Team A

Vina

Chungsang

Kimsoung

Kimseng

Kyhour

CamEd Business School

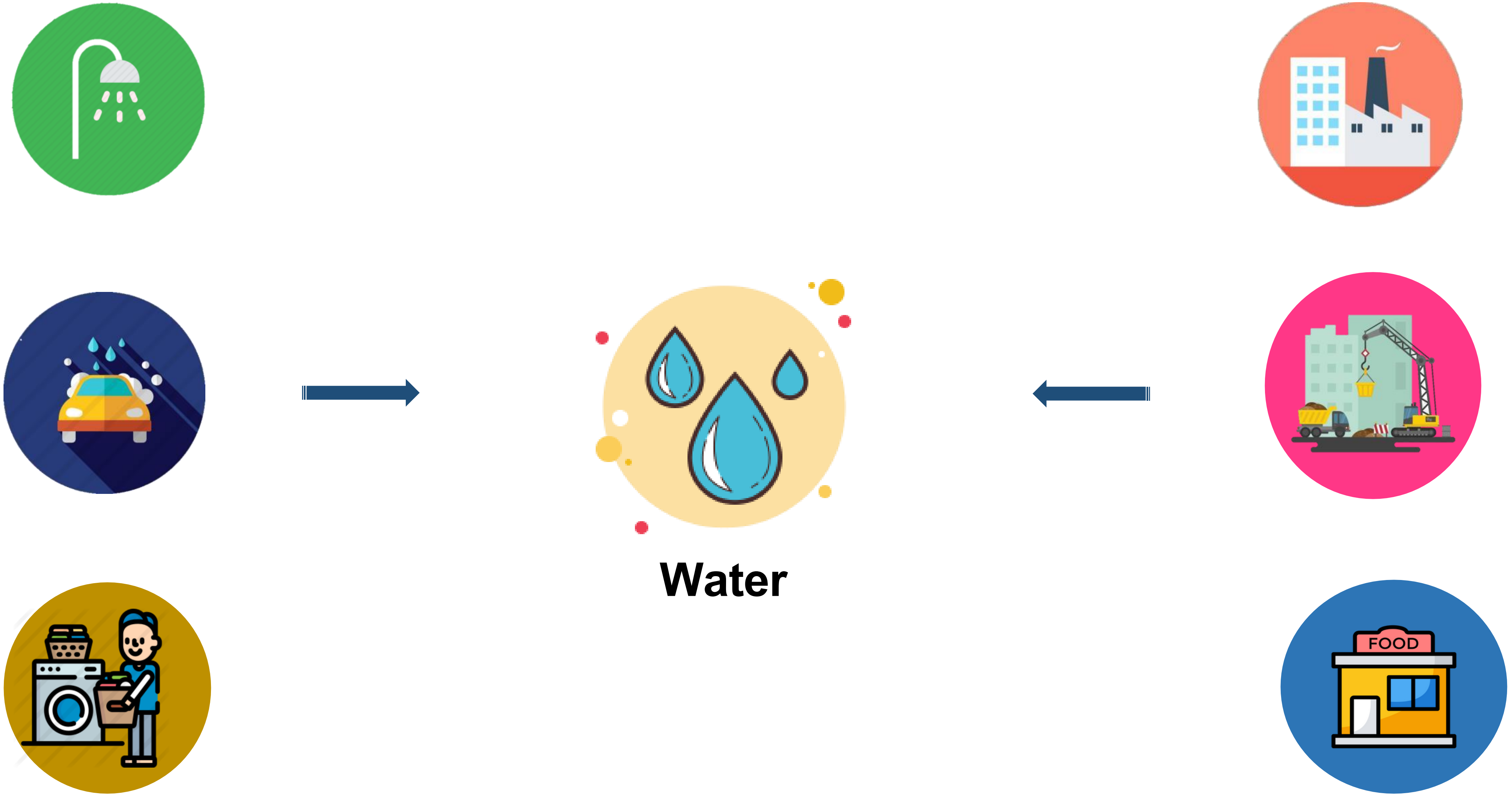
Candidates and Advisor

1. **Lim Kyhour**
   Senior Student
   Bachelor of Accounting and Finance
2. **Khov Chungsang**
   Senior Student
   Bachelor of Accounting and Finance
3. **Luong Kimseng**
   Senior Student
   Bachelor of Accounting and Finance
4. **Luong Kimsoung**
   Senior Student
   Bachelor of Accounting and Finance
5. **Sar Phasokvina**
   Senior Student
   Bachelor of Accounting and Finance

Advisor

Muhammad M. Ma’aji

Professor of Finance
CamEd Business School


Water
FOOD

រដ្ឋាករទឹកស្វយ័តក្រុងភ្នំពេញ

PHNOM PENH WATER SUPPLY AUTHORITY

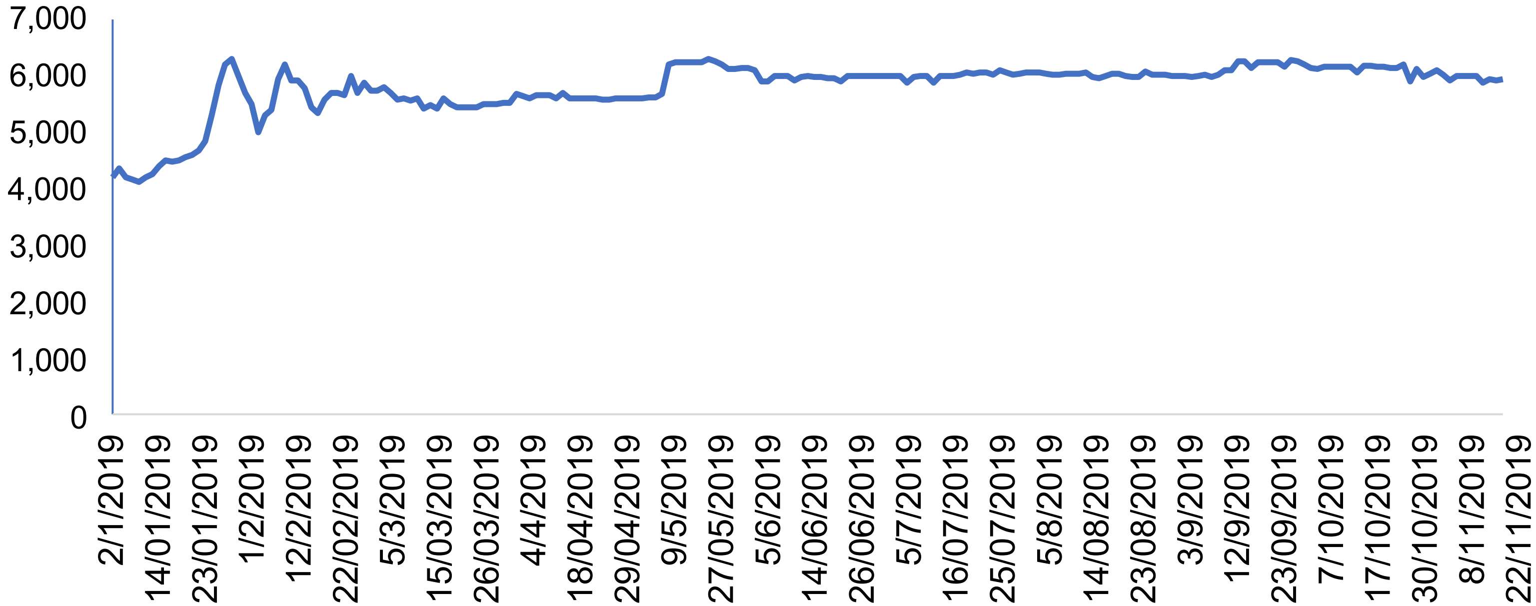
BUY

Recommendation

7,094 KHR

1.77 USD

19.4%
Upside



Expansion

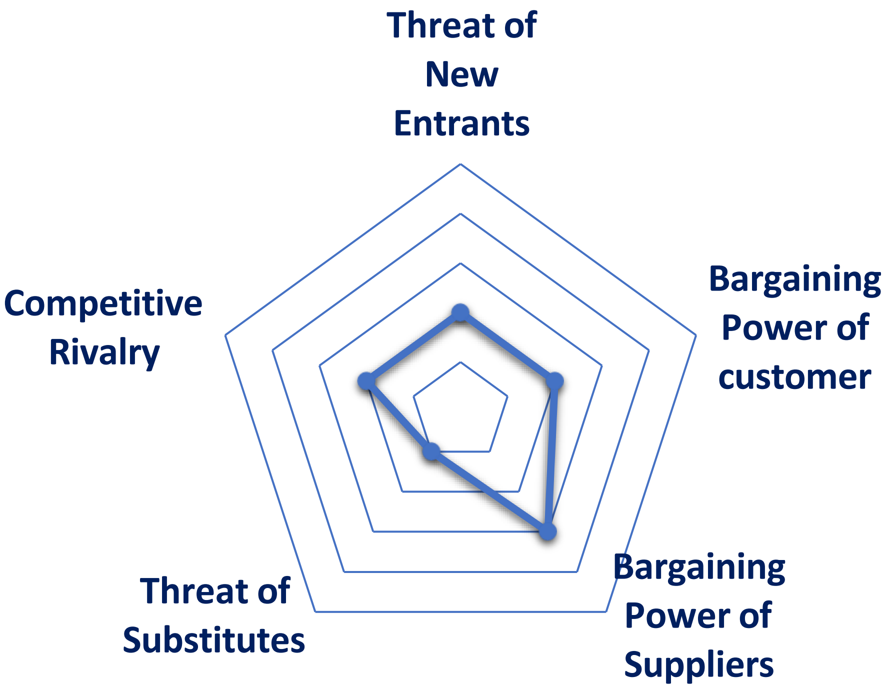
Growth

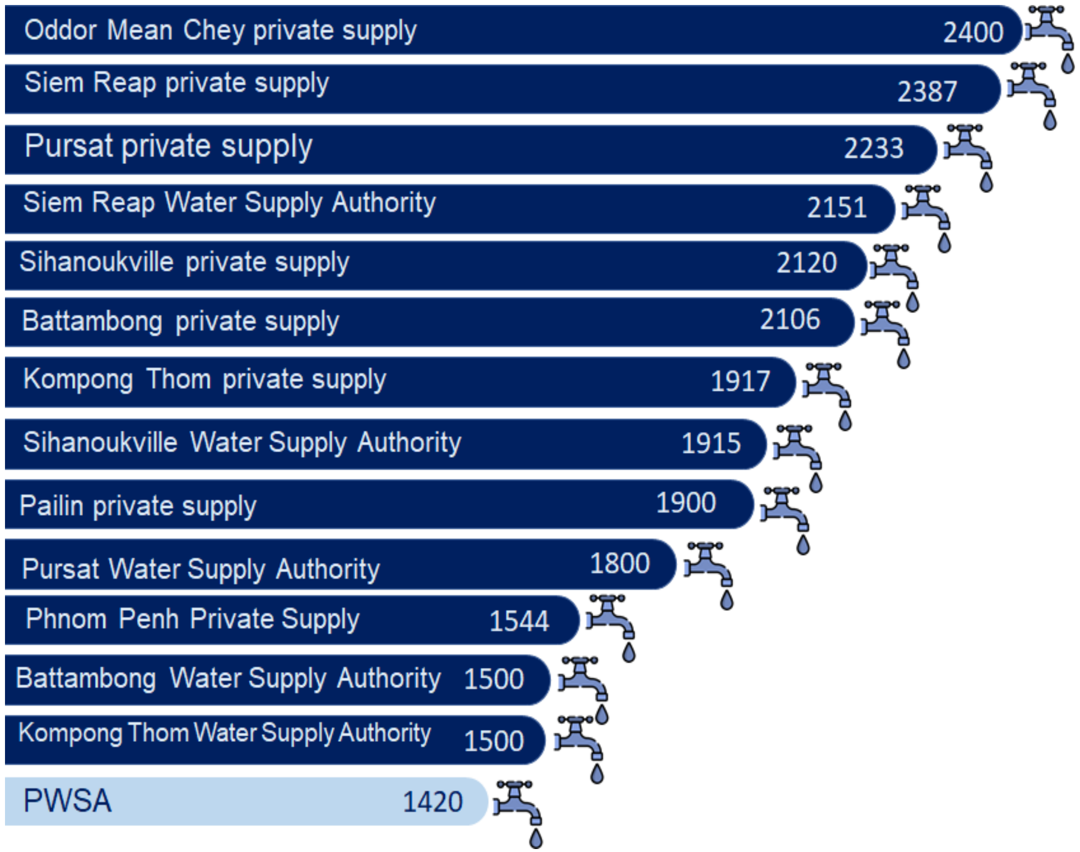
Monopoly

Monopoly

Expansion

Growth


Threat of New Entrants
Bargaining Power of customer
Bargaining Power of Suppliers
Threat of Substitutes
Competitive Rivalry

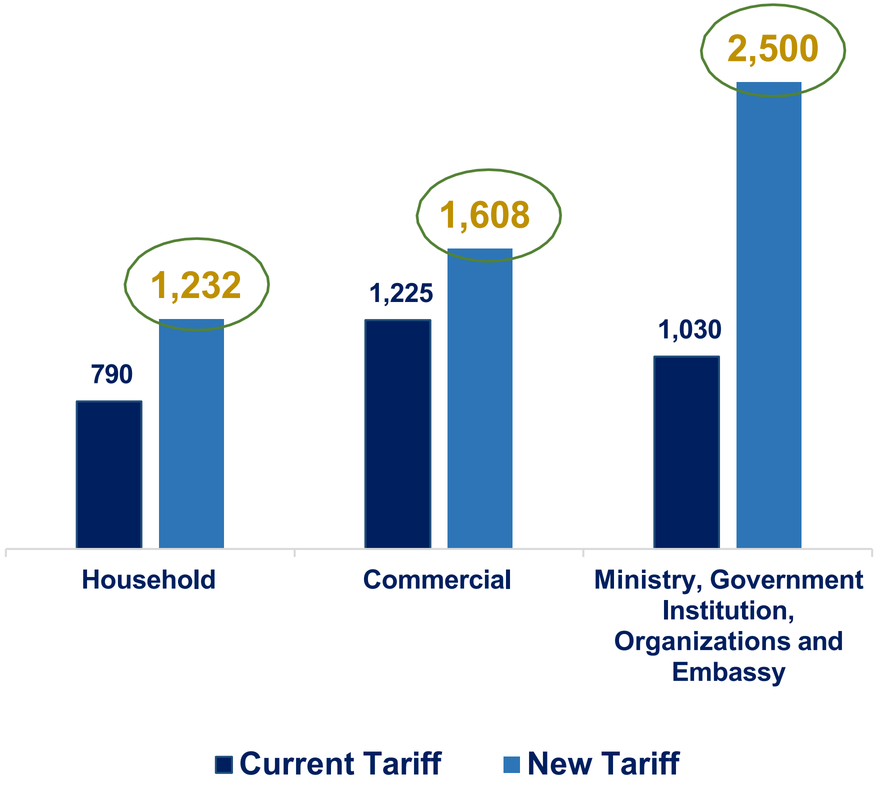

Oddor Mean Chey private supply 2400
Siem Reap private supply 2387
Pursat private supply 2233
Siem Reap Water Supply Authority 2151
Sihanoukville private supply 2120
Battambong private supply 2106
Kompong Thom private supply 1917
Sihanoukville Water Supply Authority 1915
Pailin private supply 1900
Pursat Water Supply Authority 1800
Phnom Penh Private Supply 1544
Battambong Water Supply Authority 1500
Kompong Thom Water Supply Authority 1500
PWSA 1420

Monopoly

Expansion

Growth

New tariff and Loan and Grant

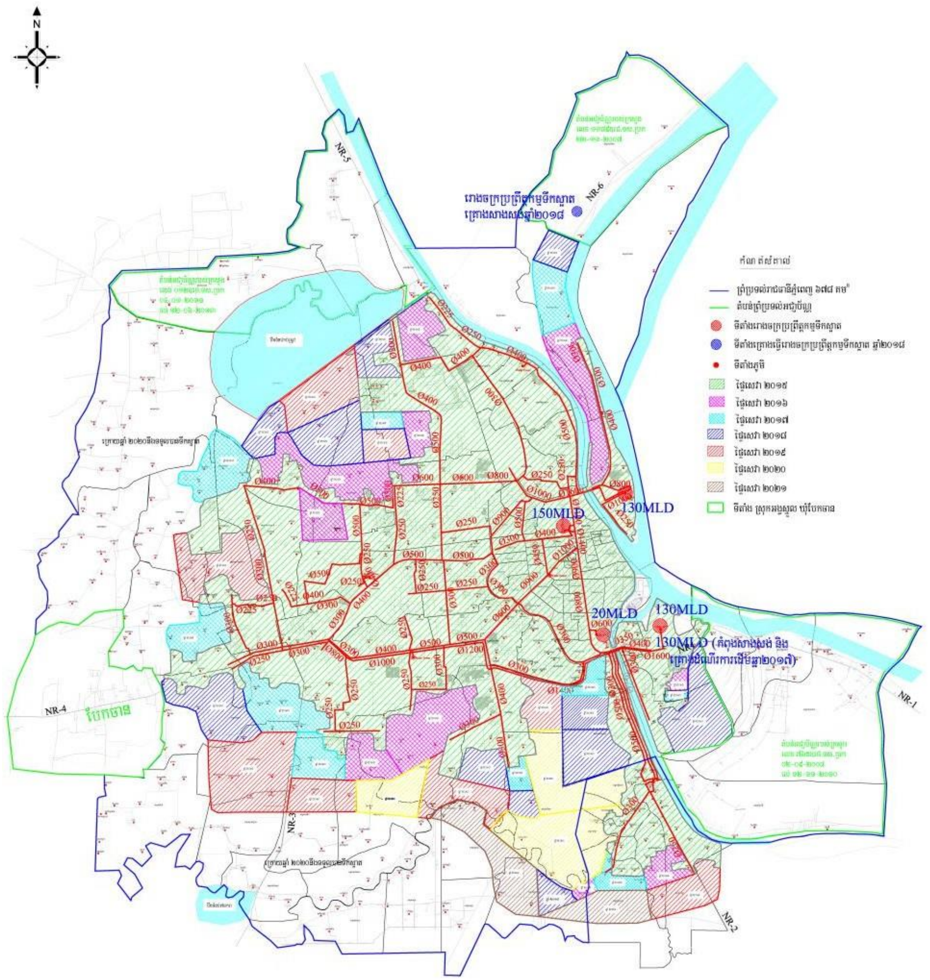


Source: Company Data, Team Analysis

Loan and Grant in FY 18 ('USD)			
	%	Grant	Loan
France	40%	5,766,400	30,273,600
Japan	39%	77,569,140	39,959,860
World Bank	11%	34,154,000	
Asian Development Bank	4%		12,745,000
UNNP/WB	1%		2,803,000
Total		**117,489,540**	**85,781,460**

Favourable regional economic condition

PWSA's Master Plan



1. Phum Prek WTP

2. Chroy Chang War WTP

3. Niroth WTP

4. Chamkar Mon WTP

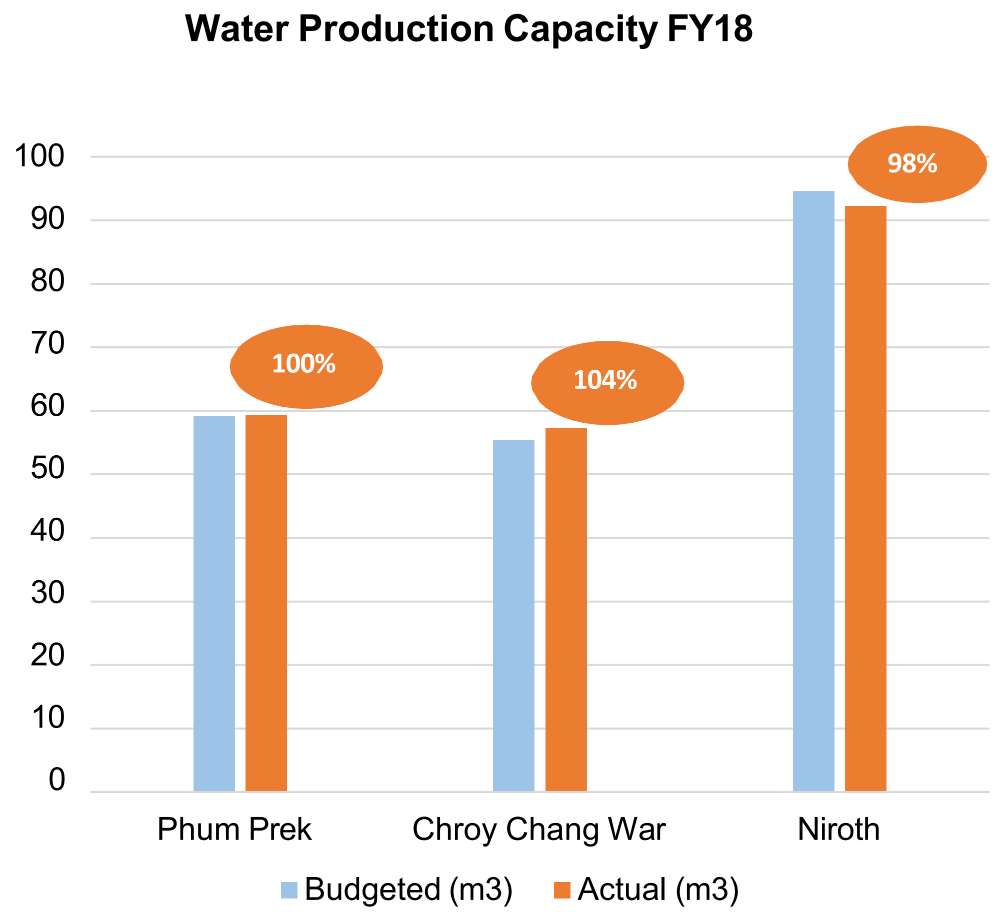
Population

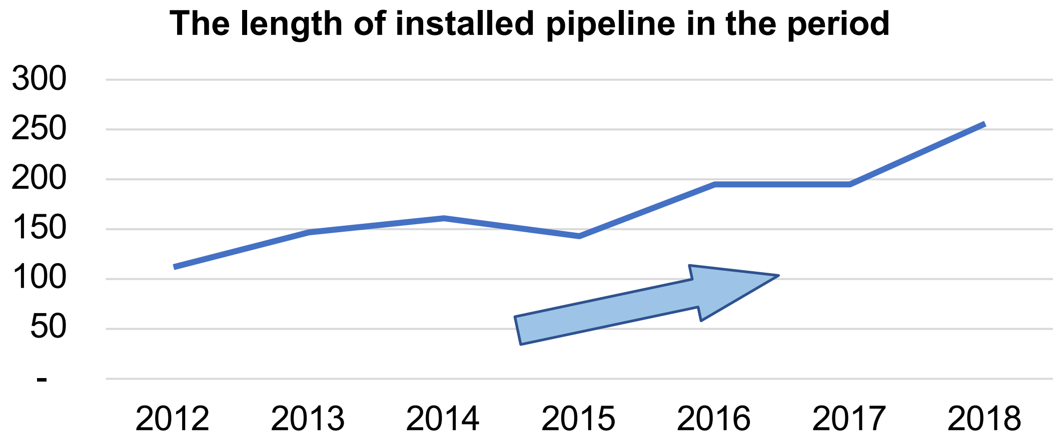
Construction Activities

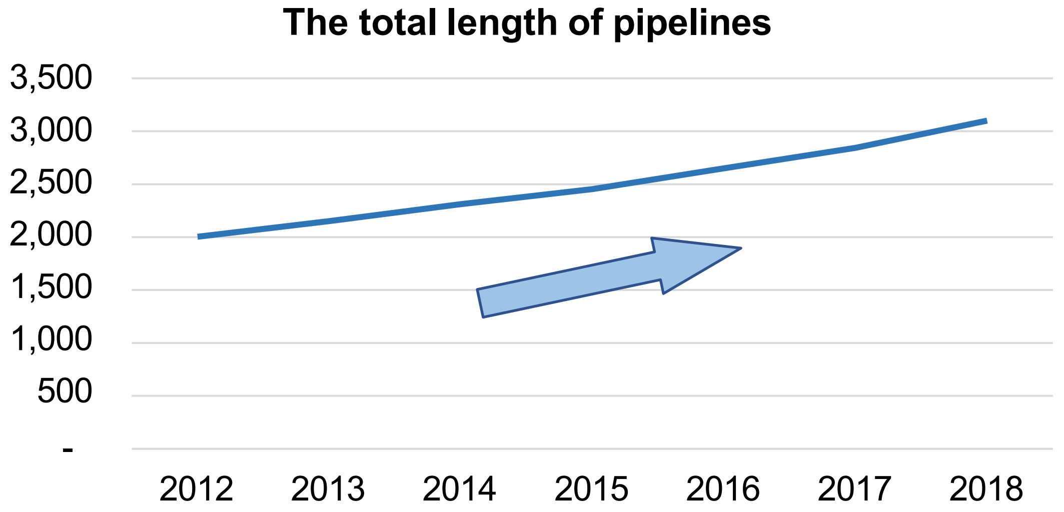
Urbanization

Foreign Direct Investment

Water capacity and service coverage







Partners

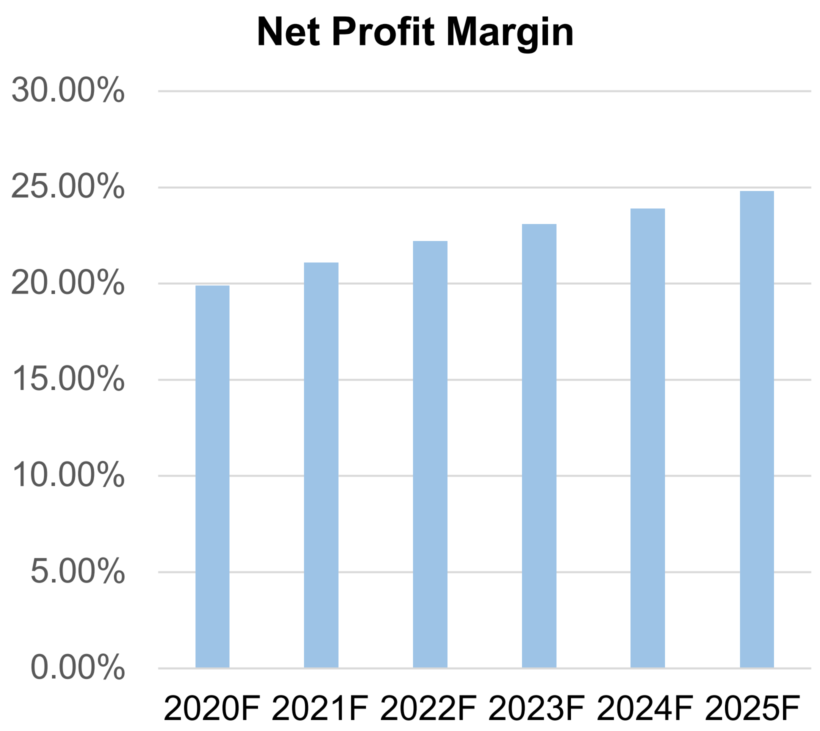
Business

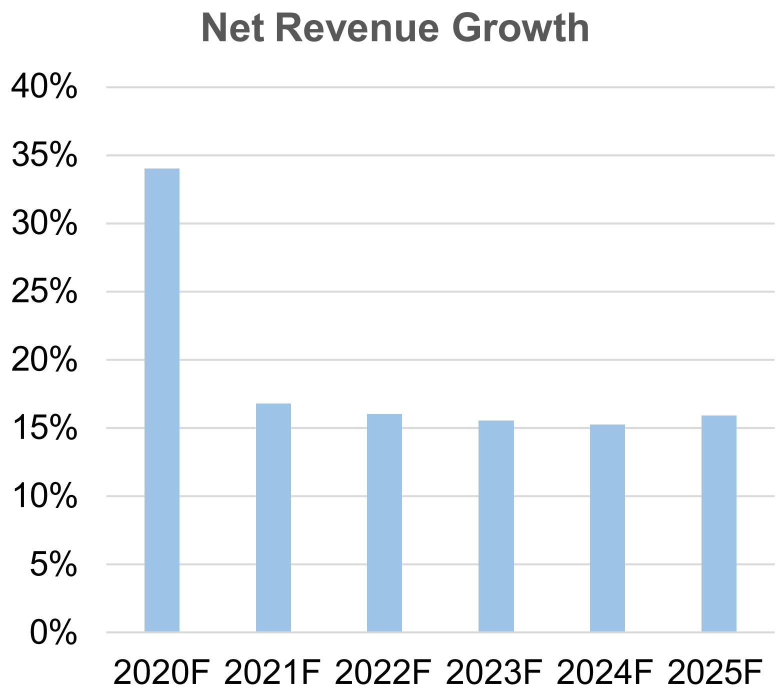
Development

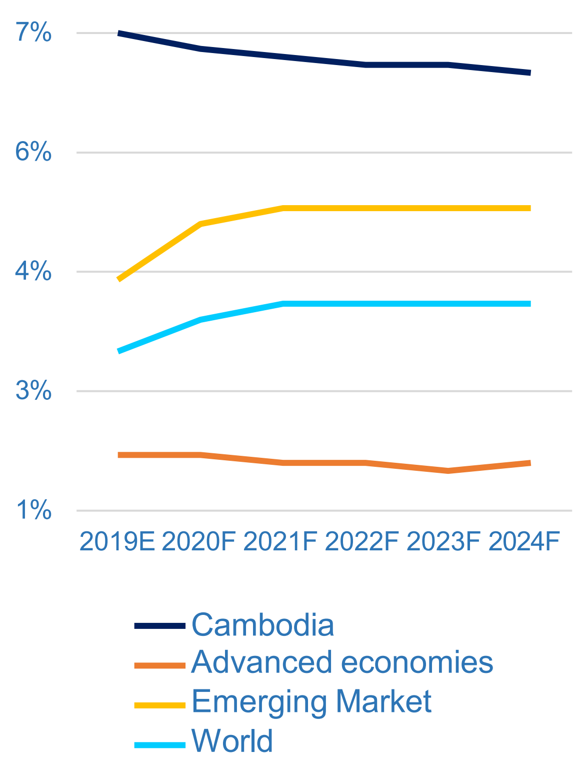
Monopoly

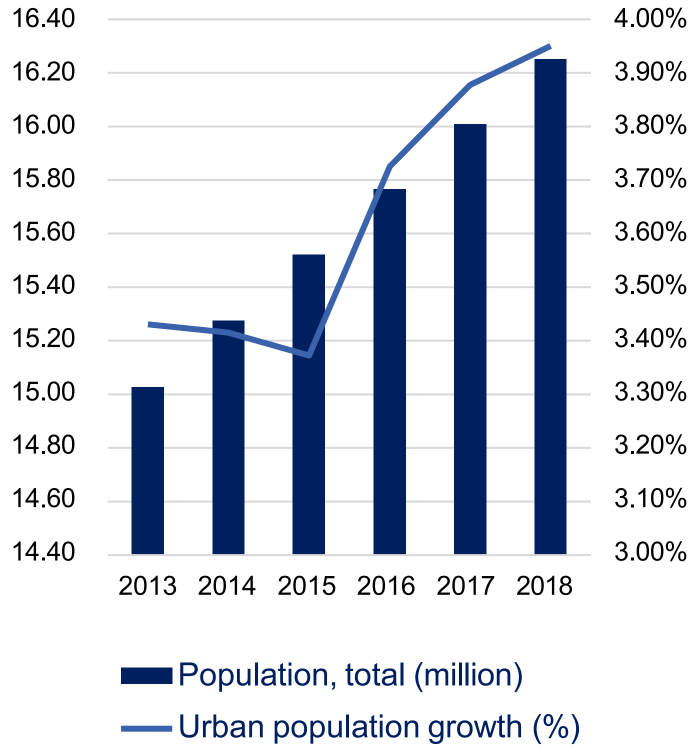
Expansion

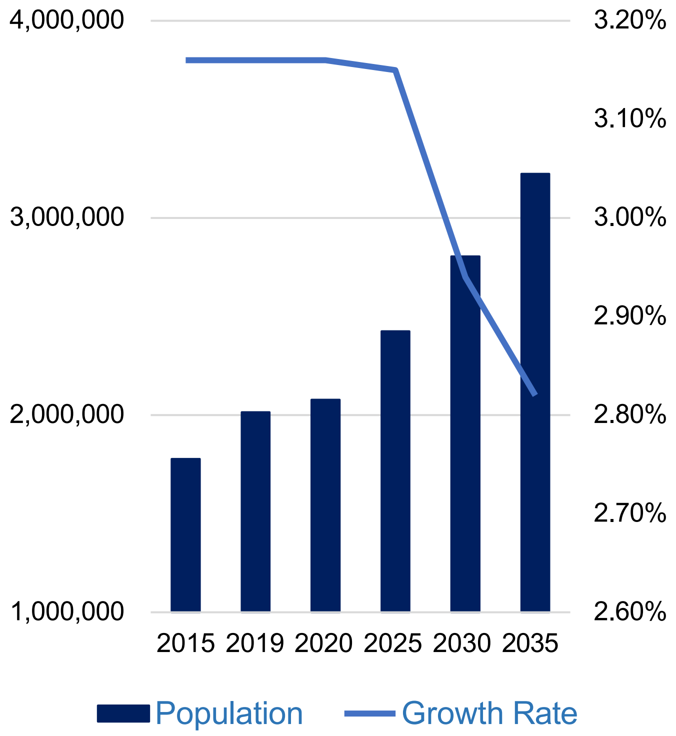
Growth


Net Profit Margin
30.00%
25.00%
20.00%
15.00%
10.00%
5.00%
0.00%
2020F 2021F 2022F 2023F 2024F 2025F

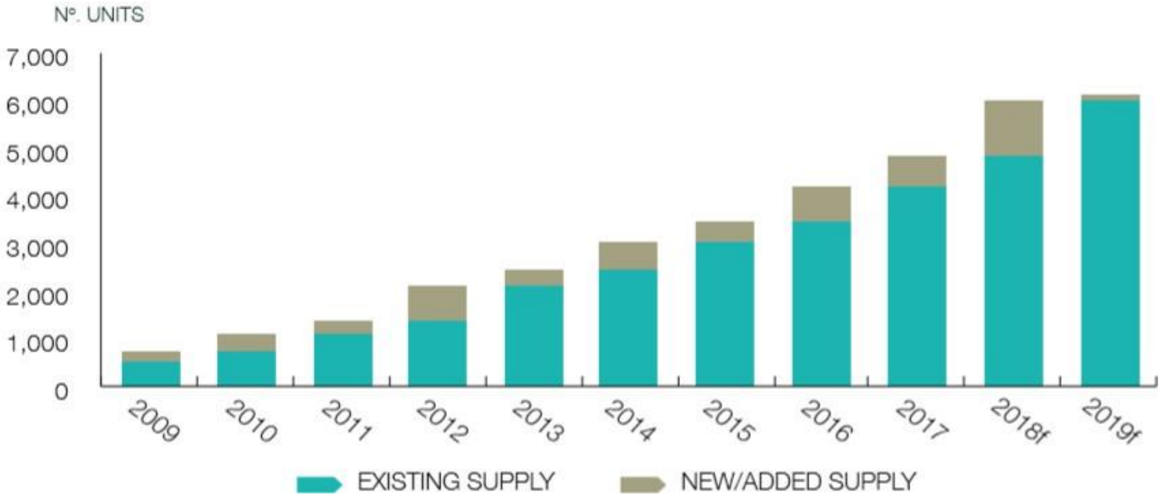

Net Revenue Growth
40%
35%
30%
25%
20%
15%
10%
5%
0%
2020F 2021F 2022F 2023F 2024F 2025F


7%
6%
4%
3%
1%
2019E 2020F 2021F 2022F 2023F 2024F
Cambodia
Advanced economies
Emerging Market
World


16.40
16.20
16.00
15.80
15.60
15.40
15.20
15.00
14.80
14.60
14.40
4.00%
3.90%
3.80%
3.70%
3.60%
3.50%
3.40%
3.30%
3.20%
3.10%
3.00%
2013 2014 2015 2016 2017 2018
Population, total (million)
Urban population growth (%)


4,000,000
3,000,000
2,000,000
1,000,000
3.20%
3.10%
3.00%
2.90%
2.80%
2.70%
2.60%
2015 2019 2020 2025 2030 2035
Population
Growth Rate

CUMULATIVE SUPPLY OF SERVICED APARTMENTS (2009 - 2019F)



SALES OF NEWLY LAUNCHED CONDOMINIUMS BY QUARTER

Expansion

Growth

Monopoly

BUY

Free Cash Flow to Equity

Methodology

Ke **12.53%**

Terminal growth **3.5%**

Source: Zacks, Bloomberg, Reuters, Team Analysis

7,094 KHR
1.77 USD

19.4% Upside

5,940 KHR (at 22nd Nov 2019)

Terminal growth rate	3.5%
Total PV of FCFE	361,635,583
PV of terminal year	255,349,227
Total Equity value	616,984,810
No of Shares	86,973
Intrinsic Value (KHR)	7,094
Current Price (22/11/2019)	5,940
Upside Gain	19.4%

Opening Date Ending Date		1/1/2019 12/31/2019	1/1/2020 12/31/2020	1/1/2021 12/31/2021	1/1/2022 12/31/2022	1/1/2023 12/31/2023	1/1/2024 12/31/2024	1/1/2025 12/31/2025	1/1/2026 12/31/2026
Number of years used in discount factor		**0.083**	**1.083**	**2.083**	**3.083**	**4.083**	**5.083**	**6.083**	
(in '000KHR)		**2019E**	**2020F**	**2021F**	**2022F**	**2023F**	**2024F**	**2025F**	
Profit after tax		51,607,421	69,164,184	80,764,917	93,710,723	108,272,754	124,794,652	144,637,554	
Changes in Working Capital (excluding cash)		-1,059,383	-15,065,447	-4,407,899	-5,022,072	-5,762,450	-6,662,817	-7,767,047	
Change in Water Deposits and Non-Current Liabilities		1,376,150	36,533,291	9,356,112	8,163,354	6,739,062	5,631,831	5,800,786	
- CAPEX + Depreciation and Amortisation		-95,238,950	-76,215,847	-63,102,425	-66,979,548	-68,654,923	-73,798,729	-77,978,214	
+ Increase in Debt		403,964,839	-31,438,602	-31,438,602	-31,438,602	-31,438,602	-50,675,023	-19,236,421	
FREE CASH FLOW TO EQUITY		360,650,076	-17,022,422	-8,827,897	-1,566,144	9,155,842	-710,087	45,456,658	522,751,564
Discount Factor	**12.50%**	0.990271638	0.880241456	0.78243685	0.695499422	0.618221708	0.549530407	0.488471473	
Present Value of FCFE		**357,141,542**	**-14,983,841**	**-6,907,272**	**-1,089,252**	**5,660,340**	**-390,214**	**22,204,281**	

Assumption	Rate	Methodology
Beta	0.57	Bottom-up beta (based on water utility average)
Risk-free rate	1.51%	Risk-free rate (five-year US treasury yield)
Equity risk premium	5.75%	Mature market equity risk premium (based on KPMG)
Country risk premium	7.64%	Cambodia country risk premium (Moody's B2 rating)
Percent exposure	100%	Percent exposure to country risk
Debt to Equity Ratio	0.50	Debt to Equity Ratio (average book value)
Tax rate	20%	Cambodia corporate tax rate
COST OF EQUITY	**12.53%**	**The capital asset pricing model**

Source: Team Analysis

EV/EBITDA	8.46
EBITDA	162,811,270
Enterprise Value Estimate	1,376,918,169
Value of Debt (Book Value)	457,407,086
Class A Share	391,100,942
Cash and Cash Equivalents	127,225,296
EV/EBITDA Value of Equity	655,635,437
Number shares	86,973
Intrinsic Value (KHR)	7,538
Current Price (KHR)	5,940
Upside Gain	26.9%

Source: Team Analysis

Company	TICKER	MKT CAP (USD mil)	Debt to Equity	Dividend Yield	ROE	P/S (x)	P/E (x)	P/E (x)	EV/EBITDA (x)	EV/EBITDA (x)
			TTM	TTM	TTM	TTM	TTM	NTM	TTM	NTM
China Water Affairs Group Ltd	0855.HK	1,242.0	144.2%	4.62%	6.61%	1.17	7.20	6.33	5.90	5.33
Manila Water Company Inc	MWC.PS	783.0	82.7%	4.75%	4.97%	2.00	7.28	9.20	7.70	7.20
Siic Environment Holdings Ltd	SIIC.SI	517.0	110.9%	7.41%	2.42%	0.68	6.70	6.50	10.00	8.10
Guangdong Investment Ltd	0270.HK	14,201.0	18.1%	3.22%	7.62%	7.97	22.17	21.66	9.80	9.10
Chongqing Water Group Company Ltd	601158.SS	3,910.8	8.1%	4.91%	7.16%	4.84	16.25	15.83	12.20	10.50
Thai Tap Water Supply	TTW.BK	1,761.3	67.0%	4.48%	13.16%	8.86	18.81	17.31	12.40	12.00
Ranhill Holdings Berhad	RANH.KL	322.4	203.0%	3.47%	2.77%	0.81	27.32	20.58	7.32	6.97
Regional Comps. Average			**90.6%**	**4.69%**	**6.39%**	**3.76**	**15.10**	**13.92**	**9.33**	**8.46**
California Water Service Group	CWT	530.0	112.0%	1.50%	8.21%	3.66	39.47	34.30	17.34	13.56
SJW Group	SJW	1,960.0	57.0%	1.74%	7.45%	4.85	34.99	31.30	15.76	14.22
Consolidated Water	CWCO	246.3	2.0%	2.07%	6.05%	3.45	26.02	24.80	11.66	13.14
International Comps. Average			**57.0%**	**1.77%**	**7.24%**	**3.99**	**33.49**	**30.13**	**14.92**	**13.64**
Overall Comps. Average			**80.5%**	**3.82%**	**6.64%**	**3.83**	**20.62**	**18.78**	**11.01**	**10.01**
Phnom Penh Water Supply	PWSA	539.2	36%	5.18%	4.95%	2.32	7.39	7.68	11.74	9.19

Source: Zacks, Bloomberg, Reuters, Team Analysis: TTM = Trailing twelve months; NTM = next twelve months

Terminal Year Growth	Cost of Equity						
	9%	10%	11%	**12.50%**	13%	14%	15%
0%	12.70%	10.10%	7.70%	4.40%	3.30%	1.30%	-0.50%
1%	16.80%	14.00%	11.40%	7.70%	6.60%	4.50%	2.40%
2%	21.60%	18.60%	15.70%	11.80%	10.50%	8.10%	5.90%
3.50%	30.90%	27.40%	24.00%	**19.40%**	18.00%	15.20%	12.60%
4%	34.80%	31.00%	27.50%	22.60%	21.10%	18.10%	15.40%
5%	43.90%	39.70%	35.70%	30.20%	28.40%	25.10%	22.00%
6%	56.00%	51.10%	46.50%	40.10%	38.10%	34.30%	30.70%

Source: Team Analysis

Investment Risk

High

Probability

		Market Liquidity Risk		
		Electricity Expense	Electricity Blackout	
	Political Risk		Foregin Exchange Risk	
	Disclosure Risk	Earning Management Risk		Low River Water Level
			Legal and Regulatory Risk	

Low

Impact

High