

**EASTERN WATER RESOURCES DEVELOPMENT AND MANAGEMENT PUBLIC COMPANY LIMITED  
MANAGEMENT DISCUSSION AND ANALYSIS FOR THE YEAR 2018**

**1. ANALYSIS OF FINANCIAL PERFORMANCE**

In 2018, East Water Group had total consolidated sales and services income of 4,220.99 million Baht, decreased by 87.05 million Baht or 2.02% compared to 2017 due to the declining in raw water sales volume and net profit attributable to Equity holders of the parent company was 1,117.52 million Baht, decreased by 103.66 million Baht or 8.49%.

**Proportion of revenues and cost**

**Revenue of 2018 = 4,220.99 million Baht**

**Cost of 2018 = 2,219.31 ล้านบาท**

Construction revenue under Concession Agreements 5.51%

Construction cost under Concession Agreements 10.48%

Rental and services revenue 3.70%

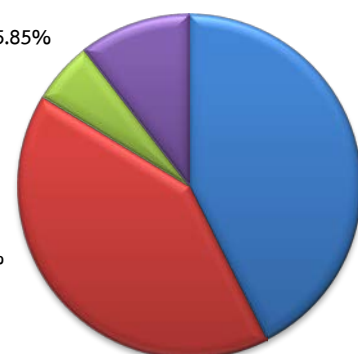
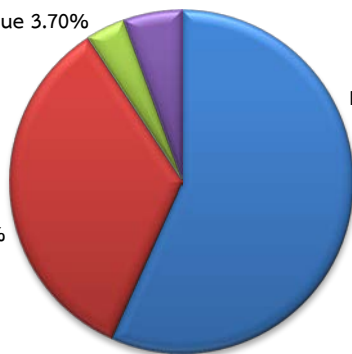
Rental and services cost 5.85%

Raw water revenue 56.71%

Raw water cost 42.55%

Tap water revenue 34.08%

Tap water cost 41.12%



Income statement (MB)	For the three-month period				2018	2017	YoY	%
	Q4/2018	Q4/2017	YoY	%				
<b>Total Sales and Services revenue</b>	<b>1,050.08</b>	<b>1,039.90</b>	<b>10.18</b>	<b>0.98%</b>	<b>4,220.99</b>	<b>4,308.04</b>	<b>(87.05)</b>	<b>(2.02%)</b>
Raw water revenue	588.09	566.33	21.76	3.84%	2,393.82	2,452.05	(58.23)	(2.37%)
Tap water revenue	361.96	353.34	8.62	2.44%	1,438.40	1,422.75	15.66	1.10%
Rental and services revenue	38.44	36.92	1.52	4.13%	156.20	157.59	(1.40)	(0.89%)
Construction revenue under Concession Agreements <sup>(1)</sup>	61.59	83.31	(21.73)	(26.08%)	232.57	275.65	(43.08)	(15.63%)
<b>Costs of Sales and Services</b>	<b>577.61</b>	<b>584.67</b>	<b>(7.06)</b>	<b>(1.21%)</b>	<b>2,219.31</b>	<b>2,224.55</b>	<b>(5.24)</b>	<b>(0.24%)</b>
Raw water cost	245.32	222.91	22.41	10.06%	944.24	935.25	8.99	0.96%
Tap water cost	241.09	242.29	(1.20)	(0.50%)	912.60	879.02	33.58	3.82%
Rental and services cost	29.61	36.16	(6.55)	(18.10%)	129.90	134.63	(4.73)	(3.51%)
Construction cost under Concession Agreements <sup>(1)</sup>	61.59	83.31	(21.73)	(26.08%)	232.57	275.65	(43.08)	(15.63%)
<b>Gross profit</b>	<b>472.47</b>	<b>455.23</b>	<b>17.24</b>	<b>3.79%</b>	<b>2,001.68</b>	<b>2,083.49</b>	<b>(81.81)</b>	<b>(3.93%)</b>
Other income	9.45	8.74	0.71	8.09%	34.34	48.59	(14.26)	(29.34%)
Selling and administrative expenses	151.65	156.44	(4.78)	(3.06%)	487.84	457.57	30.27	6.62%
<b>Operating profit</b>	<b>330.27</b>	<b>307.54</b>	<b>22.73</b>	<b>7.39%</b>	<b>1,548.17</b>	<b>1,674.52</b>	<b>(126.34)</b>	<b>(7.55%)</b>
Finance cost	54.83	35.03	19.79	56.50%	157.21	140.85	16.36	11.62%
Income tax expenses	35.20	47.54	(12.35)	(25.97%)	261.19	301.65	(40.47)	(13.42%)
<b>Net profit</b>	<b>240.25</b>	<b>224.96</b>	<b>15.29</b>	<b>6.79%</b>	<b>1,129.77</b>	<b>1,232.02</b>	<b>(102.24)</b>	<b>(8.30%)</b>
<b>Net profit attributable to owner of the parent</b>	<b>236.49</b>	<b>222.55</b>	<b>13.94</b>	<b>6.27%</b>	<b>1,117.52</b>	<b>1,221.18</b>	<b>(103.66)</b>	<b>(8.49%)</b>
<b>Earnings per share (EPS)</b>	<b>0.14</b>	<b>0.13</b>	<b>0.01</b>	<b>6.27%</b>	<b>0.67</b>	<b>0.73</b>	<b>(0.06)</b>	<b>(8.49%)</b>

**Note:** 1) Revenue and Cost that were recognized when there is construction under concession agreements for tap water according to accounting standard TFRIC12

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**1. ANALYSIS OF FINANCIAL PERFORMANCE (Cont.)**

EBITDA (MB)	For the three-month period				2018	2017	YoY	%
	Q4/2018	Q4/2017	YoY	%				
Operating profit	330.27	307.54	22.73	7.39%	1,548.17	1,674.52	(126.34)	(7.55%)
Depreciation	127.12	103.90	23.22	22.35%	432.02	393.62	38.40	9.76%
Amortization	76.69	69.78	6.90	9.90%	300.72	279.20	21.52	7.71%
<b>EBITDA</b>	<b>534.08</b>	<b>481.22</b>	<b>52.86</b>	<b>10.98%</b>	<b>2,280.92</b>	<b>2,347.33</b>	<b>(66.42)</b>	<b>(2.83%)</b>

**2. ECONOMIC SITUATION**

Thailand's economy in Q4/2018 continuously grew. Export-oriented manufacturing businesses continuously expanded but domestic-oriented manufacturing was rather stable as slow recovery of private consumption and high household debt. Domestic industries remaining expanded and some large corporates invested in long-term big projects. For example; petroleum products business which having investment plan in Eastern part and food production. In term of business tourism continuously expanded in all region from both Thai and foreign tourists. Costs slightly rose due to wage hike and increasing in commodity prices, however decreasing of oil price in this quarter had good result to Cost of production.

In Q1/2019, Export sector will consistently grow. Meanwhile, domestic consumption will expand although household have risk from high level of debt. Cost of manufacture will be increasing as trade barriers and addition of policy interest rate in December 2018.

**3. WATER SITUATION**

As of 31 January 2019, the water supply situation in Chonburi and Rayong province is moderate. Water supply in the reservoirs was approximately to average water quantity of the past 10 years. The weather forecast of the Department of Meteorology was expected that the total rainfall in the Eastern part of Thailand will be lower than average level about 10%-20% during February – April. The average water in the reservoirs in Chonburi and Rayong were 62% and 75% of total capacity respectively.

Water Volume (Million Cu.M)	Chonburi		Rayong			
	Bangpra	Nongkho	Dokkrai	Nongplalai	Klongyai	Prasae
Water reserve	75.02	10.55	65.09	136.65	34.24	202.01
Percentage of total capacity	64%	49%	82%	83%	75%	68%
Average (2009-2018)	69.95	13.23	55.79	137.55	30.01	214.15
Above/(below) average (2009-2018)	5.07	(2.68)	9.30	(0.90)	4.23	(12.14)

**4. SIGNIFICANT EVENTS**

12 July 2018, TRIS Rating affirmed the company rating and senior unsecured debenture rating of Eastern Water Resources Development and Management PLC at “A+” with “stable” outlook, which reflects the company's financial strength as the key raw water provider with a comprehensive pipeline network in the Eastern Seaboard area, its high profitability, and reliable cash flows.

9 August 2018, The Board of Director's meeting No. 9/2561 had a resolution on the interim dividend payment, based on the operating results of six months end at 30 June 2018, at Baht 0.20 per share. The record date which shareholders had the right to receive the interim dividend was on 23 August 2018 and the dividend paid on 5 September 2018. Total dividend paid was Baht 332.75 million.

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**4. SIGNIFICANT EVENTS (Cont.)**

24 August 2018, EASTW and Gulf PD Co., Ltd. (Subsidiary of GULF) signed clarified water sales contract with 25 years period.

17 November 2018, EASTW was selected as 1 of 79 listed companies under Thailand Sustainability Investment in 2018 or “sustainable stocks”, representing listed companies with outstanding environmental, social and governance performance as well as concern for stakeholders in both social and environmental aspects and sustainability management process.

21 November 2018, EASTW and Amata Water Co., Ltd. signed clarified water sales contract with 30 years period.

7 December 2018, EASTW was awarded the Sustainability Report Award 2018 by CSR Club in the Recognition category, the award for companies with outstanding commitment to ESG (Environment, Social and Governance).

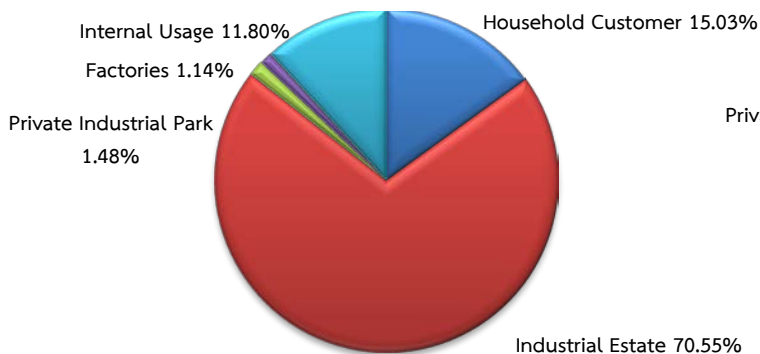
**5. RAW WATER BUSINESS**

Raw water revenue in 2018 was 2,393.23 million Baht, decreased by 58.23 million Baht or 2.37% compared to 2017. Total water sales volume was 219.98 million Cu.M. (Excluding internal usage for tap water production of 29.76 million Cu.M.), decreased by 5.92 million Cu.M., or 2.62% due to the declining of raw water sales volume in Q1/2018 - Q2/2018 of the household customers. The average raw water tariff stayed at 10.88 Baht per Cu.M., increased by 0.03 Baht per Cu.M., or 0.25%, due to the declining portion of household customers, who paid lower tariffs than other customer groups.

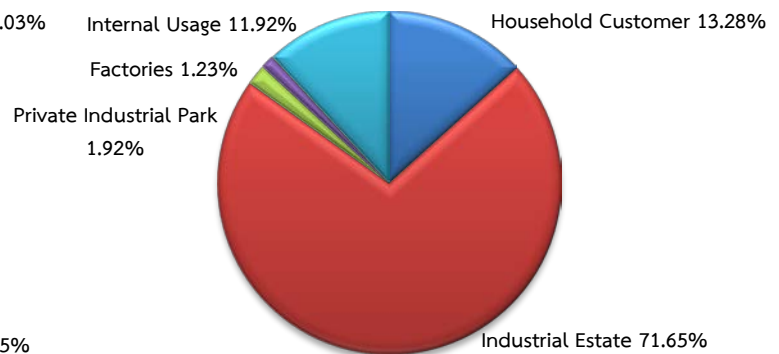
Raw Water Volume (Million Cu.M)	For the three-month period				2018	2017	YoY	%
	Q4/2018	Q4/2017	YoY	%				
Total distribution volume	61.62	59.46	2.15	3.62%	249.75	256.13	(6.38)	(2.49%)
Internal usage for tap water	7.45	7.53	(0.08)	(1.09%)	29.76	30.23	(0.46)	(1.54%)
<b>Net Raw Water Sales Volume</b>	<b>54.17</b>	<b>51.93</b>	<b>2.24</b>	<b>4.31%</b>	<b>219.98</b>	<b>225.90</b>	<b>(5.92)</b>	<b>(2.62%)</b>

**Raw Water Distribution by Customer Group (Internal usage for tap water production is included)**

Jan – Dec 2017 = 256.13 million Cu.M.



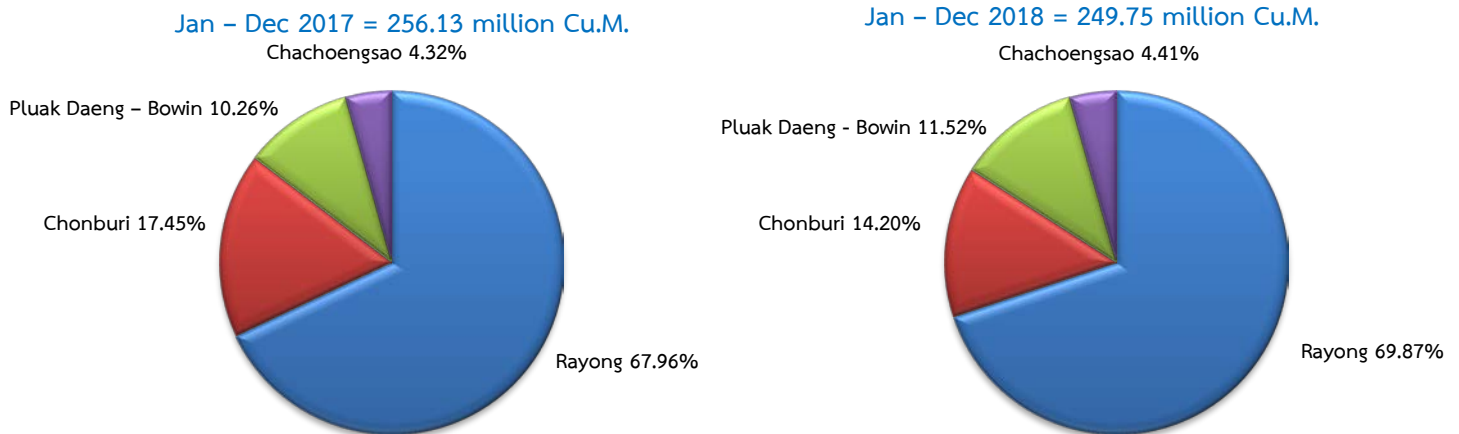
Jan – Dec 2018 = 249.75 million Cu.M.



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**5. RAW WATER BUSINESS (Cont.)**

**Raw Water Distribution by Area (Internal usage for tap water production is included)**



**Gross Profit of Raw Water Business** in 2018 was 1,449.58 million Baht, decreased by 67.23 million Baht or 4.43% as compared to 2017 due to the decreasing of household customers and the higher cost from purchasing raw water from private source, depreciation and amortization from investment to increase capacity and employee expenses. However, the company was able to save the electricity cost by 59.21 million Baht because the company has stopped transferring water from Nongplalai reservoir to Chonburi area in consistent with the sufficient water supply in Chonburi area. Therefore; gross profit margin of raw water business dropped to 60.55%.

Major costs of raw water business (MB)	For the three-month period				2018	2017	YoY	%
	Q4/2018	Q4/2017	YoY	%				
<b>Raw Water Revenue</b>	<b>588.09</b>	<b>566.33</b>	<b>21.76</b>	<b>3.84%</b>	<b>2,393.82</b>	<b>2,452.05</b>	<b>(58.23)</b>	<b>(2.37%)</b>
<b>Costs of Raw Water</b>	<b>245.32</b>	<b>222.91</b>	<b>22.41</b>	<b>10.06%</b>	<b>944.24</b>	<b>935.25</b>	<b>8.99</b>	<b>0.96%</b>
Raw Water	28.12	28.24	(0.13)	(0.46%)	141.40	120.00	21.40	17.84%
Electricity	64.64	67.25	(2.61)	(3.88%)	268.64	327.85	(59.21)	(18.06%)
Depreciation	96.65	76.40	20.25	26.50%	326.09	300.73	25.36	8.43%
Maintenance	17.25	15.53	1.72	11.04%	59.18	56.80	2.38	4.19%
Others	38.67	35.48	3.19	8.99%	148.92	129.87	19.05	14.67%
<b>Gross Profit</b>	<b>342.77</b>	<b>343.42</b>	<b>(0.65)</b>	<b>(0.19%)</b>	<b>1,449.58</b>	<b>1,516.80</b>	<b>(67.23)</b>	<b>(4.43%)</b>
<b>Gross Profit Margin</b>	<b>58.29%</b>	<b>60.64%</b>			<b>60.55%</b>	<b>61.86%</b>		

**6. TAP WATER BUSINESS**

Tap water revenue in 2018 was 1,438.40 million Baht, increased by 15.66 million Baht or 1.10%. Total tap water sales volume was 96.55 million Cu.M., increased by 0.12 million Cu.M. or 0.13% compared to 2017.

Tap water sales volume (Million Cu.M)	For the three-month period				2018	2017	YoY	%
	Q4/2018	Q4/2017	YoY	%				
Tap water sales volume	5.18	5.18	(0.003)	(0.06%)	20.96	21.28	(0.32)	(1.48%)
Tap water sales volume Subsidiary	19.13	18.62	0.51	2.74%	75.59	75.15	0.44	0.58%
<b>Total tap water sales volume</b>	<b>24.31</b>	<b>23.81</b>	<b>0.51</b>	<b>2.13%</b>	<b>96.55</b>	<b>96.43</b>	<b>0.12</b>	<b>0.13%</b>

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**6. TAP WATER BUSINESS (Cont.)**

**Gross Profit of Tap Water Business** in 2018 was 525.80 million Baht, decreased by 17.92 million Baht or 3.30% compared to 2017. The reasons were from increasing in raw water cost as some concession had purchased raw water from private sources and depreciation and amortization which increased by 18.38 million Baht. representing a lower gross profit margin to 36.55%.

Major Costs of Tap Water Business (MB)	For the three-month period				2018	2017	YoY	%
	Q4/2018	Q4/2017	YoY	%				
Tap Water Revenue	361.96	353.34	8.62	2.44%	1,438.40	1,422.75	15.66	1.10%
Costs of Tap Water	241.09	242.29	(1.20)	(0.50%)	912.60	879.02	33.58	3.82%
Raw Water	45.67	40.86	4.81	11.77%	169.57	151.39	18.18	12.01%
Electricity	35.85	38.31	(2.46)	(6.42%)	143.82	148.99	(5.17)	(3.47%)
Chemical	8.73	7.80	0.92	11.84%	33.51	28.06	5.45	19.43%
Payroll, Outsource Expenses & Maintenance	64.77	71.26	(6.49)	(9.11%)	219.77	226.22	(6.45)	(2.85%)
Depreciation	81.32	71.10	10.22	14.37%	300.79	282.42	18.38	6.51%
Others	4.76	12.96	(8.20)	(63.26%)	45.14	41.94	3.20	7.62%
<b>Gross Profit</b>	<b>120.87</b>	<b>111.05</b>	<b>9.82</b>	<b>8.84%</b>	<b>525.80</b>	<b>543.73</b>	<b>(17.92)</b>	<b>(3.30%)</b>
<b>Gross Profit Margin</b>	<b>33.39%</b>	<b>31.43%</b>			<b>36.55%</b>	<b>38.22%</b>		

**7. FINANCIAL POSITION ANALYSIS**

Financial Position (MB)	As of 31 Dec, 2018	As of 31 Dec, 2017	Increased (Decreased)	%
Total Assets	20,140.90	19,482.62	658.29	3.38%
Total Liabilities	9,335.75	9,052.71	283.04	3.13%
Equity	10,805.15	10,429.91	375.25	3.60%
- Equity attributable to owners of the parents	10,624.66	10,242.56	382.10	3.73%

**1) Assets** At the end of year 2018, total assets were 20,140.90 million Baht, increased by 658.29 million Baht or 3.38% from the end of the year 2017 due to the changes in the following items:

- Cash and cash equivalents were 578.21 million Baht, increased by 540.74 million Baht due to EASTW was refunded in Tubma reservoir development project amount 529.24 million Baht.

- Property, plant and equipment were 14,382.23, increased by 153.84 mainly from the construction project during 2018.

**2) Liabilities** At the end of year 2018, total liabilities were 9,335.75 million Baht, increased by 283.04 million Baht or 3.13% from the end of the year 2017 due to changes in the following items:

- Short term loans from financial institutions were 814.00 million Baht, increased by 731.00 million Baht because the company had drawdown additional short term loan for working capital management.

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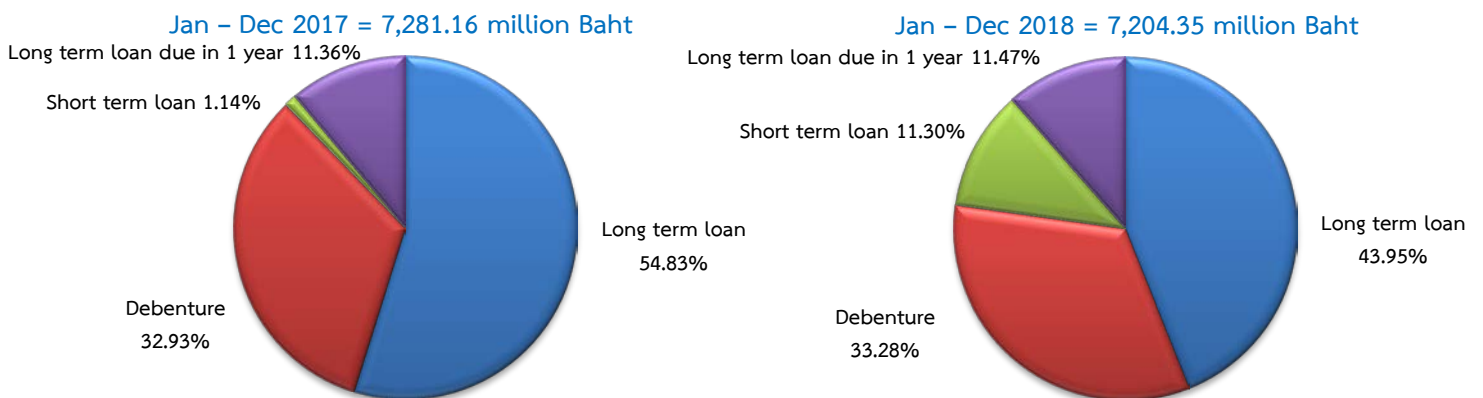
**7. FINANCIAL POSITION ANALYSIS (Cont.)**

- Long term loans from financial institutions were 3,116.20 million Baht, decreased by 826.20 million Baht from the repayment of long term loan as schedule in an amount of 808.20 million Baht.

- Payable for purchase of fixed assets increased in amount of 862.20 million Baht due to accounting record of payable in Tubma reservoir development project.

- Other non-current liabilities were 142.39 million Baht, decreased by 471.34 million Baht due to adjustment of the retention amount and advance payment for Tubma reservoir development project which recorded as Payable for purchase of fixed assets.

**Proportion of Interest Bearing Debt**



**Note:** According to the debentures and long-term loan agreements, the company was required to maintain its D/E ratio of not higher than 2.0 times. For the long-term loan agreements, there is additional condition to maintain DSCR of not less than 1.1 times.

3) **Shareholder’s Equity** At the end of year 2018, Shareholders’ equity attributable to owners of the parent was 10,624.66 million Baht, increased by 382.10 million Baht or 3.73% from the end of the year 2017, basically from the net profit of 2018 and dividend payment.

**8. LIQUIDITY ANALYSIS AND FUNDING ADIQUACY**

In 2018, the company had beginning cash and cash equivalents of 37.48 million Baht, whereby during the financial period, net cash was increased by 540.74 million Baht. This comprised of the following items:

1) **Net cash received from Operating Activities** totaling Baht 1,768.15 million Baht from the net income by net off with the changes in assets and liabilities from operations

2) **Net cash used in Investment Activities** amounted to 253.31 million Baht. This was mainly due to the investment in property, plant and equipment as well as advance payments for construction and the investment of concession asset, net off with refunded in Tubma reservoir development project amount 529.24 million Baht

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**8. LIQUIDITY ANALYSIS AND FUNDING ADIQUACY (Cont.)**

**3) Net cash used in Financing Activities** amounting to 974.11 million Baht, mainly due to the repayment of long-term loan 808.20 million Baht, 750.97 million Baht for dividend payment and 145.60 million Baht for interest paid, net off with the additional short-term loan drawdown of 731.00 million Baht for working capital management.

**9. KEY FINANCIAL RATIOS**

Key Financial Ratios	As of 31 Dec, 2018	As of 31 Dec, 2017
<b>Liquidity Ratio</b>		
Current ratio (time)	0.66	0.60
<b>Profitability Ratio<sup>(1)</sup></b>		
Gross profit / total sales and services revenue (%)	50.19%	51.67%
Net profit / total sales and services revenue (%)	28.33%	30.55%
<b>Performance Ratio</b>		
Return on Equity (ROE) (%)	10.71%	12.15%
Return on Assets (ROA) (%)	5.64%	6.21%
<b>Capital Structure and Debt Ratio</b>		
Debt to Equity ratio (time)	0.88	0.88
Debt Service Coverage ratio (DSCR) (time)	2.19	2.26

**Note:** 1) Gross profit and Net profit were excluded construction revenue under concession agreement and other income.

In 2018, East Water Group reported slightly lower profitability compared to the same period of 2017 because of the lower sales volume. Gross Profit Margin and Net Profit Margin was at 50.19% and 28.33% respectively, while Return on Equity (ROE) dropped to 10.71% and Return on Asset (ROA) was 5.64% which declined from 2017 due to the lower net profit. For the liquidity analysis, current ratio increased to 0.66 times because of the record of construction refund from Tubma reservoir development project. Debt to equity ratio was at 0.88 times and Debt service coverage ratio (DSCR) remained strong at 2.19 times.