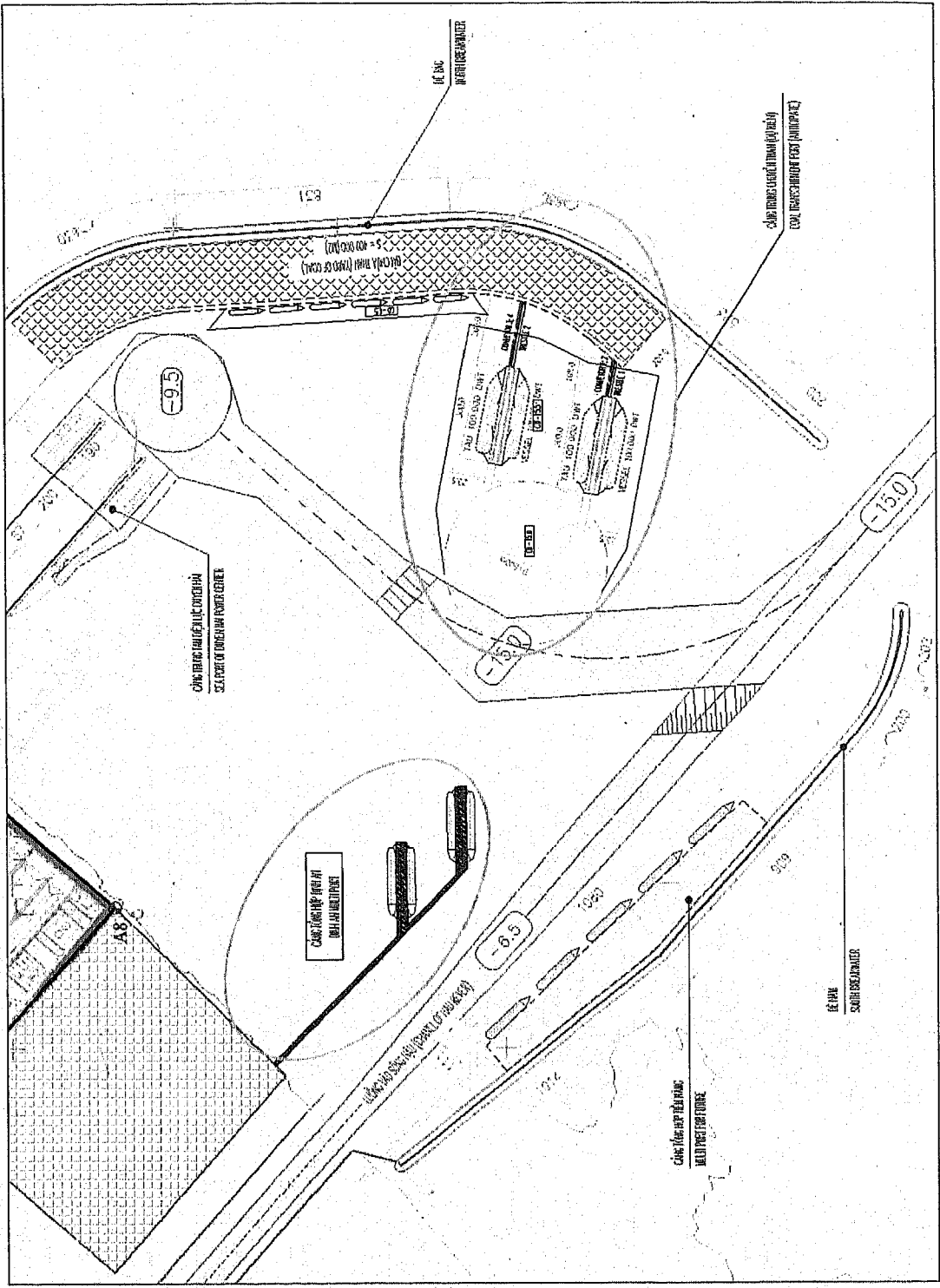


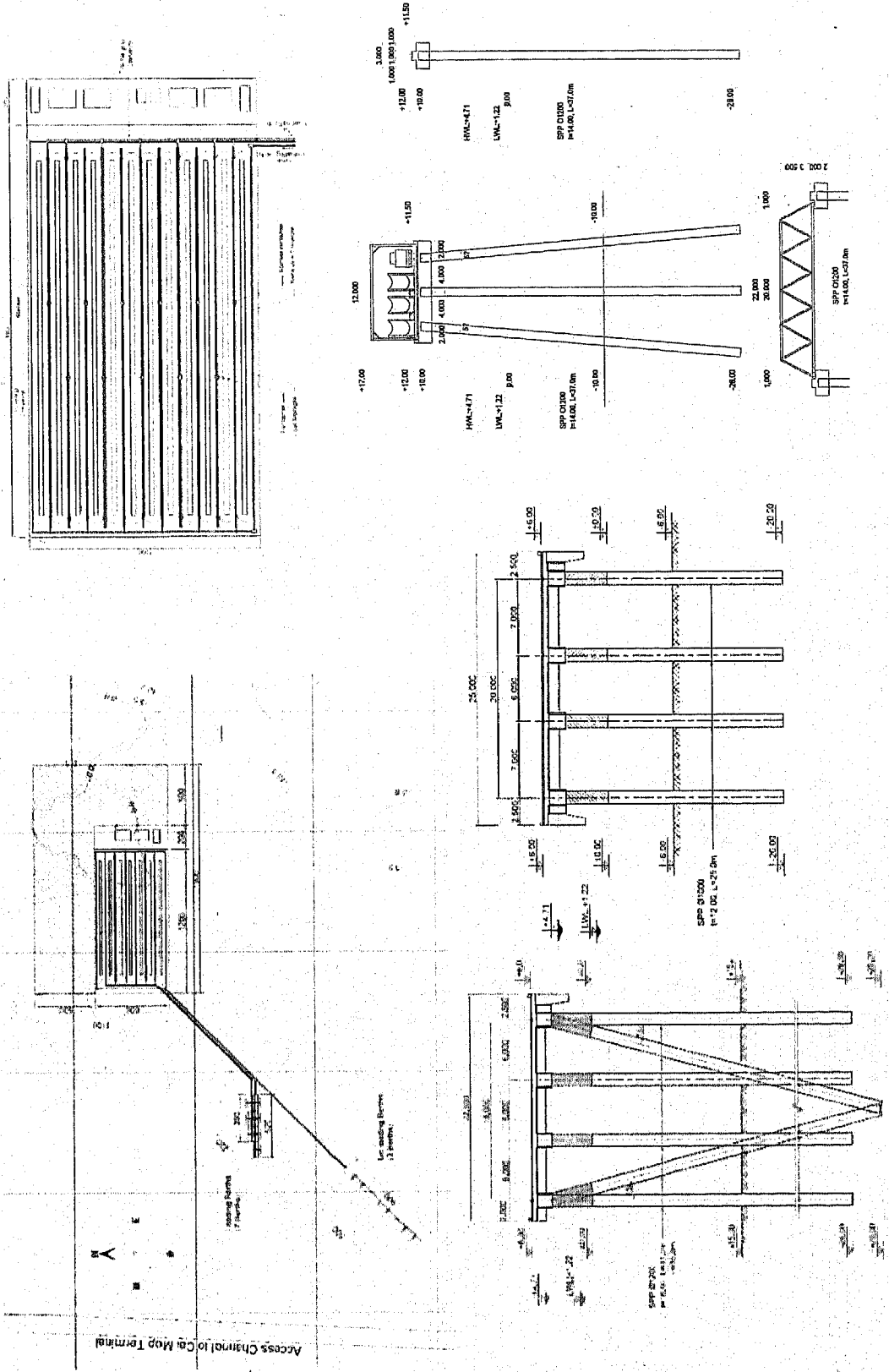
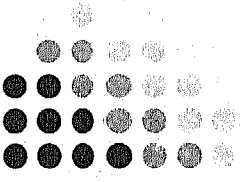
3. Terminal Layout

3.2 Tra Vinh



3. Terminal Layout

3.2 Cai Mep



4. Project Cost (Long-Term)

4.1 Summary

Unit: Million USD

Item	1. Vinh Tan + Tra Vinh	2. Vinh Tan + Cai Mep	3. Tra Vinh + Tra Vinh	4. Cai Mep + Cai Mep	5. Cai Mep + Tra Vinh
Initial Cost					
Terminal construction cost	741.0	656.0	523.0	438.0	778.0
Annual Cost (total in 30 years)					
Operations and maintenance cost	1,236.0	640.0	1,425.0	647.0	1,243.0
Secondary transport cost	377.6	752.2	164.1	574.4	199.7
Total Cost					
	2,354.6	2,048.2	2,112.1	1,659.4	2,220.7

4. Project Cost (Long-Term)

4.2 Breakdown

	1. Vinh Tan + Tra Vinh				2. Vinh Tan + Cai Mep				3. Tra Vinh + Tra Vinh						
	Capital investment mil USD	Coal handling volume mil-ton	Transport cost 4.8/0.3 US\$/t	OM cost mil US\$	Ammount mil US\$	Capital investment mil USD	Coal handling volume mil-ton	Transport cost 4.8/1.05 US\$/t	OM cost mil US\$	Ammount mil US\$	Capital investment mil USD	Coal handling volume mil-ton	Transport cost 0.3 US\$/t	OM cost mil US\$	Ammount mil US\$
0															
1	50.0				50.0					50.0					80.0
2	100.0				100.0					100.0					160.0
3	68.0				68.0					68.0					98.0
4		5.0	24.0	16.0	40.0		5.0	24.0	16.0	40.0		5.0	1.5	43.0	44.5
5		5.5	26.4	16.0	42.4		5.5	26.4	16.0	42.4		5.5	1.7	43.0	44.7
6		6.1	29.0	16.0	45.0		6.1	29.0	16.0	45.0		6.1	1.8	43.0	44.8
7		6.7	31.9	16.0	47.9		6.7	31.9	16.0	47.9		6.7	2.0	43.0	45.0
8	120.0	7.3	35.1	16.0	171.1	100.0	7.3	35.1	16.0	151.1	35.0	7.3	2.2	43.0	80.2
9	250.0	8.1	38.7	16.0	304.7	200.0	8.1	38.7	16.0	254.7	100.0	8.1	2.4	43.0	145.4
10	153.0	8.9	42.5	16.0	211.5	138.0	8.9	42.5	16.0	196.5	50.0	8.9	2.7	43.0	95.7
11		9.7	2.9	56.2	59.1		9.7	10.2	26.4	36.6		9.7	2.9	56.2	59.1
12		10.7	3.2	56.2	59.4		10.7	11.3	26.4	37.7		10.7	3.2	56.2	59.4
13		11.8	3.5	56.2	59.7		11.8	12.4	26.4	38.8		11.8	3.5	56.2	59.7
14		13.0	3.9	56.2	60.1		13.0	13.6	26.4	40.0		13.0	3.9	56.2	60.1
15		14.3	4.3	56.2	60.5		14.3	15.0	26.4	41.4		14.3	4.3	56.2	60.5
16		15.7	4.7	56.2	60.9		15.7	16.5	26.4	42.9		15.7	4.7	56.2	60.9
17		17.3	5.2	56.2	61.4		17.3	18.1	26.4	44.5		17.3	5.2	56.2	61.4
18		19.0	5.7	56.2	61.9		19.0	19.9	26.4	46.3		19.0	5.7	56.2	61.9
19		20.9	6.3	56.2	62.5		20.9	21.9	26.4	48.3		20.9	6.3	56.2	62.5
20		23.0	6.9	56.2	63.1		23.0	24.1	26.4	50.5		23.0	6.9	56.2	63.1
21		25.3	7.6	56.2	63.8		25.3	26.5	26.4	52.9		25.3	7.6	56.2	63.8
22		27.8	8.3	56.2	64.5		27.8	29.2	26.4	55.6		27.8	8.3	56.2	64.5
23		30.6	9.2	56.2	65.4		30.6	32.1	26.4	58.5		30.6	9.2	56.2	65.4
24		33.6	10.1	56.2	66.3		33.6	35.3	26.4	61.7		33.6	10.1	56.2	66.3
25		37.0	11.1	56.2	67.3		37.0	38.9	26.4	65.3		37.0	11.1	56.2	67.3
26		38.0	11.4	56.2	67.6		38.0	39.9	26.4	66.3		38.0	11.4	56.2	67.6
27		38.0	11.4	56.2	67.6		38.0	39.9	26.4	66.3		38.0	11.4	56.2	67.6
28		38.0	11.4	56.2	67.6		38.0	39.9	26.4	66.3		38.0	11.4	56.2	67.6
29		38.0	11.4	56.2	67.6		38.0	39.9	26.4	66.3		38.0	11.4	56.2	67.6
30		38.0	11.4	56.2	67.6		38.0	39.9	26.4	66.3		38.0	11.4	56.2	67.6
Total	741.0		377.6	1,236.0	2,354.6	656.0		752.2	640.0	2,048.2	523.0		164.1	1,425.0	2,112.1
			Present value		1,019.8			Present value		898.0			Present value		929.3

Note1: Capital investment includes only construction/purchase cost of terminal facility.

Note2: Environmental countermeasure cost will be required additionally around the range of US\$ 100-200 mil based on the Vietnamese Gov's requirement.

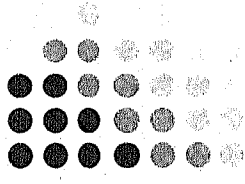
4. Project Cost (Long-Term)

4.2 Breakdown

	4. Cai Mep + Cai Mep				5. Cai Mep + Tra Vinh				Amount mil USD
	Capital investment mil USD	Coal handling volume mil. ton	Transport cost 1.05 US\$/t	OM cost mil USD	Capital investment mil USD	Coal handling volume mil. ton	Transport cost 1.05 US\$/t	OM cost mil USD	
0									
1	50.0				50.0				50.0
2	120.0				130.0				130.0
3	85.0				75.0				75.0
4		5.0	5.3	17.0		5.0	5.3	17.0	22.3
5		5.5	5.8	17.0		5.5	5.8	17.0	22.8
6		6.1	6.4	17.0		6.1	6.4	17.0	23.4
7		6.7	7.0	17.0		6.7	7.0	17.0	24.0
8	30.0	7.3	7.7	17.0	120.0	7.3	7.7	17.0	144.7
9	90.0	8.1	8.5	17.0	250.0	8.1	8.5	17.0	275.5
10	63.0	8.9	9.3	17.0	153.0	8.9	9.3	17.0	179.3
11		9.7	10.2	26.4		9.7	2.9	56.2	59.1
12		10.7	11.3	26.4		10.7	3.2	56.2	59.4
13		11.8	12.4	26.4		11.8	3.5	56.2	59.7
14		13.0	13.6	26.4		13.0	3.9	56.2	60.1
15		14.3	15.0	26.4		14.3	4.3	56.2	60.5
16		15.7	16.5	26.4		15.7	4.7	56.2	60.9
17		17.3	18.1	26.4		17.3	5.2	56.2	61.4
18		19.0	19.9	26.4		19.0	5.7	56.2	61.9
19		20.9	21.9	26.4		20.9	6.3	56.2	62.5
20		23.0	24.1	26.4		23.0	6.9	56.2	63.1
21		25.3	26.5	26.4		25.3	7.6	56.2	63.8
22		27.8	29.2	26.4		27.8	8.3	56.2	64.5
23		30.6	32.1	26.4		30.6	9.2	56.2	65.4
24		33.6	35.3	26.4		33.6	10.1	56.2	66.3
25		37.0	38.9	26.4		37.0	11.1	56.2	67.3
26		38.0	39.9	26.4		38.0	11.4	56.2	67.6
27		38.0	39.9	26.4		38.0	11.4	56.2	67.6
28		38.0	39.9	26.4		38.0	11.4	56.2	67.6
29		38.0	39.9	26.4		38.0	11.4	56.2	67.6
30		38.0	39.9	26.4		38.0	11.4	56.2	67.6
Total	438.0		574.4	647.0	778.0		199.7	1,243.0	2,220.7
			Present value				Present value		947.1
				686.1					

Note1: Capital investment includes only construction/purchase cost of terminal facility.

Note2: Environmental countermeasure cost will be required additionally around the range of US\$ 100-200 mil based on the Vietnamese Gov's requirement.



4. Project Cost (Long-Term)

4.3 Examination Result 1

- The examination result for long-term is as follows.

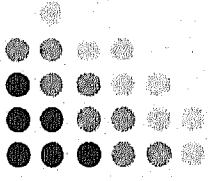
1st rank (686.1): Cai Mep + Cai Mep

2nd rank (898.0): Vinh Tan + Cai Mep

3rd rank (929.3): Tra Vinh + Tra Vinh

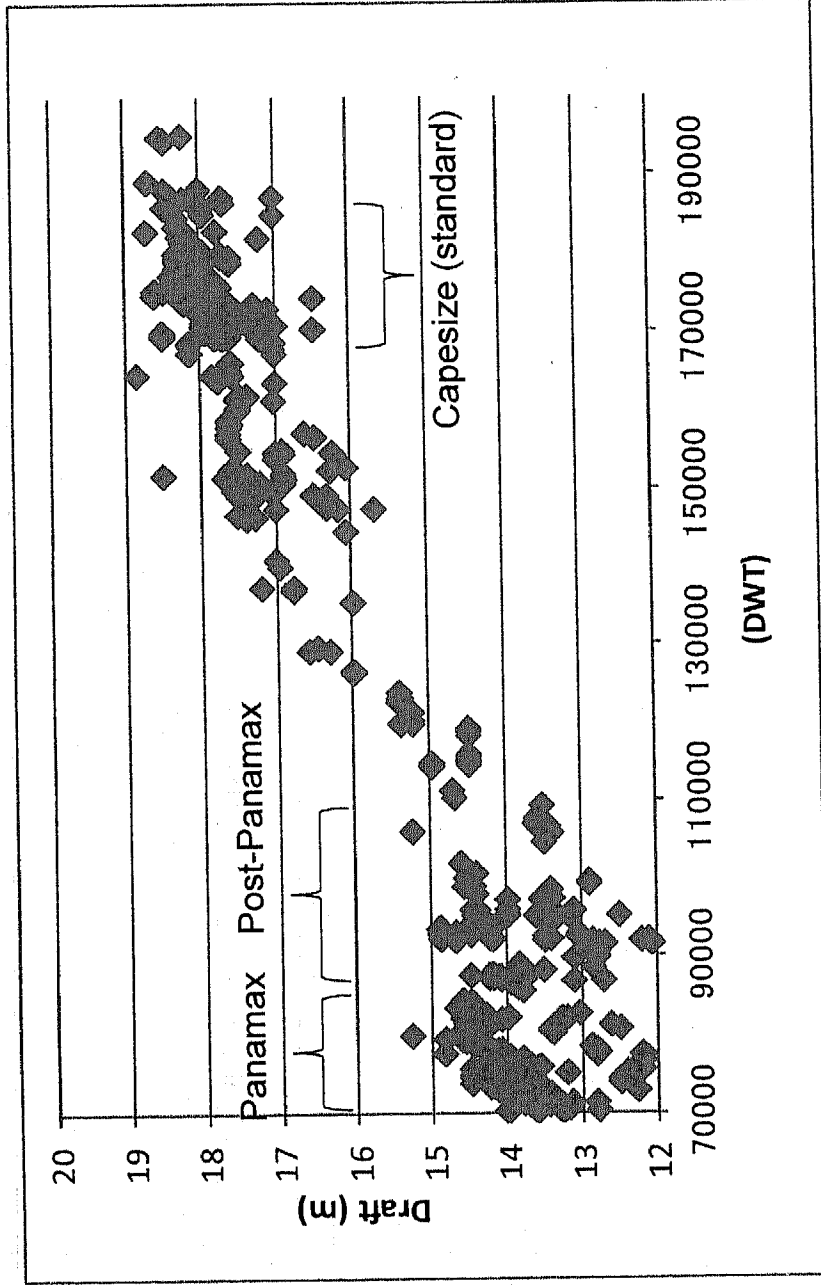
4th rank (947.1): Cai Mep + Tra Vinh

5th rank (1,019.8): Vinh Tan + Tra Vinh

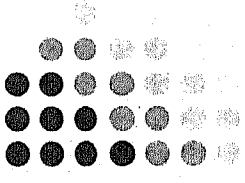


5. Ship Size

5.1 Statistical Ship Data



Source: Fairplay (UK)



5. Ship Size

5.2 Situation of Coal Loading Ports

(1) Indonesia

Taboneo Port and Satui Port (South Kalimantan)

Operation with floating facility or ship gear.

Taboneo can receive Capesize and Post-Panamax.

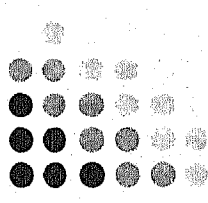
Satui can receive up to Panamax.

(2) Australia

Both Capesize and Post-Panamax are available.

According to JICA team's survey, coal price in Australia is higher than that in Indonesia. Also, transportation cost from Australia is more expensive than that from Indonesia.

Coal import from Indonesia would be realistic.



5. Ship Size

5.3 Ship Size and Berth Occupancy

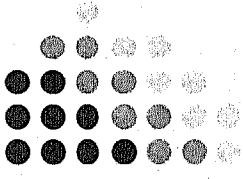
(1) Coal demand: 10 mil ton / year (short-term)

**100,000DWT – 105 ship calls / year
(Post-Panamax) (2 times / week)**

**150,000DWT – 70 ship calls / year
(1.3 times / week)**

**180,000DWT – 58 ship calls / year
(Capesize) (1.1 time / week)**

(2) 1 berth will be enough for operation in all cases.

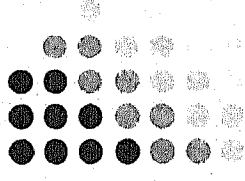


6. Project Cost (Short-Term)

6.1 Summary

Unit: Million USD

Item	1. Vinh Tan	3. Tra Vinh	4. Cai Mep
Initial Cost			
Terminal construction cost	218.0	338.0	255.0
Annual Cost (total in 10 years)			
Operations and maintenance cost	112.0	301.0	119.0
Secondary transport cost	227.7	14.2	49.8
Total Cost			
	557.7	653.2	304.8

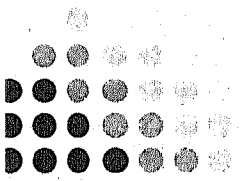


6. Project Cost (Short-Term)

6.2 Breakdown

	Vinh Tan				Tra Vinh				Cai Mep						
	Capital investment mil.USD	Coal handling volume mil. ton	Transport cost 4.8 US\$/t	OM cost mil.USD	Amount mil.USD	Capital investment mil.USD	Coal handling volume mil. ton	Transport cost 0.3 US\$/t	OM cost mil.USD	Amount mil.USD	Capital investment mil.USD	Coal handling volume mil. ton	Transport cost 1.05 US\$/t	OM cost mil.USD	Amount mil.USD
0															
1	50.0				50.0	80.0				80.0	50.0				50.0
2	100.0				100.0	160.0				160.0	120.0				120.0
3	68.0				68.0	98.0				98.0	85.0				85.0
4		5.0	24.0	16.0	40.0		5.0	1.5	43.0	44.5		5.0	5.3	17.0	22.3
5		5.5	26.4	16.0	42.4		5.5	1.7	43.0	44.7		5.5	5.8	17.0	22.8
6		6.1	29.0	16.0	45.0		6.1	1.8	43.0	44.8		6.1	6.4	17.0	23.4
7		6.7	31.9	16.0	47.9		6.7	2.0	43.0	45.0		6.7	7.0	17.0	24.0
8		7.3	35.1	16.0	51.1		7.3	2.2	43.0	45.2		7.3	7.7	17.0	24.7
9		8.1	38.7	16.0	54.7		8.1	2.4	43.0	45.4		8.1	8.5	17.0	25.5
10		8.9	42.5	16.0	58.5		8.9	2.7	43.0	45.7		8.9	9.3	17.0	26.3
Total	218.0		227.7	112.0	557.7	338.0		14.2	301.0	653.2	255.0		49.8	119.0	304.8
			Present value		399.4			Present value		492.4			Present value		326.2

Note1: Capital investment includes only construction/purchase cost of terminal facility.
 Note2: Environmental countermeasure cost will be required additionally around the range of US\$ 100-200 mil based on the Vietnamese Gov's requirement.



6. Project Cost (Short-Term)

6.3 Examination Result 2

- The examination result for short-term is as follows.

1st rank (326.2): Cai Mep

2nd rank (399.4): Vinh Tan

3rd rank (492.4): Tra Vinh

