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PRELIMINARY FINANCIAL FEASIBILITY ANALYSIS OF INVESTMENT PROPOSAL

BULK WATER SUPPLY PROJECT IN MAJALENGKA
TO SUPPLIED TO PDAM KOTA CIREBON



JUNE 2006

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Photo Credit: Benny Djumhana/ ESP Jakarta

The spring overflow of Pajajar Spring – in Majalengka District, West Java – is used to irrigate paddy fields and fish farming.

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I. INTRODUCTION

The water utility of the city of Cirebon, Indonesia (PDAM Kota Cirebon) intends to purchase raw (spring) water from the neighboring water utility of Kabupaten Majalengka in order to supply treated water to approximately 28,535 new connections on the wait list for water supply services in Cirebon.

The local government (PEMDA) of Majalengka will be inviting a private operator/investor to enter into a Public-Private Partnership (PPP) in which the operator will build and operate a transmission line to bring spring water from Majalengka to a reservoir maintained by the PDAM in Cirebon. The PDAM will install the new household connections to which the water it purchases from the private operator will be distributed. The total cost of the project is approximately Rp 200 billion, of which Rp 100 billion will be mobilized by the private sector operator via BOT for the Majalengka-to-Cirebon transmission system, and Rp 100 billion will be from the PDAM for making the new connections and building the distribution system.

PEMDA Majalengka will enter into an agreement with the private operator to build, own and operate the bulk water extraction and supply system, on terms to be agreed, while PDAM Kota Cirebon will purchase the installed capacity of that system from the private operator who will be supplying the bulk water to the reservoir in Cirebon.

This report will present information in the following chapters:

1. Water Source in Kabupaten Majalengka
2. Majalengka Bulk Water Supply Project
3. PDAM Kota Cirebon
4. PDAM Kota Cirebon Service Expansion Project
5. PDAM Kota Cirebon Projected Performance

2. WATER SOURCE IN KABUPATEN MAJALENGKA

2.1. SPRING WATER SOURCE FOR THE DRINKING WATER

Majalengka is one of the municipalities in West Java that has large resources of spring water. In a water source study conducted by Waseco in 1989 some springs that could be used for drinking water were identified. They are presented in Table I.

Table I Spring Water Source for the Drinking Water

No	Spring	Sub-district (Kecamatan)	Elevation (m ASL)	Capacity LPS
1	Cipadung	Sukahaji	450	680
2	Cipanten	Sukahaji	380	216
3	Talagaherang	Rajagaluh Sindangwangi	240	320
4	Situ Janawi	Rajagaluh	470	110
5	Cisadane	Rajagaluh	480	100
6	Cipanten Tengah	Argapura	1180	150
			Total	1576

Source: *West Java Sources Plant for Water Kab. Majalengka, Iwaco, Waseco, 1989.*

Cipadung spring is a big spring that could produce 680 LPS of clean water, located in Pajajar village. There are several small springs in this area that could also potentially be used for a drinking water source. Total capacity from all of these springs is estimated to be 800 LPS.

Some other small springs located in the Talagaherang area adjacent to the Pajajar village are estimated to produce approximately 390 LPS of clean water. These small springs include the ones in Cileles and Cikuda.

PDAM Kabupaten Majalengka is now considering utilizing the spring located in Cirumput that could supply approximately 104 LPS to fulfill the PDAM's future demand. By adding this capacity to the total capacity from the above springs, the entire capacity available for drinking water is estimated to be 1,870 LPS.

2.2. SPRING WATER SOURCE FOR IRRIGATION SYSTEM

The irrigation system has been using some potential springs for rice plantation in some areas of Kabupaten Majalengka. A report issued in 2002 by the Cimanuk Project indicated that a total of approximately 123 springs are located in Kabupaten Majalengka. A few of them are currently used for irrigation systems. These include Cikeruh, Cipanda, Cisaat and others as identified in the summary below.

Table 2 Spring Water Source for Irrigation System

No	Spring	Sub-district (Kecamatan)	Elevation (m ASL)	Capacity LPS
1	Cikeruh	Argapura	-	60 – 100
2	Cipanda	Argapura	-	210 – 350
3	Cisaat	Argapura	-	60 – 100
4	Cikimpur	Sukahaji	-	48 – 140
5	Gunung Kuring	Sukahaji	-	168 – 275
6	Talaga Nilia	Sindangwangi	-	300 –
<i>Source : Laporan akhir Inventarisasi Potensi Sumber Air, PT Cipta Wahana tahun 2002, diambil data Proyek Cimanuk</i>				846 - 965

2.3. SPRING WATER SOURCE FOR PDAM KABUPATEN MAJALENGKA

PDAM Kabupaten Majalengka recorded that total customers connected to the piped water system as of December 2005 were 11,500. Total production capacity of the PDAM, utilizing water source mostly from the springs is estimated at 225 LPS.

1. Spring 170 LPS
2. Treatment Plant 20 LPS
3. Deep well 35 LPS

Water sources from several springs have been utilized by PDAM to serve its customers, including Cihaneut, Cigowong, and Cipandeuy, as well as the Cipadung spring. PDAM has not yet utilized all available springs because of their distance from the service areas. To bring water from those springs to the service areas would require PDAM to incur considerable energy and investment costs relating to the transmission lines.

A feasibility study of PDAM water infrastructure development, issued in 1994, indicated that PDAM Kabupaten Majalengka planned to expand its services to some sub-districts, which include Jatiwangi, Dawuan, Kadipaten, Panyingkiran, Cigasong, Sukahaji, and Kota Majalengka. Total potential connections in these areas is estimated at 30,000 and to serve those connections would require additional water of 386 LPS. To serve those potential customers the PDAM has planned to use water from Cipadung spring in Pajajar village, a distance of 30

Km to the service area. To do so it was determined that total investment would be very high, so the PDAM has not yet been able to implement this plan.

2.4. WATER BALANCE ANALYSIS

Potential spring water sources in Majalengka, as described above, which could potentially be used for drinking water, could yield about 1,680 LPS. Total potential capacity is estimated to be 10% of the available capacity, which is primarily sourced from Cipadung spring in Pajajar. This estimate indicates that if the proposed project would use 410 LPS, or 24% of total potential capacity, the balance of potential spring water supply would decrease to 1,100 LPS. It is therefore considered that tapping the water for Kota Cirebon supply would not make a significant impact on potential spring water resources available to Kabupaten Majalengka. However, if the water is entirely tapped from Pajajar spring (the spring water source with the greatest potential) then it could substantially impact the development plans of PDAM, which are to use this spring to serve the Jatiwangi area. This development plan is included in the PDAM's corporate strategic plan regarding servicing of water demand in the near future.

To accommodate the concerns described above, the project proposes to exploit 2 spring resources: Pajajar and a combination of several small springs. Pajajar spring would be used to supply 200 LPS, and the remaining 210 LPS would be tapped from small springs, namely Talagaherang, Cileles and Cikuda, which could produce a total of 390 LPS in clean water.

The water balance profile for Kabupaten Majalengka after implementation of the proposed project is provided below.

Table 3 Water Balance Analysis Kabupaten Majalengka

No	Spring	Sub-district	Capacity	Existing	Majalengka	Cirebon	Balance
1	Cipadung & small springs	Sukahaji	800	120	386	200	94
2	Cipanten	Sukahaji	216				216
3	Talagaherang	Rajagaluh Sindangwangi	320 (390 + Cileles & Cikuda)			210	180
4	Situ Janawi	Rajagaluh	110				110
5	Cisadane	Rajagaluh	100				100
6	Cipanten Tengah	Argapura	150				150
7	Cirumput	Rajagaluh	104				104
			1870	120	386	410	954

Source: Hasil Analisis Awal tahun 2006

3. BULK WATER SUPPLY PROJECT IN MAJALENGKA

3.1. POTENTIAL WATER SOURCE ALTERNATIVES

Based on a water demand survey and projection recently done by ESP, PDAM Kota Cirebon will require additional water supply of approximately 410 LPS. The extension areas include Kecamatan Cirebon Utara, Kecamatan Cirebon Barat, Kecamatan Cirebon Selatan, Kecamatan Harjamukti, and Kecamatan Mundu. Total potential household connections in these areas are estimated to be 28,535.

Due to the lack of local water sources that could be used to fulfill additional water demand in Cirebon's existing and potential service areas, PDAM Kota Cirebon considers the water source alternatives located in Majalengka to be the best alternative sources. There are three springs located in Kabupaten Majalengka that could be considered as potential alternative water sources for Cirebon, namely Pajajar Spring in Kecamatan Sukahaji, Talagaherang Spring, Cikuda, and Cileles Spring in Kecamatan Sindangwangi. These three springs are located close to each other so that water from those sources can be efficiently collected into a collector chamber by using pipeline or open channel, or combination of both.

The Pajajar Spring has about 800 LPS of flow, but at present it is used for tourism purposes so that resource will be used by PDAM Majalengka as one of their water source alternatives for future water supply systems. Therefore, the project will just take approximately 200 LPS from the Pajajar Spring and the remaining water will be taken from Talagaherang spring (110 LPS), Cikuda spring (60 LPS), and Cileles spring (40 LPS), for a total of about 210 LPS.

Table 4 Potential Water Sources

Spring Alternatives	Location	Q (l/sec)	Water Quality	Distance (km)
Pajajar Spring	Kecamatan Sukahaji Kabupaten Majalengka	680 - 1200	good	26
Talagaherang spring Cikuda Spring, and Cileles Spring	Kecamatan Sindangwangi Kabupaten Majalengka	248 82 60.8 Total: 390	good	18

The following diagram shows the planned scheme for water sourcing, production, and transmission.

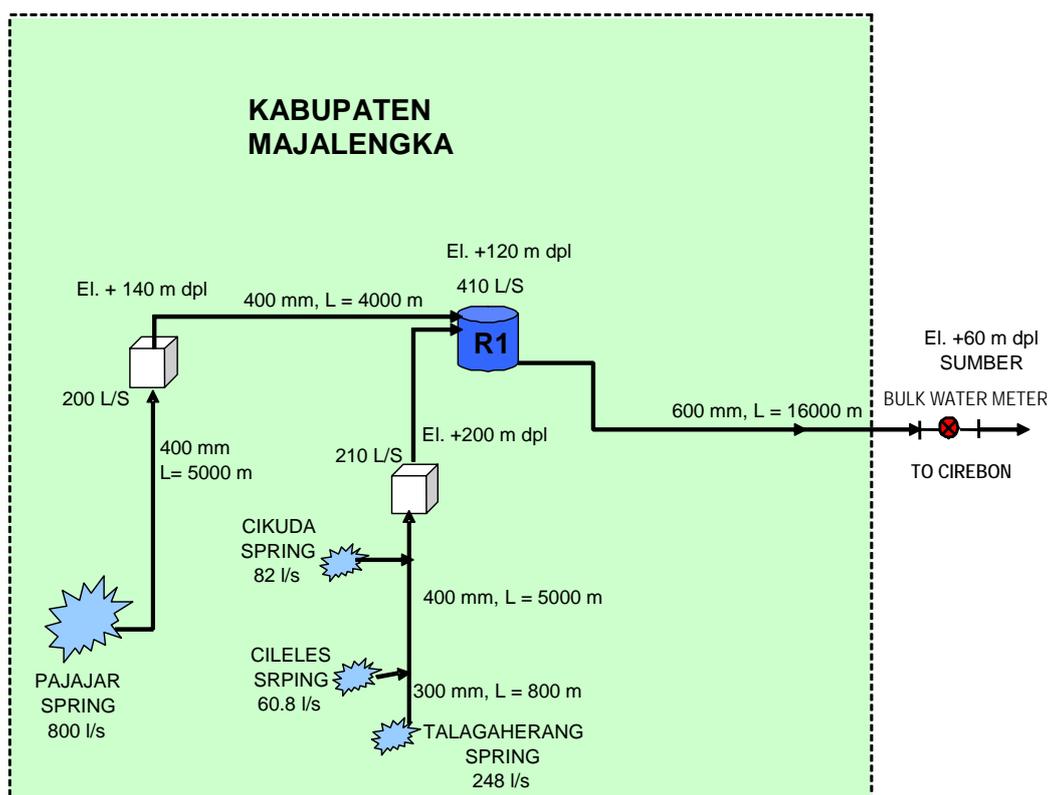


Figure 1 Bulk Water Supply Project

3.2. CAPITAL EXPENDITURE ESTIMATE

For supplying 410 LPS, given the distance of transmission will be approximately 26 KM, total investment required (mostly for the transmission pipe) is estimated to be Rp 98.68 Billion, at 2005 prices. The details of investment costs required by the project are presented below.

Table 5 Total Investment Cost, Bulk Water Supply Project (Rp million)

Description	Amount	Total Investment Costs
Water Production Programs		
A. Land Acquisition	4600 m ²	460
B. Broncapturing	440 l/sec	2,520
C. Reservoir & Pressure Release Chamber (PRC)	Ls	8,039
D. Transmission Line	30800 m	71,451
E. Open Channel	400 m ³	300
F. Vehicle, Tools, and Equipment	Ls	532
Sub Total		83,302
G. Physical Contingency	10%	8,330
Sub Total Physical Works		91,632
H. Non Physical Works	Ls	7,056
TOTAL		98,688

3.3. CONSTRUCTION STAGES AND FINANCING PLAN

The construction period for building a minor treatment plant and its transmission pipes is projected to be 3.5 years, starting in 2006. Then there will be a preliminary study, followed by physical works from 2007 to mid 2009. It is expected that project will start selling bulk water at its full capacity (revenues based on capacity) of 410 LPS to PDAM Kota Cirebon by mid 2009.

Table 6 Investment Plan, Bulk Water Supply Project (Rp 000)

NO	Description	Total	2006	2007	2008	2009
			Year 0	Year 1	Year 2	Year 3
1	Land Acquisition	460.000		460.000		
2	Broncaptering - Civil and Plumbing works	2.520.000		1,720,000	800,000	
3	Reservoir & Pressure Release Chamber (PRC)	8,039,000	-	2,280,000	5,759,000	
4	Piping/ Transmission Line	71,451,282	-	-	42,021,200	29,430,082
5	Open Channel	300,000			300,000	
6	Vehicles	532,000	-	-	-	532,000
7	Physical Contingencies	8,330,228	-	446,000	4,888,020	2,996,208
8	Non Physical (Study, etc)	7,055,703	2,519,894	1,878,466	1,328,671	1,328,671
	Total (2005 Price)	98,688,213	2,519,894	6,784,466	55,096,891	34,286,962

The project's financing is anticipated to be a loan plus investor's equity, with a 70/30 debt-to-equity ratio. The project loan interest rate is estimated to be 15% with 2 years grace period and the term of the loan is assumed to be 10 years. In years 0 and 1, the project's preparation stage, all project fund requirements would be obtained from the investor's equity.

Table 7 Financing Plan, Bulk Water Supply Project (Rp 000)

Description	Total	Year 0	Year 1	Year 2	Year 3
Total (2005 Price)	98,688,213	2,519,894	6,784,466	55,096,891	34,286,962
Inflation factor		7%	7%	7%	7%
Escalation Index : 2005 = 1	1	1.07	1.14	1.23	1.31
Total (Current Cost)	122,903,096	2,696,287	7,767,536	67,496,061	44,943,212
Equity	33,731,782	2,696,287	7,767,536	9,784,996	13,482,964
Loan	89,171,314	0	0	57,711,06	31,460,249
Total	122,903,096	2,696,287	7,767,536	67,496,061	44,943,212

3.4. FINANCIAL ASSUMPTIONS

The project is projected to reach full capacity in year 3 (mid of 2009) and will then sell its bulk water to PDAM Kota Cirebon. The project, during the duration of contract period, would generate an estimated return or IRR of 16.00% and a return for its investor (equity IRR) of at least 22%. The project contract period is assumed to be 20 years, starting in 2006 as the preliminary stage for completing a detailed study of the project, and ending in 2026.

To enable the project to cover future increases in its operating (variable) expenses, the bulk water tariff will have to be adjusted upward on an annual basis, probably based on inflation or other similar index. The financial projections assume a 7% annual tariff increase.

Some operational expenditure (Opex) items of the project have been divided into 2 categories: variable Opex, which consists of raw water and chemical components, and fixed Opex covering personnel, maintenance, and overhead expenditures. A summary of the project's projected operating expenses is provided below.

Table 8 Operational Expenditure Assumptions Bulk Water Supply Project

No	Opex	Assumption	Total	Unit Price 2006
	Fixed Opex			
1	Personnel	Number of Personnel	16	Rp. 4.9 Mil / Month
2	Maintenance	Rate of Maintenance Cost to Fixed Asset	1%	-
3	Overhead	Rate of Overhead to Personnel	25%	-
	Variable Opex			
1	Raw Water	Raw water paid to local government	-	Rp100 / m3
2	Chemical	Cost per m3 water produced/sold	-	Rp. 13 / m3

Other financial assumptions have been taken into account in the projections, such as provision of working capital components that include accounts receivable and payable, as well as inventory of chemicals. The contract between the investor and local government of Majalengka is assumed to be for 20 years. Within this period, it is expected the project will generate an overall financial internal rate of return (FIRR) of 16 % based upon the weighted average cost of capital applied to the project's financial structure. Meanwhile, return on equity for the investor interest is estimated of 22%. This return is calculated on an after tax basis assuming corporate tax of 30%.

Table 9 Other Financial Assumption Bulk Water Supply Project

No	Item	Assumption	Remarks
1	Cooperation Period	20 years	Start in 2006
2	Project Internal Rate of Return	16%	-
3	Equity Internal Rate of Return	22%	-
4	Tax on Dividend	30%	-
5	Loan Repayment Period	10 years	-
6	Loan Grace Period	2 years	-
7	Interest of Loan	15%	

3.5. BULK WATER TARIFF

The contract with the private operator/investor will be a “take-or-pay” contract based on available capacity. This means that if PDAM Kota Cirebon fails to take actual delivery of the full bulk water capacity of the facility, it will still be obligated to pay the operator for its available capacity. This provision is designed to mitigate risk to the investor. Considering this, along with other technical and financial inputs, the bulk water tariff required by the project in year 2009 is projected to be Rp 2,399 or equivalent to Rp.1,959 (2006 price) times 7% annual escalation. The projected bulk water tariffs for years 0 through 12 are summarized below. Tariff escalation for years 13 through 20 is assumed to be 7%.

Table 10 Projected Bulk Water Tariff (Base Scenario)

Bulk Water Tariff (Rp/m3)	2006	2007	2008	2009	2010	2011	2012
Tariff Escalation	7%	7%	7%	7%	7%	7%	7%
Bulk Water Tariff (Rp/m3)	1,959	2,096	2,242	2,399	2,567	2,747	2,939

Because the contract for bulk water supply should be tendered out on a fixed price, fixed schedule contract, the investor should consider the risk that engineering and construction costs may be about 10%-20% higher than what is assumed in these calculations. On that basis, the bulk water tariffs for alternative construction and engineering costs would look as follows:

Table 11 Projected Bulk Water Tariff (Alternative Scenarios)

Bulk Water Tariff (Rp/m3)	2006	2007	2008	2009	2010	2011	2012
Base Scenario	1,959	2,096	2,242	2,399	2,567	2,747	2,939
Capex : 10 % higher	2,280	2,440	2,610	2,793	2,989	3,198	3,422
Capex : 20% higher	2,464	2,636	2,821	3,019	3,230	3,456	3,698

In Attachment I, the financial projections show the expected performance of the bulk water supply project and the ability of PDAM Kota Cirebon to absorb the costs of its obligation to pay for available capacity, as well as sensitivity for capital expenditure variances. A discussion on the scenarios presented above it provided at the end of this report.

4. PDAM KOTA CIREBON

PDAM Kota Cirebon, a water utility company in the municipality of Cirebon, wishes to continue improving its service of providing clean water to the service area of Cirebon. PDAM Cirebon as of December 2005 served 53,263 connections or 98% of its population, which has been served by piped water from PDAM. The PDAM's 10 Year Plan includes an increase in service coverage up to 100%. Some areas located out of the boundary of Cirebon have also been targeted for service, such as East Cirebon and South Cirebon, areas that are administratively under the municipality of Kabupaten Cirebon.

4.1. DEMAND PROJECTION

Based upon a demand study undertaken recently, PDAM connections have been requested by 16,000 potential customers. The lack of raw water availability, and lack of full capacity utilization of production plants have caused PDAM to delay connections to these potential customers. The demand study indicated that these potential customers, plus others on the waiting list, are located in several sub-districts such as Harjamukti, Mundu, and South Cirebon, as well as North Cirebon. Total potential customers in these areas are estimated to be 28,535. Connecting piped water to those potential customers has been scheduled, following the availability of bulk water from the proposed project, starting in year 2009. The profile of new customers to be served by the new source of bulk water from the proposed project is presented below.

Table 12 Summary of Potential Customers In Target Area (Number of Connections)

Area / Connection	North Cirebon	South Cirebon	West Cirebon	Harjamukti	Mundu	Total
Household	4.440	6.090	6.140	4.340	4.340	25.530
Non Household	667	297	907	667	647	3.185
Total	5.107	6.387	7.047	5.007	4.987	28.535

Some of the areas cited above have been connected to PDAM piped water and their current average water consumption is 27.5 m³/month. Using this historical water consumption, the total additional water needed by PDAM to serve these potential customers is approximately 410 LPS. The implementation of this bulk water supply project, which will commence in year 2009, will provide service first to the waiting list of 16,000 living in Harjamukti, Mundu, and South Cirebon. The projected number of additional connections and the total connections in each area is described in the table below.

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Table 13 Summary of Projected Total Customers In Target Area

General Description	2008	2009	2010	2011	2012	2013	2014	2015
Area (Ha)	10,117	10,117	10,117	10,117	10,117	10,117	10,117	10,117
Population	386,567	391,794	397,092	402,462	407,904	413,420	419,011	424,677
Population Increase	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%
Population Density (Inhabitant/Ha)	38	39	39	40	40	41	41	42
Number of Persons per Household Connection	5	5	5	5	5	5	5	5
Number of Connections								
Households	17,705	23,955	34,405	37,505	39,955	41,655	43,055	43,055
Additional Connections	0	6,250	10,450	3,100	2,450	1,700	1,400	-
Supplied Population	88,526	119,776	172,026	187,526	199,776	208,276	215,276	215,276
Service Coverage (%)	23%	31%	43%	47%	49%	50%	51%	51%
Non Residential								
Non Household (unit)	2646	3434	4740	5131	5429	5651	5831	5831
Connections increase			1306	391	298	221	181	0
Total Connections	17,705	27,389	39,145	42,636	45,384	47,306	48,886	48,886

Taking into account the additional connections described above, total household connections to be served by PDAM Kota Cirebon is projected in the table below. The additional connections per year for 2012 through 2014 is assumed to be 1,500.

Table 14 Summary of PDAM Projected Customers (Number of Connections)

Tariff Class	2006	2007	2008	2009	2010	2011
Sosial (A)	1,374	1,374	1,374	1,374	1,374	1,374
Non-Niaga (B)	36,405	36,405	36,405	42,655	53,105	56,205
Niaga (C)	12,227	12,227	12,227	12,227	12,227	12,227
Industri (D)	3,626	3,626	3,626	4,415	5,721	6,111
Khusus (E)	131	131	131	131	131	131
Total	53,763	53,763	53,763	60,802	72,558	76,048

4.2. PDAM KOTA CIREBON HISTORICAL PERFORMANCE

The historical performance of PDAM Kota Cirebon has been an example of quality management. In terms of service coverage, number of connections, targeted investments, profitability, solvency, and liquidity, management has been more successful than many of the Indonesian water utilities in keeping things on track.

Total connections served by PDAM Kota Cirebon as of December 2005 are 53,263 covering 98% of Kota Cirebon's population. For 2006 the PDAM projects an additional 500 connections.

Table 15 Summary of Historical Customer Base (Number of Connections)

Customer	2002	2003	2004	2005	2006
Sosial (A)	1,302	1,331	1,349	1,374	1,374
Non-Niaga (B)	44,898	45,720	46,108	35,905	36,405
Niaga (C)	1,126	1,131	1,161	12,227	12,227
Industri (D)	3,664	3,645	3,688	3,626	3,626
Khusus (E)	131	136	134	131	131
Total	51,121	51,963	52,440	53,263	53,763

Tariff category (A) remains stable, which is good for the PDAM because tariffs in this category are kept low for public policy reasons, to help non-commercial operations that perform social services considered to be important. Category (B) is non-commercial customers that do not fall within the category of public service; this means category (B) is essentially residential customers. After a gradual rise from 2003 through 2004, there was actually a drop in the following year, and a significant drop. This was discussed with PDAM management and their understanding of the cause for this decline was that a customer reclassification was undertaken on that year, some of domestic (Non-Niaga) customers were moved to Niaga category. As seen in the table Niaga customers have increased significantly from 1,161 to 12,227 in year 2005.

The table below summarizes historical performance from 2002, the first year of Indonesia's full recovery from the economic crisis of the late 1990s, through 2004, the most recent year of audited financial results, then 2005 figures from internal records, then 2006 from projections of financial performance for the remainder of the current year. The continuous decline in long-term liabilities reflects PDAM management's attention to its debts, in particular the large loans obtained from donors or from the Ministry of Finance (MOF) or donor funds borrowed through MOF. Payments on such debts are usually problematic among Indonesian water utilities, so this PDAM's performance in reducing those debts is evidence of credit worthiness.

The large rise in fixed assets (net of accumulated depreciation) in 2006 is a reflection of the new assets associated with the new water supply and distribution project. Current assets, and total assets, remain steady through the period. In 2005 and 2006 we see the increased operating expenses that were caused by increased the bulk water and personnel. Bulk water costs payable to Pemda Kuningan has increased Rp. 2 billion.

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Table 16 Summary of Historical Financial Performance (Rp 000)

Description	2002	2003	2004	2005	2006
Balance Sheet					
Assets					
Cash and Bank	967,570	1,184,492	1,195,587	1,102,062	1,925,018
Accounts Receivable	1,310,975	1,385,702	1,509,798	1,858,379	2,028,780
Other Current Assets	2,507,426	1,730,551	2,039,374	3,007,795	2,919,597
Total Current Assets	4,785,971	4,300,745	4,744,759	5,968,236	6,873,395
Fixed Assets (Net)	31,539,836	31,370,252	31,206,401	30,755,823	28,234,541
Other Assets	6,817,869	7,090,309	6,090,626	8,789,609	8,789,609
Total Assets	43,539,596	43,611,147	43,170,740	45,695,282	47,932,596
Liabilities and O/E					
Current Liabilities	2,040,979	1,754,104	2,469,188	2,419,776	2,109,111
Long Term Liabilities	3,021,075	3,670,739	2,853,279	1,932,808	1,690,600
Other Liabilities	10,024,060	10,007,400	9,755,401	10,922,257	12,535,147
Total Liabilities	15,086,114	15,432,243	15,077,868	15,274,841	16,334,858
Owners Equity	28,453,482	28,178,904	28,092,872	30,420,441	31,597,738
Total Liabilities and Owners Equity	43,539,596	43,611,147	43,170,740	45,695,282	47,932,596
Income Statement					
Operating Revenues	24,049,123	21,487,298	22,398,824	32,544,330	30,363,882
Operating Expenses	13,821,594	15,877,683	16,539,832	24,026,745	23,433,671
Net Income from Operations	10,227,523	5,603,615	5,858,992	8,517,585	6,330,211
Other Expenses	1,880,685	3,001,991	3,051,618	3,022,399	2,993,193
Debt Service	287,407	221,863	210,337	186,415	155,225
Taxes	2,392,829	749,395	885,749	1,567,631	929,556
Net Income	5,666,602	1,630,366	1,711,288	3,741,140	2,252,237

Table 17 Historical Performance Financial Indicators

Year	2002	2003	2004	2005	2006
Current Ratio	2.34	2.45	1.92	2.47	3.26
Quick Ratio	1.98	2.03	1.62	2.39	2.94
Debt/Asset Ratio	0.35	0.35	0.35	0.34	0.34
Return on Equity	20%	6%	6%	12%	7%

The current ratio is an indication of a company's ability to meet short-term debt obligations. The higher the ratio, the more liquid is the company. The equation for current ratio is current assets divided by current liabilities. If the current assets of a company are more than twice the current liabilities, then that company is generally considered to have good short-term financial strength. If the ratio falls below 2 then there is a concern on the part of lenders regarding the company's ability to make current payments on the loan. The current ratio over the period of analysis presented above is above 2 in each year except one, and in that one year the ratio is still close to 2. In the final year, the ratio is well above 2, indicating both a strong ability on the part of the PDAM to meet its short-term debt obligations as well as a robust upward trend.

The quick ratio is a measure of a company's liquidity and ability to meet its obligations. This ratio is sometimes referred to as the acid test. The formula is current assets minus inventories, divided by current liabilities. Quick ratio standards vary greatly from industry to industry, but in general a quick ratio of 1 or more is accepted by most lenders. In all years presented above, the PDAM's financial performance yields a quick ratio in excess of 1, and in some years approaching and then exceeding 2, so these are indications of healthy liquidity on the part of the PDAM.

The debt/asset ratio is total liabilities divided by total assets. The ratio shows the proportion of a company's assets that are financed through debt. If the ratio is less than 1 then the majority of the company's assets are financed through equity. If the ratio is greater than 1 then a majority of the company's assets are financed through debt. An unfavorable debt/asset ratio signifies that a company may be highly leveraged, a risky situation if lenders find it necessary to demand debt payments when periodic payments have fallen behind. The ratios presented above are all below 1, indicating that a majority (more than half) of the PDAM's assets are financed by equity. These ratios indicate that the PDAM is not excessively leveraged and could tolerate more debt.

Return on equity (ROE) is net income divided by average owners equity. Average owners equity is the amount at the start of the period plus the amount at the end of the period, divided by 2. In financial markets, the cost of debt is nearly always higher than the cost of equity. In this document we present some proposed projects in Indonesia, where the cost of debt is projected to be around 15 percent and the cost of equity is projected to be around 20 percent. In every year other than 2002, the ROE for this PDAM has been well below the cost of equity in the financial markets. In conjunction with the comparatively low debt/asset ratios, this could simply mean that the PDAM is investing too much equity in income producing assets, and that future asset investments should have a higher debt component. Also, relatively low ROE figures of this nature are not unusual in government, or government-owned enterprises like this PDAM, and not unusual in the Indonesian water sector. In interpreting these ratios, one should also keep in mind that the cost of borrowing for PDAM has been historically low because of access to donor and host country

government loans at relatively low nominal interest rates, e.g. 7 to 8 percent. If their cost of borrowing is relatively low, then their return on equity could still be considered healthy at levels 4 to 5 points above the borrowing rate. Note that this PDAM achieves a return on equity of 12% in 2005, a level that is probably acceptable for a state-owned enterprise.

Table 18 Aging of Accounts Receivable Based on Most Recent Audited Results 12/04 (Rp 000 except percentages)

Tariff Class	0-3 months	%	3-6 months	%	6-12 months	%	12-24 months	%	Over 24 months	%	Total
Sosial (A)	239,175	91%	6,627	3%	5,909	2%	1,096	1%	11,148	4%	263,955
Non-Niaga (B)	293,067	48%	122,918	20%	110,271	20%	36,294	6%	38,517	6%	613,714
Niaga (C)	116,328	45%	28,858	11%	31,416	11%	22,360	9%	60,428	24%	256,832
Industri (D)	95,419	45%	3,805	2%	37,114	17%	48,015	22%	29,921	14%	214,275
Khusus (E)	2,705	4%	1,691	2%	63,936	90%	1,404	2%	1,301	2%	71,037
Total	746,694	53%	163,899	12%	248,169	18%	109,169	8%	141,315	10%	1,419,813

In accordance with the policy approved by its independent auditors, the PDAM books a reserve for bad debts at the end of each year, per the following schedule:

1. 30% of receivables aged 4 to 6 months;
2. 50% of receivables aged 7 to 12 months;
3. 75% of receivables aged 1 to 2 years; and
4. 100% of receivables aged more than 2 years.

Booking of bad debts expense to the P&L against the reserve account in the balance sheet is done at the end of each year in consultation with the PDAM's Supervisory Board.

Accordingly, it is considered that the treatment of accounts receivable by the PDAM is in conformance with international accounting standards. This in turn means that accounts receivable are not likely to be overstated, and related impacts on net income and retained earnings are accurate.

As an indicator of collection performance, we can calculate the overall average number of days for receivables by taking total sales for the year and dividing it by the number of days of service during the year, to derive a sales-per-day figure. For 2004, the most recent year audited financial results the sales per day are Rp 61 million. Then we divide total receivables at the end of the year, which in 2004 were Rp 1.07 billion, by sales per day of Rp 61 million and that yields an average age of receivable of 18 days. Then we adjust that figure for write-offs of bad debts done in accordance with auditor and management policy and the resulting figure is 32 days. For an Indonesian water utility 32 days for the average age of a receivable is good performance.

If we use un-audited results for 2005, provided by management, and current Year 2006 results projected to the end of the year, we calculate the average age of a receivable in the following manner: total receivables of Rp 1.449 billion, divided by the number of days of service of 359 for a sales-per-day figure of Rp 85 million. That figure divided into total receivables of Rp 1.449 billion yields an average receivable age of 17 days. If we adjust that figure for write-offs then the average age of a receivable for the current year 2006 is 30 days. For an Indonesian water utility an average receivable age of 30 days indicates good collection performance.

5. PDAM KOTA CIREBON SERVICE EXPANSION PROJECT

5.1. PROJECT DESCRIPTION

Based upon the demand study conducted by ESP, building new main distribution and tertiary distribution lines are required to enable PDAM sell the water to its potential customers. These new main and tertiary distributions will reach to the targeted area in 5 sub-districts (Kecamatan) in Kota Cirebon and Kabupaten Cirebon.

The demand study and potential customers waiting list indicate that to enable PDAM deliver the water to those customers the expansion of distribution line is significantly required. Total potential customers living in these areas are estimated at 28,535 and the network expansion project would commence by mid of 2009. The figure below describes the location of the area to be supplied and estimated of distribution expansion program in Kota Cirebon.

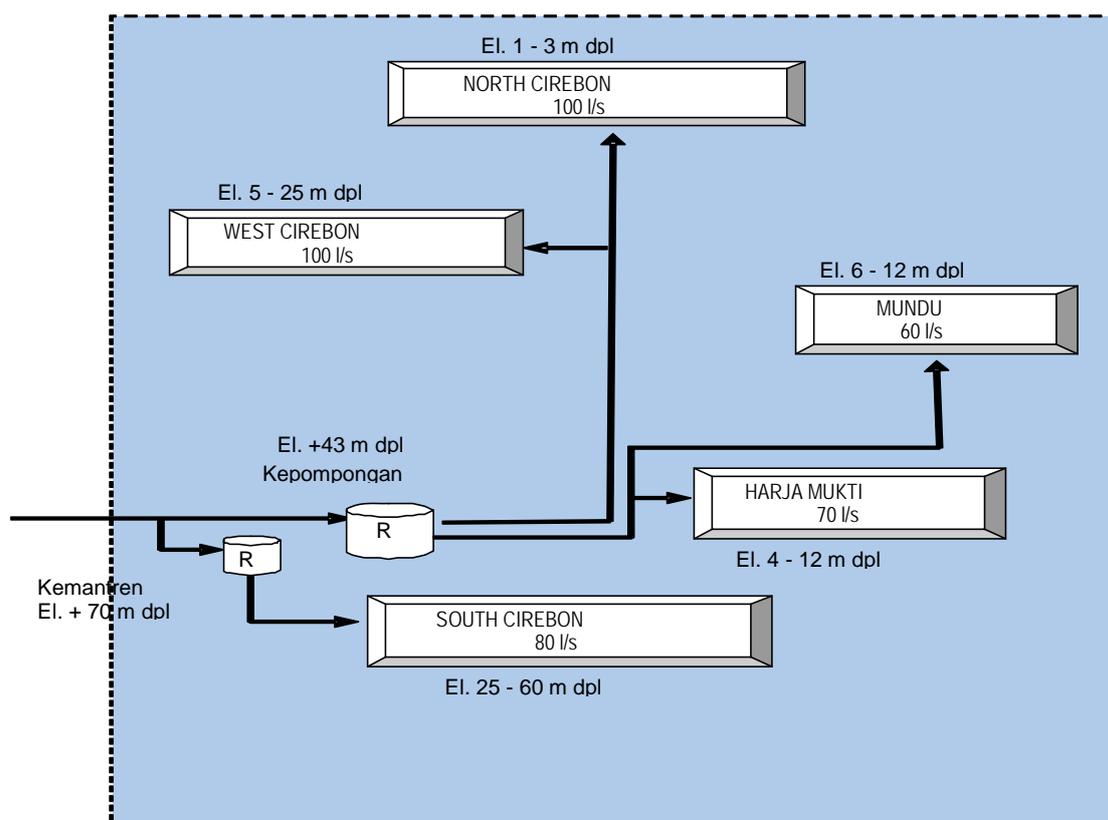


Figure 2 Location of the Potential Customers and Estimated Distribution Line Expansion

5.2. PROJECT COST ESTIMATES

The total investment required for building the distribution line is projected at Rp 103 billion, of which half will be used for main and tertiary line parts.

Table 19 Estimated Investment Cost of Distribution Expansion Program (Rp million)

Water Distribution Programs	Volume	Total Investment
A. Main Pipes	20,988 m	24,320
B. Tertiary Pipes	36,000 m	38,610
C. Distribution Reservoir	3,500 m ³	10,000
D. Connections	30,000 units	14,430
Sub Total		87,360
E. Physical Contingency	10%	8,736
Sub Total Physical Works		96,096
F. Non Physical Works	Ls	7,163
TOTAL		103,260

The construction schedule has been matched with projected growth in number of connections and construction period of the bulk water supply project. It has been assumed that construction of the distribution line will be started simultaneously with the bulk water works. The period of construction is projected to be 2.5 years starting in 2007 and ending mid 2009. Annual project costs have been projected as follows:

Table 20 Estimated Annual Investment Cost of Distribution Expansion Program (Rp million)

	Total Cost	2006	2007	2008	2009	2010	2011	2012	2013	2014
Physical Works										
Main Pipe Distribution Networks	24,320			19,177	5,142					
Tertiary Pipe Distribution Networks	38,610			7,801	13,529	5,727	5,823	5,727		
Distribution Reservoir	10,000			10,000						
Connection	14,430				3,560	5,943	1,765	1,387	973	800
TOTAL OF PHYSICAL WORKS	87,360			36,978	22,232	11,671	7,589	7,115	973	800
Physical Contingency	8,736			3,697	2,223	1,167	758	711	97,3	80
Sub Total Physical Work	96,096			40,676	24,455	12,838	8,348,	7,826	1,070	880

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	Total Cost	2006	2007	2008	2009	2010	2011	2012	2013	2014
Non Physical Works	7,163		2,882	1,921	1,310	1,048				
Inflation factor		7%	7%	7%	7%	7%	7%	7%	7%	7%
Escalation Index		1.07	1.14	1.23	1.31	1.40	1.50	1.61	1.72	1.84
Grand Total (Current Cost)	137,291	-	3,301	52,185	33,774	19,476	12,528	12,568	1,840	1,619

5.3. SERVICE EXPANSION PROJECT FINANCING PLAN

Financing plan of the project for the service expansion assumes borrowing from a private bank. Private bank financing is necessary alternative financing mechanism for PDAM because Ministry of Finance has suspended government lending. PDAM's share of project costs will be funded by PDAM internal cash generated from its annual profits. It is estimated that the total loan amount required will be Rp 100 billion.

Table 21 Financing Plan of Distribution Expansion Program (Rp million)

Financing Plan	Total Cost	2006	2007	2008	2009	2010	2011	2012	2013	2014
Grand Total (Current Cost)	137,291	-	3,301	52,185	33,774	19,476	12,528	12,568	1,840	1,619
Loan Withdrawn	100,000			50,000	30,000	20,000				
PDAM	37,291									

The grace period of the loan is assumed to be 3 years, i.e. the first repayment of the loan will be due on 2011 thereafter the loan will be completely repaid in year 2021. Interest rate of the loan is assumed to be 15%. The term of the loan is assumed to be 10 years.

6. PDAM KOTA CIREBON PROJECTED PERFORMANCE

6.1. PROJECTED FINANCIAL PERFORMANCE

Water revenue will need to be increased, and non-water revenue decreased, in order to accommodate the financial returns necessary to do this project on a PPP basis. Projected bulk water cost from new plant in Majalengka is relatively high at Rp 1,959/m³ for 2006 and Rp 2,399/m³ for 2009 and those prices will be subject to annual escalation of 7% while the average unit cost as of December 2005 is reported to be approximately Rp 1,500/m³. To enable the PPP project and PDAM's capacity to meet its obligations under the take-or-pay contract periodic tariff adjustments will be needed.

The last tariff adjustment was implemented at the end of 2004, which effectively applied in year 2005, an increase of approximately 50 percent. The present tariffs are expected to be adjusted at least every two years subject to an approval from Pemda. Based upon the analysis of the bulk water program from Majalengka as well as the inflation factor in PDAM's operational costs, a tariff adjustment of 50% will be needed in Year 2007 and another increase of 35% in year 2009 in addition to an annual increase to cover increasing PDAM costs.

The analysis below refers to the base case scenario.

Table 22 Projected Income Statement PDAM Kota Cirebon (Rp 000)

	2007	2008	2009	2010	2011	2012
Operating Revenue	43,715,898	44,893,992	77,856,132	104,650,700	101,114,097	110,075,715
Operating Expenses	24,958,079	27,370,859	44,347,698	65,447,828	71,588,985	77,101,735
Net Income from Operations	18,757,819	17,523,133	33,508,434	39,202,872	29,525,113	32,973,980
Other Expenses	3,800,212	6,521,923	14,267,788	9,328,675	10,037,966	10,774,425
Debt Service	132,870	3,864,738	3,851,130	13,587,581	15,073,373	13,560,365
Taxes	4,422,421	2,115,942	4,591,855	4,860,985	1,299,132	2,566,757
Net Income	10,402,316	5,020,530	10,797,661	11,425,631	3,114,642	6,072,433

As the projected income statement indicates, net profits from operations are indicative of a healthy PDAM, capable of honoring its obligations under a bulk water purchase agreement with the private operator of the PPP facility that will bring spring water from Majalengka. In year 2007 as indicated above, the PDAM is scheduled to have tariff increase of

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approximately 50% as part of the total increase required of 85% due to purchasing bulk water from Majalengka. In year 2009 PDAM's operational expenditures significantly increase due to the purchase of bulk water from Majalengka in that year.

Table 23 Projected Balance Sheet PDAM Kota Cirebon (Rp 000)

Description	2007	2008	2009	2010	2011	2012
Assets						
Cash	13,096,602	8,760,713	21,189,655	32,440,316	18,572,356	13,099,637
Accounts Receivable	2,970,139	3,050,162	4,321,585	5,380,078	6,320,214	7,016,449
Other Current Assets	3,136,704	3,358,839	4,083,058	4,694,886	5,228,221	5,645,601
Total Current Assets	19,203,445	15,169,713	29,594,298	42,515,280	30,121,331	25,761,687
Fixed Assets (Net)	30,294,663	29,036,625	75,001,675	101,611,218	113,327,818	117,501,324
Other Assets	12,090,246	60,974,751	42,563,861	28,266,085	21,317,959	21,357,751
Total Assets	61,588,354	105,181,089	147,159,834	172,392,583	164,767,169	164,620,762
Liabilities and Equity						
Current Liabilities	5,615,358	3,355,799	6,494,524	7,589,122	14,270,480	15,756,008
Long Term Liabilities	1,495,986	51,350,963	81,205,940	101,060,917	90,915,894	80,770,871
Other Liabilities	14,954,482	17,373,817	21,067,521	25,783,954	31,073,320	36,937,476
Total Liabilities	22,065,826	72,080,579	108,784,247	134,468,792	136,296,929	133,504,196
Owners Equity	39,522,527	33,100,510	38,375,587	37,923,791	28,470,240	31,116,566
Total Liabilities and Owners Equity	61,588,354	105,181,089	147,159,834	172,392,583	164,767,169	164,620,762

The projected balance sheet presented above shows, after a dip in the 2nd year, steady increase in cash available to service debts and operations. Accounts receivable rises in accordance with the increases in sales associated with the increased supply of bulk water. Long-term liabilities rise dramatically, a result of the borrowing necessary for the network expansion program, but equity remains steady, indicating sufficient retained earnings after debt service. Similarly earnings are invested by the PDAM in its network expansion program, hence the small decline in owners equity during the last 3 years. Current liabilities rise markedly as the bulk water project begins operation, creating demands on PDAM via the take-or-pay contract. Total liabilities rise as the bulk water project starts to build capacity, then level off over the last 3 years.

Table 24 Key Performance Indicators PDAM Kota Cirebon

Year	2007	2008	2009	2010	2011	2012
Current Ratio	3.42	4.52	4.55	5.59	2.10	1.63
Quick Ratio	3.29	4.28	4.34	5.36	1.97	1.50
Debt/Asset Ratio	0.36	0.69	0.74	0.78	0.83	0.81
Return on Equity	26%	15%	28%	30%	11%	19%
Debt Service Coverage Ratio	N/A	2.71	2.53	2.18	1.28	0.94

The current ratio is equal to current assets divided by current liabilities. Anything over 2 is generally considered acceptable to lenders, and the PDAM stays well above that in the early years, with the ratio declining as the debt is increased. By the time the entire debt of the project has been taken on, the DSCR dips below 2 but remains within industry standards for Indonesian water utilities. The quick ratio is current assets less inventories, divided by current liabilities. A quick ratio of at least 1 is generally considered acceptable by lenders. The PDAM is consistently above that required level. The debt/asset ratio is total liabilities divided by total assets. If the ratio is less than 1 then the company is financing a majority of its assets with equity. If greater than 1 then the company is financing a majority of its asset costs with debt. The ratios above indicate that the PDAM is not over-leveraged, and is financing many new assets with equity. To do so is a conservative position on the part of management. PDAM could probably afford more debt without compromising its leverage ratio and that would enable growth of an internal fund to finance repairs and maintenance of the network, with related decline in leakage.

The return-on-equity figures are generally within acceptable range of the present cost of equity in the Indonesian financial markets. A prevailing lending rate of around 4-5% plus a 4-5 points premium for equity would put an appropriate ROE in the 20% range. The PDAM's projected financial performance does not stray far from that benchmark figure. The international norm for debt service coverage ratio is about 2 for water utilities, and the PDAM drops below that as the debt facility is mobilized. An N/A is entered for the first year because the debt for this bulk water supply project has not yet been mobilized. The decline in the ratio during the following years, especially when it drops below 1, indicates a need for PDAM management to consider an extended phase-in of the debt facility or otherwise better coordinate their build-out of the new distribution network with the phase-in of the bulk water supply project, so as to keep profits at levels that will keep the ratio where it needs to be. With a little coordination along these lines, the PDAM should be able to service the debt without any significant challenges.

6.2. PROJECTED AVERAGE TARIFF

Because the addition water supply from Majalengka will cost PDAM Kota Cirebon an estimated Rp 2.399/m³, a special increase of its current average tariff is required. PDAM Kota Cirebon plans to cover this significant cost by implementing gradual adjustments to its tariff that would be implemented in year 2007 and 2009 by 50% and 35% respectively.

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Projected Tarif (Rp/m3)	2006	2007	2008	2009	2010	2011	2012
Projected Tarif Increase	-	50%	7%	35%	7%	7%	7%
Average Tarif (Rp/m3)	1,486	2,167	2,225	2,934	3,186	3,391	3,625

Because the contract for bulk water supply should be tendered out on a fixed price, fixed schedule contract, engineering and construction costs may be about 10%-20% higher than what is assumed in these calculations. On that basis, the average tariffs for alternative construction and engineering costs would look as follows:

Table 25 Projected Tarif Increase (Alternative Scenarios)

Average Increase	2006	2007	2008	2009	2010	2011	2012
Base Scenario	-	50%	7%	35%	7%	7%	7%
PPP bulk water capex : 10 % higher	0%	50%	7%	42%	7%	7%	7%
PPP bulk water capex : 20% higher	0%	50%	7%	46%	7%	7%	7%
Average Tarif (Rp/m3)	2006	2007	2008	2009	2010	2011	2012
Base Scenario	1,486	2,167	2,225	2,934	3,186	3,391	3,625
PPP bulk water capex : 10 % higher	1,486	2,167	2,225	3,077	3,351	3,567	3,813
PPP bulk water capex : 20% higher	1,486	2,167	2,225	3,159	3,445	3,668	3,921

The alternative scenarios presented above start with the base scenario for tariff increases of 50% in 2007, 7% in 2008, 35% in 2009, and then 7% per year for the following years based upon projected inflation index. In both scenarios, no change in the present plans for tariff increases are necessary for the period 2006 through 2008, but bulk water capex (which represent fixed costs for the operator of the bulk water supply facility) increases of 10% to 20% over what was projected for engineering and construction would make it necessary to increase tariffs to levels presented in the tables above.

If bulk water capex runs 10% over the levels projected, then the tariff increase in 2009 will have to be 42 percent instead of 35 percent. If bulk water capex runs 20% over the levels projected, then the tariff increase in 2009 will have to be 46% instead of the 35% base case. This PDAM encountered significant price resistance when a tariff increase of about 50% was approved in 2004 and then implemented in 2005. The PDAM is still trying to recover its customer base in the aftermath of that price resistance, and progress is steady but slow.

Generally, a tariff increase of 7% can be achieved without much resistance because it is pegged to an inflation index and there is legislation to support such increases. PDAM Kota Cirebon is one of the healthier water utilities in Indonesia, and its high penetration rate helps to provide the kind of service delivery image that is needed to foster political support for tariff increases. At 35% one would anticipate that this PDAM could reasonably be expected to get approval for such increase and would meet little price resistance from consumers. At 42% the resistance will start to build, but probably not to levels that cannot be overcome with a concerted effort by the PDAM. At 46% we would be approaching the

level of increase that was implemented in 2005, with its associated decline in subsequent consumer demand. Accordingly, the builder/operator of the new bulk water supply facility will need to ensure that capex overruns do not exceed 20 percent. That is a manageable goal, but one that will require some care in the management of engineering and construction activities.

Attachment 2 provides financial projections to show the expected performance of PDAM Kota Cirebon after implementation of the PPP bulk water project and implementation of the PDAM's distribution network expansion program.

7. ATTACHMENTS

ATTACHMENT 1 – MAJALENGKA BULK WATER SUPPLY PROJECT

ATTACHMENT 2 – RENCANA PEMANTAPAN KINERJA
KEUANGAN, PROYEKSI LAPORAN LABA RUGI, NERACA DAN
LAPORAN PERPUTARAN KAS PDAM KOTA CIREBON

ATTACHMENT I – MAJALENGKA BULK WATER SUPPLY PROJECT

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MAJALENGKA

BULK WATER SUPPLY PROJECT

Table 1 - Supply and Distribution Water

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Supply and Water Distribution											
Connection											
Connection, begin	0	0	0	0	14,268	28,535	28,535	28,535	28,535	28,535	28,535
New connection	0	0	0	14,268	14,268	0	0	0	0	0	0
Connection, end	0	0	0	14,268	28,535						
Connection fee (Rp 000)	0	0	0	0	0	0	0	0	0	0	0
Administration fee (Rp 000)	0	0	0	0	0	0	0	0	0	0	0
Meter rental fee	0	0	0	0	0	0	0	0	0	0	0
Projected water sold by new connection	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Projected increase in consumption	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Projected consumption (m3/month/conn)	0	-	-	27.35	27.35	27.35	27.35	27.35	27.35	27.35	27.35
Total Demand in Area New and Existing			-	4,682,594	9,365,187	9,365,187	9,365,187	9,365,187	9,365,187	9,365,187	9,365,187
Additional Water Demand in Area New and Existing				4,682,594	4,682,594	-	-	-	-	-	-
Non-Revenue Water (%)				25%	25%	25%	25%	25%	25%	25%	25%
Total Water To Be Purchased (m3/year)				6,243,458	12,486,916						
Total Water To Be Purchased (liter/second)				198	396	396	396	396	396	396	396
Production											
Total water supplied to Cirebon (liter/second)	0	0	0	198	396	396	396	396	396	396	396
Total water supplied to Cirebon (m3/year)	0	0	0	6,243,458	12,486,916	12,486,916	12,486,916	12,486,916	12,486,916	12,486,916	12,486,916
Capacity utilization (%)	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Total production before losses	0	0	0	6,243,458	12,486,916						
Non-Revenue Water (%) in production plant	0.00%	0.00%	0.00%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Total water produced (m3/year)	0	0	0	6,403,547	12,807,093	12,807,093	12,807,093	12,807,093	12,807,093	12,807,093	12,807,093
Water demand incl. entire losses	0	0	0	6,458,750	12,917,499	12,917,499	12,917,499	12,917,499	12,917,499	12,917,499	12,917,499
% Supply-Demand Ratio	#DIV/0!	#DIV/0!	#DIV/0!	99.15%	99.15%	99.15%	99.15%	99.15%	99.15%	99.15%	99.15%
Total water produced (liter per second)				205	410	410	410	410	410	410	410
Distribution (m3)											
Households	0	0	0	4,682,594	12,917,499	12,917,499	12,917,499	12,917,499	12,917,499	12,917,499	12,917,499
Industry	0	0	0	0	0	0	0	0	0	0	0
Total Distribution	0	0	0	4,682,594	12,917,499						

**PRELIMINARY FINANCIAL FEASIBILITY ANALYSIS OF INVESTMENT PROPOSAL
BULK WATER SUPPLY PROJECT IN MAJALENGKA TO SUPPLIED TO PDAM KOTA CIREBON**

MAJALENGKA

BULK WATER SUPPLY PROJECT

Table 1 - Supply and Distribution Water

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Supply and Water Distribution										
Connection										
Connection, begin	28,535	28,535	28,535	28,535	28,535	28,535	28,535	28,535	28,535	28,535
New connection	0	0	0	0	0	0	0	0	0	0
Connection, end	28,535									
Connection fee (Rp 000)	0	0	0	0	0	0	0	0	0	0
Administration fee (Rp 000)	0	0	0	0	0	0	0	0	0	0
Meter rental fee	0	0	0	0	0	0	0	0	0	0
Projected water sold by new connection	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Projected increase in consumption	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Projected consumption (m3/month/conn)	27.35	27.35	27.35	27.35	27.35	27.35	27.35	27.35	27.35	27.35
Total Demand in Area New and Existing	9,365,187	9,365,187	9,365,187	9,365,187	9,365,187	9,365,187	9,365,187	9,365,187	9,365,187	9,365,187
Additional Water Demand in Area New and Existing	-	-	-	-	-	-	-	-	-	-
Non-Revenue Water (%)	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%
Total Water To Be Purchased (m3/year)	12,486,916									
Total Water To Be Purchased (liter/second)	396									
Production										
Total water supplied to Cirebon (liter/second)	396	396	396	396	396	396	396	396	396	396
Total water supplied to Cirebon (m3/year)	12,486,916	12,486,916	12,486,916	12,486,916	12,486,916	12,486,916	12,486,916	12,486,916	12,486,916	12,486,916
Capacity utilization (%)	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Total production before losses	12,486,916									
Non-Revenue Water (%) in production plant	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Total water produced (m3/year)	12,807,093	12,807,093	12,807,093	12,807,093	12,807,093	12,807,093	12,807,093	12,807,093	12,807,093	12,807,093
Water demand incl. entire losses	12,917,499	12,917,499	12,917,499	12,917,499	12,917,499	12,917,499	12,917,499	12,917,499	12,917,499	12,917,499
% Supply-Demand Ratio	99.15%	99.15%	99.15%	99.15%	99.15%	99.15%	99.15%	99.15%	99.15%	99.15%
Total water produced (liter per second)	410	410	410	410	410	410	410	410	410	410
Distribution (m3)										
Households	12,917,499	12,917,499	12,917,499	12,917,499	12,917,499	12,917,499	12,917,499	12,917,499	12,917,499	12,917,499
Industry	0	0	0	0	0	0	0	0	0	0
Total Distribution	12,917,499									

**PRELIMINARY FINANCIAL FEASIBILITY ANALYSIS OF INVESTMENT PROPOSAL
BULK WATER SUPPLY PROJECT IN MAJALENGKA TO SUPPLIED TO PDAM KOTA CIREBON**

**MAJALENGKA
BULK WATER SUPPLY PROJECT**

Table 2 :

Operational Expenditure	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Inflasi	0.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%
Personel											
- Number of personel	0	0	0	16	16	16	16	16	16	16	16
- Salary per employee (yearly)		51,392	54,989	29,419	62,957	67,364	72,080	77,125	82,524	88,301	94,482
- Salary per employee (monthly)	4,002	4,283	4,582	4,903	5,246	5,614	6,007	6,427	6,877	7,358	7,873
Raw water											
- Number of raw water	0	0	0	6,403,547	12,807,093	12,807,093	12,807,093	12,807,093	12,807,093	12,807,093	12,807,093
- Rate per m3	100.00	107.00	114.49	122.50	131.08	140.26	150.07	160.58	171.82	183.85	196.72
Electricity											
- Number of water production	0	0	0	6,403,547	12,807,093	12,807,093	12,807,093	12,807,093	12,807,093	12,807,093	12,807,093
- Rate per m3 (Rp./m3)	0	0	0	0	0	0	0	0	0	0	0
Chemical											
- Number of water production	0	0	0	6,403,547	12,807,093	12,807,093	12,807,093	12,807,093	12,807,093	12,807,093	12,807,093
- Rate per m3	13.23	14.15	15.14	16.20	17.34	18.55	19.85	21.24	22.72	24.31	26.02
Maintenance											
- % Fixed Assets	0.00%	0.00%	0.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Insurance											
- % total asset	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Overhead											
- % overhead	15.00%	0.00%	0.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%
Depreciation											
- % total asset	0.00%	0.00%	0.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
Account receivable											
# Days	30	30	30	30	30	30	30	30	30	30	30
Inventory (Finish Goods)											
# Days	7	7	7	7	7	7	7	7	7	7	7
Chemicals stock											
# Days	30	30	30	30	30	30	30	30	30	30	30
Account payable											
# Days	30	30	30	30	30	30	30	30	30	30	30
Tariff Increase	0.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%

**PRELIMINARY FINANCIAL FEASIBILITY ANALYSIS OF INVESTMENT PROPOSAL
BULK WATER SUPPLY PROJECT IN MAJALENGKA TO SUPPLIED TO PDAM KOTA CIREBON**

**MAJALENGKA
BULK WATER SUPPLY PROJECT**

Table 2 :

Operational Expenditure	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Inflasi	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%
Personel										
- Number of personel	16	16	16	16	16	16	16	16	16	16
- Salary per employee (yearly)	101,095	108,172	115,744	123,846	132,515	141,792	151,717	162,337	173,701	185,860
- Salary per employee (monthly)	8,425	9,014	9,645	10,321	11,043	11,816	12,643	13,528	14,475	15,488
Raw water										
- Number of raw water	12,807,093	12,807,093	12,807,093	12,807,093	12,807,093	12,807,093	12,807,093	12,807,093	12,807,093	12,807,093
- Rate per m3	210.49	225.22	240.98	257.85	275.90	295.22	315.88	337.99	361.65	386.97
Electricity										
- Number of water production	12,807,093	12,807,093	12,807,093	12,807,093	12,807,093	12,807,093	12,807,093	12,807,093	12,807,093	12,807,093
- Rate per m3 (Rp./m3)	0	0	0	0	0	0	0	0	0	0
Chemical										
- Number of water production	12,807,093	12,807,093	12,807,093	12,807,093	12,807,093	12,807,093	12,807,093	12,807,093	12,807,093	12,807,093
- Rate per m3	27.84	29.79	31.87	34.10	36.49	39.04	41.78	44.70	47.83	51.18
Maintenance										
- % Fixed Assets	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Insurance										
- % total asset	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Overhead										
- % overhead	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%
Depreciation										
- % total asset	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
Account receivable										
# Days	30	30	30	30	30	30	30	30	30	30
Inventory (Finish Goods)										
# Days	7	7	7	7	7	7	7	7	7	7
Chemicals stock										
# Days	30	30	30	30	30	30	30	30	30	30
Account payable										
# Days	30	30	30	30	30	30	30	30	30	30
Tariff Increase	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%

**PRELIMINARY FINANCIAL FEASIBILITY ANALYSIS OF INVESTMENT PROPOSAL
BULK WATER SUPPLY PROJECT IN MAJALENGKA TO SUPPLIED TO PDAM KOTA CIREBON**

**MAJALENGKA
BULK WATER SUPPLY PROJECT**

Table 3- Income Statement

(Rp 000)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Revenue	0	0	0	14,979,596	32,056,336	34,300,279	36,701,299	39,270,390	42,019,317	44,960,669	48,107,916
Tarif (Rp./m3)	1,959	2,096	2,242	2,399	2,567	2,747	2,939	3,145	3,365	3,601	3,853
Water tariff	0	0	0	14,979,596	32,056,336	34,300,279	36,701,299	39,270,390	42,019,317	44,960,669	48,107,916
Non Water Revenue	0	0	0	0	0	0	0	0	0	0	0
				0.50	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expenditure	0	0	0	2,646,786	4,388,940	4,610,134	4,846,811	5,100,055	5,371,027	5,660,967	5,971,202
Raw water Purchased	0	0	0	784,462	1,678,749	1,796,261	1,921,999	2,056,539	2,200,497	2,354,532	2,519,349
Personel	0	0	0	470,707	1,007,314	1,077,826	1,153,274	1,234,003	1,320,383	1,412,810	1,511,707
Electricity	0	0	0	0	0	0	0	0	0	0	0
Chemical	0	0	0	103,747	222,018	237,559	254,188	271,981	291,020	311,392	333,189
Maintenance& Insurance	0	0	0	1,229,031	1,229,031	1,229,031	1,229,031	1,229,031	1,229,031	1,229,031	1,229,031
Provisi rekening ragu-ragu	0	0	0	0	0	0	0	0	0	0	0
Royalty	0	0	0	0	0	0	0	0	0	0	0
Insurance	0	0	0	0	0	0	0	0	0	0	0
Overhead	0	0	0	58,838	251,828	269,456	288,318	308,501	330,096	353,202	377,927
Gross Profit Margin	0	0	0	12,332,811	27,667,396	29,690,146	31,854,488	34,170,334	36,648,290	39,299,702	42,136,714
Depreciation/amortization	0	0	0	2,555,213	8,042,971	8,042,971	8,042,971	8,042,971	8,042,971	8,042,971	8,042,971
Earning before interest and tax	0	0	0	9,777,598	19,624,425	21,647,175	23,811,517	26,127,364	28,605,319	31,256,732	34,093,743
Interest	0	0	0	9,305,909	13,448,283	12,010,396	10,572,509	9,134,621	7,696,734	6,258,846	4,820,959
Earning before tax	0	0	0	471,688	6,176,142	9,636,779	13,239,009	16,992,742	20,908,585	24,997,885	29,272,784
Corporate Tax	0	0	0	141,507	1,852,842	2,891,034	3,971,703	5,097,823	6,272,576	7,499,366	8,781,835
Earning after tax	0	0	0	330,182	4,323,299	6,745,745	9,267,306	11,894,920	14,636,010	17,498,520	20,490,949
Royalty	0.00%										

**PRELIMINARY FINANCIAL FEASIBILITY ANALYSIS OF INVESTMENT PROPOSAL
BULK WATER SUPPLY PROJECT IN MAJALENGKA TO SUPPLIED TO PDAM KOTA CIREBON**

**MAJALENGKA
BULK WATER SUPPLY PROJECT**

Table 3- Income Statement

(Rp 000)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Revenue	51,475,470	55,078,753	58,934,266	63,059,664	67,473,841	72,197,010	77,250,800	82,658,356	88,444,441	94,635,552
Tarif (Rp./m3)	4,122	4,411	4,720	5,050	5,404	5,782	6,187	6,620	7,083	7,579
Water tariff	51,475,470	55,078,753	58,934,266	63,059,664	67,473,841	72,197,010	77,250,800	82,658,356	88,444,441	94,635,552
Non Water Revenue	0	0	0	0	0	0	0	0	0	0
	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Expenditure	6,303,154	6,658,343	7,038,395	7,445,050	7,880,172	8,345,752	8,843,923	9,376,966	9,947,323	10,557,604
Raw water Purchased	2,695,704	2,884,403	3,086,311	3,302,353	3,533,517	3,780,864	4,045,524	4,328,711	4,631,721	4,955,941
Personel	1,617,526	1,730,753	1,851,906	1,981,539	2,120,247	2,268,664	2,427,471	2,597,394	2,779,211	2,973,756
Electricity	0	0	0	0	0	0	0	0	0	0
Chemical	356,512	381,468	408,171	436,743	467,315	500,027	535,029	572,481	612,554	655,433
Maintenance& Insurance	1,229,031	1,229,031	1,229,031	1,229,031	1,229,031	1,229,031	1,229,031	1,229,031	1,229,031	1,229,031
Provisi rekening ragu-ragu	0	0	0	0	0	0	1	2	3	4
Royalty	0	0	0	0	0	0	0	0	0	0
Insurance	0	0	0	0	0	0	0	0	0	0
Overhead	404,382	432,688	462,976	495,385	530,062	567,166	606,868	649,348	694,803	743,439
Gross Profit Margin	45,172,316	48,420,410	51,895,871	55,614,614	59,593,669	63,851,258	68,406,877	73,281,390	78,497,118	84,077,948
Depreciation/amortization	8,042,971	8,042,971	7,610,138	7,374,186	7,374,186	7,374,186	7,374,186	7,374,186	7,374,186	7,374,186
Earning before interest and tax	37,129,345	40,377,439	44,285,733	48,240,428	52,219,483	56,477,072	61,032,691	65,907,204	71,122,933	76,703,762
Interest	3,383,071	1,945,184	507,297	0	0	0	0	0	0	0
Earning before tax	33,746,274	38,432,255	43,778,437	48,240,428	52,219,483	56,477,072	61,032,691	65,907,204	71,122,933	76,703,762
Corporate Tax	10,123,882	11,529,677	13,133,531	14,472,128	15,665,845	16,943,122	18,309,807	19,772,161	21,336,880	23,011,129
Earning after tax	23,622,392	26,902,579	30,644,906	33,768,300	36,553,638	39,533,951	42,722,884	46,135,043	49,786,053	53,692,634
Royalty										

**PRELIMINARY FINANCIAL FEASIBILITY ANALYSIS OF INVESTMENT PROPOSAL
BULK WATER SUPPLY PROJECT IN MAJALENGKA TO SUPPLIED TO PDAM KOTA CIREBON**

**MAJALENGKA
BULK WATER SUPPLY PROJECT**

Table 4 - Balance Sheet

(Rp 000)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Current Assets											
Cash	0	0	0	661,696	1,758,931	2,911,465	4,123,168	5,398,181	6,740,938	8,156,180	9,648,980
Account Receivable	0	0	0	1,231,200	2,634,767	2,819,201	3,016,545	3,227,703	3,453,642	3,695,397	3,954,075
Less : Allowance for doubtful accounts	0	0	0	0	0	0	0	0	0	0	0
Inventories	0	0	0	8,527	18,248	19,525	20,892	22,355	23,919	25,594	27,385
Total current assets	0	0	0	1,901,423	4,411,947	5,750,191	7,160,605	8,648,239	10,218,500	11,877,171	13,630,441
Fixed Assets											
Fixed assets (incl. land)	2,696,287	10,463,822	77,959,882	122,903,095	122,903,095	122,903,095	122,903,095	122,903,095	122,903,095	122,903,095	122,903,095
Less : Accumulated depreciation	0	0	0	(2,122,380)	(9,496,566)	(16,870,751)	(24,244,937)	(31,619,123)	(38,993,309)	(46,367,494)	(53,741,680)
Net Fixed Assets in Service	2,696,287	10,463,822	77,959,882	120,780,715	113,406,530	106,032,344	98,658,158	91,283,972	83,909,787	76,535,601	69,161,415
Other Assets											
Deferred charges	0	0	4,328,330	6,687,849	6,687,849	6,687,849	6,687,849	6,687,849	6,687,849	6,687,849	6,687,849
Less : Accumulated Amortization	0	0	0	(432,833)	(1,101,618)	(1,770,403)	(2,439,188)	(3,107,972)	(3,776,757)	(4,445,542)	(5,114,327)
Total Other Assets	0	0	4,328,330	6,255,016	5,586,231	4,917,446	4,248,661	3,579,876	2,911,091	2,242,306	1,573,522
TOTAL ASSETS	2,696,287	10,463,822	82,288,212	128,937,154	123,404,707	116,699,981	110,067,424	103,512,088	97,039,378	90,655,079	84,365,378
LIABILITIES AND EQUITY											
Current Liabilities											
Account Payable	0	0	0	236,292	259,719	277,899	297,352	318,166	340,438	364,269	389,768
Taxes Payable	0	0	0	0	0	0	0	0	0	0	0
Maturing long-term debt	0	0	0	6,203,939	9,585,916	9,585,916	9,585,916	9,585,916	9,585,916	9,585,916	9,585,916
Total Current Liabilities	0	0	0	6,440,232	9,845,635	9,863,815	9,883,268	9,904,083	9,926,354	9,950,185	9,975,684
Long-term Debt	0	0	62,039,395	89,655,223	80,069,307	70,483,391	60,897,474	51,311,558	41,725,642	32,139,726	22,553,809
Equity											
PDAM	0	0	0	0	0	0	0	0	0	0	0
Second Party	2,696,287	10,463,822	20,248,818	33,731,782	33,731,782	33,731,782	33,731,782	33,731,782	33,731,782	33,731,782	33,731,782
Retained earnings	0	0	(0)	(890,083)	(242,016)	2,620,994	5,554,900	8,564,665	11,655,600	14,833,386	18,104,103
Total Equity	2,696,287	10,463,822	20,248,817	32,841,699	33,489,765	36,352,775	39,286,682	42,296,447	45,387,382	48,565,168	51,835,885
TOTAL LIABILITIES AND EQUITY	2,696,287	10,463,822	82,288,212	128,937,154	123,404,707	116,699,981	110,067,424	103,512,088	97,039,378	90,655,079	84,365,378
Balance	0	0	0	0	0	0	0	0	0	0	0

**PRELIMINARY FINANCIAL FEASIBILITY ANALYSIS OF INVESTMENT PROPOSAL
BULK WATER SUPPLY PROJECT IN MAJALENGKA TO SUPPLIED TO PDAM KOTA CIREBON**

**MAJALENGKA
BULK WATER SUPPLY PROJECT**

Table 4 - Balance Sheet

(Rp 000)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Current Assets										
Cash	11,224,769	12,889,355	14,648,954	16,510,216	18,480,259	20,566,697	22,777,678	25,121,919	27,608,750	30,248,151
Account Receivable	4,230,861	4,527,021	4,843,912	5,182,986	5,545,795	5,934,001	6,349,381	6,793,837	7,269,406	7,778,265
Less : Allowance for doubtful accounts	0	0	0	0	0	0	0	0	0	0
Inventories	29,302	31,354	33,548	35,897	38,409	41,098	43,975	47,053	50,347	53,871
Total current assets	15,484,932	17,447,729	19,526,414	21,729,099	24,064,464	26,541,796	29,171,033	31,962,810	34,928,503	38,080,287
Fixed Assets										
Fixed assets (incl. land)	122,903,095	122,903,095	122,903,095	122,903,095	122,903,095	122,903,095	122,903,095	122,903,095	122,903,095	122,903,095
Less : Accumulated depreciation	(61,115,866)	(68,490,051)	(75,864,237)	(83,238,423)	(90,612,609)	(97,986,794)	(105,360,980)	(112,735,166)	(120,109,351)	(127,483,537)
Net Fixed Assets in Service	61,787,230	54,413,044	47,038,858	39,664,672	32,290,487	24,916,301	17,542,115	10,167,930	2,793,744	(4,580,442)
Other Assets										
Deferred charges	6,687,849	6,687,849	6,687,849	6,687,849	6,687,849	6,687,849	6,687,849	6,687,849	6,687,849	6,687,849
Less : Accumulated Amortization	(5,783,112)	(6,451,897)	(6,687,849)	(6,687,849)	(6,687,849)	(6,687,849)	(6,687,849)	(6,687,849)	(6,687,849)	(6,687,849)
Total Other Assets	904,737	235,952	0							
TOTAL ASSETS	78,176,898	72,096,725	66,565,272	61,393,771	56,354,950	51,458,097	46,713,149	42,130,740	37,722,247	33,499,845
LIABILITIES AND EQUITY										
Current Liabilities										
Account Payable	417,051	446,245	477,482	510,906	546,669	584,936	625,881	669,693	716,572	766,732
Taxes Payable	0	0	0	0	0	0	0	0	0	0
Maturing long-term debt	9,585,916	9,585,916	3,381,977	0	0	0	0	0	0	0
Total Current Liabilities	10,002,967	10,032,161	3,859,459	510,906	546,669	584,936	625,881	669,693	716,572	766,732
Long-term Debt	12,967,893	3,381,977	0							
Equity										
PDAM	0	0	0	0	0	0	0	0	0	0
Second Party	33,731,782	33,731,782	33,731,782	33,731,782	33,731,782	33,731,782	33,731,782	33,731,782	33,731,782	33,731,782
Retained earnings	21,474,256	24,950,805	28,974,032	27,151,084	22,076,499	17,141,379	12,355,486	7,729,265	3,273,893	(998,669)
Total Equity	55,206,038	58,682,587	62,705,813	60,882,866	55,808,281	50,873,161	46,087,267	41,461,046	37,005,675	32,733,113
TOTAL LIABILITIES AND EQUITY	78,176,898	72,096,725	66,565,272	61,393,771	56,354,950	51,458,097	46,713,149	42,130,740	37,722,247	33,499,845
Balance	0	0	0	0	0	0	0	0	0	0

**PRELIMINARY FINANCIAL FEASIBILITY ANALYSIS OF INVESTMENT PROPOSAL
BULK WATER SUPPLY PROJECT IN MAJALENGKA TO SUPPLIED TO PDAM KOTA CIREBON**

**MAJALENGKA
BULK WATER SUPPLY PROJECT**

Table 5 - Cashflow

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(Rp 000)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
OPERATIONAL CASHFLOW	0	0	0	12,332,811	27,667,396	29,690,146	31,854,488	34,170,334	36,648,290	39,299,702	42,136,714
Revenues	0	0	0	14,979,596	32,056,336	34,300,279	36,701,299	39,270,390	42,019,317	44,960,669	48,107,916
Tariff revenue	0	0	0	14,979,596	32,056,336	34,300,279	36,701,299	39,270,390	42,019,317	44,960,669	48,107,916
Connection fees	0	0	0	0	0	0	0	0	0	0	0
Other revenue	0	0	0	0	0	0	0	0	0	0	0
Expenditures	0	0	0	2,646,786	4,388,940	4,610,134	4,846,811	5,100,055	5,371,027	5,660,967	5,971,202
Raw water Purchased	0	0	0	784,462	1,678,749	1,796,261	1,921,999	2,056,539	2,200,497	2,354,532	2,519,349
Personel	0	0	0	470,707	1,007,314	1,077,826	1,153,274	1,234,003	1,320,383	1,412,810	1,511,707
Electricity	0	0	0	0	0	0	0	0	0	0	0
Chemical	0	0	0	103,747	222,018	237,559	254,188	271,981	291,020	311,392	333,189
Maintenance	0	0	0	1,229,031	1,229,031	1,229,031	1,229,031	1,229,031	1,229,031	1,229,031	1,229,031
Provisi rekening ragu-ragu	0	0	0	0	0	0	0	0	0	0	0
Royalty	0	0	0	0	0	0	0	0	0	0	0
Insurance	0	0	0	0	0	0	0	0	0	0	0
Overhead	0	0	0	58,838	251,828	269,456	288,318	308,501	330,096	353,202	377,927
INVESTMENT CASHFLOW	(2,696,287)	(7,767,535)	(67,496,061)	(44,943,213)	0						
FINANCIAL CASHFLOW	2,696,287	7,767,535	67,496,061	35,637,304	(19,652,223)	(21,596,312)	(20,158,425)	(18,720,537)	(17,282,650)	(15,844,763)	(14,406,875)
Equity (paid-in capital)	2,696,287	7,767,535	9,784,996	13,482,964	0	0	0	0	0	0	0
PDAM	0	0	0	0	0	0	0	0	0	0	0
Second Party	2,696,287	7,767,535	9,784,996	13,482,964	0	0	0	0	0	0	0
Loans	0	0	57,711,065	31,460,249	0	0	0	0	0	0	0
Bank Loan	0	0	0	0	0	0	0	0	0	0	0
Stockholder Loan	0	0	0	0	0	0	0	0	0	0	0
Debt service	0	0	0	(9,305,909)	(19,652,223)	(21,596,312)	(20,158,425)	(18,720,537)	(17,282,650)	(15,844,763)	(14,406,875)
Principal	0	0	0	0	(6,203,939)	(9,585,916)	(9,585,916)	(9,585,916)	(9,585,916)	(9,585,916)	(9,585,916)
Interest	0	0	0	(9,305,909)	(13,448,283)	(12,010,396)	(10,572,509)	(9,134,621)	(7,696,734)	(6,258,846)	(4,820,959)
Corporate taxes /a	0	0	0	(141,507)	(1,852,842)	(2,891,034)	(3,971,703)	(5,097,823)	(6,272,576)	(7,499,366)	(8,781,835)
Net working capital	0	0	0	(1,003,434)	(1,389,862)	(167,531)	(179,258)	(191,806)	(205,232)	(219,599)	(234,971)
Dividend payments	0	0	(0)	(1,220,264)	(3,675,233)	(3,882,735)	(6,333,400)	(8,885,154)	(11,545,075)	(14,320,734)	(17,220,232)
BOY CASH BALANCE	0	0	0	0	661,696	1,758,931	2,911,465	4,123,168	5,398,181	6,740,938	8,156,180
Net cashflow	0	0	0	661,696	1,097,235	1,152,533	1,211,703	1,275,014	1,342,757	1,415,242	1,492,801
EOY cash balance	0	0	0	661,696	1,758,931	2,911,465	4,123,168	5,398,181	6,740,938	8,156,180	9,648,980

**PRELIMINARY FINANCIAL FEASIBILITY ANALYSIS OF INVESTMENT PROPOSAL
BULK WATER SUPPLY PROJECT IN MAJALENGKA TO SUPPLIED TO PDAM KOTA CIREBON**

**MAJALENGKA
BULK WATER SUPPLY PROJECT**

Table 5 - Cashflow

(Rp 000)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
OPERATIONAL CASHFLOW	45,172,316	48,420,410	51,895,871	55,614,614	59,593,669	63,851,258	68,406,877	73,281,390	78,497,118	84,077,948
Revenues	51,475,470	55,078,753	58,934,266	63,059,664	67,473,841	72,197,010	77,250,800	82,658,356	88,444,441	94,635,552
Tariff revenue	51,475,470	55,078,753	58,934,266	63,059,664	67,473,841	72,197,010	77,250,800	82,658,356	88,444,441	94,635,552
Connection fees	0	0	0	0	0	0	0	0	0	0
Other revenue	0	0	0	0	0	0	0	0	0	0
Expenditures	6,303,154	6,658,343	7,038,395	7,445,050	7,880,172	8,345,752	8,843,923	9,376,966	9,947,323	10,557,604
Raw water Purchased	2,695,704	2,884,403	3,086,311	3,302,353	3,533,517	3,780,864	4,045,524	4,328,711	4,631,721	4,955,941
Personel	1,617,526	1,730,753	1,851,906	1,981,539	2,120,247	2,268,664	2,427,471	2,597,394	2,779,211	2,973,756
Electricity	0	0	0	0	0	0	0	0	0	0
Chemical	356,512	381,468	408,171	436,743	467,315	500,027	535,029	572,481	612,554	655,433
Maintenance	1,229,031	1,229,031	1,229,031	1,229,031	1,229,031	1,229,031	1,229,031	1,229,031	1,229,031	1,229,031
Provisi rekening ragu-ragu	0	0	0	0	0	0	1	2	3	4
Royalty	0	0	0	0	0	0	0	0	0	0
Insurance	0	0	0	0	0	0	0	0	0	0
Overhead	404,382	432,688	462,976	495,385	530,062	567,166	606,868	649,348	694,803	743,439
INVESTMENT CASHFLOW	0	0	0	0	0	0	0	0	0	0
FINANCIAL CASHFLOW	(12,968,988)	(11,531,100)	(10,093,213)	(3,381,977)	(0)	(0)	(0)	(0)	(0)	(0)
Equity (paid-in capital)	0	0	0	0	0	0	0	0	0	0
PDAM	0	0	0	0	0	0	0	0	0	0
Second Party	0	0	0	0	0	0	0	0	0	0
Loans	0	0	0	0	0	0	0	0	0	0
Bank Loan	0	0	0	0	0	0	0	0	0	0
Stockholder Loan	0	0	0	0	0	0	0	0	0	0
Debt service	(12,968,988)	(11,531,100)	(10,093,213)	(3,381,977)	(0)	(0)	(0)	(0)	(0)	(0)
Principal	(9,585,916)	(9,585,916)	(9,585,916)	(3,381,977)	0	0	0	0	0	0
Interest	(3,383,071)	(1,945,184)	(507,297)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Corporate taxes /a	(10,123,882)	(11,529,677)	(13,133,531)	(14,472,128)	(15,665,845)	(16,943,122)	(18,309,807)	(19,772,161)	(21,336,880)	(23,011,129)
Net working capital	(251,419)	(269,018)	(287,849)	(307,998)	(329,558)	(352,627)	(377,311)	(403,723)	(431,984)	(462,223)
Dividend payments	(20,252,239)	(23,426,029)	(26,621,679)	(35,591,248)	(41,628,223)	(44,469,071)	(47,508,778)	(50,761,264)	(54,241,424)	(57,965,196)
BOY CASH BALANCE	9,648,980	11,224,769	12,889,355	14,648,954	16,510,216	18,480,259	20,566,697	22,777,678	25,121,919	27,608,750
Net cashflow	1,575,789	1,664,586	1,759,599	1,861,263	1,970,043	2,086,438	2,210,981	2,344,242	2,486,831	2,639,401
EOY cash balance	11,224,769	12,889,355	14,648,954	16,510,216	18,480,259	20,566,697	22,777,678	25,121,919	27,608,750	30,248,151

**PRELIMINARY FINANCIAL FEASIBILITY ANALYSIS OF INVESTMENT PROPOSAL
BULK WATER SUPPLY PROJECT IN MAJALENGKA TO SUPPLIED TO PDAM KOTA CIREBON**

**MAJALENGKA
BULK WATER SUPPLY PROJECT**

Table 6 : Summary Financial Projection

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Operational Cashflow	0	0	0	3,026,901	8,015,173	8,093,833	11,696,063	15,449,797	19,365,640	23,454,940	27,729,838
Investment Cashflow	(2,696,287)	(7,767,535)	(67,496,061)	(44,943,213)	0	0	0	0	0	0	0
Net cashflow	(2,696,287)	(7,767,535)	(67,496,061)	(41,916,312)	8,015,173	8,093,833	11,696,063	15,449,797	19,365,640	23,454,940	27,729,838
NPV	7,219,329			WACC : 15.90%							
IRR	16.99%			DEBT : 70%@15%							
				EQUIT :30%@18%							
Table 6.1 : Cash Flow Investor											
Investor Cash Flow - Private Party	(2,696,287)	(7,767,535)	(9,784,996)	(13,482,964)	0	0	0	0	0	0	0
Investor Cash Flow - PDAM	0	0	0	0	0	0	0	0	0	0	0
Total Investor Cash Flow	(2,696,287)	(7,767,535)	(9,784,996)	(13,482,964)	0	0	0	0	0	0	0
Dividen Payment To Investors	0	0	0	1,220,264	3,675,233	3,882,735	6,333,400	8,885,154	11,545,075	14,320,734	17,220,232
Tax on Dividen	0	0	(0)	(366,079)	(1,102,570)	(1,164,821)	(1,900,020)	(2,665,546)	(3,463,522)	(4,296,220)	(5,166,070)
Net Investor Cash Flow	(2,696,287)	(7,767,535)	(9,784,996)	(12,628,779)	2,572,663	2,717,915	4,433,380	6,219,608	8,081,552	10,024,514	12,054,162
IRR TO INVESTORS	22.00%										

**PRELIMINARY FINANCIAL FEASIBILITY ANALYSIS OF INVESTMENT PROPOSAL
BULK WATER SUPPLY PROJECT IN MAJALENGKA TO SUPPLIED TO PDAM KOTA CIREBON**

MAJALENGKA

BULK WATER SUPPLY PROJECT

Table 6 : Summary Financial Projection

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Operational Cashflow	32,203,328	36,889,310	41,802,658	52,232,637	59,593,669	63,851,258	68,406,877	73,281,390	78,497,118	84,077,948
Investment Cashflow	0	0	0	0	0	0	0	0	0	0
Net cashflow	32,203,328	36,889,310	41,802,658	52,232,637	59,593,669	63,851,258	68,406,877	73,281,390	78,497,118	84,077,948
NPV										
IRR										
Table 6.1 : Cash Flow Investor										
Investor Cash Flow - Private Party	0	0	0	0	0	0	0	0	0	0
Investor Cash Flow - PDAM	0	0	0	0	0	0	0	0	0	0
Total Investor Cash Flow	0									
Dividen Payment To Investors	20,252,239	23,426,029	26,621,679	35,591,248	41,628,223	44,469,071	47,508,778	50,761,264	54,241,424	57,965,196
Tax on Dividen	(6,075,672)	(7,027,809)	(7,986,504)	(10,677,374)	(12,488,467)	(13,340,721)	(14,252,633)	(15,228,379)	(16,272,427)	(17,389,559)
Net Investor Cash Flow	14,176,567	16,398,221	18,635,175	24,913,873	29,139,756	31,128,350	33,256,144	35,532,885	37,968,997	40,575,637
IRR TO INVESTORS										

**PRELIMINARY FINANCIAL FEASIBILITY ANALYSIS OF INVESTMENT PROPOSAL
BULK WATER SUPPLY PROJECT IN MAJALENGKA TO SUPPLIED TO PDAM KOTA CIREBON**

**MAJALENGKA
BULK WATER SUPPLY PROJECT**

Table 7a - Debt Repayment Schedule - Commercial Loan - Tranch A

(Rp 000)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Periode of payment	10										
	2										
Interest rate	15.00%										
IDC	0										
Disbursement	0	0	57,711,065	0	0	0	0	0	0	0	0
Interest Grace	0	0	4,328,330	0	0	0	0	0	0	0	0
Total Interest Capitalized	0	0	4,328,330	3,895,497	3,462,664	3,029,831	2,596,998	2,164,165	1,731,332	1,298,499	865,666
Loan Balance	0	0	62,039,395	55,835,455	49,631,516	43,427,576	37,223,637	31,019,697	24,815,758	18,611,818	12,407,879
Principal payment	0	0	0	5,771,107	5,771,107	5,771,107	5,771,107	5,771,107	5,771,107	5,771,107	5,771,107
Amortization of Interest Capitalized	0	0	0	432,833	432,833	432,833	432,833	432,833	432,833	432,833	432,833
Sub Total, Principal	0	0	0	6,203,939	6,203,939	6,203,939	6,203,939	6,203,939	6,203,939	6,203,939	6,203,939
Interest	0	0	0	9,305,909	8,375,318	7,444,727	6,514,136	5,583,546	4,652,955	3,722,364	2,791,773
Penalty	0	0	0	0	0	0	0	0	0	0	0
Commitment Charge	0	0	0	0	0	0	0	0	0	0	0
Service Charge	0	0	0	0	0	0	0	0	0	0	0
Sub Total, Interest, etc.	0	0	0	9,305,909	8,375,318	7,444,727	6,514,136	5,583,546	4,652,955	3,722,364	2,791,773
Total Payment	0	0	0	15,509,849	14,579,258	13,648,667	12,718,076	11,787,485	10,856,894	9,926,303	8,995,712

**PRELIMINARY FINANCIAL FEASIBILITY ANALYSIS OF INVESTMENT PROPOSAL
BULK WATER SUPPLY PROJECT IN MAJALENGKA TO SUPPLIED TO PDAM KOTA CIREBON**

**MAJALENGKA
BULK WATER SUPPLY PROJECT**

Table 7a - Debt Repayment Schedule - Commercial

(Rp 000)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Period of payment										
Interest rate										
IDC										
Disbursement	0	0	0	0	0	0	0	0	0	0
Interest Grace	0	0	0	0	0	0	0	0	0	0
Total Interest Capitalized	432,833	0	0	0	0	0	0	0	0	0
Loan Balance	6,203,939	0	0	0	0	0	0	0	0	0
Principal payment	5,771,107	5,771,107	0	0	0	0	0	0	0	0
Amortization of Interest Capitalized	432,833	432,833	0	0	0	0	0	0	0	0
Sub Total, Principal	6,203,939	6,203,939	0	0	0	0	0	0	0	0
Interest	1,861,182	930,591	0	0	0	0	0	0	0	0
Penalty	0	0	0	0	0	0	0	0	0	0
Commitment Charge	0	0	0	0	0	0	0	0	0	0
Service Charge	0	0	0	0	0	0	0	0	0	0
Sub Total, Interest, etc.	1,861,182	930,591	0	0	0	0	0	0	0	0
Total Payment	8,065,121	7,134,530	0							

**PRELIMINARY FINANCIAL FEASIBILITY ANALYSIS OF INVESTMENT PROPOSAL
BULK WATER SUPPLY PROJECT IN MAJALENGKA TO SUPPLIED TO PDAM KOTA CIREBON**

**MAJALENGKA
BULK WATER SUPPLY PROJECT**

Table 7b - Debt Repayment Schedule - Commercial Loan - Tranch B

(Rp 000)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Period of payment	10										
	2										
Interest rate	15.00%										
IDC	0										
Disbursement	0	0	0	31,460,249	0	0	0	0	0	0	0
Interest Grace	0	0	0	2,359,519	0	0	0	0	0	0	0
Total Interest Capitalized	0	0	0	2,359,519	2,123,567	1,887,615	1,651,663	1,415,711	1,179,759	943,807	707,856
Loan Balance	0	0	0	33,819,768	30,437,791	27,055,814	23,673,837	20,291,861	16,909,884	13,527,907	10,145,930
Principal payment	0	0	0	0	3,146,025	3,146,025	3,146,025	3,146,025	3,146,025	3,146,025	3,146,025
Amortization of Interest Capitalized	0	0	0	0	235,952	235,952	235,952	235,952	235,952	235,952	235,952
Sub Total, Principal	0	0	0	0	3,381,977	3,381,977	3,381,977	3,381,977	3,381,977	3,381,977	3,381,977
Interest	0	0	0	0	5,072,965	4,565,669	4,058,372	3,551,076	3,043,779	2,536,483	2,029,186
Penalty	0	0	0	0	0	0	0	0	0	0	0
Commitment Charge	0	0	0	0	0	0	0	0	0	0	0
Service Charge	0	0	0	0	0	0	0	0	0	0	0
Sub Total, Interest, etc.	0	0	0	0	5,072,965	4,565,669	4,058,372	3,551,076	3,043,779	2,536,483	2,029,186
Total Payment	0	0	0	0	8,454,942	7,947,645	7,440,349	6,933,052	6,425,756	5,918,459	5,411,163

**PRELIMINARY FINANCIAL FEASIBILITY ANALYSIS OF INVESTMENT PROPOSAL
BULK WATER SUPPLY PROJECT IN MAJALENGKA TO SUPPLIED TO PDAM KOTA CIREBON**

**MAJALENGKA
BULK WATER SUPPLY PROJECT**

Table 7b - Debt Repayment Schedule - Commercial

(Rp 000)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Period of payment										
Interest rate										
IDC										
Disbursement	0	0	0	0	0	0				
Interest Grace	0	0	0	0	0	0				
Total Interest Capitalized	471,904	235,952	0	0	0	0				
Loan Balance	6,763,954	3,381,977	0	0	0	0				
Principal payment	3,146,025	3,146,025	3,146,025	0	0	0				
Amortization of Interest Capitalized	235,952	235,952	235,952	0	0	0				
Sub Total, Principal	3,381,977	3,381,977	3,381,977	0	0	0				
Interest	1,521,890	1,014,593	507,297	0	0	0				
Penalty	0	0	0	0	0	0				
Commitment Charge	0	0	0	0	0	0				
Service Charge	0	0	0	0	0	0				
Sub Total, Interest, etc.	1,521,890	1,014,593	507,297	0	0	0				
Total Payment	4,903,866	4,396,570	3,889,273	0	0	0				

**ATTACHMENT 2 – RENCANA PEMANTAPAN
KINERJA KEUANGAN, PROYEKSI LAPORAN
LABA RUGI, NERACA DAN LAPORAN
PERPUTARAN KAS PDAM KOTA CIREBON**

PRELIMINARY FINANCIAL FEASIBILITY ANALYSIS OF INVESTMENT PROPOSAL
BULK WATER SUPPLY PROJECT IN MAJALENGKA TO SUPPLIED TO PDAM KOTA CIREBON

TABEL L.1
PDAM KOTA CIREBON
RENCANA PEMANTAPAN KINERJA KEUANGAN

NO.	URAIAN	Audit / Eksisting		ESTIMASI	Proyeksi							
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
I.	TARIF											
1	Proyeksi Kenaikan tarif		54%	0%	0%	50%	0%	35%	7%	7%	7%	7%
2	Kenaikan Tarif Rata-rata	0%	5%	0%	0%	46%	0%	32%	9%	6%	7%	7%
3	Tarif rata-rata	1,007	1,055	1,575	1,486	2,167	2,225	2,934	3,186	3,391	3,625	3,876
4	Biaya rata-rata (Rp/m ³)	994	993	1,415	1,399	1,484	1,937	2,980	3,675	3,645	3,683	3,736
5	Kebutuhan Kenaikan Tarif	-1%	-6%	-10%	-6%	-31%	-13%	2%	15%	7%	2%	-4%
6	Saldo Kas Akhir (Rp. 000)	1,184,492	1,195,586	1,102,062	1,925,018	13,096,602	8,760,713	21,189,655	32,440,316	18,572,356	13,099,637	18,631,714
7	Saldo kas thd minim. kas yg diperlukan (#2 bulan operasi)		0.8	0.5	1.0	6.2	3.3	4.7	4.9	2.6	1.6	2.1
8	Debt Coverage Ratio		13.3	20.1	17.5	50.0	4.3	3.4	2.9	1.9	1.4	1.6
II.	TEKNIK											
1	Jumlah sambungan akhir	51,963	52,440	53,263	53,763	53,763	53,763	60,802	72,558	76,048	78,797	80,718
2	Tambahan jumlah sambungan	842	477	823	500	0	0	7,039	11,756	3,491	2,748	1,921
3	Optimalisasi Kapasitas	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	81.3%	68.5%	68.5%	68.5%	68.5%
4	Kehilangan air (%)	28.1%	26.0%	28.3%	28.1%	27.8%	27.8%	36.9%	39.1%	32.8%	30.2%	28.3%
5	Peningkatan (Penurunan) Kehilangan air	0.0%	-2.1%	2.4%	-0.3%	-0.3%	0.0%	9.1%	2.2%	-6.3%	-2.6%	-1.9%
III.	MANAJEMEN											
1	Jumlah hari penagihan (piutang)	28	32	24	21	21	21	21	21	21	21	21
2	Jumlah pegawai	365	364	359	359	359	359	359	366	378	381	384
3	Ratio pegawai per 1000 sambungan	7	7	7	7	7	7	6	5	5	5	5
IV.	INVESTASI											
1	Investasi Rutin	0	0	0	1,000,000	2,000,000	2,140,000	2,289,800	2,450,086	2,621,592	2,805,103	3,001,461
2	Investasi Perluasan	0	0	0	4,035,050	3,300,637	52,185,142	33,774,252	19,476,476	12,528,350	12,568,142	1,839,800
3	Investasi Program Penyehatan	0	0	0	0	0	0	0	0	0	0	0
V.	STRUKTUR BIAYA (Biaya/Pendapatan air)											
1	Biaya Langsung Usaha	74.9%	72.0%	72.5%	74.3%	54.2%	58.1%	68.4%	82.3%	76.7%	74.5%	72.8%
2	Depresiasi	16.7%	15.1%	10.7%	12.8%	9.4%	15.4%	13.8%	12.5%	11.5%	11.1%	10.4%
3	Bunga	1.1%	1.0%	0.6%	0.5%	0.3%	8.9%	16.0%	17.7%	16.7%	13.5%	10.9%
	Total	92.8%	88.1%	83.9%	87.6%	63.9%	82.4%	98.1%	112.5%	104.9%	99.2%	94.1%
4	Pendapatan samb. Baru dll	9.4%	5.8%	6.3%	4.8%	3.0%	3.0%	26.1%	36.2%	12.0%	9.8%	7.6%

**PRELIMINARY FINANCIAL FEASIBILITY ANALYSIS OF INVESTMENT PROPOSAL
BULK WATER SUPPLY PROJECT IN MAJALENGKA TO SUPPLIED TO PDAM KOTA CIREBON**

**TABEL L.1
PDAM KOTA CIREBON
RENCANA PEMANTAPAN KINERJA KEUANGAN**

NO.	URAIAN	Audit / Eksisting		ESTIMASI		Proyeksi						
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
VI.	Penarikan Pinjaman dan Saldo Hutang (Rp. 000)											
1	Pinjaman Eksisting	2,152,467	1,915,002	1,675,270	1,433,062	1,238,448	1,093,425	948,402	803,379	658,356	513,333	368,310
2	Program Penyehatan	-	-	-	-	-	-	-	-	-	-	-
3	Pinjaman Baru lainnya	-	-	-	-	-	50,000,000	80,000,000	100,000,000	90,000,000	80,000,000	70,000,000
VII.	Pembayaran Pinjaman (Rp. 000)											
1	Pinjaman Eksisting											
	Pokok	235,388	237,465	239,732	242,208	194,614	145,023	145,023	145,023	145,023	145,023	145,023
	Bunga, Js Bank, C. Charge	-	8,694	162,100	155,225	132,870	114,798	101,190	87,581	73,973	60,365	46,756
	Total	235,388	246,159	401,832	397,433	327,484	259,821	246,213	232,604	218,996	205,388	191,779
2	Pinjaman Program Penyehatan											
	Pokok	-	-	-	-	-	-	-	-	-	-	-
	Bunga, Js Bank, C. Charge	-	-	-	-	-	-	-	-	-	-	-
	Total	-	-	-	-	-	-	-	-	-	-	-
3	Pinjaman Baru lainnya											
	Pokok	-	-	-	-	-	-	-	-	10,000,000	10,000,000	10,000,000
	Bunga, Js Bank, C. Charge	-	-	-	-	-	3,750,000	9,750,000	13,500,000	15,000,000	13,500,000	12,000,000
	Total	-	-	-	-	-	3,750,000	9,750,000	13,500,000	25,000,000	23,500,000	22,000,000
	Total Pinjaman											
	Pokok	235,388	237,465	239,732	242,208	194,614	145,023	145,023	145,023	10,145,023	10,145,023	10,145,023
	Bunga, Js Bank, C. Charge	-	8,694	162,100	155,225	132,870	3,864,798	9,851,190	13,587,581	15,073,973	13,560,365	12,046,756
	Total	235,388	246,159	401,832	397,433	327,484	4,009,821	9,996,213	13,732,604	25,218,996	23,705,388	22,191,779

PRELIMINARY FINANCIAL FEASIBILITY ANALYSIS OF INVESTMENT PROPOSAL
BULK WATER SUPPLY PROJECT IN MAJALENGKA TO SUPPLIED TO PDAM KOTA CIREBON

TABEL L.2
PDAM KOTA CIREBON
PROYEKSI LAPORAN LABA RUGI

NO.	URAIAN	Audit / Eksisting		Internal	Proyeksi							
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
I. UMUM												
1	Jumlah penduduk daerah pelayanan (Jiwa)	267,130	268,607	270,093	271,579	273,072	274,574	276,084	277,603	279,130	280,665	282,208
2	Jumlah Penduduk yg terlayani (Jiwa)	258,655	261,189	265,826	268,696	268,696	268,696	301,196	355,536	371,656	384,396	393,236
3	Cakupan Pelayanan (%)	96.83%	97.24%	98.42%	98.94%	98.40%	97.86%	109.10%	128.07%	133.15%	136.96%	139.34%
4	Jumlah Pelanggan Akhir	51,963	52,440	53,263	53,763	53,763	53,763	60,802	72,558	76,048	78,797	80,718
5	Jumlah sambungan baru	842	477	823	500	0	0	7,039	11,756	3,491	2,748	1,921
6	Konsumsi m3/bln atau tahun/pelanggan	31	32	30	30	30	30	29	28	29	29	29
7	Jumlah produksi (000 m3)	27,121	27,121	27,121	27,121	27,121	27,121	33,364	39,608	39,608	39,608	39,608
8	Jumlah permintaan air (000 m3)	19,511	20,078	19,440	19,510	19,580	19,580	21,042	24,126	26,627	27,649	28,415
9	Jumlah konsumsi air (000 m3)	19,511	20,078	19,440	19,510	19,580	19,580	21,042	24,126	26,627	27,649	28,415
10	Kehilangan air yang diharapkan (%)	20%	24%	25%	25%	25%	25%	25%	25%	25%	25%	25%
11	Kehilangan air (%)	28%	26%	28%	28%	28%	28%	37%	39%	33%	30%	28%
12	Kenaikan tarif rata-rata	0%	5%	49%	0%	46%	3%	32%	9%	6%	7%	7%
13	Tingkat pemulihan biaya minimal (Biaya Akunting) Rp/m3	994	993	1,415	1,399	1,484	1,937	2,980	3,675	3,645	3,683	3,736
14	Tarif rata-rata (Rp/m3)	1,007	1,055	1,575	1,486	2,167	2,225	2,934	3,186	3,391	3,625	3,876
15	% pemulihan biaya minimal (biaya akunting)	101%	106%	111%	106%	146%	115%	98%	87%	93%	98%	104%
II PENDAPATAN (Rp. 000)												
1	<u>Pendapatan air</u>											
a.	Pendapatan Penjualan Air	16,487,411	17,864,542	27,303,104	27,369,687	40,011,227	41,154,405	58,043,225	72,141,830	85,007,977	94,370,828	103,717,454
b.	Pendapatan administrasi & sewa meter	3,159,114	3,309,512	3,323,995	1,612,890	2,419,335	2,419,335	3,693,704	4,716,433	5,289,366	5,864,156	6,427,638
	<u>Jumlah Pendapatan Penjualan Air</u>	19,646,525	21,174,054	30,627,099	28,982,577	42,430,562	43,573,740	61,736,929	76,858,263	90,297,343	100,234,984	110,145,091
2	<u>Pendapatan non air</u>											
a.	Pendapatan sambungan baru	710,530	740,245	910,892	500,000	0	0	14,253,403	25,472,313	8,092,739	6,817,831	5,099,691
b.	Pendapatan Non air Lainnya	630,823	475,944	995,075	869,477	1,272,917	1,307,212	1,852,108	2,305,748	2,708,920	3,007,050	3,304,353
c.	Pendapatan Air Limbah	499,420	8,581	11,264	11,827	12,419	13,039	13,691	14,376	15,095	15,850	16,642
	Jumlah pendapatan non air	1,840,773	1,224,770	1,917,231	1,381,305	1,285,335	1,320,252	16,119,202	27,792,437	10,816,754	9,840,730	8,420,686
	Jumlah pendapatan Operasi	21,487,298	22,398,824	32,544,330	30,363,882	43,715,898	44,893,992	77,856,132	104,650,700	101,114,097	110,075,715	118,565,777

PRELIMINARY FINANCIAL FEASIBILITY ANALYSIS OF INVESTMENT PROPOSAL
BULK WATER SUPPLY PROJECT IN MAJALENGA TO SUPPLIED TO PDAM KOTA CIREBON

TABEL L.2
PDAM KOTA CIREBON
PROYEKSI LAPORAN LABA RUGI

NO.	URAIAN	Audit / Eksisting		Internal	Proyeksi							
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
III.	BIAYA-BIAYA (Rp. 000)											
1	Biaya Operasi Tunai :											
a.	Tenaga Kerja	9,918,679	10,631,524	13,952,453	14,929,125	15,974,163	17,092,355	18,288,820	19,952,717	22,035,082	23,795,381	25,644,584
b.	Listrik dan Bahan Bakar	0	0	329,858	352,948	377,654	404,090	531,913	675,651	722,947	773,553	827,701
c.	Bahan Kimia dan Bahan Pembantu	77,824	96,772	128,931	137,956	147,613	157,946	207,908	264,090	282,577	302,357	323,522
d.	Pemeliharaan & Biaya Bahan	1,427,165	1,274,032	1,826,690	2,005,238	2,040,686	2,221,738	2,384,957	4,019,205	5,105,935	5,768,877	6,228,881
e.	Administrasi & Umum	2,756,358	2,536,086	3,153,747	2,239,369	2,396,125	2,563,853	2,743,323	2,992,907	3,305,262	3,569,307	3,846,688
f.	Penyisihan Piutang	205,098	344,552	244,599	115,930	169,722	174,295	246,948	307,433	361,189	400,940	440,580
g.	Air Baku	330,000	360,000	2,572,926	1,762,862	1,886,263	2,712,096	2,901,943	3,105,079	3,322,434	3,555,005	3,803,855
h.	Pembelian air dari Mitra Swasta	0	0	0	0	0	0	14,915,621	31,919,429	34,153,789	36,544,555	39,102,673
i.	Biaya Operasi Air Limbah	1,162,559	1,296,866	1,817,541	1,890,243	1,965,852	2,044,486	2,126,266	2,211,317	2,299,769	2,391,760	2,487,430
	Jumlah Biaya Operasi Tunai	15,877,683	16,539,832	24,026,745	23,433,671	24,958,079	27,370,859	44,347,698	65,447,828	71,588,985	77,101,735	82,705,915
IV.	LABA RUGI (Rp. 000)											
a.	Laba Rugi Operasi	5,609,615	5,858,992	8,517,585	6,930,211	18,757,819	17,523,133	33,508,434	39,202,872	29,525,113	32,973,980	35,859,863
b.	Pendapatan Non Operasi	354,209	257,461	421,134	144,913	212,153	217,869	308,685	384,291	451,487	501,175	550,725
c.	Biaya Non Operasi	(73,679)	(118,335)	(156,230)	(35,151)	(37,437)	(41,056)	(66,522)	(98,172)	(107,383)	(115,653)	(124,059)
d.	Laba Rugi Sebelum Penyusutan	5,890,145	5,998,118	8,782,489	7,039,973	18,932,535	17,699,945	33,750,597	39,488,992	29,869,216	33,359,502	36,286,529
e.	Biaya Penyusutan	3,288,522	3,190,083	3,287,303	3,702,896	3,974,928	6,698,675	8,509,892	9,614,795	10,381,468	11,159,948	11,412,516
f.	Laba Rugi sebelum Bunga	2,601,624	2,808,035	5,495,186	3,337,077	14,957,607	11,001,270	25,240,705	29,874,196	19,487,748	22,199,554	24,874,013
g.	Biaya Bunga	221,863	210,997	186,415	155,225	132,870	3,864,798	9,851,190	13,587,581	15,073,973	13,560,365	12,046,756
h.	Laba Rugi sebelum Pajak	2,379,761	2,597,037	5,308,771	3,181,853	14,824,737	7,136,472	15,389,515	16,286,615	4,413,775	8,639,189	12,827,257
i.	Pajak penghasilan badan	749,395	885,749	1,567,631	929,556	4,422,421	2,115,942	4,591,855	4,860,985	1,299,132	2,566,757	3,823,177
j.	Laba Rugi setelah Pajak	1,630,366	1,711,288	3,741,140	2,252,297	10,402,316	5,020,530	10,797,661	11,425,631	3,114,642	6,072,433	9,004,080
V.	Return On Investment (ROI):											
a.	Nilai Aktiva Tetap Rata-Rata	59,757,951	62,629,183	65,458,750	67,432,062	71,040,394	76,778,237	106,736,027	152,085,666	181,246,870	199,962,631	215,414,159
b.	ROI Tahunan	2.73%	2.73%	5.72%	3.34%	14.64%	6.54%	10.12%	7.51%	1.72%	3.04%	4.18%
c.	ROI Rata-Rata (3 Tahun)	3.73%	3.93%	7.90%	8.17%	10.43%	8.06%	6.45%	4.09%	2.98%	4.27%	5.16%
d.	Biaya Operasi/Pendapatan											
	Operasi(Working Ratio) < 100%	80.82%	78.11%	78.45%	80.85%	58.82%	62.82%	71.83%	85.15%	79.28%	76.92%	75.09%
e.	Beban Yg. Hrs Ditutup/Pend.Oprsi											
	(Operating Ratio) < 100%	102.50%	98.36%	94.91%	97.37%	78.92%	91.91%	109.01%	121.67%	108.91%	104.14%	99.86%
1	Current Ratio	2.45	1.92	2.47	3.26	3.42	4.52	4.55	5.58	2.11	1.63	1.88
2	Ratio Hutang (Hutang Lancar + Panjang)	12.4%	12.3%	9.5%	7.9%	11.5%	52.0%	59.6%	63.0%	63.9%	58.7%	53.4%
3	EBITDA /Beban bunga dan Pokok	1172.6%	1330.8%	2947.8%	844.9%	3987.9%	271.0%	252.5%	217.5%	128.0%	93.6%	112.1%
4	Laba/pendapatan air	8.3%	8.1%	12.2%	7.8%	24.5%	11.5%	17.5%	14.9%	3.4%	6.1%	8.2%

**PRELIMINARY FINANCIAL FEASIBILITY ANALYSIS OF INVESTMENT PROPOSAL
BULK WATER SUPPLY PROJECT IN MAJALENGKA TO SUPPLIED TO PDAM KOTA CIREBON**

**TABEL L.3
PDAM KOTA CIREBON
PROYEKSI NERACA
(In Rp. 000)**

NO.	URAIAN	Audit / Eksisting		ESTIMASI	Proyeksi							
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
A.	AKTIVA :											
I.	AKTIVA LANCAR :											
a.	Kas & Bank	1,184,492	1,195,587	1,102,062	1,925,018	13,096,602	8,760,713	21,189,655	32,440,316	18,572,356	13,099,637	18,631,714
b.	Piutang Usaha	986,535	1,074,644	1,473,533	1,449,129	2,121,528	2,178,687	3,086,846	3,842,913	4,514,867	5,011,749	5,507,255
c.	Piutang Lain-lain	399,167	435,154	384,846	579,652	848,611	871,475	1,234,739	1,537,165	1,805,947	2,004,700	2,202,902
d.	Persediaan	744,667	755,831	186,995	680,229	740,579	794,986	1,339,735	1,701,978	1,922,959	2,076,294	2,231,990
e.	Pembayaran Dimuka	985,884	1,283,544	2,820,800	2,239,369	2,396,125	2,563,853	2,743,323	2,992,907	3,305,262	3,569,307	3,846,688
	Jumlah Aktiva Lancar	4,300,745	4,744,759	5,968,236	6,873,395	19,203,445	15,169,713	29,594,298	42,515,280	30,121,391	25,761,687	32,420,548
II.	AKTIVA TETAP											
a.	Tanah	6,048,649	6,151,832	6,154,894	6,154,894	6,154,894	6,154,894	6,154,894	6,154,894	6,154,894	6,154,894	6,154,894
b.	Harga Perolehan diluar tanah	61,182,121	64,076,245	66,841,255	68,022,869	74,057,919	79,498,556	133,973,497	170,197,836	192,295,904	207,629,358	223,198,960
c.	Akumulasi Penyusutan	(35,860,519)	(39,021,675)	(42,240,326)	(45,943,222)	(49,918,150)	(56,616,825)	(65,126,716)	(74,741,512)	(85,122,979)	(96,282,927)	(107,695,444)
	Nilai Buku	31,370,252	31,206,401	30,755,823	28,234,541	30,294,663	29,036,625	75,001,675	101,611,218	113,327,818	117,501,324	121,658,411
III.	AKTIVA TETAP DLM PENYELESAIAN	849,842	1,128,953	181,614	4,035,050	3,300,637	52,185,142	33,774,252	19,476,476	12,528,350	12,568,142	1,839,800
IV.	AKTIVA LAIN-LAIN	7,090,309	6,090,626	8,789,609	8,789,609	8,789,609	8,789,609	8,789,609	8,789,609	8,789,609	8,789,609	8,789,609
V.	JUMLAH AKTIVA	43,611,147	43,170,740	45,695,282	47,932,596	61,588,354	105,181,089	147,159,834	172,392,583	164,767,169	164,620,762	164,708,368
B.	PASIVA :											
I.	HUTANG LANCAR											
a.	Hutang Usaha	219,227	448,631	198,211	468,673	499,162	547,417	886,954	1,308,957	1,431,780	1,542,035	1,654,118
b.	Hutang Lancar Lainnya	108,457	359,260	517,000	468,673	499,162	547,417	886,954	1,308,957	1,431,780	1,542,035	1,654,118
c.	Hutang Pajak	779,106	885,749	1,464,832	929,556	4,422,421	2,115,942	4,591,855	4,860,985	1,299,132	2,566,757	3,823,177
d.	Pinjaman Jangka Panjang Jatuh Tempo	647,314	775,548	239,733	242,208	194,614	145,023	145,023	145,023	10,145,023	10,145,023	10,145,023
	Jumlah Hutang Lancar	1,754,104	2,469,188	2,419,776	2,109,111	5,615,358	3,355,799	6,510,786	7,623,921	14,307,715	15,795,849	17,276,437
II.	HUTANG JANGKA PANJANG :											
a.	Pinjaman Jangka Panjang	2,145,767	1,915,035	1,675,273	1,433,062	1,238,448	51,093,425	80,948,402	100,803,379	90,658,356	80,513,333	70,368,310
b.	Kewajiban Lainnya	1,524,972	938,244	257,535	257,538	257,538	257,538	257,538	257,538	257,538	257,538	257,538
	Jumlah Hutang Jangka Panjang	3,670,739	2,853,279	1,932,808	1,690,600	1,495,986	51,350,963	81,205,940	101,060,917	90,915,894	80,770,871	70,625,848

**PRELIMINARY FINANCIAL FEASIBILITY ANALYSIS OF INVESTMENT PROPOSAL
BULK WATER SUPPLY PROJECT IN MAJALENGKA TO SUPPLIED TO PDAM KOTA CIREBON**

**TABEL L.3
PDAM KOTA CIREBON
PROYEKSI NERACA
(In Rp. 000)**

NO.	URAIAN	Audit / Eksisting		ESTIMASI	Proyeksi							
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
III.	HUTANG LAIN-LAIN :											
a.	Uang Jaminan Langganan+ Cadangan Meter	2,364,819	2,112,820	3,279,676	4,892,566	7,311,901	9,731,236	13,424,940	18,141,373	23,430,739	29,294,895	35,722,533
b.	Penyertaan Pemerintah YBDS	7,642,581	7,642,581	7,642,581	7,642,581	7,642,581	7,642,581	7,642,581	7,642,581	7,642,581	7,642,581	7,642,581
	Jumlah Hutang Lain-Lain	10,007,400	9,755,401	10,922,257	12,535,147	14,954,482	17,373,817	21,067,521	25,783,954	31,073,320	36,937,476	43,365,114
	JUMLAH HUTANG	15,432,243	15,077,868	15,274,841	16,334,858	22,065,826	72,080,579	108,784,247	134,468,792	136,296,929	133,504,196	131,267,398
IV.	MODAL DAN CADANGAN :											
a.	Kekayaan PEMDA Yg Dipisahkan	19,680,910	19,680,910	19,680,910	19,680,910	19,680,910	19,680,910	19,680,910	19,680,910	19,680,910	19,680,910	19,680,910
b.	Penyertaan Pemerintah Pusat	0	0	0	0	0	0	0	0	0	0	0
c.	Selisih Penilaian Kembali Aktiva Tetap	0	0	0	0	0	0	0	0	0	0	0
d.	Modal Penyertaan Lain-lain	2,266,197	2,266,197	2,266,197	2,266,197	2,266,197	2,266,197	2,266,197	2,266,197	2,266,197	2,266,197	2,266,197
e.	Dana Cadangan	4,601,429	4,434,477	5,050,540	7,398,334	7,173,104	6,132,873	5,630,820	4,551,054	3,408,491	3,097,026	2,489,783
f.	Laba Rugi Thn Berjalan	1,630,368	1,711,288	3,422,794	2,252,297	10,402,316	5,020,530	10,797,661	11,425,631	3,114,642	6,072,433	9,004,080
	Jumlah Modal dan Cadangan	28,178,904	28,092,872	30,420,441	31,597,738	39,522,527	33,100,510	38,375,587	37,923,791	28,470,240	31,116,566	33,440,970
	JUMLAH PASIVA	43,611,147	43,170,740	45,695,282	47,932,596	61,588,354	105,181,089	147,159,834	172,392,583	164,767,169	164,620,762	164,708,368

**PRELIMINARY FINANCIAL FEASIBILITY ANALYSIS OF INVESTMENT PROPOSAL
BULK WATER SUPPLY PROJECT IN MAJALENGKA TO SUPPLIED TO PDAM KOTA CIREBON**

**TABEL L.4
PDAM KOTA CIREBON
PROYEKSI LAPORAN PERPUTARAN KAS**

NO.	URAIAN	Audit / Eksisting		Estimasi	Proyeksi							
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
A.	SUMBER DANA (Rp.000)											
I.	KAS :											
	- Pendapatan (Rugi) Bersih Di Dalam Usaha sebelum											
	Depresiasi dan Pembayaran Bunga - Pajak	4,860,220	4,973,243	6,949,954	6,000,655	14,335,398	15,407,191	28,916,579	34,341,888	28,225,980	30,407,223	32,036,686
	- Pendapatan (Rugi) Bersih Di Luar Usaha	280,530	139,126	264,904	109,762	174,716	176,812	242,163	286,120	344,103	385,522	426,667
	Jumlah Pendapatan (Rugi) Bersih (Kas)	5,140,750	5,112,369	7,214,858	6,110,418	14,510,114	15,584,004	29,158,742	34,628,007	28,570,083	30,792,745	32,463,352
	Uang Jaminan Pelanggan + Cadangan Meter	0	0	0	1,612,890	2,419,335	2,419,335	3,693,704	4,716,433	5,289,366	5,864,156	6,427,638
II.	Hibah:											
	Jumlah Hibah	0	0	0	0	0	0	0	0	0	0	0
	Investasi Perluasan	0	0	0	0	0	0	0	0	0	0	0
	Investasi Penyehatan	0	0	0	0	0	0	0	0	0	0	0
III.	Modal:											
	Suntikan Penyertaan											
	Suntikan Modal Sendiri	0	0	0	0	0	0	0	0	0	0	0
	Jumlah Modal	0	0	0	0	0	0	0	0	0	0	0
IV.	Pinjaman & Kerjasama Swasta:											
	Kerjasama dengan Swasta	0	0	0	0	0	50,000,000	30,000,000	20,000,000	0	0	0
	Pinjaman untuk investasi penyehatan	0	0	0	0	0	0	0	0	0	0	0
	Pinjaman untuk investasi perluasan	0	0	0	0	0	50,000,000	30,000,000	20,000,000	0	0	0
	Beban Bunga Masa Tenggang yang Ditangguhkan	0	0	0	0	0	0	0	0	0	0	0
	JUMLAH SUMBER DANA	5,140,750	5,112,369	7,214,858	7,723,308	16,929,449	68,003,339	62,852,447	59,344,440	33,859,449	36,656,901	38,890,990

PRELIMINARY FINANCIAL FEASIBILITY ANALYSIS OF INVESTMENT PROPOSAL
BULK WATER SUPPLY PROJECT IN MAJALENGKA TO SUPPLIED TO PDAM KOTA CIREBON

TABEL L.4
PDAM KOTA CIREBON
PROYEKSI LAPORAN PERPUTARAN KAS

NO.	URAIAN	Audit / Eksisting		Estimasi	Proyeksi							
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
B.	PENGUNAAN DANA (Rp. 000)											
	- Investasi Penyehatan	0	0	0	0	0	0	0	0	0	0	0
	- Investasi perluasan	3,535,710	5,014,174	3,433,285	4,035,050	3,300,637	52,185,142	33,774,252	19,476,476	12,528,350	12,568,142	1,839,800
I.	Total Investasi	3,535,710	5,014,174	3,433,285	4,035,050	3,300,637	52,185,142	33,774,252	19,476,476	12,528,350	12,568,142	1,839,800
	Investasi Rutin	0	0	0	1,000,000	2,000,000	2,140,000	2,289,800	2,450,086	2,621,592	2,805,103	3,001,461
	Beban Bunga Masa Tenggang yang Ditangguhkan	0	0	0	0	0	0	0	0	0	0	0
	Jumlah Pengeluaran Barang Modal	3,535,710	5,014,174	3,433,285	5,035,050	5,300,637	54,325,142	36,064,052	21,926,562	15,149,942	15,373,245	4,841,261
II.	Angsuran Pokok Pinjaman	233,488	230,732	237,465	239,733	242,208	194,614	145,023	145,023	145,023	10,145,023	10,145,023
	Pembayaran Bunga	221,139	208,921	186,415	155,225	132,870	3,864,798	9,851,190	13,587,581	15,073,973	13,560,365	12,046,756
	Jumlah Pembayaran	454,627	439,653	423,880	394,958	375,078	4,059,412	9,996,213	13,732,604	15,218,996	23,705,388	22,191,779
	Modal Kerja diluar Kas	(1,044,342)	(829,327)	(342,991)	395,344	(2,395,376)	2,512,126	(1,159,344)	557,186	4,790,277	(375,120)	(353,803)
	Perubahan Aktiva/Kewajiban Lain-Lain	1,157,493	(999,683)	2,698,983	0	0	0	0	0	0	0	0
	Bagian Pemda Atas Laba Bersih	700,014	802,875	900,000	900,000	1,238,763	5,721,274	2,761,292	5,938,713	6,284,097	1,713,053	3,339,838
	Bagian Karyawan Atas Laba Bersih	120,327	673,583	195,225	175,000	1,238,763	5,721,274	2,761,292	5,938,713	6,284,097	1,713,053	3,339,838
	JUMLAH PENGUNAAN DANA	4,923,829	5,101,275	7,308,382	6,900,352	5,757,865	72,339,227	50,423,504	48,093,780	47,727,409	42,129,620	33,358,913
	Kenaikan (Penurunan) Dana	216,922	11,094	(93,525)	822,956	11,171,584	(4,335,889)	12,428,942	11,250,660	(13,867,960)	(5,472,718)	5,532,077
	Saldo Kas (Awal Tahun)	967,570	1,184,492	1,195,586	1,102,062	1,925,018	13,096,602	8,760,713	21,189,655	32,440,316	18,572,356	13,099,637
	Saldo Kas (Akhir Tahun)	1,184,492	1,195,586	1,102,062	1,925,018	13,096,602	8,760,713	21,189,655	32,440,316	18,572,356	13,099,637	18,631,714
	Kas Minimum (Cadangan) yang diperlukan (2 bulan operasional)	2,722,052	2,829,914	4,075,104	3,971,438	4,222,193	5,238,379	9,057,318	13,196,739	14,467,997	16,801,187	17,482,949
	Year-End Cash Balance to Minimum Cash Requirement	0.9	0.8	0.5	1.0	6.2	3.3	4.7	4.9	2.6	1.6	2.1
	Equity PDAM (Internal Cash Generation) Regular	0	0	0	1,000,000	2,000,000	2,140,000	2,289,800	2,450,086	2,621,592	2,805,103	3,001,461
	Equity PDAM (Internal Cash Generation) Rescue Program	0	0	0	0	0	0	0	0	0	0	0

ENVIRONMENTAL SERVICES PROGRAM

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