,000	2001	Selangor Water Management Corporation, Ltd.
Manila	Philippines	12,660,788	2001	Metropolitan Waterworks and Sewerage System
Osaka	Japan	2,611,528	2001	Osaka Municipal Waterworks Bureau
Phnom Penh	Cambodia	532,130	2001	Phnom Penh Water Supply Authority
Seoul	Korea, Rep. of	10,330,000	2001	Seoul Metropolitan Government (Office of Waterworks)
Shanghai	China, People's Rep. of	10,500,000	2001	Shanghai Water Bureau.
Tashkent	Uzbekistan	2,136,000	2001	Tashkent State Unitary Enterprise (Suvsoz)
Ulaanbaatar	Mongolia	743,054	2001	Ulaanbaatar City Water Supply and Sewerage System Co., Ltd.
Vientiane	Lao PDR	616,221	2001	Vientiane Water Supply Company (Nam Papa Vientiane)

<sup>1</sup> Population refers to the population of the area of responsibility of the utility in the city.

<sup>2</sup> Year refers to the year when population was determined or estimated.

Table 3: SIZE OF UTILITIES

City	Daily Production (m <sup>3</sup> )	City	Number of Utility Connections	City	Number of Staff	City	People Served
Shanghai	4,946,904	Shanghai	2,995,000	Delhi	27,321	Shanghai	10,500,000
Manila	4,084,932	Hong Kong	2,430,000	Shanghai	17,000	Seoul	10,326,560
Seoul	4,030,000	Seoul	2,144,000	Karachi	8,162	Delhi	9,510,253
Delhi	2,860,199	Osaka	1,397,732	Hong Kong	5,673	Manila	7,312,408
Hong Kong	2,575,342	Delhi	1,374,622	Manila	4,177	Hong Kong	6,857,600
Tashkent	2,211,218	Karachi	1,283,200	Jakarta	3,256	Karachi	6,400,000
Karachi	2,193,182	Manila	955,500	Tashkent	3,156	Dhaka	5,304,690
Osaka	1,379,030	Jakarta	610,806	Seoul	2,923	Jakarta	4,954,440
Jakarta	1,320,325	Tashkent	567,398	Osaka	2,366	Osaka	2,611,528
Dhaka	1,140,548	Ho Chi Minh	332,336	Dhaka	2,151	Chengdu	2,400,000
Chengdu	917,562	Dhaka	185,866	Kathmandu	1,865	Ho Chi Minh	2,304,458
Ho Chi Minh	850,737	Kuala Lumpur	173,561	Chengdu	1,691	Tashkent	2,130,000
Kuala Lumpur	627,273	Kathmandu	123,062	Ulaanbaatar	1,174	Kuala Lumpur	1,420,000
Colombo	285,255	Colombo	86,586	Ho Chi Minh	1,147	Kathmandu	1,256,552
Ulaanbaatar	159,701	Phnom Penh	74,945	Colombo	656	Colombo	594,492
Kathmandu	140,897	Chengdu	50,077	Vientiane	440	Phnom Penh	448,245
Vientiane	105,748	Vientiane	42,052	Phnom Penh	402	Vientiane	387,098
Phnom Penh	103,462	Ulaanbaatar	1,426	Kuala Lumpur	250	Ulaanbaatar	366,860

Figure 1: WORKING RATIO

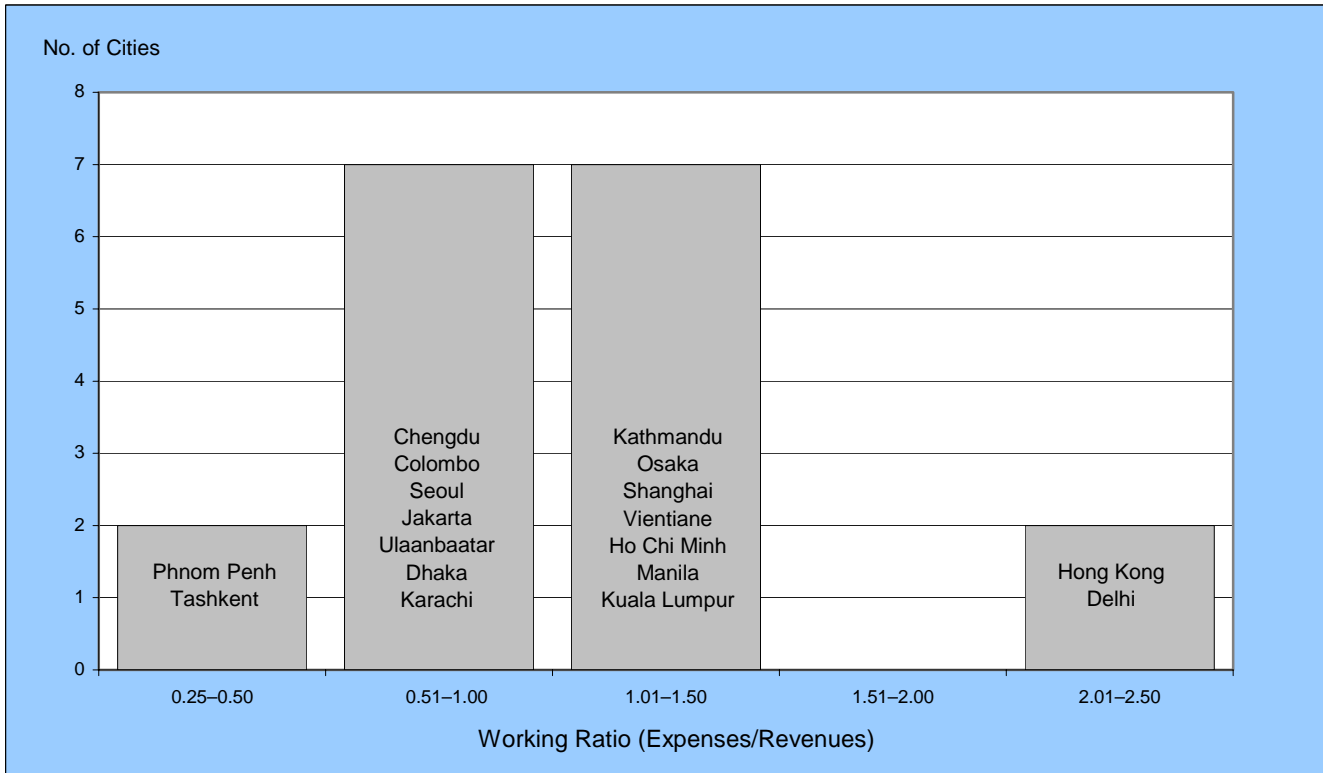


Figure 2: CAPITAL EXPENDITURE PER CONNECTION

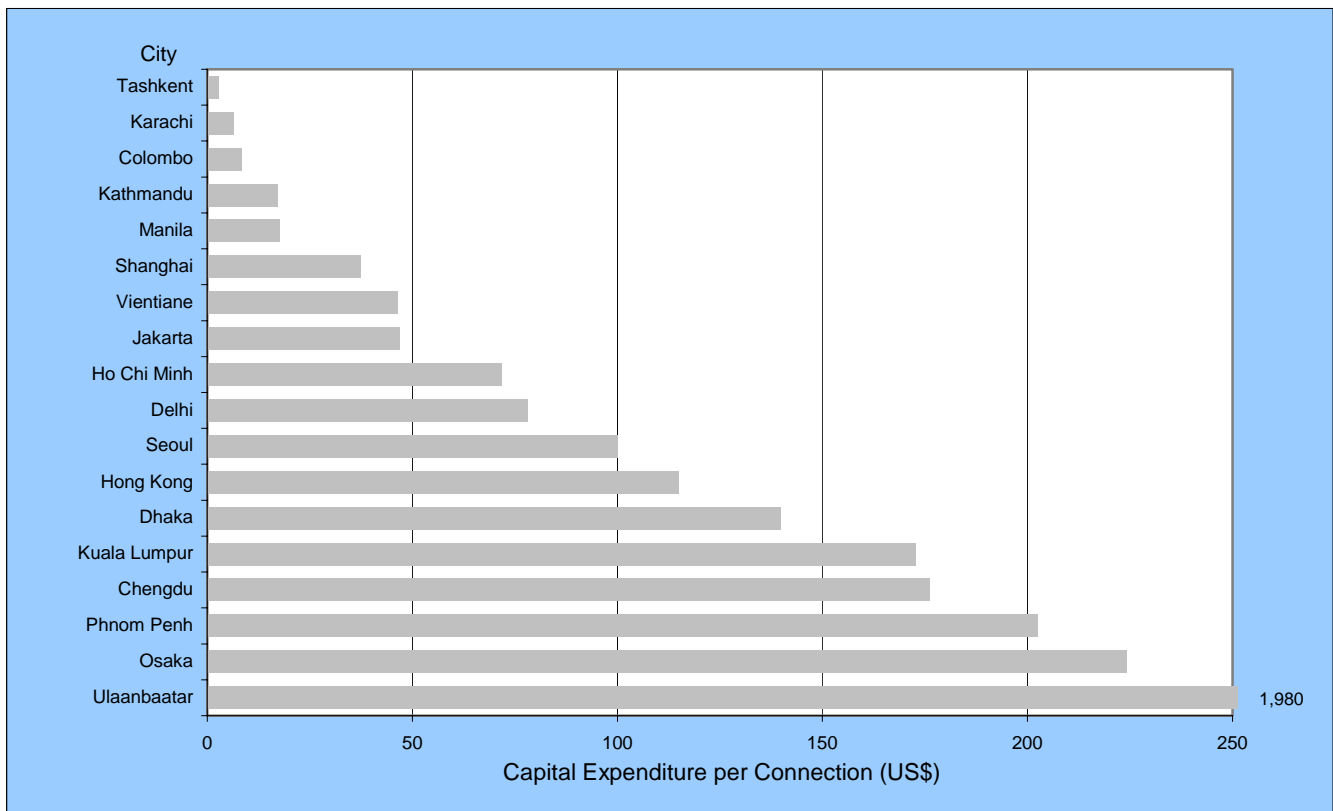


Figure 3: PRODUCTION VOLUME

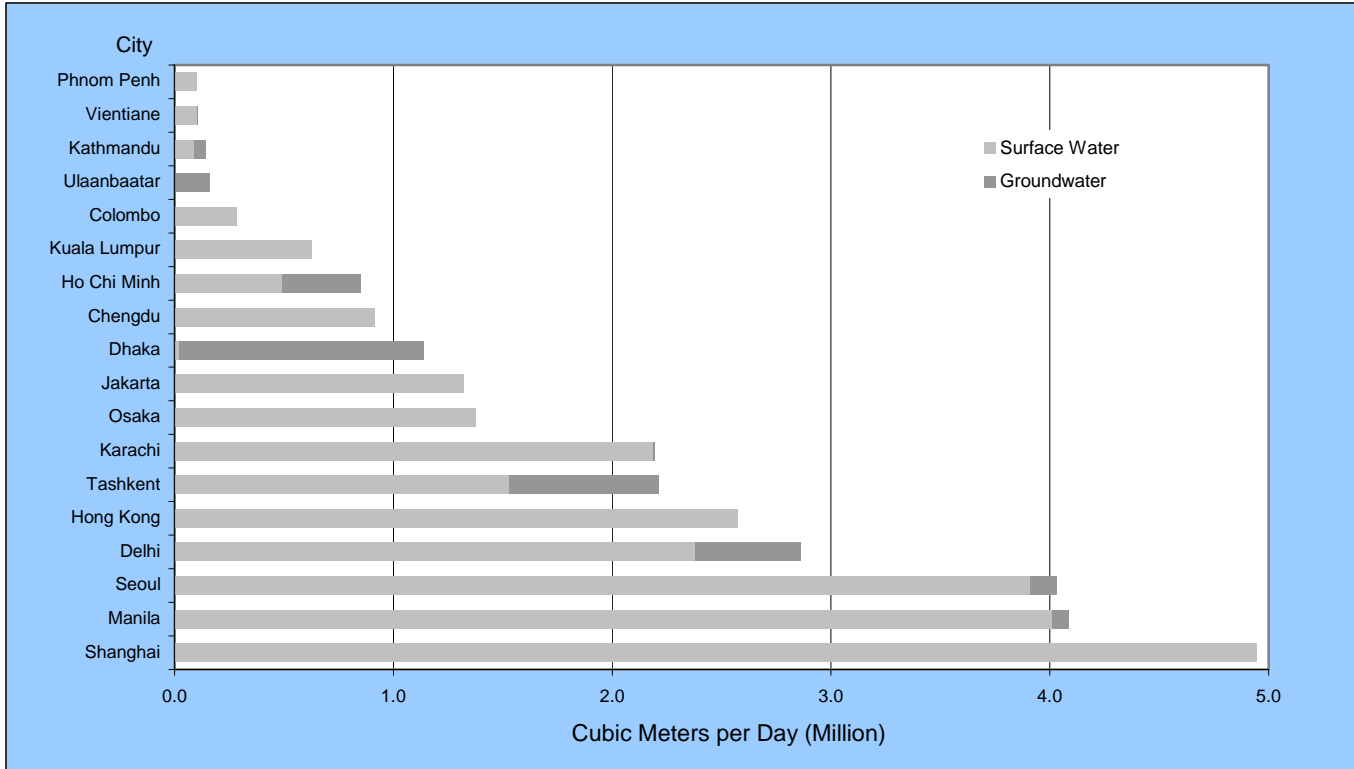


Figure 4: CONSUMPTION VOLUME

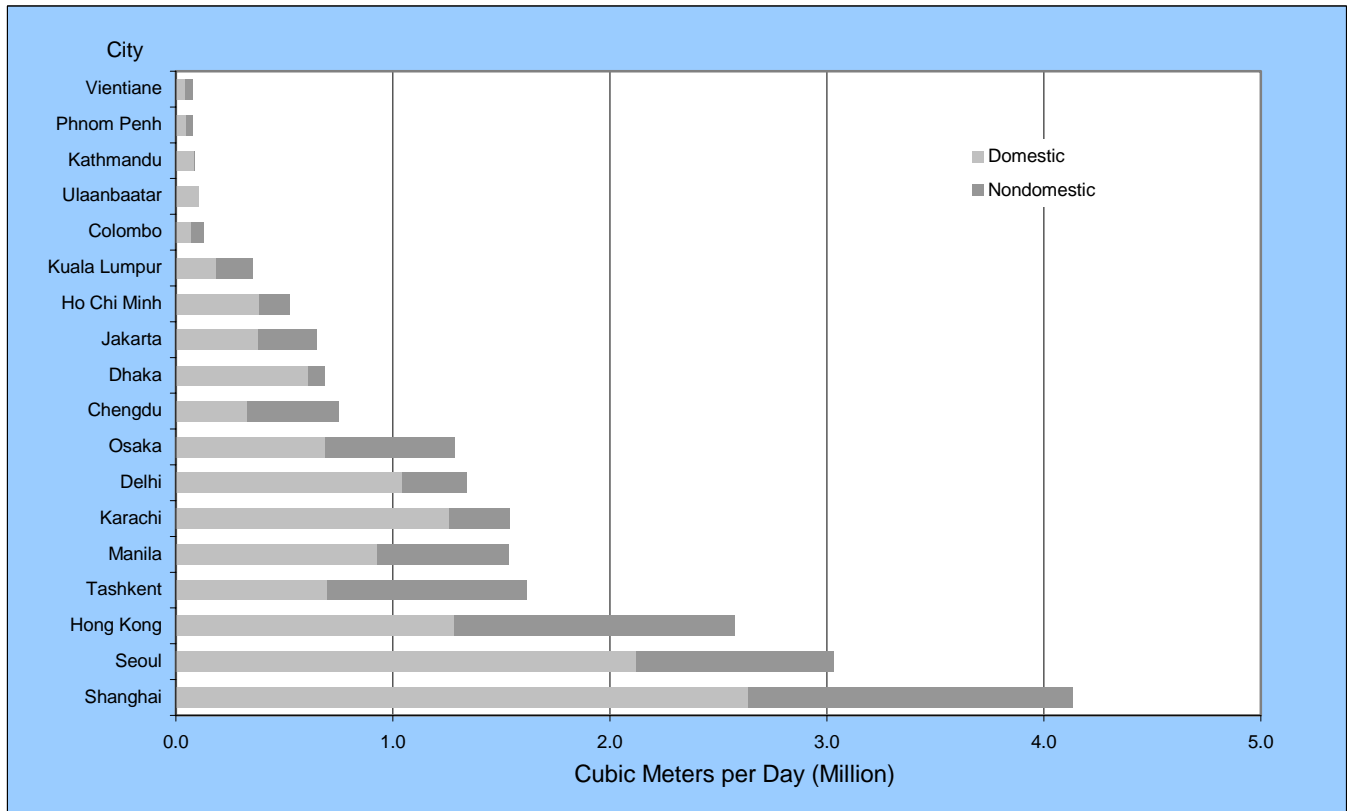


Figure 5: ANNUAL OPERATION AND MAINTENANCE COSTS

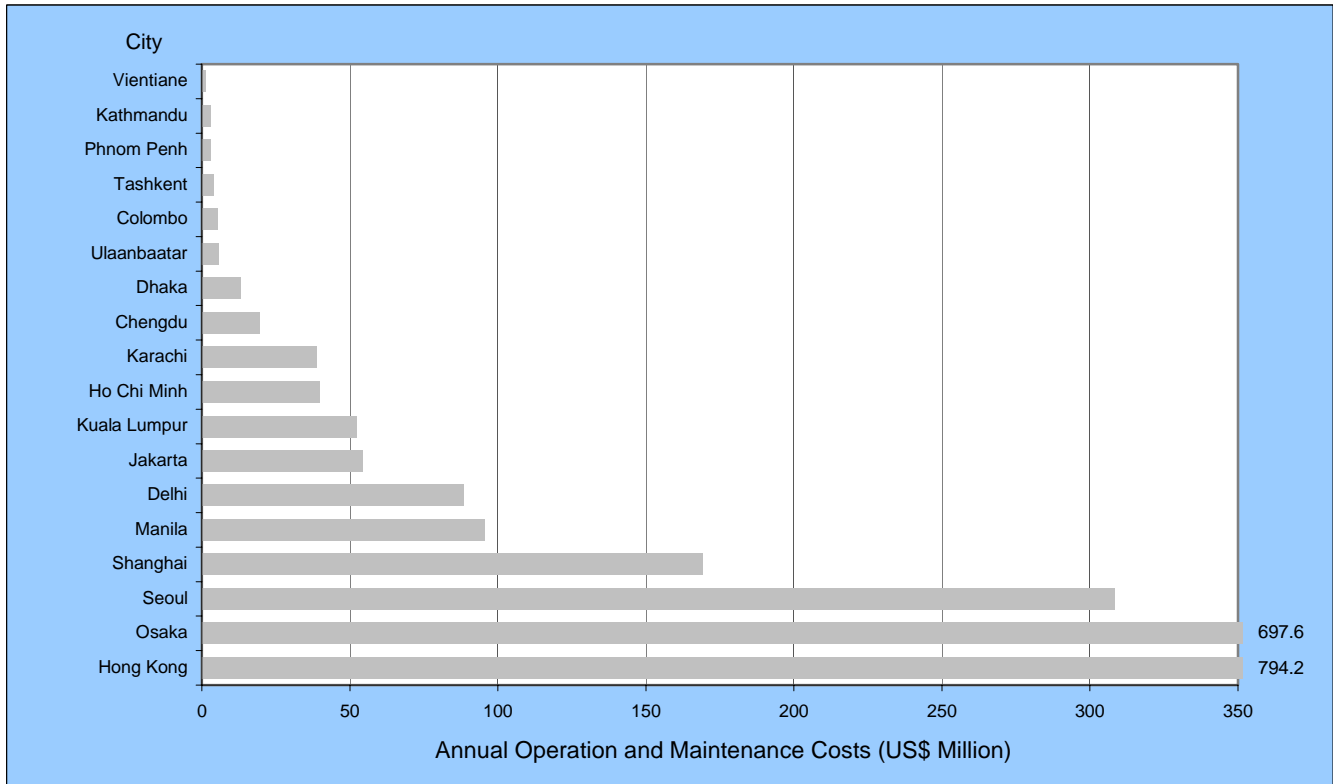


Figure 6: CONSUMER METERING

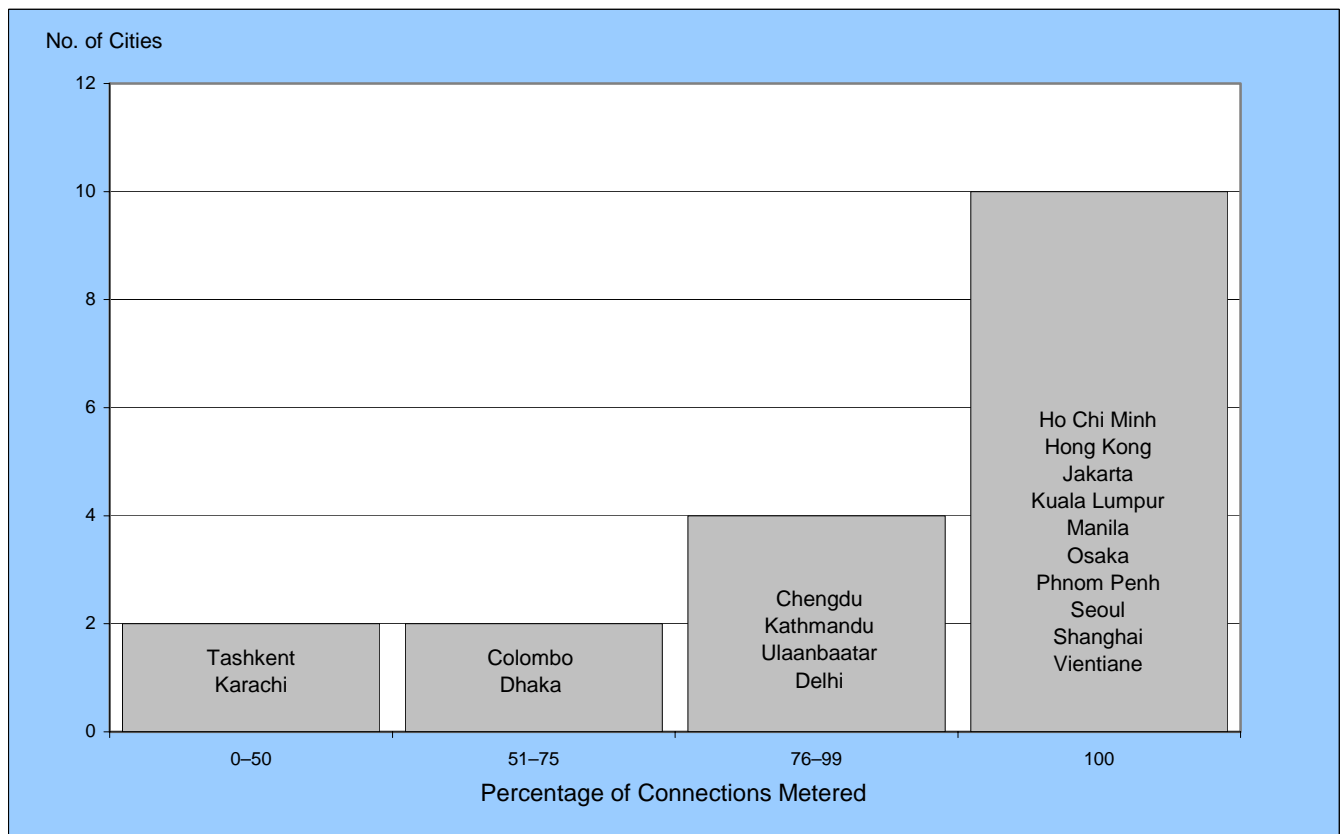


Figure 7: WATER SUPPLY COVERAGE

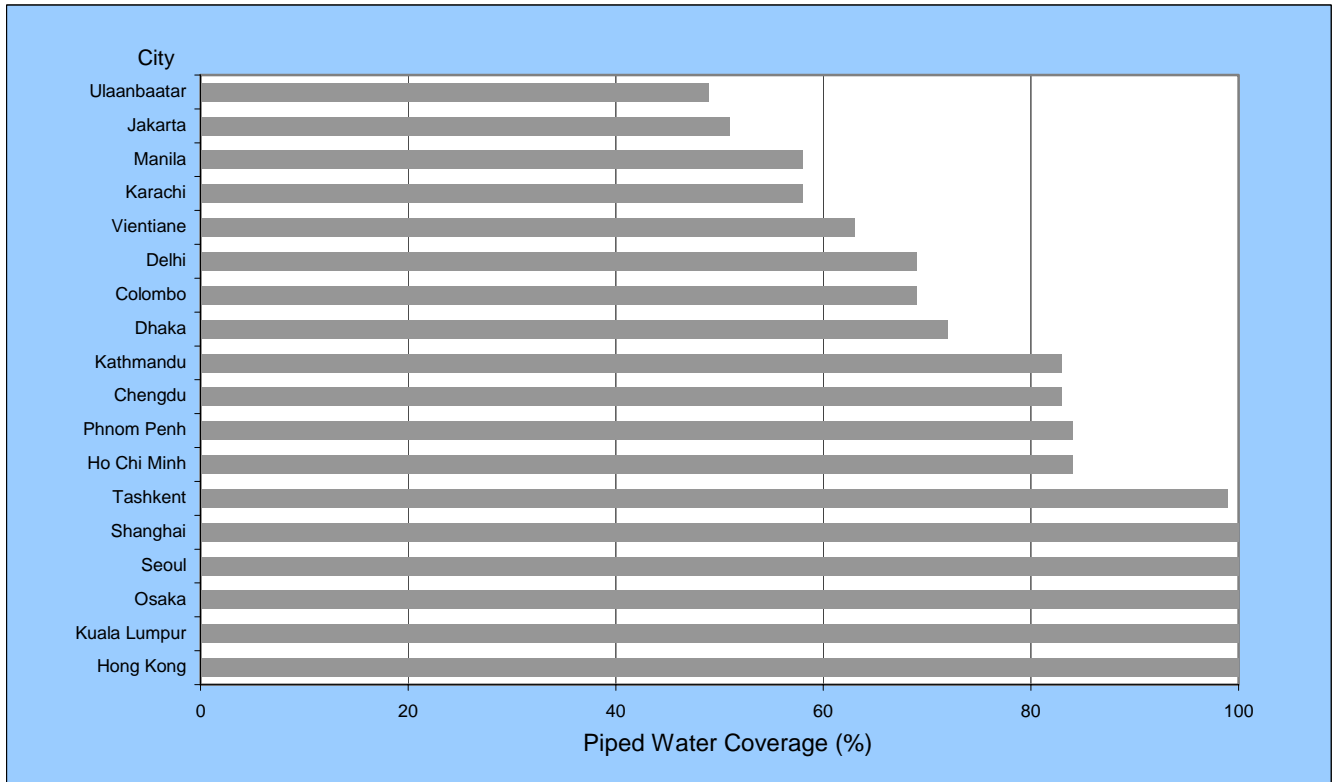


Figure 8: SEWERAGE ACCESS

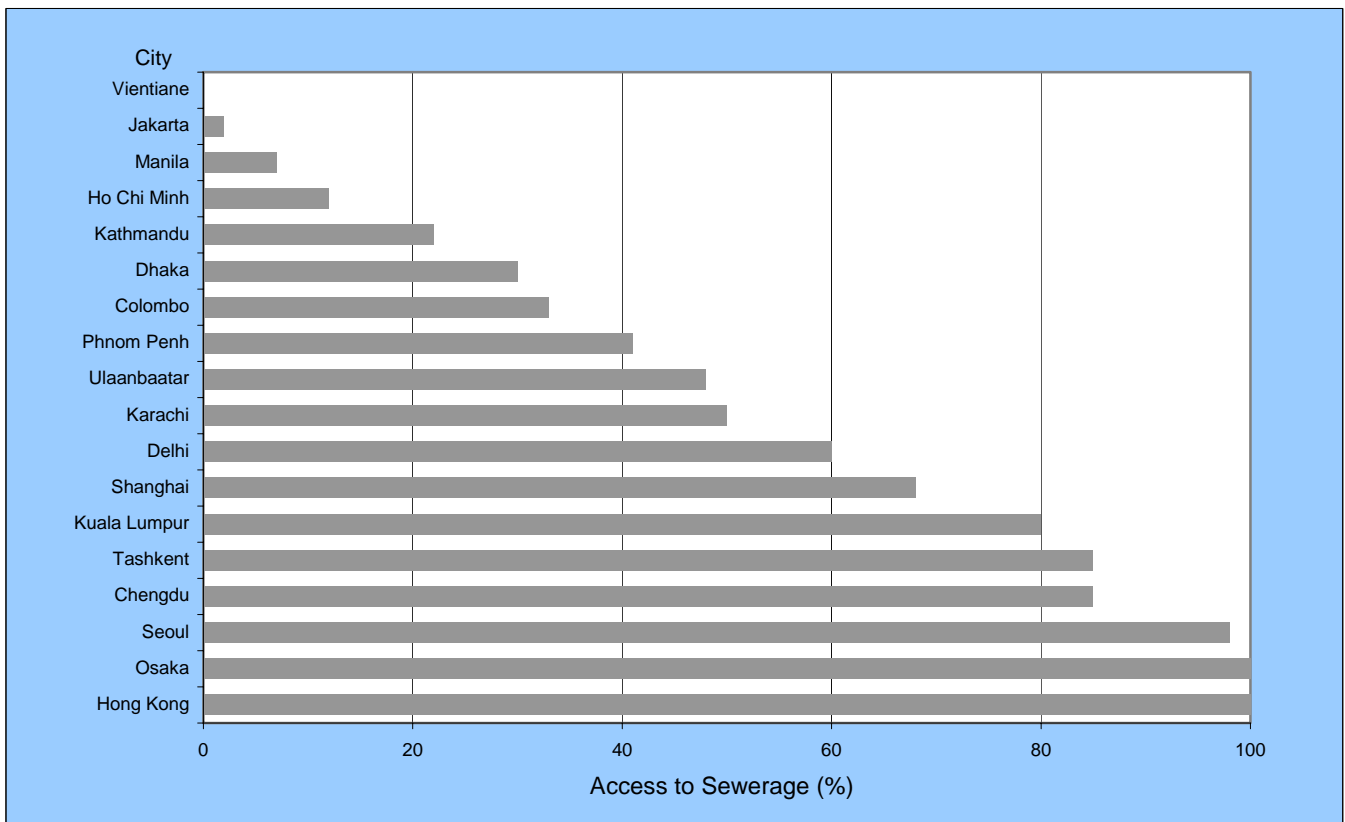


Figure 9: CITY CONNECTIONS

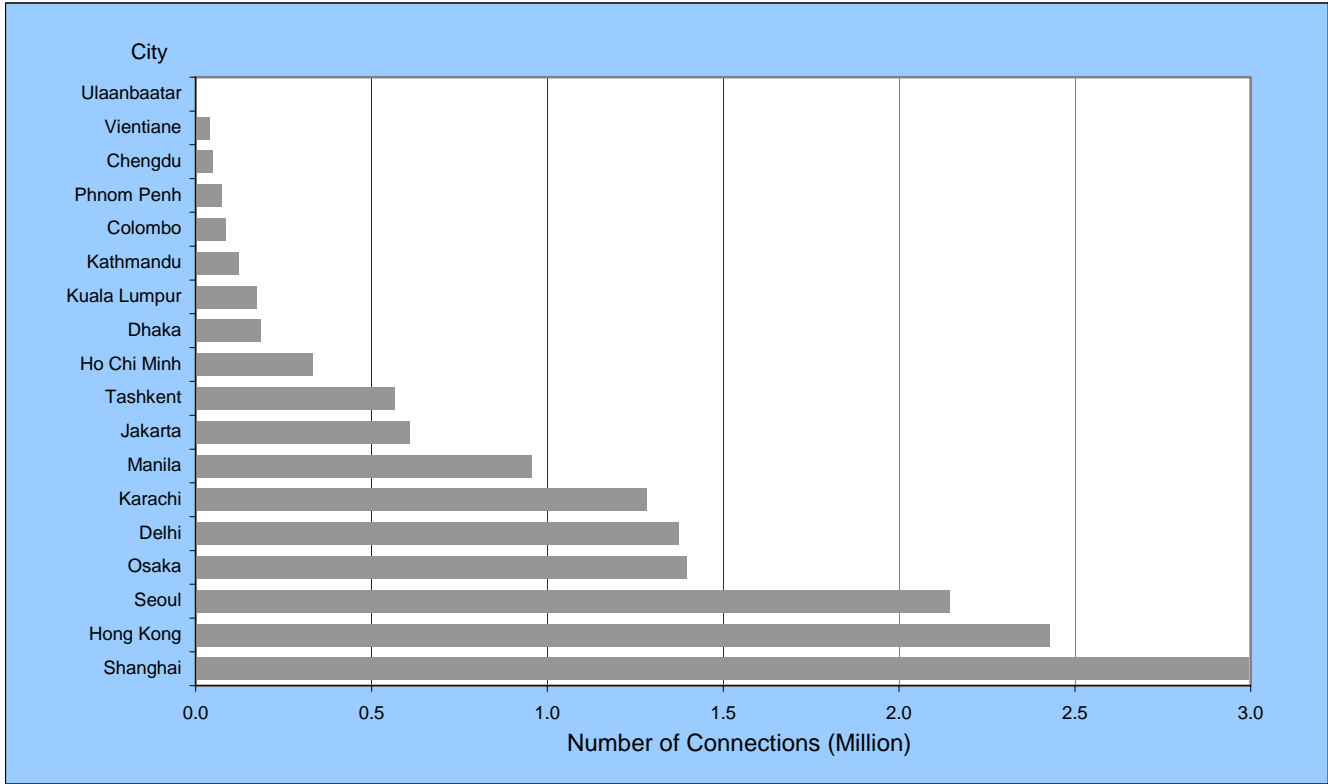


Figure 10: PERSONS PER DOMESTIC CONNECTION

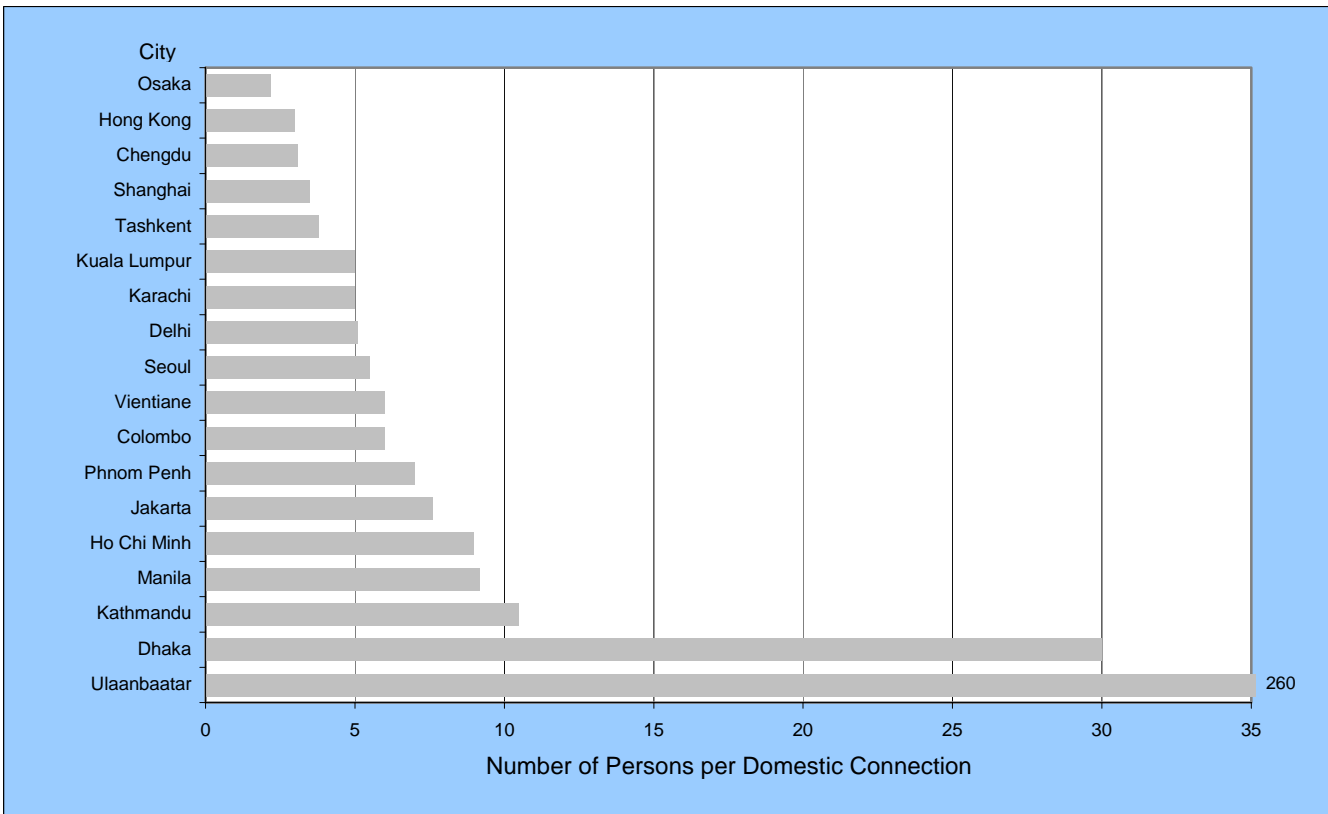


Figure 11: WATER AVAILABILITY

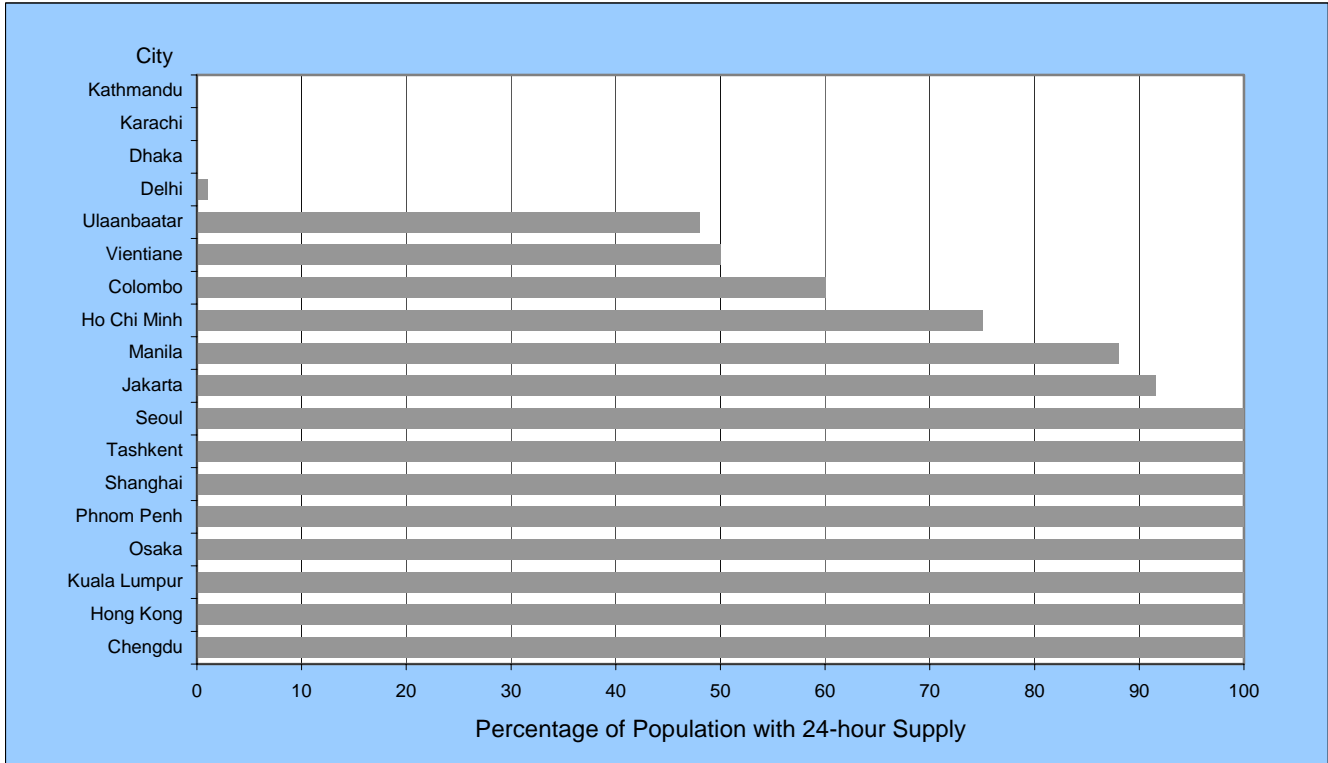


Figure 12: WATER USE

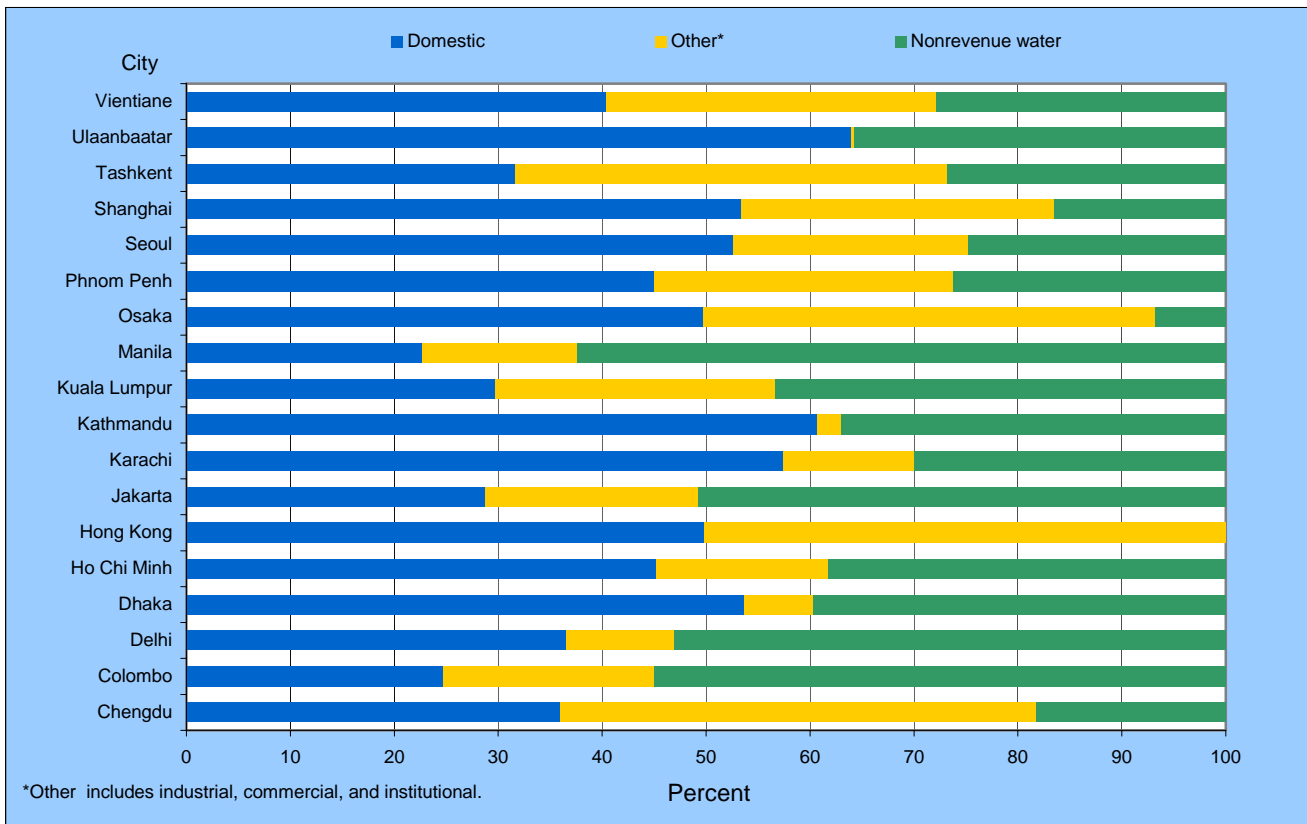


Figure 13: PER CAPITA CONSUMPTION

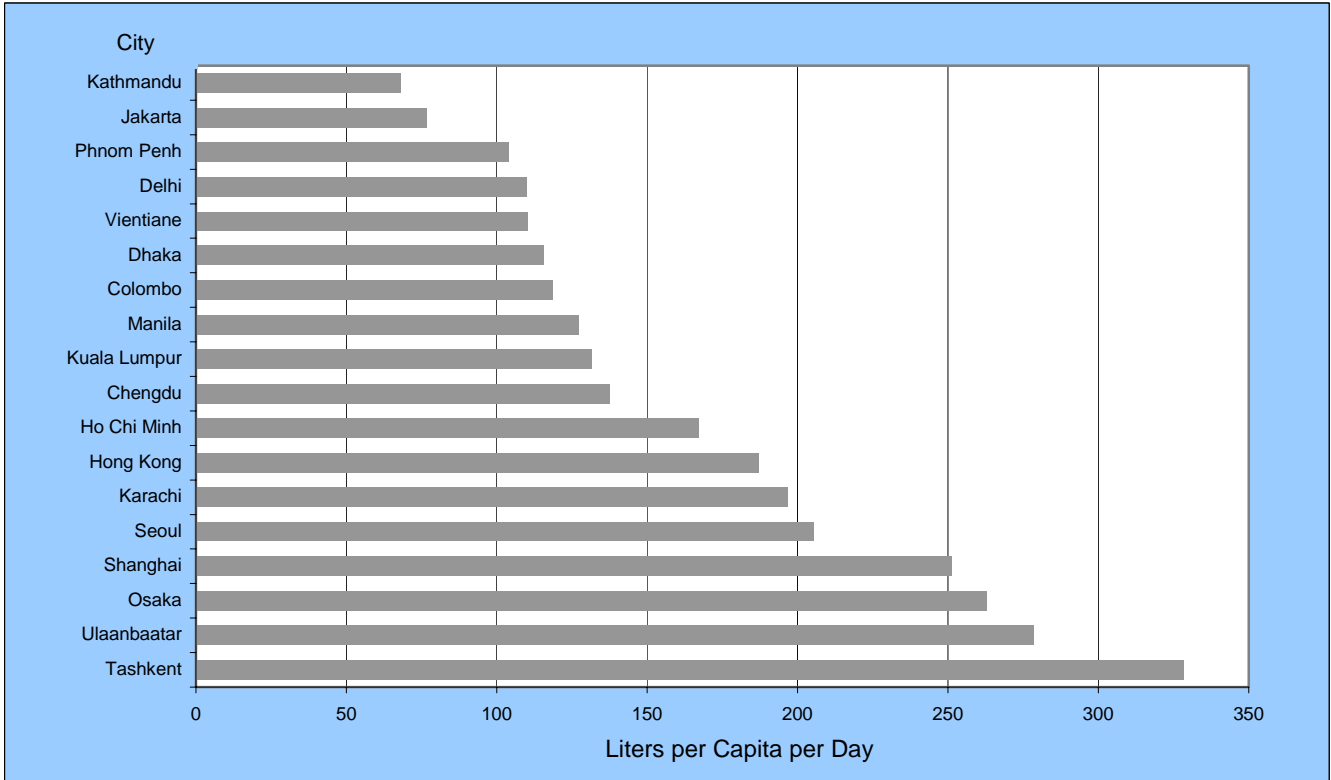


Figure 14: BOTTLED WATER USAGE

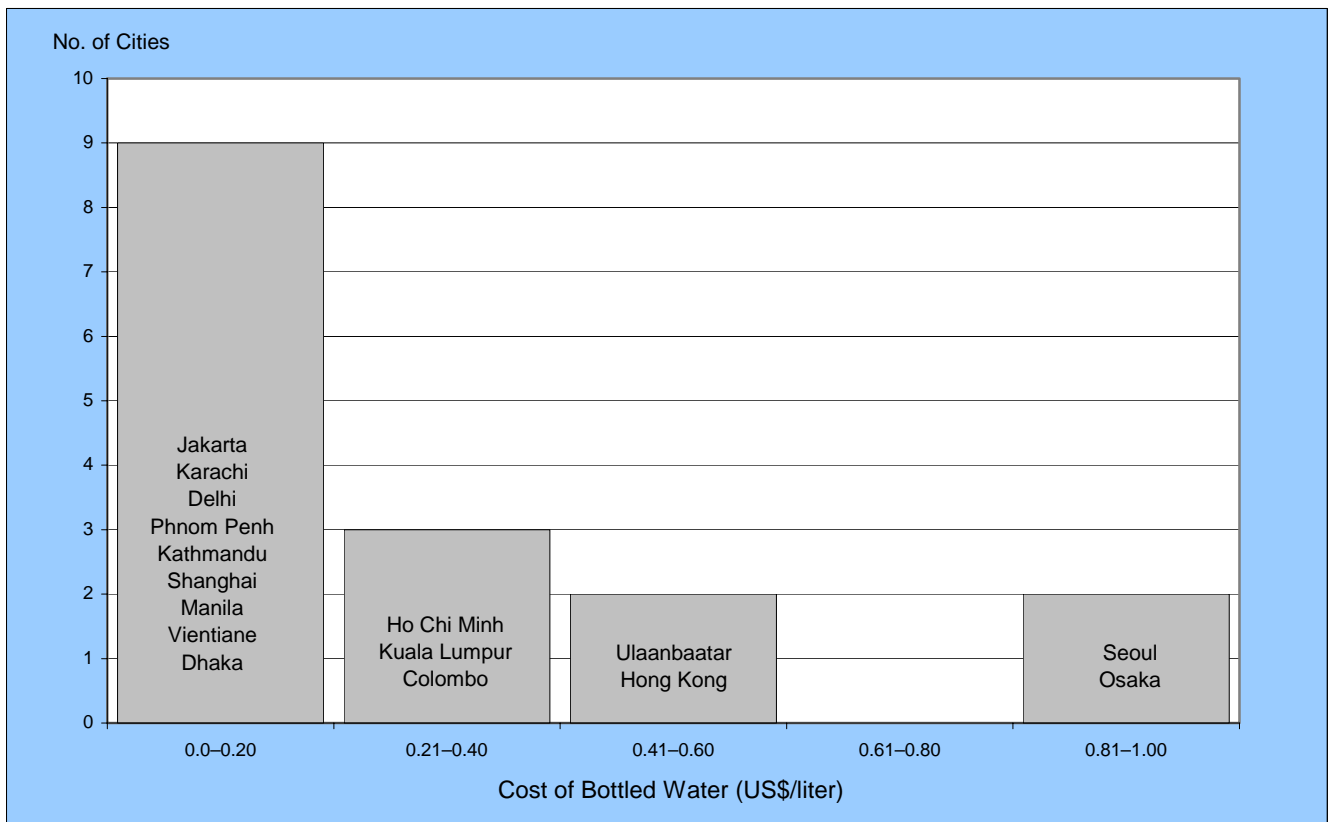


Figure 15: NONREVENUE WATER

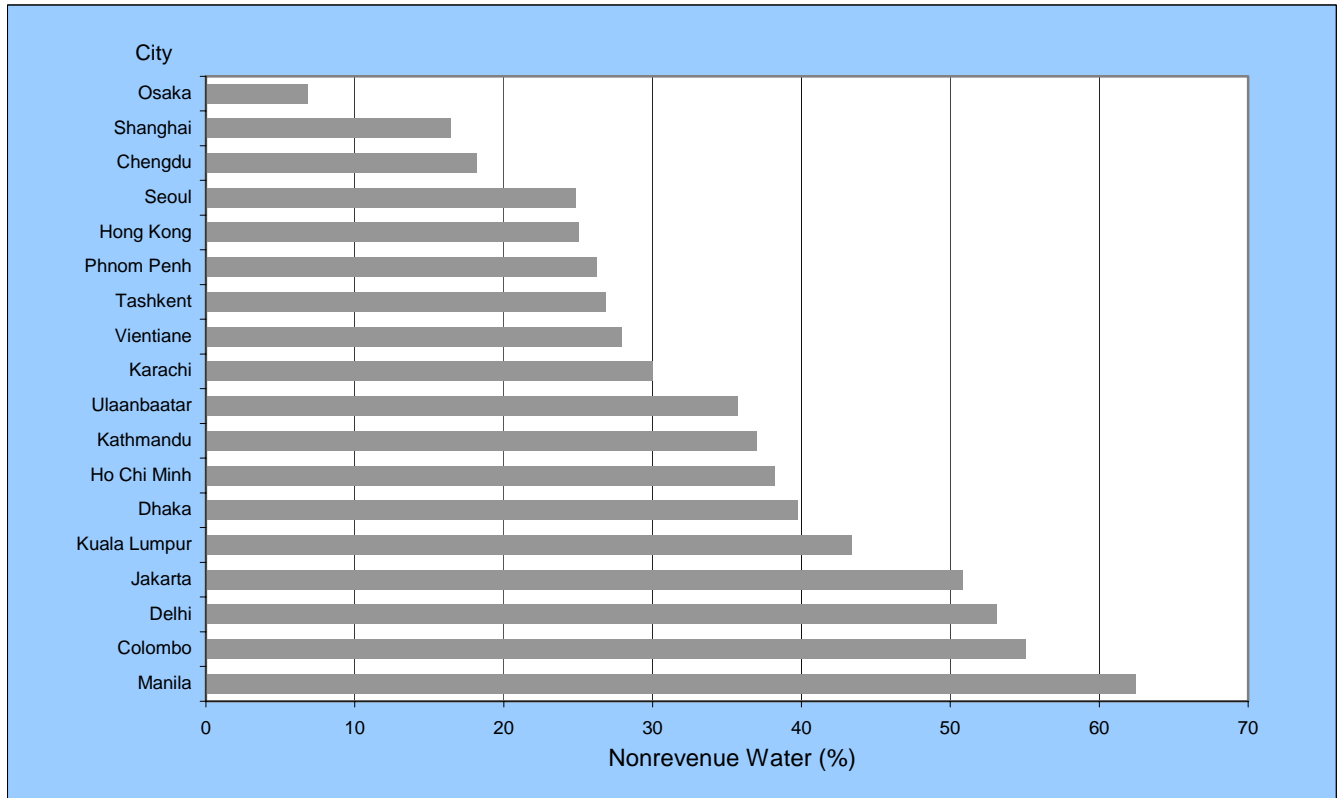


Figure 16: UNIT PRODUCTION COST

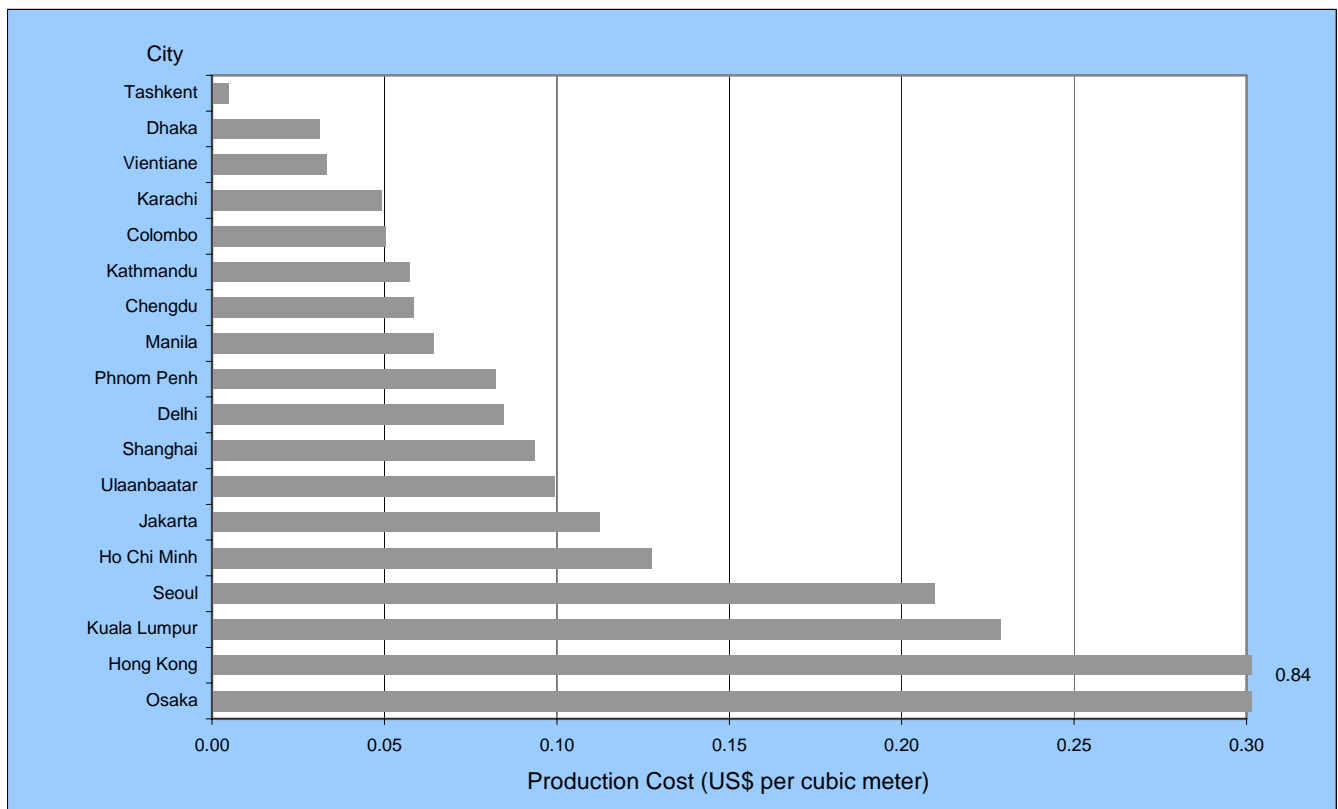


Figure 17: AVERAGE TARIFF

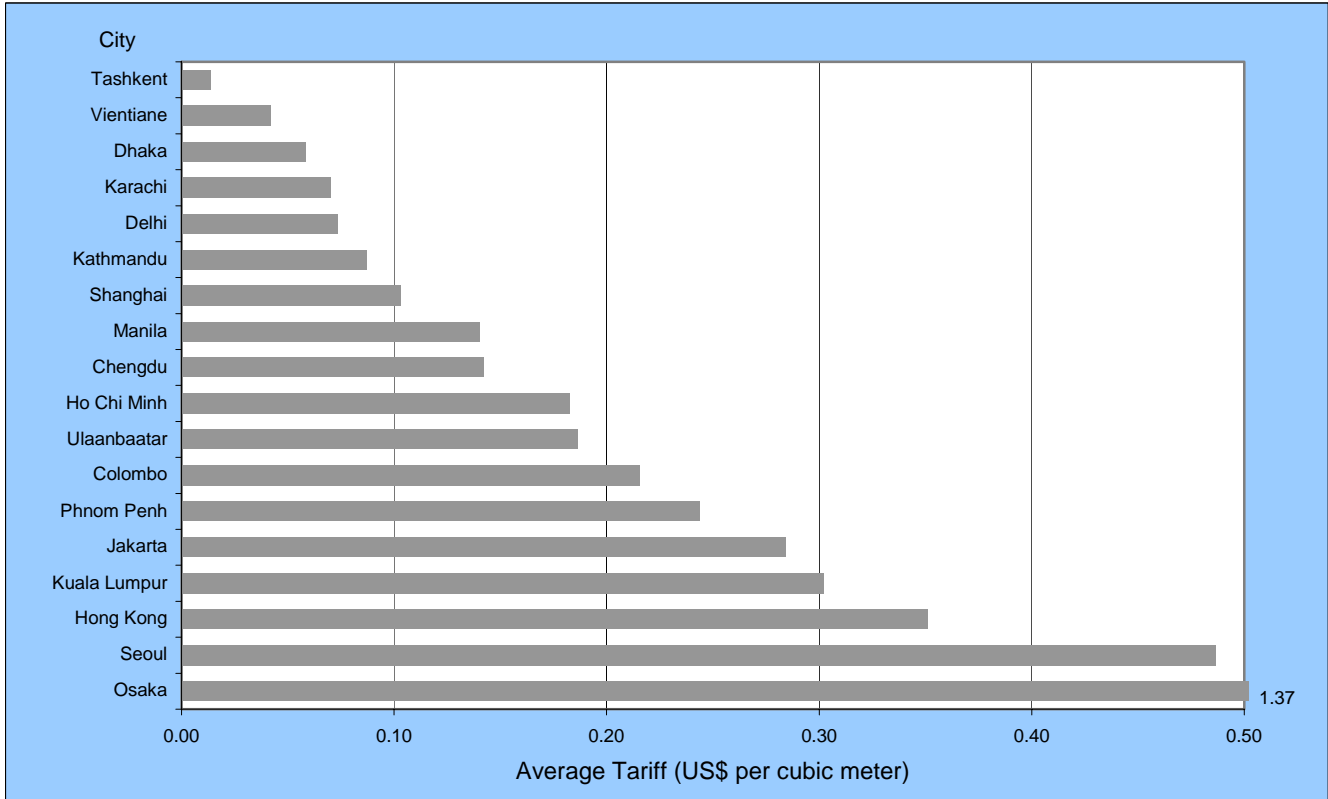


Figure 18: STAFF PER 1,000 CONNECTIONS

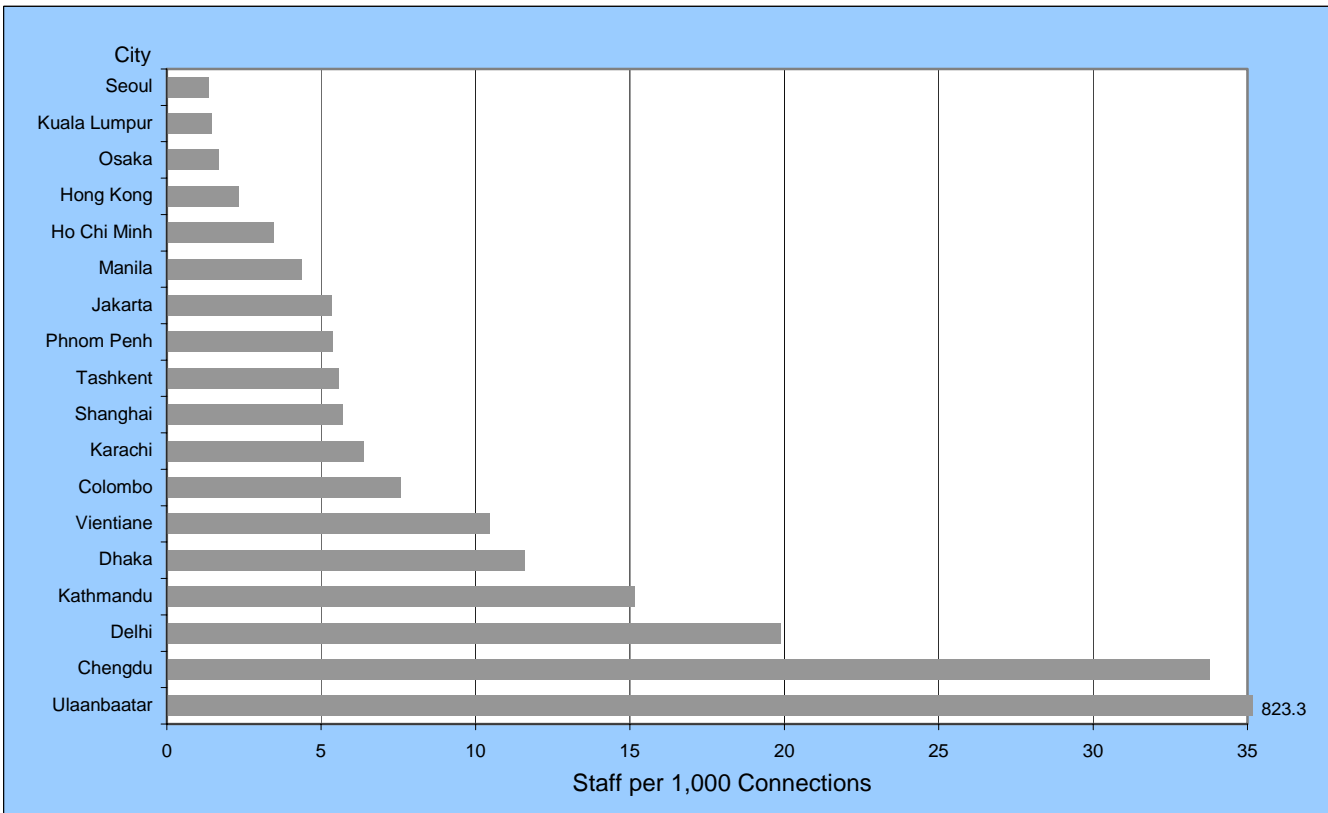


Figure 19a: DOMESTIC TARIFF STRUCTURES – GROUP 1

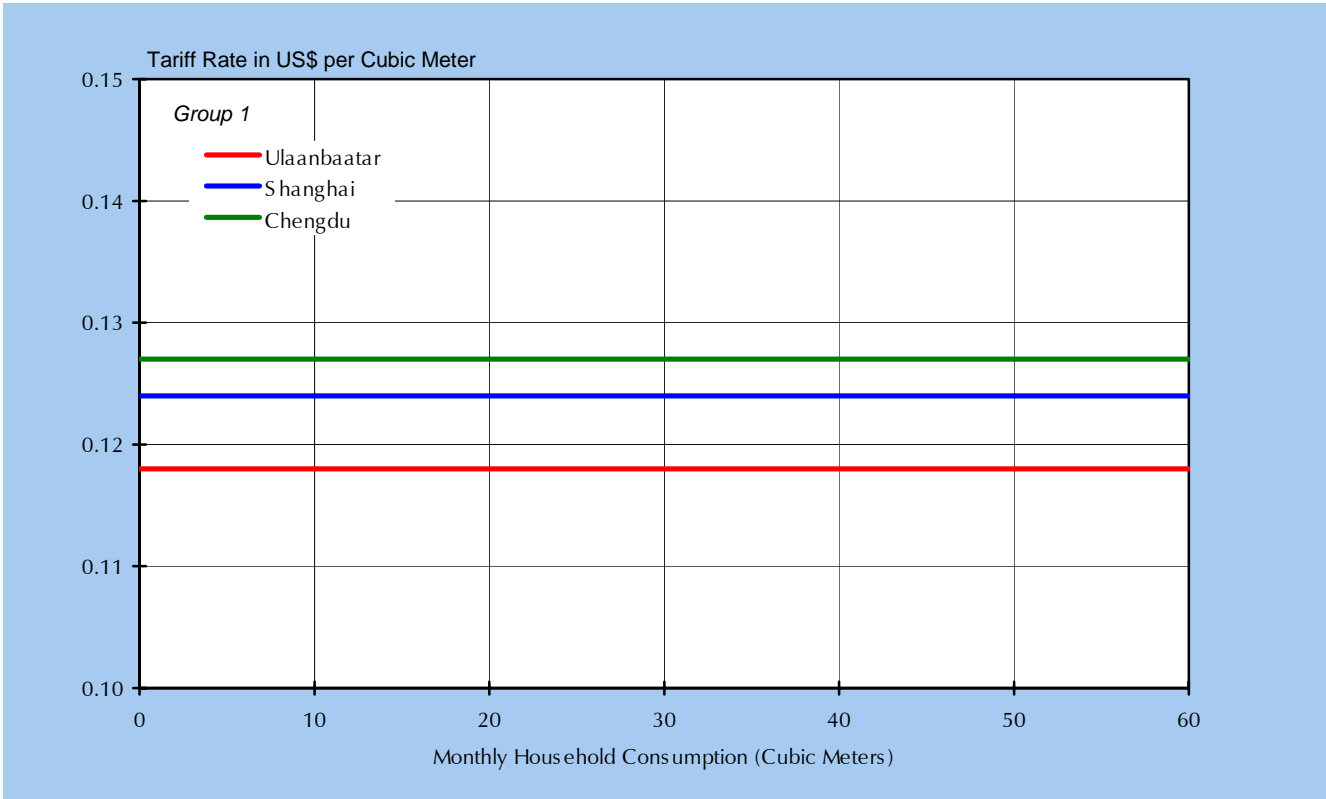


Figure 19b: DOMESTIC TARIFF STRUCTURES – GROUP 2

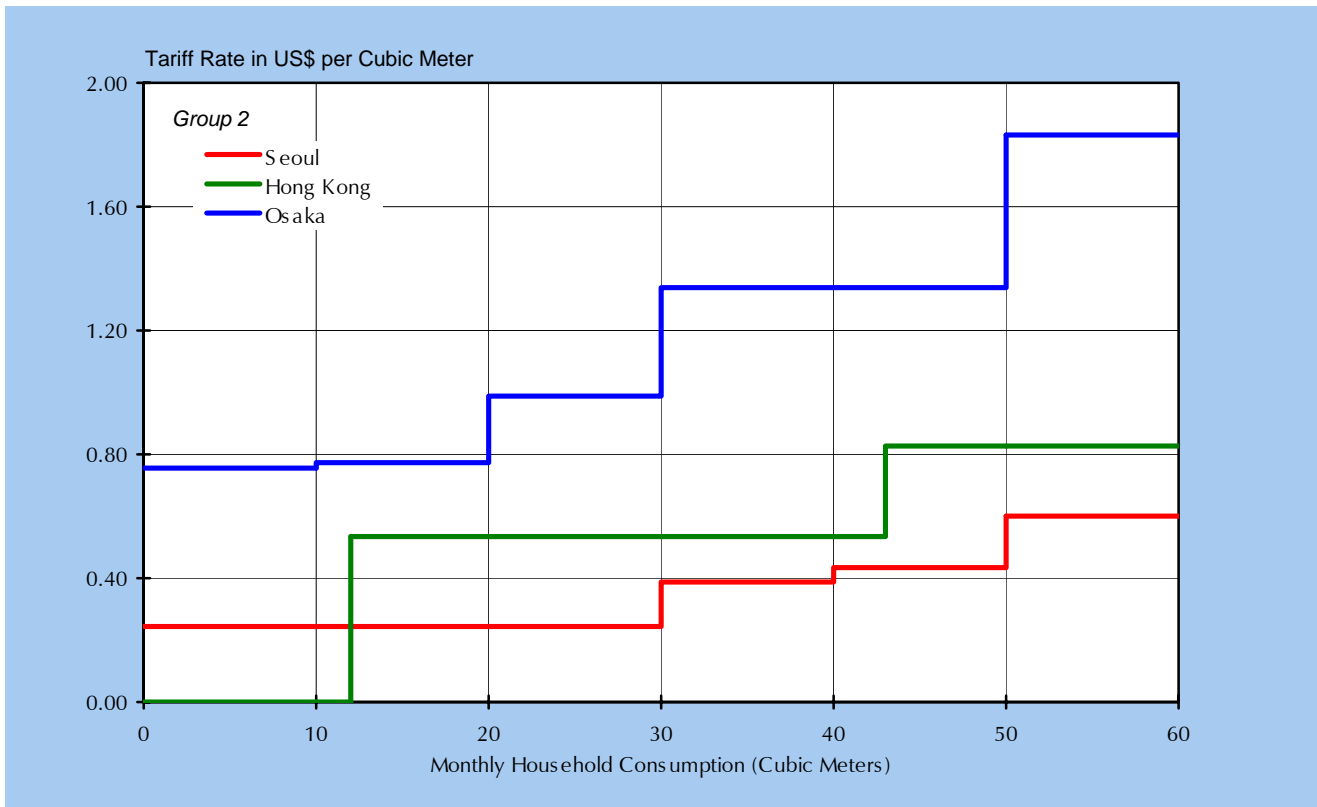


Figure 19c: DOMESTIC TARIFF STRUCTURES – GROUP 3

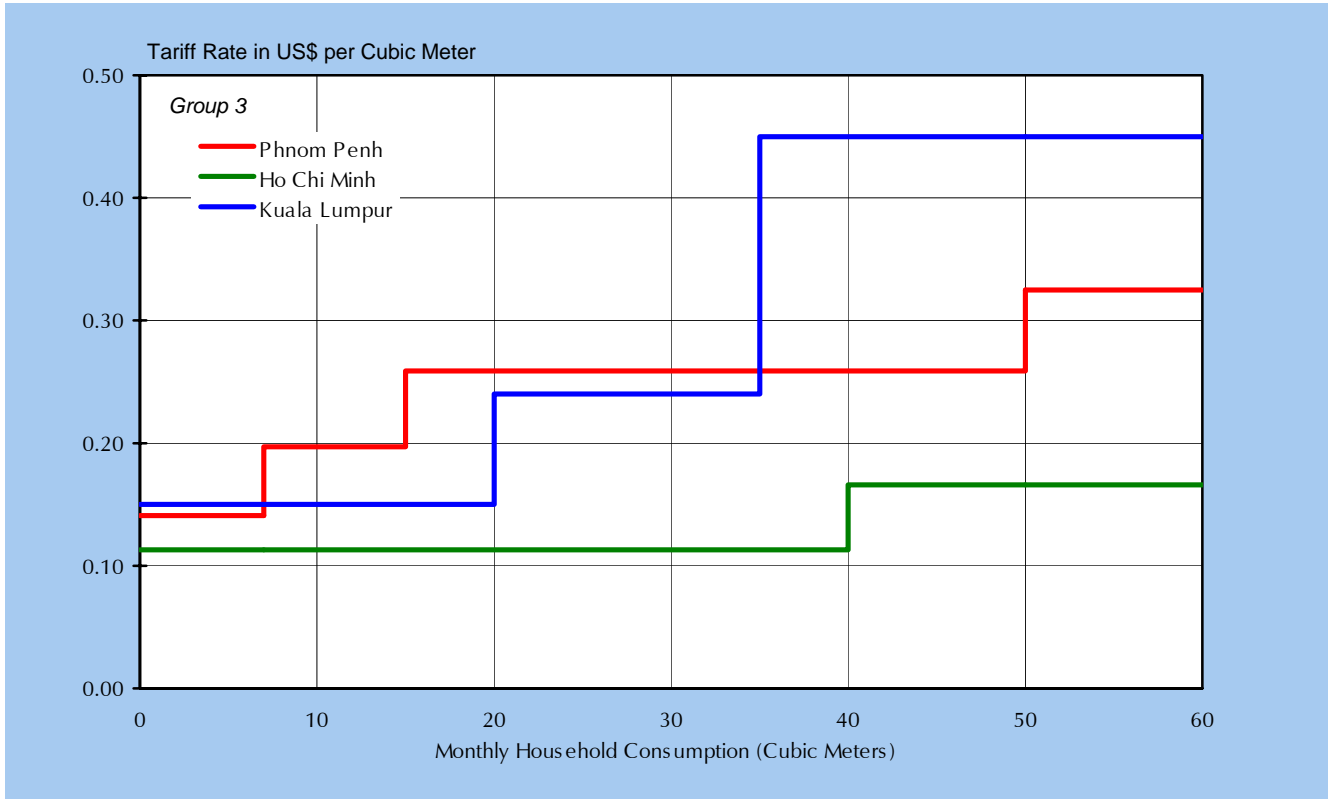


Figure 19d: DOMESTIC TARIFF STRUCTURES – GROUP 4

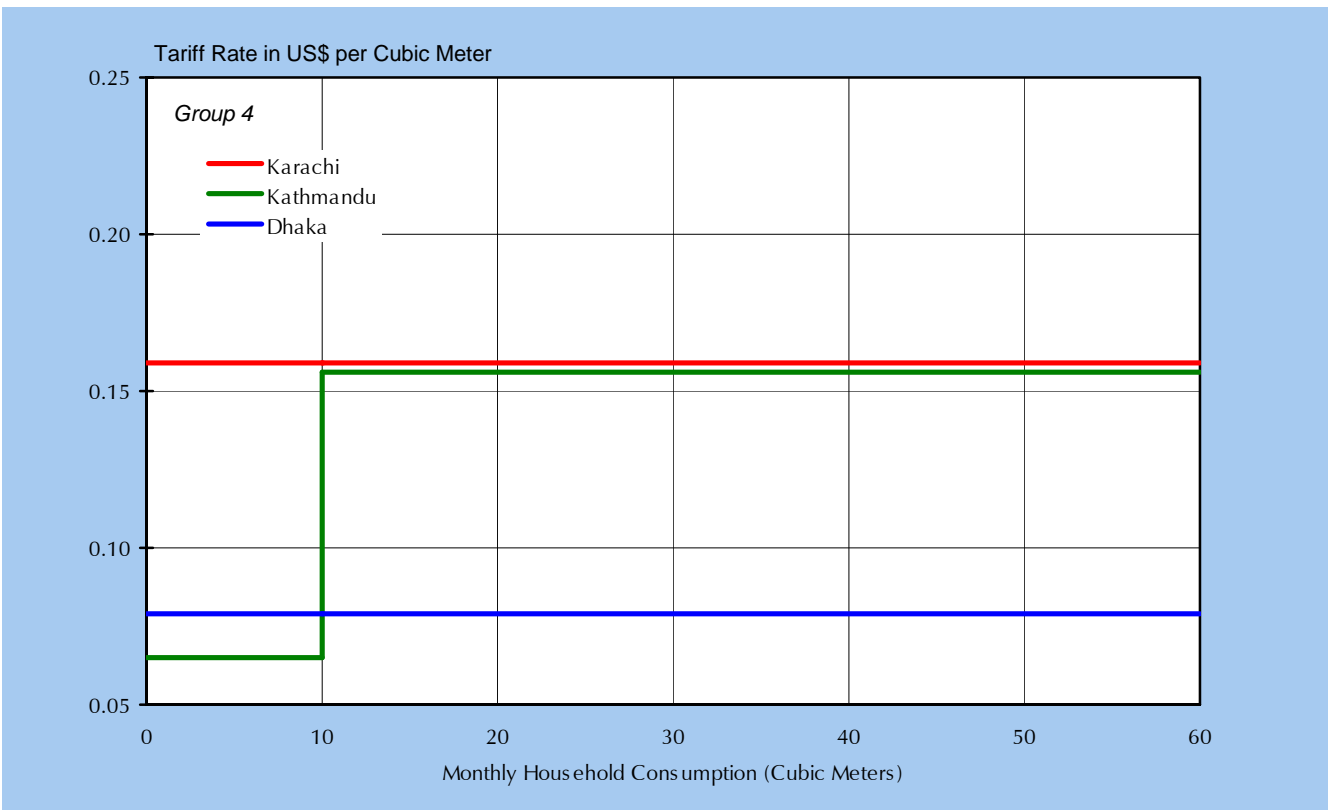


Figure 19e: DOMESTIC TARIFF STRUCTURES – GROUP 5

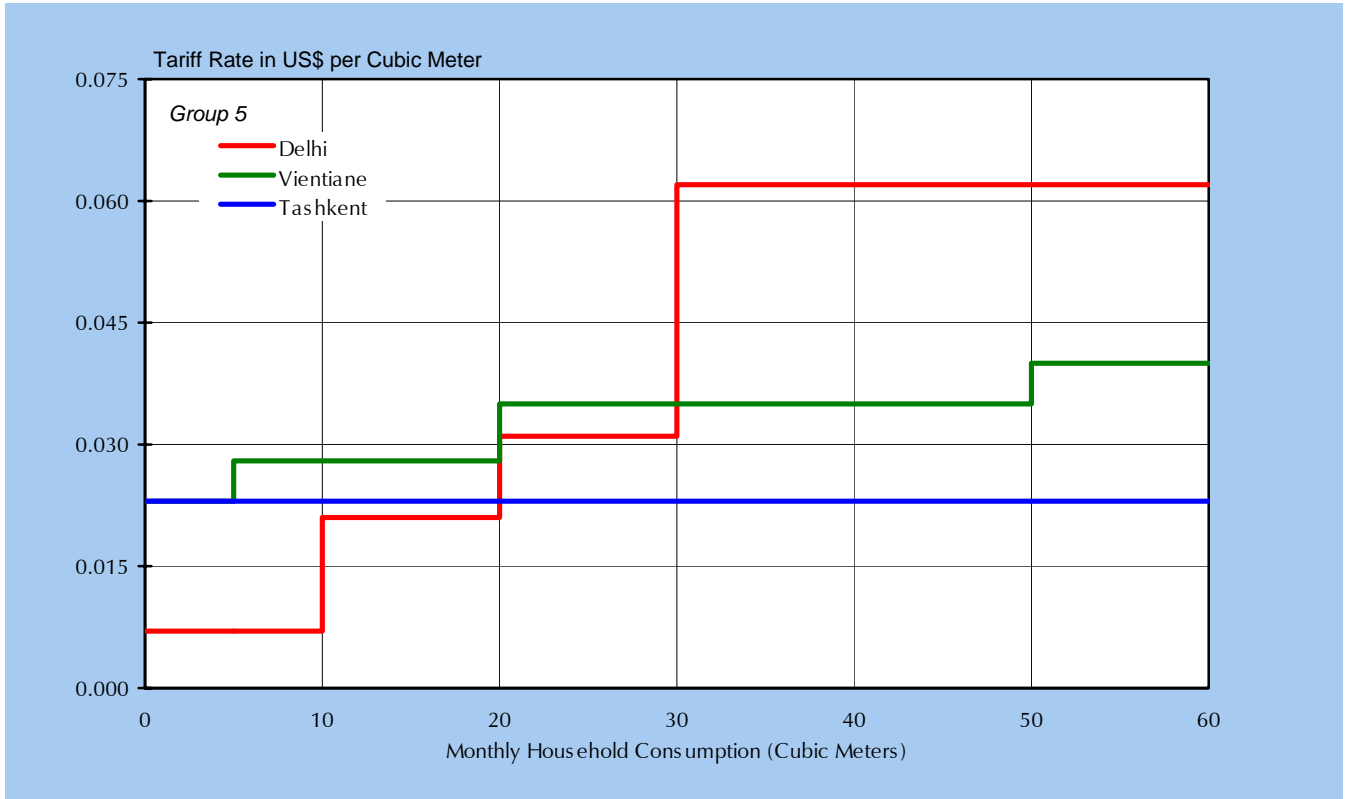


Figure 19f: DOMESTIC TARIFF STRUCTURES – GROUP 6

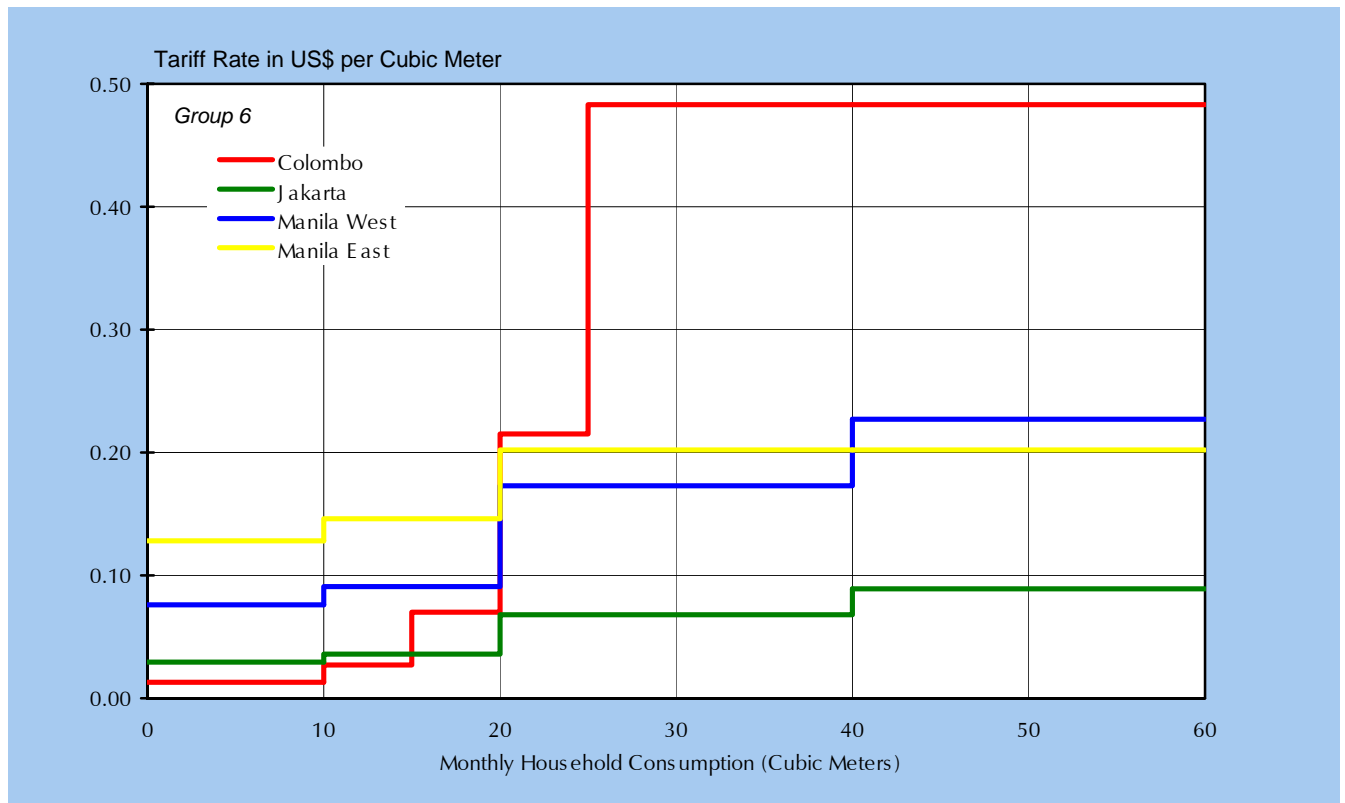


Figure 20: RATIO OF INDUSTRIAL/DOMESTIC TARIFF FOR 30 CUBIC METERS PER MONTH

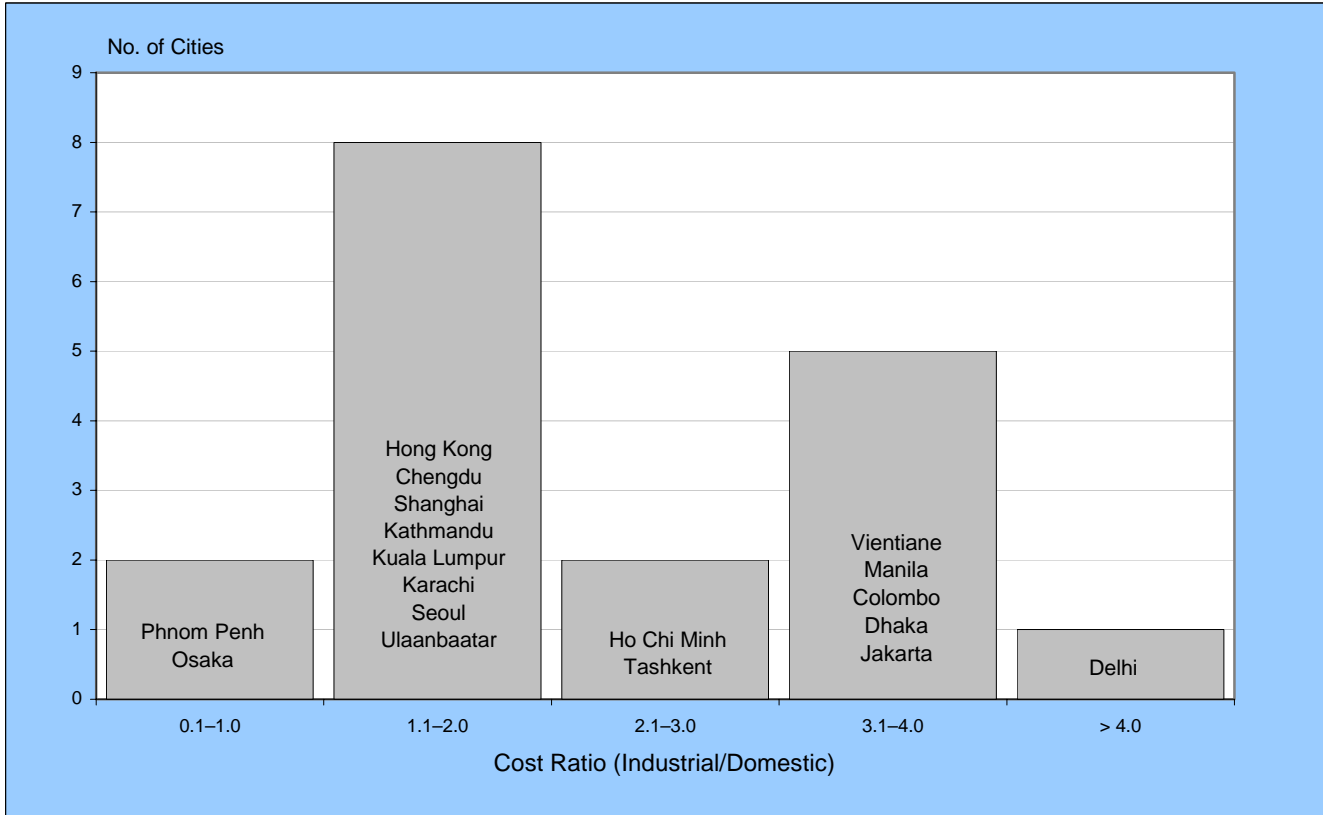
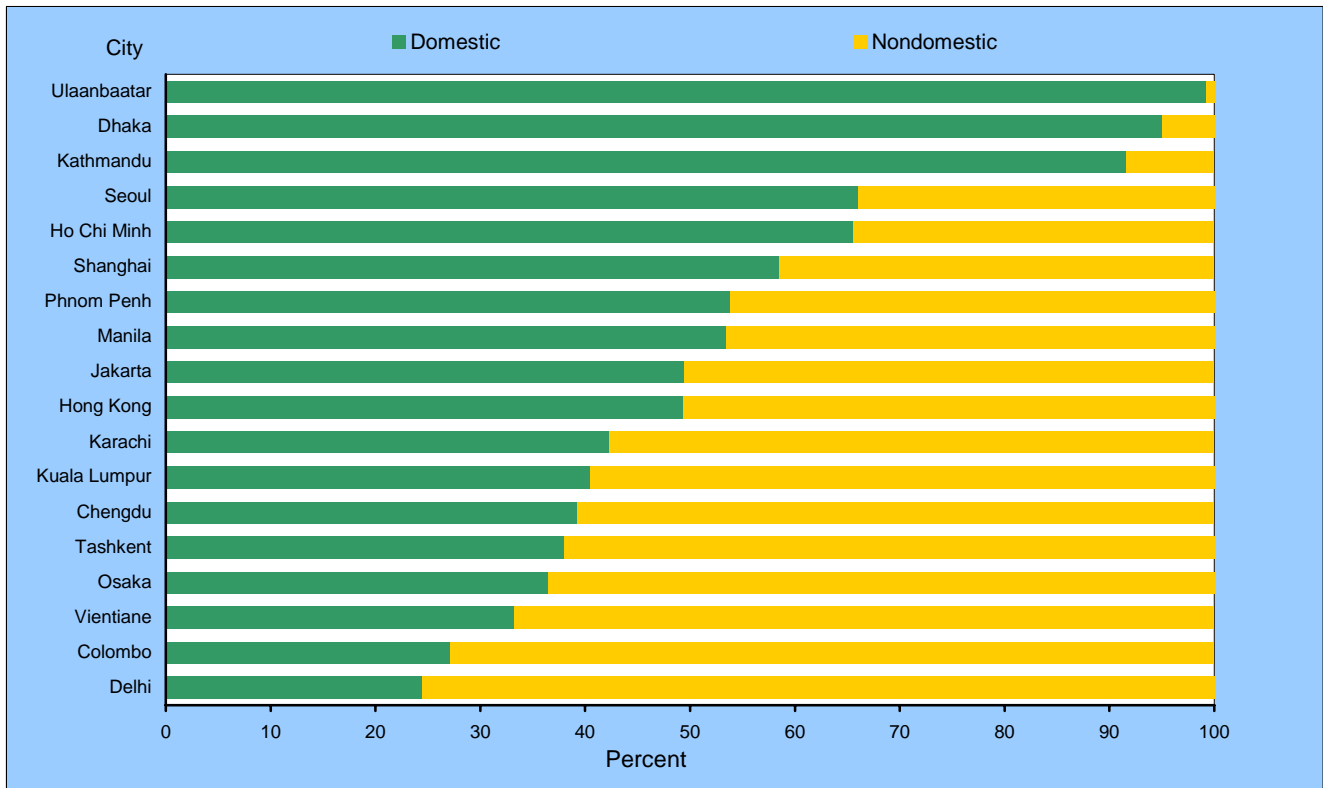


Figure 21: WATER REVENUE COMPONENTS



**Table 4: COST OF WATER FOR DOMESTIC USE (HOUSE CONNECTIONS)**  
(10, 20, 30 & 50 m<sup>3</sup>/month)

City	Cost of 10 m <sup>3</sup> (US\$)	City	Cost of 20 m <sup>3</sup> (US\$)	City	Cost of 30 m <sup>3</sup> (US\$)	City	Cost of 50 m <sup>3</sup> (US\$)
Osaka <sup>1</sup>	8.04	Osaka <sup>1</sup>	16.26	Osaka <sup>1</sup>	26.76	Osaka <sup>1</sup>	55.22
Hong Kong <sup>2</sup>	3.74	Hong Kong <sup>2</sup>	13.29	Hong Kong <sup>2</sup>	24.90	Hong Kong <sup>2</sup>	48.12
Seoul <sup>1</sup>	2.85	Seoul <sup>1</sup>	6.01	Seoul <sup>1</sup>	11.19	Seoul <sup>1</sup>	23.21
Phnom Penh <sup>3</sup>	1.93	Phnom Penh <sup>3</sup>	4.52	Kuala Lumpur <sup>3</sup>	8.93	Phnom Penh <sup>3</sup>	13.94
Karachi	1.59	Kuala Lumpur <sup>3</sup>	4.43	Phnom Penh <sup>3</sup>	7.44	Colombo	13.77
Kuala Lumpur <sup>3</sup>	1.50	Karachi	3.18	Karachi	4.77	Kuala Lumpur <sup>3</sup>	13.43
Chengdu	1.27	Chengdu	2.54	Colombo	4.11	Karachi	7.95
Shanghai	1.24	Shanghai	2.48	Chengdu	3.81	Kathmandu <sup>1</sup>	6.89
Ho Chi Minh	1.13	Jakarta	2.28	Jakarta	3.78	Jakarta	6.78
Jakarta	1.00	Ho Chi Minh	2.26	Kathmandu <sup>1</sup>	3.77	Ho Chi Minh	6.39
Ulaanbaatar	0.95	Kathmandu <sup>1</sup>	2.21	Shanghai	3.72	Chengdu	6.35
Dhaka	0.79	Ulaanbaatar	1.90	Ho Chi Minh	3.39	Shanghai	6.20
Kathmandu <sup>1</sup>	0.65	Dhaka	1.58	Ulaanbaatar	2.85	Manila <sup>4</sup>	5.15
Manila <sup>4</sup>	0.52	Manila <sup>4</sup>	1.16	Dhaka	2.37	Ulaanbaatar	4.75
Vientiane	0.26	Colombo	0.62	Manila <sup>4</sup>	2.37	Dhaka	3.95
Tashkent	0.23	Vientiane	0.54	Vientiane	0.89	Delhi	3.23
Colombo	0.13	Tashkent	0.46	Tashkent	0.69	Vientiane	1.59
Delhi	0.07	Delhi	0.28	Delhi	0.59	Tashkent	1.15

**Notes:**

<sup>1</sup> Subject to minimum charge.

<sup>2</sup> Cost of equivalent monthly volume based on 4-month billing practiced in Hong Kong.

<sup>3</sup> Cost of equivalent monthly volume based on bi-monthly billing practiced in Phnom Penh and Kuala Lumpur.

<sup>4</sup> Average tariffs of two concessionaires. Also subject to minimum charge.

**Table 5: FEE FOR HOUSE CONNECTION**

City	Price of New Connection (US\$)
Osaka	1,506.25
Seoul	850.00
Ulaanbaatar	453.72
Hong Kong	146.21
Colombo	128.81
Manila	106.62
Phnom Penh	86.66
Shanghai	82.71
Vientiane	73.76
Ho Chi Minh	53.04
Tashkent	31.96
Dhaka	28.95
Kathmandu	20.92
Kuala Lumpur	13.00
Jakarta	12.50
Karachi	2.50
Delhi	2.08

Note: Chengdu connection fee is US\$1.34 per square foot.

Figure 22: REVENUE COLLECTION EFFICIENCY

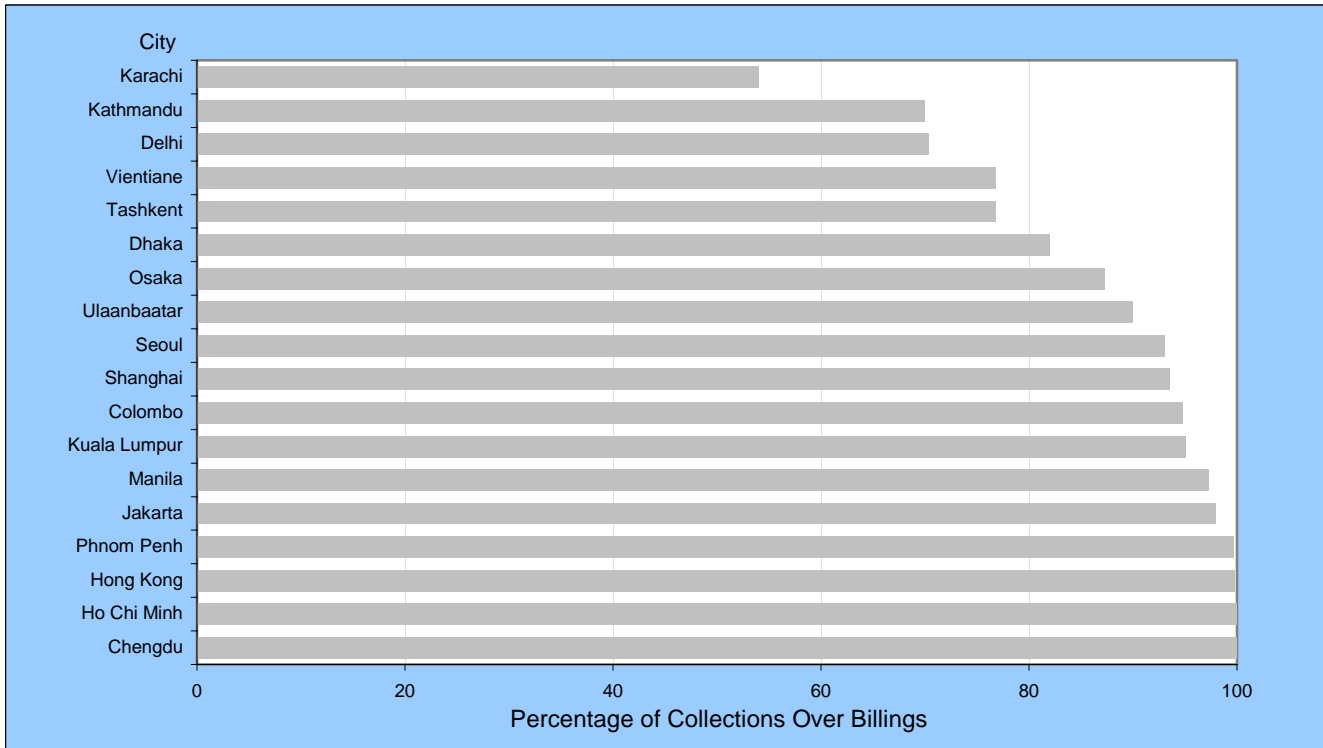


Figure 23: SEWERAGE SURCHARGE

