

APPENDIX 2: SUMMARY TABLE OF TOTAL INVESTMENT AMOUNTS

Project to renovate and upgrade the exhaust gas treatment system of Quang Ninh Thermal Power Plant - 1200MW

No.	Category	Pre-tax value	VAT	Post-tax value	Convert to USD	Note
		VND	VND	VND		
(1) (2)		(3)	(5)	(7)	(8)	
1.	Construction costs	150,056,185,858	14,105,281,471	164,161,467,329	6,221,065	Details can be found in Table 1.
2.	Equipment Costs	2,941,051,776,554	276,458,866,996	3,217,510,643,550	121,930,826	Details can be found in Table 2.
3.	Project Management Costs	23,962,268,925		23,962,268,925	908,074	Appendix VIII - Circular 12/2021/ TT-BXD dated August 31, 2021
4.	Consulting fees	26,623,725,828	2,234,510,939	28,858,236,767	1,093,612	Details can be found in Table 3.
5.	Other expenses	142,421,524,027	3,057,446,728	145,478,970,755	5,513,073	See Table 4 for details.
5.1	Interest on loans during the construction period	109,184,886,142		109,184,886,142	4,137,672	
5.2	Other examples include: Construction insurance; protection and security, ...	33,236,637,885	3,057,446,728	36,294,084,612	1,375,401	
6.	Contingency costs	200,768,057,230	18,449,033,624	219,217,090,853	8,307,454	Circular No. 11/2021/TT-BXD dated August 31, 2021 (5% x (1+2+3+4+5) before tax)
6.1	Contingency costs for unforeseen workload.	164,205,774,060	14,792,805,307	178,998,579,366	6,783,333	
6.2	Contingency costs for price fluctuations	36,562,283,170	3,656,228,317	40,218,511,487	1,524,121	
	Total investment	3,484,883,538,421	314,305,139,757	3,799,188,678,178	143,974,105	

Note

- Exchange rates of the Foreign Trade Bank on January 19, 2026

26,388 VND

TABLE 1: CONSTRUCTION SUMMARY

TT	Categories	Pre-tax value		VAT		Value after tax		Note
		VND	Convert to USD	VND	Convert to USD	VND	Convert to USD	
	I. Construction Costs	150,056,185,858	5,686,531	15,005,618,586	568,653	165,061,804,444	6,255,184	<i>See Table 1.1 for details.</i>
	1. NOx treatment system support frame	103,329,058,077	3,915,759	9,712,931,459	368,081	113,041,989,536	4,283,841	
	2. Flue gas duct	25,778,488,119	976,902	2,423,177,883	91,829	28,201,666,002	1,068,731	
	3. SCR support frame 4.	11,410,155,584	432,399	1,072,554,625	40,646	12,482,710,209	473,045	
	Ammonia storage and preparation facility	4,923,740,495	186,590	462,831,607	17,539	5,386,572,102	204,130	
	5. Ammonia power plant/	299,961,677	11,367	28,196,398	1,069	328,158,075	12,436	
6	house Other costs (Costs for dismantling old steel structures of oil system, discharge electrodes, collector electrodes, transformers, etc.)	2,099,502,058	79,563	197,353,193	7,479	2,296,855,251	87,042	
7	Container for inverter equipment (estimated)	2,215,279,848	83,950	208,236,306	7,891	2,423,516,154	91,842	
	TOTAL (I+II+III)	150,056,185,858	5,686,531	14,105,281,471	534,534	164,161,467,329	6,221,065	

TABLE 1.1 SUMMARY OF PROJECT ESTIMATES

PROJECT: Renovation and upgrading of the flue gas treatment system for the boiler at Quang Ninh Thermal Power Plant.

Unit of measurement: VND

No.	EXPENSE ITEMS	CALCULATION METHOD	VALUE	SYMBOL
1.	Construction costs before tax	According to the itemized cost estimate summary	147,840,906,010	G
	NOx processor support frame system (NMNý) Quang Ninh has 4 frame systems.		103,329,058,077	
	Smoke duct section (11x2.4x5) - (Each set has 1 smoke duct system) (Quang Ninh Thermal Power Plant has 4x2 smoke duct lines)		25,778,488,119	
	SCR exhaust gas treatment system - (Quang Ninh Thermal Power Plant) Ninh has 4x2 sets of SCRs.		11,410,155,584	
	Ammonia storage and preparation		4,923,740,495	
	Ammonia power plant		299,961,677	
	Dismantling costs		2,099,502,058	

TABLE 1.1.1 SUMMARY OF PROJECT ESTIMATES

PROJECT: Renovation and upgrading of the flue gas treatment system for the boiler at Quang Ninh Thermal Power Plant.

ITEM: Support frame system for NOx treatment unit - (Quang Ninh Thermal Power Plant has 4 frame systems)

Unit of measurement: VND

No.	COST CONTENT	CALCULATION METHOD	SYMBOL VALUE	
I.	DIRECT COSTS			
1.	Material costs -	VLHT	61,173,036,519	VL
	Material unit prices	According to the calculation sheet, the quantity surveying work is done. presentation	61,173,036,519	VLHT
2.	Labor Costs - Labor	NCHT	19,001,043,696	NC
	Unit Prices	According to the calculation sheet, the quantity surveying work is done. presentation	19,001,043,696	NCHT
3.	Construction machinery costs -	MHT	9,876,953,012	M
	Construction machinery unit prices	According to the calculation sheet, the quantity surveying work is done. presentation	9,876,953,012	MHT
	Direct costs	VL + NC + M	90,051,033,227	T
II.	INDIRECT COSTS			
1.	General expenses	T x 5.3%	4,772,704,761	C
2.	Costs of temporary housing for accommodation and construction management.	T x 0.95%	855,484,816	LT
3.	Costs for certain tasks whose quantities cannot be determined from the design.	T x 2%	1,801,020,665	TT
	Indirect costs	C + LT + TT	7,429,210,242	GT
III.	PRE-TAXABLE INCOME	(T + GT) x 6%	5,848,814,608	TL
	Construction costs before tax	T + GT + TL	103,329,058,077	G

SUMMARY TABLE OF PROJECT ESTIMATES

PROJECT: Renovation and upgrading of the flue gas treatment system for the boiler at Quang Ninh Thermal Power Plant.

ITEM: Flue gas ducts (11x2, 4x5) - (One flue gas duct system per set) (Quang Ninh Thermal Power Plant has 4x2 flue gas ducts)

Unit of measurement: VND

No.	COST CONTENT	CALCULATION METHOD	SYMBOL VALUE	
I.	DIRECT COSTS			
1.	Material costs -	VLHT	10,508,630,745	VL
	Material unit prices	According to the calculation sheet, the quantity surveying work is done. presentation	10,508,630,745	VLHT
2.	Labor Costs - Labor	NCHT	9,223,870,330	NC
	Unit Prices	According to the calculation sheet, the quantity surveying of the construction project is performed.	9,223,870,330	NCHT
3.	Construction machinery costs -	MHT	2,733,391,224	M
	Construction machinery unit prices	According to the calculation sheet, the quantity surveying work is done. presentation	2,733,391,224	MHT
	Direct costs	VL + NC + M	22,465,892,299	T
II.	INDIRECT COSTS			
1.	General expenses	T x 5.3%	1,190,692,292	C
2.	Costs of temporary housing for accommodation and construction management.	T x 0.95%	213,425,977	LT
3.	Costs for certain tasks whose quantities cannot be determined from the design.	T x 2%	449,317,846	TT
	Indirect costs	C + LT + TT	1,853,436,115	GT
III.	PRE-TAXABLE INCOME	(T + GT) x 6%	1,459,159,705	TL
	Construction costs before tax	T + GT + TL	25,778,488,119	G

SUMMARY TABLE OF PROJECT ESTIMATES

PROJECT: Renovation and upgrading of the flue gas treatment system for the boiler at Quang Ninh Thermal Power Plant.

ITEM: SCR Exhaust Gas Treatment System - (Quang Ninh Thermal Power Plant has 4x2 SCR units)

Unit of measurement: VND

No.	COST CONTENT	CALCULATION METHOD	SYMBOL VALUE	
I.	DIRECT COSTS			
1.	Material costs -	VLHT	5,680,925,639	VL
	Material unit prices	According to the calculation sheet, the quantity surveying work is done. presentation	5,680,925,639	VLHT
2.	Labor Costs - Labor	NCHT	2,508,355,627	NC
	Unit Prices	According to the calculation sheet, the quantity surveying of the construction project is performed.	2,508,355,627	NCHT
3.	Construction machinery costs -	MHT	1,754,642,725	M
	Construction machinery unit prices	According to the calculation sheet, the quantity surveying work is done. presentation	1,754,642,725	MHT
	Direct costs	VL + NC + M	9,943,923,991	T
II.	INDIRECT COSTS			
1.	General expenses	$T \times 5.3\%$	527,027,972	C
2.	Costs of temporary housing for accommodation and construction management.	$T \times 0.95\%$	94,467,278	LT
3.	Costs for certain tasks whose quantities cannot be determined from the design.	$T \times 2\%$	198,878,480	TT
	Indirect costs	C + LT + TT	820,373,730	GT
III.	PRE-TAXABLE INCOME	$(T + GT) \times 6\%$	645,857,863	TL
	Construction costs before tax	T + GT + TL	11,410,155,584	G

SUMMARY TABLE OF PROJECT ESTIMATES

PROJECT: Renovation and upgrading of the flue gas treatment system for the boiler at Quang Ninh Thermal Power Plant.

ITEM: Ammonia Storage and Preparation

Unit of measurement: VND

No.	COST CONTENT	CALCULATION METHOD	SYMBOL VALUE	
I.	DIRECT COSTS			
1.	Material costs -	VLHT	3,112,770,550	VL
	Material unit prices	According to the calculation sheet, the quantity surveying work is done. presentation	3,112,770,550	VLHT
2.	Labor Costs - Labor	NCHT	708,045,769	NC
	Unit Prices	According to the calculation sheet, the quantity surveying of the construction project is performed.	708,045,769	NCHT
3.	Construction machinery costs -	MHT	470,212,045	M
	Construction machinery unit prices	According to the calculation sheet, the quantity surveying work is done. presentation	470,212,045	MHT
	Direct costs	VL + NC + M	4,291,028,364	T
II.	INDIRECT COSTS			
1.	General expenses	$T \times 5.3\%$	227,424,503	C
2.	Costs of temporary housing for accommodation and construction management.	$T \times 0.95\%$	40,764,769	LT
3.	Costs for certain tasks whose quantities cannot be determined from the design.	$T \times 2\%$	85,820,567	TT
	Indirect costs	C + LT + TT	354,009,839	GT
III.	PRE-TAXABLE INCOME	$(T + GT) \times 6\%$	278,702,292	TL
	Construction costs before tax	T + GT + TL	4,923,740,495	G

SUMMARY TABLE OF PROJECT ESTIMATES

PROJECT: Renovation and upgrading of the flue gas treatment system for the boiler at Quang Ninh Thermal Power Plant.

CATEGORY: Ammonia House Electrical System

Unit of measurement: VND

No.	COST CONTENT	CALCULATION METHOD	SYMBOL VALUE	
I.	DIRECT COSTS			
1.	Material costs -	VLHT	184,170,676	VL
	Material unit prices	According to the calculation sheet, the quantity surveying work is done. presentation	184,170,676	VLHT
2.	Labor Costs - Labor	NCHT	66,494,809	NC
	Unit Prices	According to the calculation sheet, the quantity surveying of the construction project is performed.	66,494,809	NCHT
3.	Construction machinery costs -	MHT	10,750,417	M
	Construction machinery unit prices	According to the calculation sheet, the quantity surveying work is done. presentation	10,750,417	MHT
	Direct costs	VL + NC + M	261,415,902	T
II.	INDIRECT COSTS			
1.	General expenses	$T \times 5.3\%$	13,855,043	C
2.	Costs of temporary housing for accommodation and construction management.	$T \times 0.95\%$	2,483,451	LT
3.	Costs for certain tasks whose quantities cannot be determined from the design.	$T \times 2\%$	5,228,318	TT
	Indirect costs	C + LT + TT	21,566,812	GT
III.	PRE-TAXABLE INCOME	$(T + GT) \times 6\%$	16,978,963	TL
	Construction costs before tax	T + GT + TL	299,961,677	G

SUMMARY TABLE OF PROJECT ESTIMATES

PROJECT: Renovation and upgrading of the flue gas treatment system for the boiler at Quang Ninh Thermal Power Plant.

ITEM: Dismantling Costs

Unit of measurement: VND

No.	COST CONTENT	CALCULATION METHOD	SYMBOL VALUE	
I.	DIRECT COSTS			
1.	Material costs -	VLHT	91,731,200	VL
	Material unit prices	According to the calculation sheet, the quantity surveying work is done. presentation	91,731,200	VLHT
2.	Labor Costs - Labor	NCHT	1,319,977,728	NC
	Unit Prices	According to the calculation sheet, the quantity surveying of the construction project is performed.	1,319,977,728	NCHT
3.	Construction machinery costs -	MHT	418.002.221	M
	Construction machinery unit prices	According to the calculation sheet, the quantity surveying work is done. presentation	418.002.221	MHT
	Direct costs	VL + NC + M	1,829,711,149	T
II.	INDIRECT COSTS			
1.	General expenses	T x 5.3%	96,974,691	C
2.	Costs of temporary housing for accommodation and construction management.	T x 0.95%	17,382,256	LT
3.	Costs for certain tasks whose quantities cannot be determined from the design.	T x 2%	36,594,223	TT
	Indirect costs	C + LT + TT	150,951,170	GT
III.	PRE-TAXABLE INCOME	(T + GT) x 6%	118,839,739	TL
	Construction costs before tax	T + GT + TL	2,099,502,058	G

F1 Estimate

CONSTRUCTION PROJECT CALCULATION AND QUANTITY SURVEYING TABLE

(Issued together with Circular No. 13/2021/TT-BXD dated August 31, 2021 of the Ministry of Construction)

PROJECT: Renovation and upgrading of the flue gas treatment system for the boiler at Quang Ninh Thermal Power Plant.

ITEM: Support frame system for NOx treatment unit - (Quang Ninh Thermal Power Plant has 4 frame systems)

No.	Job code	Task list	Unit	Total weight	Directness			Total amount		
					Materials	Labor	Construction machinery	Material	Labor	Construction machinery
	*	NOX - Quang Ninh								
		NOx processor support frame system (NMNý) Quang Ninh has 4 frame systems.	4							
1 Al.	11131	Fabrication of columns using steel sections: $23.87 * 7850 / 1000 * 4 = 749.518$	ton	749.52	20,515,530	2,376,003	1,633,123	15,376,759,015	1,780,857,017	1,224,055,085
2 Al.	61111	Installation of various types of steel columns $749.52 = 749.518$	ton	749.52	463,662	3,035,657	1,730,731	347,523,015	2,275,279,563	1,297,214,038
3 Al.	11311	Fabrication of wall beams and lower beams for steel trusses: $49.75 * 7850 / 1000 * 4 = 1,562.15$	ton	1,562.15	19,970,497	6,018,166	2,528,355	31,196,911,889	9,401,278,017	3,949,669,763
4 Al.	61151	Erection of wall beams, column beams, and single crane beams. $1,562.15 = 1,562.15$	ton	1,562.15	1,086,122	1,922,687	1,587,865	1,696,685,482	3,003,525,497	2,480,483,310
5 AK	12222	Install corrugated metal roofing on the walls, any length. Roofing: $78 * 4 / 100 = 3.12$	100m2	4.36	28,558,583	1,296,000		124,515,422	5,650,560	
		Drawing F387-FSR-TT3-C&A-AR-02.05, 02.06, 02.07: Roofing with corrugated iron: $31 * 4 / 100 = 1.24$								
8 Al.	63211	Installation of iron rallings $787.55 = 787.5453$	m2	787.55	9,152	125,053	36,096	7,207,615	98,484,902	28,427,235
10 Al.	61171	Install the working platform $(1807 * 4) * 50 / 1000 = 361.4$	ton	361.40	466,620	4,261,174	2,482,301	168,636,468	1,539,988,284	897,103,581
13 Al.	63121	Installation of iron and aluminum frame doors: $9.60 + 52.80 = 62.4$	m2	62.40	4,424	93,790		276,058	5,852,496	
14 AK	83520	Steel structure painting: Painting steel structures with various types of paint, one primer coat, two top coats. $(6240 + 1980) * 4 = 32,880$	1m2	32,880.00	41,396	27,072		1,361,100,480	890,127,360	
	THM	TOTAL ITEM						61,173,036,519	19,001,043,696	9,876,953,012

F1 Estimate

No.	Job code	Task list	Unit	Total weight	Directness			Total amount			
					Materials	Labor	Construction machinery	Material	Labor	Construction machinery	

F1 Estimate

No.	Job code	Task list	Unit	Total weight	Directness			Total amount		
					Materials	Labor	Construction machinery	Material	Labor	Construction machinery

CONSTRUCTION PROJECT CALCULATION AND QUANTITY SURVEYING TABLE

(Issued together with Circular No. 13/2021/TT-BXD dated August 31, 2021 of the Ministry of Construction)

PROJECT: Renovation and upgrading of the flue gas treatment system for the boiler at Quang Ninh Thermal Power Plant.

ITEM: Flue gas ducts (11x2, 4x5) - (One flue gas duct system per set) (Quang Ninh Thermal Power Plant has 4x2 flue gas ducts)

No.	Job code	Task list	Unit	Total weight	Directness			Total amount		
					Materials	Labor	Construction machinery	Material	Labor	Construction machinery
		NOX - Quang Ninh								
	*	Smoke duct section (11x2.4x5) - (Each set has 1 smoke duct system) (Quang Ninh Thermal Power Plant has 4x2 smoke duct lines)	8							
1	Al.11132	Fabrication of columns from steel plates: $58.48 * 8 = 467.84$	ton	467.84	7,398,007	4,626,954	4,111,846	8,139,483,595	2,164,674,159	1,923,686,033
2	Al.61111	Erecting steel columns $467.84 = 467.84$	ton	467.84	463,662	3,035,657	1,730,731	216,919,630	1,420,201,771	809,705,191
3	BC.12202	Insulate ventilation equipment with fiberglass wool, with a fiberglass layer thickness of 50mm. https://cachamcachnhietak.com/bao-gia-bong-thuy-tinh.html/ One roll of 0.9m ³ costs 720,000 VND, so $1m^3 = 720,000/0.9 = 800,000$ VND Insulation for the outside of the flue gas duct: $1490 * 8 = 11,920$ Wrapping corrugated iron with fiberglass insulation: $1490 * 8 = 11,920$	m2	23,840.00	48,882	209,463		1,165,346,880	4,993,597,920	
4	AK.83520	Apply two coats of primer and alkali-resistant paint. Jotun smoked paint, painted on both the inside and outside. $2 * 1490 * 8 = 23,840$	1m2	23,840.00	41,396	27,072		986,880,640	645,396,480	
	THM	TOTAL ITEM						10,508,630,745	9,223,870,330	2,733,391,224

F1 Estimate

No.	Job code	Task list	Unit	Total weight	Directness			Total amount		
					Materials	Labor	Construction machinery	Material	Labor	Construction machinery

CONSTRUCTION PROJECT CALCULATION AND QUANTITY SURVEYING TABLE

(Issued together with Circular No. 13/2021/TT-BXD dated August 31, 2021 of the Ministry of Construction)

PROJECT: Renovation and upgrading of the flue gas treatment system for the boiler at Quang Ninh Thermal Power Plant.

ITEM: SCR Exhaust Gas Treatment System - (Quang Ninh Thermal Power Plant has 4x2 SCR units)

No.	Job code	Task list	Unit	Total weight	Directness			Total amount		
					Materials	Labor	Construction machinery	Material	Labor	Construction machinery
	*	SCR exhaust gas treatment system - (Quang Ninh Thermal Power Plant has 4x2 SCR units)	8							
1	AI.11132	Fabrication of steel plate columns. Fabrication of steel plates for SCR enclosure boxes: 37.54 * 8 = 300.32	ton	300.32	17,398,007	4,626,954	4,111,846	5,224,969,462	1,389,566,825	1,234,869,591
2	AI.61111	Erecting various types of steel columns 300.32 = 300.32	ton	300.32	463,662	3,035,657	1,730,731	139,246,972	911,668,510	519,773,134
3	AK.83520	Paint iron and steel with various types of paint, one coat of primer, two coats of topcoat. 2 * 478.17 * 8 = 7,650.72	1m2	7,650.72	41,396	27,072		316,709,205	207,120,292	
	THM	TOTAL ITEM						5,680,925,639	2,508,355,627	1,754,642,725

F1 Estimate

No.	Job code	Task list	Unit	Total weight	Directness			Total amount		
					Materials	Labor	Construction machinery	Material	Labor	Construction machinery

CONSTRUCTION PROJECT CALCULATION AND QUANTITY SURVEYING TABLE

(Issued together with Circular No. 13/2021/TT-BXD dated August 31, 2021 of the Ministry of Construction)

PROJECT: Renovation and upgrading of the flue gas treatment system for the boiler at Quang Ninh Thermal Power Plant.

ITEM: Ammonia Storage and Preparation

No.	Job code	Task list	Unit	Total weight	Directness			Total amount		
					Materials	Labor	Construction machinery	Material	Labor	Construction machinery
	*	Ammonia storage and preparation	1							
		Prestressed reinforced concrete pile D300, length L=12m.								
1	AC.26321-D300	Prestressed reinforced concrete pipe pile driving using a pile driving machine. Automated hydraulic robot, pile driving 300mm - Soil class II	100m	3.12	28,256,770	1,857,600	17,684,263	88,161,122	5,795,712	55,174,901
		$26 * 12 / 100 = 3.12$								
2	AC.29411	Connecting reinforced concrete pipe piles, pile diameter <= 600mm	1 connection		411,990	216,000	196,518			
		$26 * 0 = 0$								
3	AA.22410	Breaking concrete pile heads of all types using a pneumatic hammer with a capacity of 3 m ³ /min, on dry land.	m3	0.35	24,000	181,724	599,737	8,470	64,130	211,647
		$26 * \pi * (0.15^2 - (0.15 - 0.06)^2) * 0.3 = 0.3529$								
4	AF.31126	Concrete pouring by machine, pouring with concrete pump, foundation concrete, foundation width >250 cm, 1x2 aggregate, grade 400	m3	0.66	1,507,461	208,061	115,039	997,336	137,653	76,110
		Concrete fill for pile heads:								
		$26 * \pi * (0.15 - 0.06)^2 * 1 = 0.6616$								
5	AF.51160	Concrete mortar is produced using an on-site mixing plant with a capacity of <= 90 m ³ /h.	100m3	0.01		1,269,434	3,789,331		8,505	25,389
		$0.66 * 1.015 / 100 = 0.0067$								
6	AF.52152	Transporting concrete mortar, 10.7m ³ mixer truck, within a radius of $\sqrt{3}$km.	100m3	0.01			13,743,622			92,082
		$0.01 = 0.0067$								
7	AF.61120	Steel reinforcement fabrication and installation work. Foundation reinforcement, steel bar diameter <= 18mm	ton	0.10	16,426,496	2,208,960	691,987	1,629,508	219,129	68,645

F1 Estimate

No.	Job code	Task list	Unit	Total weight	Directness			Total amount		
					Materials	Labor	Construction machinery	Material	Labor	Construction machinery
		0.15 * 0.66 = 0.0992								
8 AB	55311	Loading the mixed stone onto a transport vehicle using a 1.25m³ excavator.	100m3	0.35		224,632	1,165,369		79,273	411,259
		0.35 = 0.3529								
9 AB	56411	Transporting mixed stone, 12-ton dump trucks within a radius of 1000m	100m3	0.35			2,142,421			756,060
		0.35 = 0.3529								
10 AB	57111	Transporting mixed stone by 12-ton dump truck for 1km within a 5km radius.	100 m³/1 km	0.35			3,916,203			1,382,028
		0.35 = 0.3529								
11 CE	12610	Static compression testing of concrete piles using the loading method. Compression load from 100 to <= 500 tons.	1 ton test load/ 1 test	200.00	22,724	68,427	82,280	4,544,800	13,685,400	16,456,000
		2 * 100 = 200								
		Earthwork:								
12 AB	25123	Excavation of foundations using a 1.25m³ excavator, foundation width 6m - Soil class III	100m3	0.71		1,113,062	1,150,431		789,829	816,346
		(8.54 + 46.04) * 1.3 / 100 = 0.7096								
13 AB	65130	Compact the soil using a 70kg hand-held compactor, ensuring the desired compaction. Y/CK = 0.95	100m3	0.16		1,799,576	1,946,899		294,591	318,707
		0.71 - (8.54 + 46.04) / 100 = 0.1637								
14 AB	41423	Transporting soil by 7-ton dump truck, within a range of 1000m - Soil classification III	100m3	0.55			2,362,292			1,289,575
		0.71 - 0.16 = 0.5459								
15 AB	42123	Transport the soil for the next 1km using a dump truck. 7T, within a radius of 5km - Land classification III	100 m³/1 km	0.55			3,395,219			1,853,450
		0.55 = 0.5459								
16 AB	34110	Leveling the waste dump site with a 110CV bulldozer: 0.55 = 0.5459	100m3	0.55			175,238			95,662
		Concrete work								
17 AF	31111	Foundation concrete, width 250cm, concrete pump, M150, 1x2 aggregate, PCB40	m3	8.54	1,139,895	144,852	115,039	9,736,413	1,237,253	982,606
		F1: 12*2.2*1.2*0.1 = 3.168								

F1 Estimate

No.	Job code	Task list	Unit	Total weight	Directness			Total amount		
					Materials	Labor	Construction machinery	Material	Labor	Construction machinery
		F2: $2*1.7*1.7*0.1 = 0.578$								
		Giying: $((26-2*1)*4+(31.8-3*2-1)*2+(8.9*2-1.7-0.85-1)*0.3*0.1 = 4.7955$								
18 AF	31115	Foundation concrete, width $\check{y}250\text{cm}$, concrete pump, M350, 1x2 aggregate, PCB40	m3	46.04	1,421,246	144,852	115,039	65,439,851	6,669,565	5,296,856
		F1: $12*2*1*0.9 = 21.6$								
		F2: $2*1.5*1.5*0.9 = 4.05$								
		Foundation neck: $12*0.7*0.7*0.6 + 2*0.7*0.7*0.6 = 4.116$								
		Boundary: $((26-2*1)*2+(26-1-1.5)+(31.8-3*2-1)*2+(8.9*2-1.5-0.75-1))*0.3*0.4 = 16.278$								
19 AF	32235	Concrete column TD $>0.1\text{m}^2$, height $\check{y}6\text{m}$, concrete pump, M350, 1x2 aggregate, PCB40	m3	1.37	1,463,461	570,240	154,550	2,007,868	782,369	212,043
		Foundation neck: $12*0.7*0.7*0.2 + 2*0.7*0.7*0.2 = 1.372$								
20 AF	31325	Concrete for machine base, concrete pump, M350, 1x2 aggregate, PCB40	m3	180.80	1,421,246	281,804	115,039	256,961,277	50,950,163	20,799,051
		4 pedestals: $39.2 * 4 = 156.8$								
		$20 * 0.6 * 4 * 0.5 = 24$								
21 AF	51160	Concrete mortar is produced using an on-site mixing plant.	100m3	2.40		1,269,434	3,789,331		3,050,577	9,106,141
		$(8.54 + 46.04 + 1.37 + 180.80) * 1.015 / 100 = 2.4031$								
22 AF	52152	Transporting concrete mortar, 10.7m3 mixer truck, within a radius of $\check{y}3\text{km}$.	100m3	2.40			13,743,622			33,027,298
		$2.40 = 2.4031$								
23 AF	81111	Foundation formwork	100m2	1.40	5,080,080	3,919,680		7,102,968	5,480,497	
		F1: $12*(2+1)*2*0.9/100 = 0.648$								
		F2: $2*(1.5+1.5)*2*0.9/100 = 0.108$								
		Foundation neck: $(12+2)*(0.7+0.7)*2*0.6/100 = 0.2352$								
		Boundary: $((26-2*1)*2+(26-1-1.5)+(31.8-3*2-1)*2+(8.9*2-1.5-0.75-1))*0.3/100 = 0.407$								
24 AF	81132	Column formwork - Square and rectangular columns	100m2	0.08	5,508,763	9,187,200		431,887	720,276	

F1 Estimate

No.	Job code	Task list	Unit	Total weight	Directness			Total amount		
					Materials	Labor	Construction machinery	Material	Labor	Construction machinery
		Footnail: $12 \times (0.7+0.7) \times 2 \times 0.2 / 100 + 2 \times (0.7+0.7) \times 2 \times 0.2 / 100 = 0.0784$								
25	AF.81111	Formwork for strip foundations, raft foundations, machine bases $(4+14) \times 2 \times 0.7 \times 4 / 100 = 1.008$ $(0.6 + 4) \times 2 \times 0.5 / 100 \times 20 = 0.92$	100m2	1.93	5,080,080	3,919,680		9,794,394	7,557,143	
26	AF.61120	Installation of foundation reinforcement, diameter $\varnothing 18\text{mm}$: $0.12 \times 46.04 = 5.5253$	ton	5.53	16,426,496	2,208,960	691,987	90,761,318	12,205,167	3,823,436
27	AF.61421	Install reinforcing steel for columns and pillars, diameter $\varnothing 18\text{mm}$, height $\varnothing 6\text{m}$ $0.12 \times 1.37 = 0.1646$	ton	0.16	16,430,996	2,655,360	712,613	2,704,542	437,072	117,296
28	AF.61220	Installation of reinforcement for machine base, diameter $\varnothing 18\text{mm}$: $0.12 \times 180.80 = 21.696$	ton	21.70	16,430,996	2,669,760	712,613	356,486,889	57,923,113	15,460,852
		Concrete wall construction work								
29	AF.32115	Concrete wall - Thickness $\varnothing 45\text{cm}$, height $\varnothing 6\text{m}$, concrete pump, M350, 1x2 aggregate, PCB40 $2 \times 25.3 \times 1.5 \times 0.2 + 2 \times 19.1 \times 1.5 \times 0.2 = 26.64$	m3	26.64	1,477,533	478,080	147,431	39,361,479	12,736,051	3,927,562
30	AF.51160	Concrete mortar production via a batching plant with a capacity of $\varnothing 90 \text{ m}^3/\text{h}$ $26.64 \times 1.015 / 100 = 0.2704$	100m3	0.27		1,269,434	3,789,331		343,255	1,024,635
31	AF.52152	Transporting concrete mortar by 10.7m3 mixer truck, within a range of $\varnothing 3\text{km}$. $0.27 = 0.2704$	100m3	0.27			13,743,622			3,716,275
32	AF.81111	Formwork for strip foundations, raft foundations, machine bases $(2 \times 25.3 \times 1.5 \times 2 + 2 \times 19.1 \times 1.5 \times 2) / 100 = 2.664$	100m2	2.66	5,080,080	3,919,680		13,533,333	10,442,028	
33	AF.61321	Install wall reinforcement, diameter $\varnothing 18\text{mm}$, height $\varnothing 6\text{m}$ $0.12 \times 26.64 = 3.1968$	ton	3.20	16,426,496	2,960,640	691,987	52,512,222	9,464,574	2,212,144
34	AF.31121	Foundation work: Concrete pouring by machine, pouring with a concrete pump, foundation concrete, foundation width $>250 \text{ cm}$, 1x2 aggregate, grade 150. $(31.8 + 2 \times 0.3) \times (26 + 2 \times 0.3) \times 0.1 = 86.184$	m3	86.18	1,162,467	208,061	115,039	100,186,056	17,931,529	9,914,521

F1 Estimate

No.	Job code	Task list	Unit	Total weight	Directness			Total amount		
					Materials Labor	Construction	machinery	Material	Workers:	Construction machinery
35 AF	51160	Concrete mortar is produced using an on-site mixing plant with a capacity of <= 90 m3/h. 86.18 * 1.015 / 100 = 0.8748	100m3	0.87		1,269,434	3,789,331		1,110,501	3,314,907
36 AF	52152	Transporting concrete mortar by truck, distance <= 3km, truck capacity 10.7m3 0.87 = 0.8748	100m3	0.87			13,743,622			12,022,921
37 AF	81111	Formwork for strip foundations, raft foundations, machine bases (31.8 + 2*0.3 + 26 + 2*0.3)*2*0.1/100 = 0.118	100m2	0.12	5,080,080	3,919,680		599,449	462,522	
38 AL	16122- polyethylene	Lay polyethylene waterproofing layer https://vmcco.vn/bat-che/bang-bao-gia-bat-nhua-pe.html#google_vignette A plot of land measuring 4*50=200 m2 costs 1,298,000 VND, so the price per m2 is: 1,298,000 VND / 200 = 6,490 VND/m2. Therefore, 31.8 * 26 / 100 = 8.268 VND.	100m2	8.27	682,813	311,040		5,645,498	2,571,679	
39 AF	31215	Concrete foundation thickness 300mm 322.2 = 322.2	m3	322.20	1,421,246	105,347	114,624	457,925,461	33,942,803	36,931,853
40 AF	51160	Concrete mortar is produced using an on-site mixing plant with a capacity of <= 90 m3/h. 322.20 * 1.015 / 100 = 3.2703	100m3	3.27		1,269,434	3,789,331		4,151,430	12,392,249
41 AF	52152	Transporting concrete mortar by mixer truck, distance <= 3km, truck capacity 10.7m3. 3.27 = 3.2703	100m3	3.27			13,743,622			44,945,767
42 AF	81111	Wooden formwork. Formwork for strip foundations, raft foundations, and machine bases. (31.8 + 26) * 2 * 0.3 / 100 = 0.3468	100m2	0.35	5,080,080	3,919,680		1,761,772	1,359,345	
43 AF	61120	Installation of foundation reinforcement, diameter 18mm 0.07*322.20 = 22.554	ton	22.55	16,426,496	2,208,960	691,987	370,483,191	49,820,884	15,607,075
44 AK	41123	Uncolored floor screed, 3cm thick, M75 cement mortar, PCB40 31.8 * 26 = 826.8	m2	826.80	35,979	33,139	1,854	29,747,437	27,399,325	1,532,887
45 AL	11131	Steel column fabrication 12.7955 = 12.7955	ton	12.80	20,515,530	2,376,003	1,633,123	262,506,464	30,402,146	20,896,625
46 AL	51111	Installation of various types of steel columns	ton	12.80	463,662	3,035,657	1,730,731	5,932,787	38,842,749	22,145,569

F1 Estimate

No.	Job code	Task list	Unit	Total weight	Directness			Total amount		
					Materials	Labor	Construction machinery	Material	Labor	Construction machinery
		12.80 = 12.7955								
47	AL11321	Fabrication of roof beams 17.0345 = 17.0345	ton	17.03	19,805,873	5,496,071	1,610,996	337,383,144	93,622,821	27,442,511
48	AL61142	Install steel bracing connected by bolts 17.03 = 17.0345	ton	17.03	2,411,826	747,190	2,299,690	41,084,250	12,728,008	39,174,069
49	AF32315	Concrete for beams, girders, roof slabs, concrete pump, M350, 1x2 aggregate, PCB40. 20.35 = 20.35	m3	20.35	1,421,246	478,080	147,431	28,922,356	9,728,928	3,000,221
50	AF51160	Concrete mortar production via a batching plant with a capacity of 90 m3/h 20.35 * 1.015 / 100 = 0.2066	100m3	0.21		1,269,434	3,789,331		262,265	782,876
51	AF52152	Transporting concrete mortar by 10.7m3 mixer truck, within a range of 3km. 0.21 = 0.2066	100m3	0.21			13,743,622			2,839,432
52	AF81111	Formwork for strip foundations, raft foundations, machine bases (0.3 + 0.5) * 2 * 14.53 / 100 = 0.2325 (0.3 + 0.5) * 2 * 23.53 / 100 = 0.3765 (0.3 + 0.5) * 2 * 24 / 100 = 0.384 (0.3 + 0.5) * 2 * 24.8 / 100 = 0.3968	100m2	1.39	5,080,080	3,919,680		7,060,295	5,447,571	
53	AF61120	Installation of foundation reinforcement, diameter 18mm: 0.12 * 20.35 = 2.442	ton	2.44	16,426,496	2,208,960	691,987	40,113,503	5,394,280	1,689,832
54	AK12222	Roof sheet thickness 0.54 mm 942/100 = 9.42	100m2	9.42	28,558,583	1,296,000		269,021,852	12,208,320	
55	AL11511	Fabrication of steel mesh fence 376.062 = 376.062	m2	376.06	329,953	256,358	61,879	124,082,785	96,406,502	23,270,340
56	AL63211	Installation of iron railings and wire mesh fences: 376.06 = 376.062	m2	376.06	9,152	125,053	36,096	3,441,719	47,027,681	13,574,334
57	AK83520	Painting iron and steel with various types of paint: 1 coat of primer + 2 coats of topcoat. 20*(12.80+17.03) = 596.6	1m2	596.60	41,396	27,072		24,696,854	16,151,155	
	THM	TOTAL ITEM						3,112,770,550	708,045,769	470,212,045

F1 Estimate

No.	Job code	Task list	Unit	Total weight	Directness			Total amount		
					Materials	Labor	Construction machinery	Material	Labor	Construction machinery

CONSTRUCTION PROJECT CALCULATION AND QUANTITY SURVEYING TABLE

(Issued together with Circular No. 13/2021/TT-BXD dated August 31, 2021 of the Ministry of Construction)

PROJECT: Renovation and upgrading of the flue gas treatment system for the boiler at Quang Ninh Thermal Power Plant.

CATEGORY: Ammonia House Electrical System

No.	Job code	Task list	Unit	Total weight	Directness			Total amount		
					Materials	Labor	Construction machinery	Material	Labor	Construction machinery
		Earthwork:								
1	AB.25123	Excavation of building foundations, foundation width <= 6m, using a 1.25m3 excavator, soil class III. 4*(2.2 + 2*0.3)*(1.2 + 2*0.3)*1.1/100 = 0.2218 ((5-0.22)*2+(6.5-0.22)*2)*0.3*0.3/100 = 0.0199	100m3	0.24		1,113,062	1,150,431		269,027	278,059
2	AB.65130	Fill the embankment with a 70kg hand-held compactor, achieving a compaction level of Y/CK = 0.95. 0.24 - (0.78 + 4.06 + (4 * 0.22 * 0.22 * 0.3)) / 100 = 0.1928	100m3	0.19		1,799,576	1,946,899		346,958	375,362
3	AB.41423	Transporting soil by 7-ton dump truck, within a range of ÿ1000m - Soil classification III 0.24 - 0.19 = 0.0489	100m3	0.05			2,362,292			115,516
4	AB.42123	Transport soil for the next 1km by 7T dump truck, within a radius of ÿ5km - Soil classification III 0.05 = 0.0489	100 m³/1 km	0.05			3,395,219			166,026
5	AB.34110	Leveling the waste dump site with a 110CV bulldozer: 0.05 = 0.0489	100m3	0.05			175,238			8,569
AF.3	111A	Foundation concrete work 6 concrete, width ÿ250cm, pump Concrete, M100, 1x2 aggregate, PCB30 0.78 = 0.78	m3	0.78	1,137,699	144,852	115,039	887,405	112,985	89,730

F1 Estimate

No.	Job code	Task list	Unit	Total weight	Directness			Total amount		
					Materials	Labor	Construction machinery	Material	Workers :	Construction machinery
7	AF.31125	Concrete pouring by machine, pouring with a concrete pump, foundation concrete, foundation width >250 cm, 1x2 aggregate, grade 350. Foundation PL1: $4*1.3*1.3*0.6 = 4.056$	m3	4.06	1,449,389	208,061	115,039	5,878,722	843,895	466,598
8	AF.32215	Concrete column TD y0.1m2, height y6m, concrete pump, M350, aggregate 1x2, PCB40 Concrete column: $0.78 = 0.78$ Below cos 0.00: $4*0.22*0.22*0.3 = 0.0581$	m3	0.84	1,463,461	653,760	147,431	1,226,527	547,916	123,562
9	AF.32315	Concrete for beams, girders, roof slabs, concrete pump, M350, 1x2 aggregate, PCB40. Concrete for beams and bracing: $4.6 = 4.6$	m3	4.60	1,421,246	478,080	147,431	6,537,732	2,199,168	678,183
10	AF.51160	Concrete mortar is produced using an on-site mixing plant. $(0.78 + 4.06 + 0.84 + 4.60) * 1.015 / 100 = 0.1043$	100m3	0.10		1,269,434	3,789,331		132,402	395,227
11	AF.52152	Transporting concrete mortar, 10.7m3 mixer truck, within a radius of y3km. $0.10 = 0.1043$	100m3	0.10			13,743,622			1,433,460
12	AF.81111	Formwork for strip foundations, raft foundations, machine bases $4*(1.5+1.5)*2*0.1/100 = 0.024$ $4*(1.3+1.3)*2*0.6/100 = 0.1248$	100m2	0.15	5,080,080	3,919,680		755,916	583,248	
13	AF.81132	Column formwork - Square and rectangular columns $4*(0.22+0.22)*2*4.5/100 = 0.1584$	100m2	0.16	5,508,763	9,187,200		872,588	1,455,252	
14	AF.81141	Wooden formwork for beams and bracing Calculation: $2*0.6*6.5*2/100 + 2*0.6*5*2/100 = 0.276$ Beam: $2*0.6*6.5*2/100 + 2*0.6*5*2/100 = 0.276$	100m2	0.55	7,276,892	7,920,000		4,016,844	4,371,840	
15	AF.61321	Reinforcement steel for foundations, column bases, and walls: $0.12*(4.06+0.84+4.60) = 1.1393$	ton	1.14	16,426,496	2,960,640	691,987	18,714,707	3,373,057	788,381
16	BG.Cuadi	Fire-resistant steel door $1*2.2*1.1 = 2.42$	m2	2.42	3,900,000			9,438,000		
17	BG.cuaso	Window $3*1.3*1.8 = 7.02$	m2	7.02	2,525,806			17,731,158		
18	AL.63121	Installation of iron and aluminum frame doors	m2	9.44	4,424	93,790		41,763	885,378	

F1 Estimate

No.	Job code	Task list	Unit	Total weight	Directness			Total amount		
					Materials	Labor	Construction machinery	Material	Labor	Construction machinery
		2.42 + 7.02 = 9.44								
19 AF	12515	Concrete lintels, lintels with integrated eaves, gutters, slabs, canopies, M350 concrete, 1x2 aggregate. PCB40	m3	0.21	1,227,189	766,080	127,232	261,391	163,175	27,100
		Software runtime: 0.213 = 0.213								
		Build a wall								
20 AE	22213	Construct a straight wall using fired clay bricks measuring 6.5x10.5x22 cm, with a thickness of <= 33 cm and a height of <= 6 m. XM mortar grade 75	m3	25.41	1,063,530	469,440	12,981	27,024,297	11,928,470	329,847
		25.41 = 25.41								
21 AK	21133	Exterior walls should be plastered 2cm thick with M75 cement mortar. PCB40	m2	115.50	24,648	92,160	1,113	2,846,844	10,644,480	128,552
		25.41/0.22 = 115.5								
22 AK	21233	Interior wall plastering: 2cm thick, using M75 cement mortar. PCB40	m2	115.50	24,648	63,360	1,113	2,846,844	7,318,080	128,552
		25.41/0.22 = 115.5								
23 AE	21213	Construct the foundation using fired clay bricks 6.5x10.5x22cm - Thickness >33cm, cement mortar. M75, PCB40	m3	0.88	1,008,859	362,880	13,352	889,107	319,806	11,767
		three steps: 2,040*(0.3+0.8+0.13)*0.2+2,040*(0.8+0.13)* 0.2 = 0.8813								
24 AK	41123	Unpainted floor screed, 3cm thick, mortar XM M75, PCB40	m2	2.51	35,979	33,139	1,854	90,279	83,152	4,652
		2.04 * (0.3 + 0.8 + 0.13) = 2.5092								
25 AK	92111	Apply waterproofing solution to roofs, eaves, and overhangs.	m2	2.51	101,890	8,640		255,662	21,679	
		2.51 = 2.5092								
26 AK	51283	Floor tiling - Tile cross-section y 0.36m2, mortar XM M75, PCB40	m2	2.51	294,902	43,768	1,155	739,968	109,823	2,898
		2.51 = 2.5092								
		Foundation work								
27 AF	31212	Concrete base, concrete pump, M200, 1x2 aggregate. PCB40	m3	4.50	1,216,646	105,347	114,624	5,474,907	474,062	515,808

F1 Estimate

No.	Job code	Task list	Unit	Total weight	Directness			Total amount		
					Materials	Labor	Construction machinery	Material	Labor	Construction machinery
		30 * 0.15 = 4.5								
28 AK	92111	Waterproofing foundation 30 = 30	m2	30.00	101,890	8,640		3,056,700	259,200	
29 AK	41114	Unpainted floor screed, 2cm thick, mortar XM M100, PCB40 30 = 30	m2	30.00	27,884	21,259	1,484	836,520	637,770	44,520
30 AK	51230	Floor tiling, tile size <=0.06m2, mortar XM mark 75 30 = 30	m2	30.00	109,731	53,147	867	3,291,930	1,594,410	26,010
31 AF	51160	Concrete mortar production via a batching plant with a capacity of ý90 m3/h 4.50 * 1.015 / 100 = 0.0457	100m3	0.05		1,269,434	3,789,331		58,013	173,172
32 AF	52152	Transporting concrete mortar by 10.7m3 mixer truck, within a range of ý3km. 0.05 = 0.0457	100m3	0.05			13,743,622			628,084
33 AF	81111	Formwork for strip foundations, raft foundations, machine bases (5+6.5)*2*0.15/100 = 0.0345 Roofing work	100m2	0.03	5,080,080	3,919,680		175,263	135,229	
34 AF	32313	Concrete for beams, girders, roof slabs, concrete pump, M250, 1x2 aggregate, PCB40. 8.93 = 8.93	m3	8.93	1,293,639	478,080	147,431	11,552,196	4,269,254	1,316,559
35 AF	51160	Concrete mortar production via a batching plant with a capacity of ý90 m3/h 8.93 * 1.015 / 100 = 0.0906	100m3	0.09		1,269,434	3,789,331		115,011	343,313
36 AF	52152	Transporting concrete mortar by 10.7m3 mixer truck, within a range of ý3km. 0.09 = 0.0906	100m3	0.09			13,743,622			1,245,172
37 AF	81151	Wooden formwork for roof slab (6.5+1+1)*(5+1+1)/100+(6.5+1+1+5+1+1)*0, 15*2/100 = 0.6415	100m2	0.64	5,814,549	7,761,600		3,730,033	4,979,066	
38 AF	61521	Install reinforcing steel for beams and bracing, diameter ý18mm, height ý6m 0.12 * 8.93 = 1.0716	ton	1.07	16,427,996	2,661,120	698,691	17,604,241	2,851,656	748,717

F1 Estimate

No.	Job code	Task list	Unit	Total weight	Directness			Total amount		
					Materials	Labor	Construction machinery	Material	Workers:	Construction machinery
39 AK	41114	Unpainted floor screed, 2cm thick, mortar XM M100, PCB40 (6.5 + 1 + 1) * (5 + 1 + 1) = 59.5	m2	59.50	21,259,148	484	27,884	1,659,098	1,264,911	88,298
40 AK	92111	Apply waterproofing solution to roofs, eaves, and overhangs. 59.50 * 3 = 178.5	m2	178.50	101,890	8,640		18,187,365	1,542,240	
41 AK	51283	Floor tiling - Tile cross-section \dot{y} 0.36m ² , mortar XM M75, PCB40 59.50 = 59.5	m2	59.50	294,902	43,768	1,155	17,546,669	2,604,196	68,723
	THM	TOTAL ITEM						184,170,676	66,494,809	10,750,417

F1 Estimate

No.	Job code	Task list	Unit	Total weight	Directness			Total amount		
					Materials	Labor	Construction machinery	Material	Labor	Construction machinery

CONSTRUCTION PROJECT CALCULATION AND QUANTITY SURVEYING TABLE

(Issued together with Circular No. 13/2021/TT-BXD dated August 31, 2021 of the Ministry of Construction)

PROJECT: Renovation and upgrading of the flue gas treatment system for the boiler at Quang Ninh Thermal Power Plant.

ITEM: Dismantling Costs

No.	Job code	Task list	Unit	Total weight	Directness			Total amount		
					Materials	Labor	Construction machinery	Material	Labor	Construction machinery
		Dismantling costs								
1	AA.32121	Costs for dismantling the old steel structure of the oil system, discharge electrodes, collector electrodes, transformers, etc.	ton	1,324.80	31,500	996,360	315,521	41,731,200	1,319,977,728	418.002.221
2	TT	Transporting dismantled steel structures to the	package	1.00	50,000,000			50,000,000		
	THM	warehouse (TOTAL ITEM)						91,731,200	1,319,977,728	418.002.221

TABLE 2: SUMMARY OF EQUIPMENT COSTS

TT	Categories	Pre-tax value		VAT		Value after tax		Note
		VND	Convert to USD	VND	Convert to USD	VND	Convert to USD	
I.	Equipment Procurement	2,605,161,852,034	98,725,248	244,885,214,091	9,280,173	2,850,047,066,125	<i>Table 2.1 , item</i>	<i>For details, see</i>
I.1	Main Equipment 1. SO2	2,592,200,847,795	98,234,078	243,666,879,693	9,234,003	2,835,867,727,487	107,468,081	
	Removal System 2. NOx	225,008,299,173	8,526,918	21,150,780,122	801,530	246,159,079,296	9,328,448	
	Removal System 3.	1,417,954,456,187	53,734,821	133,287,718,882	5,051,073	1,551,242,175,069	58,785,894	
	Replacement of Indirect Discharge Faucet (IDF)	174,005,349,172	6,594,109	16,356,502,822	619,846	190,361,851,994	7,213,955	
4	Inverters 5 GGH	165,072,000,000	6,255,571	15,516,768,000	588,024	180,588,768,000	6,843,594	
	Smoke Dryers Ammonia	91,896,000,000	3,482,492	8,638,224,000	327,354	100,534,224,000	3,809,846	
6	House Fire Protection System (Installation Included)	864,850,000	32,774	81,295,900	3,081	946,145,900	35,855	
7	Electrostatic precipitator (ESP) dust collector system	464,623,893,263	17,607,393	43,674,645,967	1,655,095	508,298,539,229	19,262,488	
8	PF plate and Electric Razor (ESI) cleaning system for the plate. PF	52,776,000,000	2,000,000	4,960,944,000	188,000	57,736,944,000	2,188,000	
9.	Electrical and C&I Equipment	<i>included in (1), (2), (3) and (4)</i>	<i>included in (1), (2), (3) and (4)</i>	<i>included in (1), (2), (3) and (4)</i>	<i>included in (1), (2), (3) and (4)</i>	<i>included in (1), (2), (3) and (4)</i>	<i>included in (1), (2), (3) and (4)</i>	
I.2	Equipment for construction	12,961,004,239	491,170	1,218,334,398	46,170	14,179,338,637	537,340	
II	Costs of equipment installation, testing, and calibration.	335,389,924,520	12,709,941	31,526,652,905	1,194,734	366,916,577,425	13,904,676	<i>See Table 2.2 for details.</i>
III.	Training Costs	500,000,000	18,948	47,000,000	1,781	547,000,000	<i>Estimated</i>	20,729
	TOTAL (I+II+III)	2,941,051,776,554	111,454,137	276,458,866,996	10,476,689	3,217,510,643,550	121,930,826	

TABLE 2.1: SUMMARY TABLE OF EQUIPMENT PURCHASE COSTS

Equipment Category	Unit Quantity	Weight (tons)	Unit price		Pre-tax value		VAT		Value after tax		Ghi Chú	
			cau	4	VND	Convert to cau	VND	Convert to cau	VND	Convert to cau		
I.1	Equipment section Main											
1. SC2	Removal System		1			225,008,299,173	8,526,918	21,150,780,122	801,530	246,159,079,296	9,328,448	
1.1	Spray manifold and nozzles (replacement)											
	- Branch pipe connecting the manifold and nozzle	truss	16	98,000		41,376,384,000	1,568,000	3,889,380,096	147,392	45,265,764,096	1,715,392	Reference bid prices from contractors : For the NOx, SOx Hai Phong Thermal Power
	- Nozzle	the	1,088	56		1,607,768,064	60,928	151,130,198	5,727	1,758,898,262	66,655	Plant project: Reference bid prices from contractors for the NOx, SOx Hai Phong Thermal Power Plant project.
1.2	Dehumidifier											
	- Dehumidifier	truss	8	98,000		20,688,192,000	784,000	1,944,690,048	73,696	22,632,882,048	857,696	Reference bid prices from contractors: for the NOx project, Sox NMNý Hai Room
	- Number of faucets	faucet	1,680	56		2,482,583,040	94,080	233,362,806	8,844	2,715,945,846	102,924	Reference bid prices from contractors : for the NOx, SOx project of Hai Phong Thermal Power Plant
1.2 New	installation section:											

Equipment Category	Unit	Quantity	Weight (tons)	Unit price		Pre-tax value		VAT		Value after tax		Ghi Chú
				cau	4	VND	Convert to cau	VND	Convert to cau	VND	Convert to cau	
- Smoke distribution tray in the absorption tower	set	4	12.0		1,858,669,238	7,434,676,953	281,745	698,859,634	26,484	8,133,536,586	308,229	Standard according to Decision No. 2572/QĐ-BCT/ April 23, 2013, of the Ministry of Industry and Trade
- Inner baffle of the absorption tower	set	12	3.6		185,866,924	2,230,403,086	84,523	209,657,890	7,945	2,440,060,976	QĐ-BCT/ 92,469	The standard according to Decision No. 2572/ April 23, 2013, of the Ministry of Industry and Trade
1.3 Oxygen aeration fan (Replacement)												
Quantity		6			360,074	57,009,812,694	2,160,445	5,358,922,393	203,082	62,368,735,088	2,363,526	Check prices EPC Vung Ang 1
1.4 Absorption tower circulation pump (replacement)												
Number of pumps	female	16			218,325	92,178,479,336	3,493,197	8,664,777,058	328,361	100,843,256,394	3,821,557	Check prices EPC Vung Ang 1
2. NOx Removal Systems		4			13,433,705	1,417,954,456,187	53,734,821	133,287,718,882	5,051,073	1,551,242,175,069	list 58,785,894	Refer to the price of the NOx removal system in contract price <small>The EPC (Engineering, Procurement, and Construction) figures for the Duyet Hai 1 Thermal Power Plant project have been calculated to meet 2023 standards</small>
SCR system	set	8										
Ammonia storage and supply system												
- NH3 storage tank	the	4										

Equipment Category	Unit	Quantity	Weight (tons)	Unit price		Pre-tax value		VAT		Value after tax		Ghi Chú
				cau	4	VND	Convert to cau	VND	Convert to cau	VND	Convert to cau	
- Compressor Ammonia	the	4										
- Ammonia pump	piece	4										
- Evaporator	piece	6										
- Storage tank	piece	6										
- SDR set	piece	8										
- Dilution air fan	the	8										
- Safety equipment	the	2										
- Waste ammonia solution tank	the	4										
- Sludge tank	the	4										
Flue gas system	HT	1										
Other auxiliary equipment	HT	1										
3. Replace the exhaust fan (IDF).		8		824,264		174,005,349,172	6,594,109	16,356,502,822	619,846	190,361,851,994	expansion : 213,955	Check prices EPC contract for Vung Ang, Duyen Hai 3 Includes inflation adjustment to the present time (2025)
4 Inverters	Set	8		26,430,821,934		165,072,000,000	6,255,571	15,516,768,000	588,024	180,588,768,000	converters for	Refer to the investment project for frequency 6,843,594 Smoke generators and wind turbines at Nghi Son 1 have been approved.
5 GGH Smoke Drying Units						91,896,000,000	3,482,492	8,638,224,000	327,354	100,534,224,000	price quote	Howden 's is 3,809,846.
GGH 30.5V- exhaust gas heat exchanger element SMRC:				18,294,000,000		73,176,000,000	2,773,079	6,878,544,000	260,669	80,054,544,000	3,033,748	
- Profile: HC 12e												
- Heat exchanger molecular height: 800mm												

Equipment Category	Unit	Quantity	Weight (tons)	Unit price		Pre-tax value		VAT		Value after tax		Ghi Chú	
				cau	4	VND	Convert to cau	VND	Convert to cau	VND	Convert to cau		
Heat: 0.75mm + 0.3mm enamel coating	set	4											
- Frame material: Corten A													
- Enamel coating method: dry powder electrostatic coating (Electrostatic Dry Power method)													
+ Compression process for the heat exchanger section: Surepack Elements													
Frame type: Mark 3 (MK3)													
Quantity: 1 set 01 GGH: 36x4=144 pieces													
Shaft-loading fan, model: ZSC -63- 4N- LG135 (including the engine) GGH													
SGW29- gearbox 100D(CW)- GGH	Set	4		4,680,000,000	18,720,000,000	709,413	1,759,680,000	66,685	20,479,680,000	776,098			
6 Ammonia house fire suppression system (installation included)							864,850,000	32,774	81,295,900	3,081	946,145,900	35,855	
Fire extinguisher	female	20		540,000	10,800,000	409	1,015,200	38	11,815,200	448		Refer to the market value of Limited Liability Company XSTM Nguyen Velvet	
Automatic sprinkler fire extinguishing system	m2	538		1,588,635	854,050,000	32,365	80,280,700	3,042	934,330,700	35,407		Refer to the newspaper. price of Technology Investment Joint Stock Company Lighthouse	
7 Electrostatic precipitator (ESP) dust collector system							464,623,893,263	17,607,393	43,674,645,967	1,655,095	508,298,539,229	19,262,488	

Equipment Category	Unit Quantity	Weight (tons)	Unit price		Pre-tax value		VAT		Value after tax		Ghi Chú	
			cau	4	VND	Convert to cau	VND	Convert to cau	VND	Convert to cau		
5.1	ESP system upgrade equipment					269,087,788,563	10,197,354	25,294,252,125	958,551	294,382,040,687	11,155,906	Refer to the final settlement price of the power plant project. Pha Lai has completed the construction and pricing of EPC contracts for the projects. Hai Phong, Vung Ang 1, Thai Binh 2, Vinh Tan 2, Nghi Son 1 and Thang Long
5.1.1	Integrated pulse transformer with 100-140 kV DC output voltage.	Set	64		2,511,451,798	160,732,915,051	6,091,137	15,108,894,015	572,567	175,841,809,066	6,663,704	
5.1.2	Complete set of accessories for installing pulse transformers.	Set	64		73,611,518	4,711,137,165	178,533	442,846,894	16,782	5,153,984,059	195,315	
5.1.3	High-pressure pipes (busbars)	Set	64		8,053,966	515,453,831	19,534	48,452,660	1,836	563,906,491	21,370	
5.1.4	High-voltage ceramic insulators withstand maximum voltage minimum 110kV	Testicles	256		28,578,589	7,316,118,892	277,252	687,715,176	26,062	8,003,834,068	303,313	
5.1.5	Insulated Shaft	Testicles	64		13,856,286	886,802,290	33,606	83,359,415	3,159	970,161,705	36,765	
5.1.6	ADP-1 Electrical Cabinet (400V, 160A, 40kA) install the equipment controlled to close ESP cut, intersection area with transformer high-frequency rectifier	Cabinet	16		601,538,795	9,624,620,720	364,735	904,714,348	34,285	10,529,335,068	399,020	

Equipment Category	Unit Quantity	Weight (tons)	Unit price		Pre-tax value		VAT		Value after tax		Ghi Chú	
			cau	4	VND	Convert to cau	VND	Convert to cau	VND	Convert to cau		
5.1.7	ADP-2 electrical cabinet (400V, 40A, 25kA) install the closing devices cut ESP, interface with transformers high-frequency rectifier	Cabinet	16		307,360,400	4,917,766,394	186,364	462,270,041	17,518	5,380,036,435	203,882	
5.1.8	Ceramic support drying cabinet (JB-1A, JB-2A, JB-3A, JB-4A) (1x4kW)	Cabinet	64		16,477,505	1,054,560,342	39,964	99,128,672	3,757	1,153,689,014	43,720	
5.1.9	Ceramic shaft drying cabinet (JB) (1x4kW)	Cabinet	16		16,477,505	263,640,085	9,991	24,782,168	939	288,422,254	10,930	
5.1.10	Control cabinet closed on-site cutting for engine	Cabinet	304		16,477,505	5,009,161,624	189,827	470,861,193	17,844	5,480,022,817	207,671	
5.1.11	Ceramic drying rack support 380V 1kW electric	Set	256		5,629,116	1,441,053,721	54,610	135,459,050	5,133	1,576,512,771	59,744	
5.1.12	shaft dryer 380V 1kW ETU	Set	64			Included in item D (12)						
5.1.13	electrical terminal Ethernet end holding hands for monitoring and configuration transformer. Go included with the system transformer control High-frequency rectifier	Set	16		80,106,652	1,281,706,435	48,572	120,480,405	4,566	1,402,186,840	53,137	
5.1.14	Network switch Ethernet Fiber Optic Ethernet Switch	set	16		389,708,038	6,235,328,601	236,294	586,120,889	22,212	6,821,449,490	258,506	
5.1.15	Grounding switch assembly,	set	64		67,549,393	4,323,161,163	163,831	406,377,149	15,400	4,729,538,313	179,231	
5.1.16	Display and control unit control over network Ethernet ETU	set	16		80,106,652	1,281,706,435	48,572	120,480,405	4,566	1,402,186,840	53,137	
5.1.17	Tapping gear reducer inlet smoke splitter dust filter integrated with rotary motor 380V/370W	Set	8		66,510,172	532,081,374	20,164	50,015,649	1,895	582,097,023	22,059	

Equipment Category	Unit	Quantity	Weight (tons)	Unit price		Pre-tax value		VAT		Value after tax		Ghi Chú
				cau	4	VND	Convert to cau	VND	Convert to cau	VND	Convert to cau	
5.1.18	Electric knock reducer extremely quiet, combined with AC motor 380V/370W	Set	32		74,477,536	2,383,281,154	90,317	224,028,428	8,490	2,607,309,583	98,807	
5.1.19	Electric knock reducer combined discharge electrode with rotary motor 380V/370W	Set	32		74,477,536	2,383,281,154	90,317	224,028,428	8,490	2,607,309,583	98,807	
5.1.20	Vibratory hammer system knock on the smoke splitter input	Ton	4		65,817,357	263,269,430	9,977	24,747,326	938	288,016,756	10,915	
5.1.21	Spiked electrode SSD40 steel (School 1-3)	Ton	28.0		81,838,688	2,291,483,261	86,838	215,399,427	8,163	2,506,882,687	95,001	
5.1.22	Wire discharge electrode 904L stainless steel spiral (School 4)	Ton	6.0		67,549,393	405,296,359	15,359	38,097,858	1,444	443,394,217	16,803	
5.1.23	Electrode holder	Ton	216			Included in section (5.1.22)						
5.1.24	Discharge the receiving electrode. cold-rolled steel SPDD (ASTM 366) 1.25mm thick, in the shape Dhỹ ý	Ton	708		67,549,393	47,824,970,371	1,812,376	4,495,547,215	170,363	52,320,517,586	1,982,739	
5.1.25	Electrode Mount for Tonnage		260			Included in section (5.1.24)						
5.1.26	Vibration System	Ton	28		65,557,552	1,835,611,459	69,562	172,547,477	6,539	2,008,158,936	76,101	
5.1.27	Collector's pole Vibration system extreme temperature	Ton	24		65,557,552	1,573,381,250	59,625	147,897,838	5,605	1,721,279,088	65,230	
5.2	New installation of heat recovery system.	HT	1		6,071,429	160,212,868,452	6,071,429	15,060,009,634	570,714	175,272,878,086	6,642,143	According to the offer from supplier Longking
5.2.1	Input for	Set	2									
5.2.2	the Conduit Bundle Module	Set	2									
5.2.3	Heat Enclosure	Set	2									
5.2.4	Lighting System & control	Set	1									

Equipment Category	Unit Quantity	Weight (tons)	Unit price		Pre-tax value		VAT		Value after tax		Ghi Chú	
			cau	4	VND	Convert to cau	VND	Convert to cau	VND	Convert to cau		
5.2.5	Pipeline system coolant	Set	1									
5.2.6	Stairs & walkways inputs 5.2.7	Set	1									
	Stairs & walkways	Set	1									
5.3	Replace the static dust filter housing. electrical (plate steel, clad insulation...	female	4		8,830,809,062	35,323,236,248	1,338,610	3,320,384,207	125,829	38,643,620,455	1,464,439	Compare the prices in the contractor's bids. for ESP system of the plant and adjusted for inflation according to the PPI index to the present (2025)
8	PF Panels and Electric Hammering System (ESI rapper) clean PF panel	female	4		500,000	52,776,000,000	2,000,000	4,960,944,000	188,000	57,736,944,000	at 2,188,000	Price quoted ERC
9	Electrical appliances and C&I					included in (1), (2), (3) and (4)						
7.1	Electrical equipment -											
	Low-voltage switchgear:											
	+ #12, #34 Ammonia MDD 400V, 160A, 50kA +	cabnet	2									
	#1, #2, #3, #4 SDR MDD 400V, 250A, 50kA	cabnet	4									
	- Electrical cables and cable trays/racks											
	+ Low voltage cable 0.6/1kV-Du/PVD/XLPE/PV D	system	1									

Equipment Category	Unit Quantity	Weight (tons)	Unit price		Pre-tax value		VAT		Value after tax		Ghi Chú
			cau	4	VND	Convert to cau	VND	Convert to cau	VND	Convert to cau	
- Safe and working grounding system, copper/steel grounding conductor.	system	1									
- Lighting system for the areas abyss	system	1									
7.2 C&I Equipment - The											
NOx removal system control system is integrated with the plant's existing DDS system (hardware, control system software, connection cabinets, power cables, measuring cables, communication cables, industrial computers in the on-site control room, printers, addition of MMI interface on the existing DDS system, etc.)	system	1									
- Measuring equipment includes flow meters, pressure gauges, NOx content analyzers at the inlet and outlet of the NOx scavenger,	system	1									
I.2 temperature gauges, and control valves. Auxiliary items to support the construction process (electricity and water supply systems).					12,961,004,239	491,170	1,218,334,398	46,170	14,179,338,637	537,340	estimate (0.5% * 1.1)
Total (I.1+I.2)					2,605,161,852,034	98,725,248	244,885,214,091	9,280,173	2,850,047,066,125	108,005,422	

TABLE 2.2: SUMMARY TABLE OF EQUIPMENT INSTALLATION, TESTING AND CALIBRATION COSTS

TT	Categories	Pre-tax value		VAT		Value after tax		Note
		VND	Convert to USD	VND	Convert to USD	VND	Convert to USD	
II	Costs of equipment installation, testing, and calibration.	335,389,924,520	12,709,941	31,526,652,905	1,194,734	366,916,577,425	13,904,676	Estimate
1.	SOx Removal System - FGD	33,751,244,876	1,279,038	3,172,617,018	120,230	36,923,861,894	1,399,267	<i>15% of the average value</i>
2.	NOx Removal Systems	212,693,168,428	8,060,223	19,993,157,832	757,661	232,686,326,260	8,817,884	<i>15% of the average value</i>
3	IDF fan systems	26,100,802,376	989,116	2,453,475,423	92,977	28,554,277,799	1,082,093	<i>15% of the average value</i>
4	Inverters	780,740,556	29,587	73,389,612	2,781	854.130.168	32,368	<i>Refer to inverters Nghi Son</i>
5	GGH Smoke Drying Units	13,784,400,000	522,374	1,295,733,600	49,103	15,080,133,600	571,477	<i>15% of average</i>
6.	Electrostatic Dust Filtration Systems	40,363,168,284	1,529,603	3,794,137,819	143,783	44,157,306,103	1,673,386	<i>value 15% of average value</i>
7	PF Panel and Hammer System Electric tapping (ESI rapper) clean PF panel	7,916,400,000	300,000	744,141,600	28,200	8,660,541,600	328,200	<i>15% of the average value</i>

TABLE 3. CONSULTING FEE TABLE

TT	Content	Pre-tax value		VAT		Value after tax		Hypothetical calculation	Note
		VND	Convert to cau	VND	Convert to USD	VND	Convert to cau		
1	Initial project planning costs <small>private</small>	3,194,912,616	121,074	319,491,262	12,107	3,514,403,878	133,182		<i>Contract number Contract No. 30/2016/HD-XD dated August 23, 2016, signed between VNL and Quang Ninh Thermal Power Joint Stock Company and the final settlement value.</i>
2	Investment project review costs	426,830,462	16,175	0	0	426,830,462	16,175		<i>Contract No. 31/2016/HD- Agreement dated August 31, 2016 between Quang Ninh Joint Stock Company Ninh and VTA and settlement value</i>
3.	Costs of selling bidding documents	-252,727,282	-9,577	-25,272,728	0	-278,000,010	-10,535		
4	Costs for consulting and inspecting the structural integrity of a building.	643,500,000	24,386	51,480,000	1,951	694,980,000	26,337		<i>Contract number Contract No. 105/2025/Hy- DV dated November 1, 2025</i>
5	Topographic surveying and mapping, and preparation of a master plan at a scale. 1/500	133,580,556	5,062	10,686,444	405	144,267,000	5,467		<i>Contract number 25/2025/QHTMB- Decree No. 31/10/2025</i>
6	Consulting on technical design and evaluation of bids.	930,084,943	35,247	0	0	930,084,943	35,247		<i>Contract number Contract No. 46/2016/HD-XD dated November 9, 2016 and final settlement value</i>
7	Consulting services for evaluating contractor selection results.	95,000,000	3,600	0	0	95,000,000	3,600		<i>Contract number 118/2017/Hy-XD July 24, 2017 between Quang Ninh Joint Stock Company <small>Ninh and the Association of Science and Technology</small> Vietnam Heat</i>

TT	Content	Pre-tax value		VAT		Value after tax		Hypothetical calculation	Note
		VND	Convert to cau	VND	Convert to USD	VND	Convert to cau		
8	Consulting fees for preparing revised feasibility study reports and Basic design for the project to upgrade and renovate the exhaust gas treatment system. Thermal power plant Quang Ninh	1,333,847,188	50,547	106,707,775	5,055	1,440,554,963	55,602		The contract was signed between VNL and Quang Ninh Thermal Power Joint Stock Company
9	Costs for reviewing the revised Feasibility Study Report and Basic Design Report. Project to upgrade and renovate the exhaust gas treatment system of Quang Ninh Thermal Power Plant.	377,777,778	14,316	30,222,222	1,432	408,000,000	15,748		The contract was signed between PECC1 and JSC Quang Ninh Thermal Power Plant
10	Costs of preparing technical designs	2,907,713,741	110,191	232,617,099	8,815	3,140,330,841	119,006	1.6850% * (CPXD)*1.15	Appendix VIII - Circular 12/2021/ TT-BXD dated August 31, 2021
11	Costs of technical design review	193,572,480	7,336	15,485,798	587	209,058,278	7,922	0.1290% * (CPXD)	
12	Costs for reviewing construction project estimates.	223,283,605	8,462	17,862,688	677	241,146,293	9,138	0.124% *1.2* (CPXD)	
13	Design costs Construction drawings	1,744,628,245	66,114	139,570,260	5,289	1,884,198,504	71,404	1.685% * 60% * (CPXD)	
14	Costs for reviewing construction drawings and designs.	92,914,790	3,521	7,433,183	282	100,347,974	3,803	0.129% *40%*1.2*(CPXD)	
15	Costs of preparing tender documents and evaluating bids for construction projects.	180,067,423	6,824	14,405,394	546	194,472,817	7,370	0.120% * (CPXD)	
16	Costs for preparing tender documents and evaluating bids for equipment procurement.	1,941,094,173	73,560	155,287,534	5,885	2,096,381,706	79,445	0.0660% * (CPTB)	

TT	Content	Pre-tax value		VAT		Value after tax		Hypothetical calculation	Note
		VND	Convert to cau	VND	Convert to USD	VND	Convert to cau		
	Verification costs Tender documents and verification of contractor selection results.	804,438,077	30,485	64,355,046	2,439	868,793,123	32,924	The expected panel of experts to review the bidding documents is 8. Verification of contractor selection results: 9 experts	
18	Construction supervision costs	2,759,533,258	104,575	259,396,126	9,830	3,018,929,384	114,405	1.839% * (CPXD)	<i>Appendix VIII - Circular</i> <i>Circular No. 12/2021/TT-BXD dated</i> <i>August 31, 2021</i> <i>It is projected that 30%</i> <i>of the work will be</i> <i>completed in 2026</i> <i>with an 8% VAT rate.</i> <i>The remaining work will</i> <i>be completed in 2027 with</i> <i>a 10% VAT rate.</i>
19	Costs for supervising equipment installation.	8,734,923,776	331,019	821,082,835	31,116	9,556,006,611	362,135	0.297% * (CPTB)	
17	Costs for translating tender documents and bid evaluation materials.	108,750,000	4,121	8,700,000	330	117,450,000	4,451	500 * 217,500 VND/page	<i>(Applicable unit price)</i> <i>Decision No.</i> <i>Decision No. 1327/QĐ-EVN dated</i> <i>December 31, 2010</i>
20	Perform other consulting tasks.	50,000,000	1,895	5,000,000	189	55,000,000	2,084		<i>Estimate</i>
	TOTAL	26,623,725,828	1,008,933	2,234,510,939	86,934	28,858,236,767	1,094,909		

TABLE 4. TABLE OF OTHER EXPENSES

TT	Content	Pre-tax value		VAT		Value after tax		Hypothetical calculation	Note
		VND	Convert to cau	VND	Convert to cau	VND	Convert to cau		
1	Interest on loans during the construction period	109,184,886,142	4,137,672			109,184,886,142	4,137,672		See the calculation section for details. <i>Mathematics</i>
2	Construction Insurance Premiums	15,455,539,812	585,703	1,452,820,742	55,056	16,908,360,554	640,759	0.50% * (GTXD+GTTB)	<i>Estimate</i> It is projected that 30% of the work will be completed in 2026 with an 8% VAT rate. The remaining work will be completed in 2027 with a 10% VAT rate.
3	Cleaning costs during construction	100,000,000	3,790	9,400,000	356	109,400,000	4,146	5 million VND * 2 people * 10 months	<i>Estimate</i> It is projected that 30% of the work will be completed in 2026 with an 8% VAT rate. The remaining work will be completed in 2027 with a 10% VAT rate.
4	Construction site security and protection costs	200,000,000	7,579	18,800,000	712	218,800,000	8,292	5 million VND * 2 people * 20 months	<i>Estimate</i> It is projected that 30% of the work will be completed in 2026 with an 8% VAT rate. The remaining work will be completed in 2027 with a 10% VAT rate.
5	Costs of quality inspection and acceptance of construction works.	100,000,000	3,790	9,400,000	356	109,400,000	4,146		<i>Estimate</i>
6	Costs for verification and approval of final accounts.	1,043,909,163	39,560			1,043,909,163	39,560	0.077% * 70% * 50% (TMTD)	Decree 99/2021/ TT-CP dated November 11, 2021
7	Independent audit costs	2,982,597,609	113,029	298,259,761	11,303	3,280,857,370	124,331	0.110% * 70% * (TMTy)	

TT	Content	Pre-tax value		VAT		Value after tax		Hypothetical calculation	Note
		VND	Convert to cau	VND	Convert to cau	VND	Convert to cau		
8	Investment project appraisal fee	38,735,034	1,468	0	0	38,735,034	1.468	0.001% * (TMTy)	According to Circular 28/2023/ TT-BTC, the On May 12, 2023, the , maximum is... amount shall not exceed 150 million VND.
	Business trip expenses, accommodation, and entertainment/catering costs.	690,045,260	26,150	7,734,525	293	697,779,785	26.443	0.000% * (TMTy)	Factory data provided
9.	Fire safety inspection fees	77,470,068	2,936	6,197,605	235	83,667,673	3.171	0.002% * (TMTy)	Circular No. 258/2016/ TT-BTC dated November 11, 2016.
10.	Costs for testing	12,548,340,939	475,532	1,254,834,094	47,553	13,803,175,033	523,085		See Table 5 for details.
11	Costs for temporary on-site housing and construction management.	0	0	0	0	0	0		Included in construction costs according to Circular 11/2021/ TT-BXD dated August 31, 2021.
	TOTAL	142,421,524,027	5,397,208	3,057,446,728	115,865	145,478,970,755	5,513,073		

Table 5 - TESTING COSTS

No.	Content 1.	Unit	Pre-tax value (VND)	Note
	Material and raw material		10,156,950,782	
	consumption Trial		360	The expected trial run time is 15 days.
	run time	(hours)	8,238,862,080	
	Absorbent - Average ammonia consumption rate	(VND)	1,505.64	Estimated to be 75% of the standard consumption
	- Ammonia price	(kg/hour)	15,200	Reference price of NH3 supplied to Vung Ang 1 Thermal Power Plant in 2023
	- Average limestone consumption rate - Limestone	(VND/kg)	0.00	Limestone usage remains unchanged compared to the existing amount the factory is currently using.
	price -	(tons/hour)	145,000	Reference price of limestone based on actual prices at Quang Ninh Power Plant.
	Electricity - Power consumption	(VND/	1,918,088,702	
	- Electricity prices	ton) (kW)	2,617	Estimated at 85% of rated capacity
		(VND/kWh)	which	According to Decision 1279/QD-BCT dated May 9, 2025 of the Ministry of Industry and Trade, regulates retail electricity prices.
	2. Labor - Number		300,000,000	
	of workers performing the task	(People)	30	
	- Number of workers	(monthly	15	
	- Average salary	wage) (VND/	20,000,000	
	3. Other expenses	month) (estimated)	2,091,390,156	estimated = 20% ((1) + (2))
	TOTAL		12,548,340,939	

CALCULATING ELECTRICITY CONSUMPTION FOR TESTING PERFORMANCE

Based on Decision 1279/QD-BCT dated May 9, 2025

(Electricity price for production, voltage level 110kV and above)

No.	Type of time in a day	Electricity price per hour (hours/day) (VND/kWh)	Electricity price x Number of hours (VND)
		1,811	
1	Normal Hour		13
			23,543
2	Off-peak hours	1,146	5
			5,730
3	Peak Hours	3,266	6
			19,596
	Total		24
			48,869
	Average electricity price (VND/kWh)	2,036	

APPENDIX 3 - TABLE 1: CALCULATION OF ECONOMIC AND FINANCIAL EFFICIENCY

Plant operating parameters and modes		
Category	Value	Unit
Installed Capacity	1,200	kW
Self-consumption Ratio	9.61%	%
Net Power Output	Power Production	Power
Commercial Power Operating	Top	1,085
Hours Power	Top	1,085
Reduction Factor	GWh	7,200.00
Project Lifespan	GWh	691.92
Depreciation Period Annual	GWh	6,501.57
O&M and Routine	h/year	6,000.00
Repair Costs	every year	0.10%
		10
	year	10.00
	billion VND/year	102.01
Electricity, water, and chemical costs in billions of VND/year.		470.29
Ammonia consumption (kg/year)		12,045,120
Electricity consumption	kWh/year	18,470,400
Ammonia price	VND/kg	26,350.00
Electricity purchase price for trial runs	VND/kWh	2,036

Capital Structure and Loan Conditions Components	
Value	Equity Ratio 20.00% Loan Ratio 80.00% Commercial
Loans (VND)	2,787,907 Commercial loan interest rate in local currency
	8.25%

Investment capital allocation plan	
Year of implementation	Total
Prepare	0.00%
XD 1	30.00%
XD2+VH	70.00%
Total	100.00%

Corporate income tax	
Time	Value
Plant operating hours	20.00%

Results of the project economic analysis	
Economic discount rate (ik) (%)	7.48%
EIRR (%)	9.91%
NPV (VND)	377,795
B/C	1,122
Payback Period (years)	10.00

Project financial analysis results	
Financial discount factor (if) (%)	7.48%
FIRR (%)	11.00%
NPV (VND)	156,800
B/C	1.07
Payback period (years)	11.00
Rate of return (NPV/I) (%)	5.08%

Amount recovered through electricity selling price (VND/kWh)	169.44
1. Recovery rate through base year electricity generation price (P G)	169.44
- Recovery rate through fixed average price (FC)	81.42
- Recovery through fixed operating and maintenance costs (FOMCb) in the base year	15.69
- Value Added Tax (VCb) based on variable prices.	72.33

TABLE 2: BUSINESS PERFORMANCE REPORT

Unit: Million VND

	Total	Prepare	XD 1	XD2+VH	CY1	CY2	CY3	CY4	CY5	CY6	CY7
<i>Fiscal year</i>		0	1	2	3	4	5	6	7	8	9
<i>Year of operation</i>			1	2	3	4	5	6	7	8	
BUSINESS RESULTS											
I	Income (I = 1+2)	12,485,362.84	0.00	0.00	367,216.55	1,101,649.66	1,101,649.66	1,101,649.66	1,101,649.66	1,101,649.66	1,101,649.66
	1. Revenue	12,485,362.84	0.00	0.00	367,216.55	1,101,649.66	1,101,649.66	1,101,649.66	1,101,649.66	1,101,649.66	1,101,649.66
II	Total cost (II = 1+2+3)	11,475,750.38	0.00	0.00	421,858.86	1,147,448.70	1,127,076.33	1,106,769.31	1,086,529.26	1,066,357.87	1,046,256.86
	1. <i>Direct costs</i>										
	Operating and maintenance costs 1.1 and regular annual repair costs	1,339,232.56	0.00	0.00	34,002.19	104,556.73	107,170.64	109,849.91		112,596.16	115,411.06
	Fixed operating and maintenance costs	1,138,347.68	0.00	0.00	28,901.86	88,873.22	91,095.05	93,372.42		95,706.74	98,099.40
	Variable operating and maintenance costs	200,884.88	0.00	0.00	5,100.33	15,683.51	16,075.60	16,477.49		16,889.42	17,311.66
	1.2 Electricity, water, and chemical costs	5,329,922.50	0.00	0.00	156,762.43	470,287.28	470,287.28	470,287.28	470,287.28	470,287.28	470,287.28
	1.2 Depreciation	3,484,883.54	0.00	0.00	116,162.78	348,488.35	348,488.35	348,488.35	348,488.35	348,488.35	348,488.35
	2 Resource tax (N/A)	0.00	0.00	0.00	0.00	0.00	0.00	114,931.46	0.00	0.00	155,157.40
	3. Financial expenses (interest payments + fees)	1,321,711.78	0.00	0.00	224,116.35	201,130.05	178,143.76			109,184.89	
III	Profit before tax (III = I - II)	1,009,612.46	0.00	0.00	-54,642.30	-45,799.04	-25,426.67	-5,119.64	15,120.40	35,291.79	55,392.80
	Income tax rate Corporate				0%	0%	0%	0%	20%	20%	20%
	income tax (IV = III x Corporate income tax rate)	228,120.02	0.00	0.00	0.00	0.00	0.00	0.00	3,024.08	7,058.36	11,078.56
V	Net profit after tax (V = III - IV)	781,492.43	0.00	0.00	-54,642.30	-45,799.04	-25,426.67	-5,119.64	12,096.32	28,233.43	44,314.24

TABLE 2: BUSINESS PERFORMANCE REPORT

Unit: Million VND

	Total	CY8	CY9	CY10	CY11	CY12
<i>Fiscal year</i>		10	11	12	13	14
<i>Year of operation</i>		9	10	11	12	13
BUSINESS RESULTS						
I Income (I = 1+2)	12,485,362.84	1,101,649.66	1,101,649.66	1,101,649.66	1,101,649.66	0.00
1. Revenue	12,485,362.84	1,101,649.66	1,101,649.66	1,101,649.66	1,101,649.66	0.00
II Total cost (II = 1+2+3)	11,475,750.38	1,006,273.03	986,393.86	850,429.59	604,128.73	0.00
1. Direct costs						
Operating and maintenance costs 1.1 and regular annual repair costs	1,339,232.56	124,285.09	127,392.22	130,577.02	133,841.45	0.00
Fixed operating and maintenance costs	1,138,347.68	105,642.33	108,283.39	110,990.47	113,765.23	0.00
Variable operating and maintenance	200,884.88	18,642.76	19,108.83	19,586.55	20,076.22	0.00
costs 1.2 Electricity, water, and chemical costs	5,329,922.50	470,287.28	470,287.28	470,287.28	470,287.28	348,488.35
	3,484,883.54	348,488.35	282,325.57	0.00	0.00	0.00
1.2 Depreciation 2 Resource tax (N/A)	0.00	40,226.01	17,239.72	0.00		
3. Financial expenses (interest payments + fees)	1,321,711.78					
III Profit before tax (III = I - II)	1,009,612.46	95,376.63	115,255.80	251,220.07	497,520.93	0.00
Income tax rate		20%	20%	20%	20%	0%
Corporate income tax (IV = III x Corporate income tax rate	228,120.02	19,075.33	23,051.16	50,244.01	99,504.19	0.00
V Net profit after tax (V = III - IV)	781,492.43	76,301.31	92,204.64	200,976.06	398,016.75	0.00

TABLE 3: CUMULATIVE AND OUTFRONT LINES
ECONOMIC INDICATORS

Unit: Million VND

0%	1,000,000	Total	Prepare XD	0	XD2+VH 2	CY1	CY2	CY3	CY4	CY5	CY6	CY7	CY8
	Fiscal Year			1		3	4	5	6	7	8	9	10
	Year of operation			1	1	2	3	2	3	4	5	6	7
ECONOMIC BENEFITS OF THE PROJECT													
I. Factory Production Plan													
	1. CS installed (MW)		0.0	0.0	400.0	1,200.0	1,200.0	1,200.0	1,200.0	1,200.0	1,200.0	1,200.0	1,200.0
	2. Net Power (MW) 3.		0.0	0.0	361.6	1,084.7	1,084.7	1,084.7	1,084.7	1,084.7	1,084.7	1,084.7	1,084.7
	Electricity Production (GWh/year)	81,600.00	0.0	0.0	2,400.0	7,200.0	7,200.0	7,200.0	7,200.0	7,200.0	7,200.0	7,200.0	7,200.0
4	Electricity Production (GWh/year) (considering power degradation)	73,684.48	0.0	0.0	2,167.2	6,501.6	6,501.6	6,501.6	6,501.6	6,501.6	6,501.6	6,501.6	6,501.6
II Source (=1+2+3+4+5+6)		5,885,536.05	0.00	34,479.44	176,451.94	526,805.66	524,191.74	521,512.47	518,766.22	515,951.32	513,066.04	510,108.63	507,077.29
	1. Profit before tax	1,009,612.46	0.00	0.00	-54,642.30	-45,799.04	55,392.86	72,617.69	95,375.83	119.64	15,120.40	35,291.79	
	2. Pay loan interest and fees.	1,356,191.22	0.00	34,479.44	14,931.46	224,116.35	201,130.05	178,143.76	155,157.47	132,171.18	109,184.89	86,198.59	63,212.30
	3. Depreciation	3,484,883.54	0.00	0.00	0.00	116,162.78	348,488.35	348,488.35	348,488.35	348,488.35	348,488.35	348,488.35	348,488.35
	4. Remaining Value of Fixed Assets	34,848.84	0.00	0.00	1,045,465.06	2,439,418.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00
III. Usage		3,484,883.54	0.00	1,045,465.06	2,439,418.48	0.00	0.00	0.00					
	Initial investment capital	3,484,883.54				0.00	0.00	0.00					
	Economic accumulation (CFBtk) = I - II	2,400,652.51	0.00	-1,010,985.62	-2,262,966.54	526,805.66	524,191.74	521,512.47	518,766.22	515,951.32	513,066.04	510,108.63	507,077.29
V. Discounted Economic Accumulation		377,794.67	0.00	-940,654.75	-1,959,064.24	424,332.45	392,854.07	363,656.26	336,576.14	311,462.41	288,174.44	266,581.57	246,562.42
VI Accumulated discounting of economic value			0.00	-940,654.75	-2,899,718.99	-2,475,386.54	-2,082,532.46	-1,718,876.21	-1,382,300.07	-1,070,837.66	-782,663.22	-516,081.65	-269,519.22
	Payback period		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 3: CUMULATIVE AND OUTFRONT LINES
ECONOMIC INDICATORS

Unit: Million VND

0%	1,000,000 T	Total	CY9	CY10	CY11	CY12
	<i>Fiscal year</i>		11	12	13	14
	<i>Year of operation</i>		8	9	10	11
ECONOMIC BENEFITS OF THE PROJECT						
I. Factory Production Plan						
1	CS installed (MW)		1,200.0	1,200.0	1,200.0	0.0
2	CS net (MW)		1,084.7	1,084.7	1,084.7	0.0
3	Electricity production (GWh/year)	81,600.00	7,200.0	7,200.0	7,200.0	0.0
4	Electricity consumption in the city (GWh/year) (considering power degradation)	73,684.48	6,501.6	6,501.6	6,501.6	0.0
II Source (=1+2+3+4+5+6)		5,885,536.05	503,970.16	500,785.36	532,369.77	0.00
1.	Profit before tax	1,009,612.46	115,255.80	251,220.07	497,520.93	40,226.01
2.	Pay loan interest and fees.	1,356,191.22	17,239.72	0.00	348,488.35	232,325.57
3.	Depreciation	3,484,883.54	0.00	0.00	0.00	34,848.84
4.	Remaining Value of Fixed Assets	34,848.84				0.00
III. Usage		3,484,883.54				
	Initial investment capital	3,484,883.54				
	Economic accumulation (CFBTK) = I - II	2,400,652.51	503,970.16	500,785.36	532,369.77	0.00
V. Discounted Economic Accumulation		377,794.67	228,004.19	210,802.08	208,507.62	0.00
VI	Accumulated discounting of economic value		-41,515.03	169,287.05	377,794.67	377,794.67
	Payback period		0.00	Paypack	Paypack	Paypack

TABLE 4: CUMULATIVE AND OUTFRONT LINES
FINANCIAL INDICATORS

Unit: Million VND

	Total	Prepare XD	1 0	XD2+VH	CY1	CY2	CY3	CY4	CY5	CY6	CY7	CY8
Fiscal year			1	2	3	4	5	6	7	8	9	10
Year of operation			1	1	2	3	4	5	6	7	8	9
FINANCIAL BENEFITS												
I	Factory production plan											
1	CS installed (MW)	13,600.00	0.00	0.00	400.00	1,200.00	1,200.00	1,200.00	1,200.00	1,200.00	1,200.00	1,200.00
2	Net Power (MW)	12,293.04	0.00	0.00	361.56	1,084.68	1,084.68	1,084.68	1,084.68	1,084.68	1,084.68	1,084.68
3	Electricity Production (GWh/	81,600.00	0.00	0.00	2,400.00	7,200.00	7,200.00	7,200.00	7,200.00	7,200.00	7,200.00	7,200.00
4	year) Electricity Production (GWh/year) (considering power degradation)	73,684.48	0.00	0.00	2,167.19	6,501.57	6,501.57	6,501.57	6,501.57	6,501.57	6,501.57	6,501.57
II	Source (II = 1+2+3+4)	4,301,224.81	0.00	0.00	61,520.48	302,689.31	323,061.68	343,368.71	-54,642.30	-45,799.04	360,584.67	376,721.78
1.	Net profit after tax	781,492.43	0.00	0.00	-25,426.67	-5,119.64	116,162.73	348,488.35	348,488.35	348,488.35	12,096.32	23,233.43
2.	Depreciation	3,484,883.54	0.00	0.00							44,314.24	60,337.35
3	Remaining value of fixed assets	34,848.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
III.	Usage (III = 1+2)	3,484,883.54	0.00	209,093.01	487,883.70	278,790.68	278,790.68	278,790.68	278,790.68	278,790.68	278,790.68	278,790.68
1.	Equity	696,976.71	0.00	209,093.01	487,883.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.	Repay the principal loan	2,787,906.83	0.00	0.00	278,790.68	278,790.68	278,790.68	278,790.68	278,790.68	278,790.68	278,790.68	278,790.68
	Financial accumulation (III = I - II)	816,341.27	0.0	209,093.0	-426,363.2	23,898.6	44,271.0	64,578.0	81,794.0	97,931.10	114,011.91	130,035.02
V	Discounted financial accumulation	156,800.44	0.00	-194,547.11	-369,105.29	19,249.91	33,178.78	45,030.95	53,068.04	59,117.70	64,037.21	67,956.00
VI	Accumulated discount financial accumulation		0.00	-194,547.11	-563,652.41	-544,402.49	-511,223.71	-466,192.76	-413,124.72	-354,007.02	-289,969.81	-222,018.81
	Discounted payback period		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE 4: CUMULATIVE AND OUTFRONT LINES
FINANCIAL INDICATORS

Unit: Million VND

	Total	CY9	CY10	CY11	CY12
<i>Fiscal year</i>		11	12	13	14
<i>Year of operation</i>		10	11	12	13
FINANCIAL BENEFITS					
I Factory production plan					
1 CS installed (MW)	13,600.00	1,200.00	1,200.00	1,200.00	0.00
2. Net Power (MW)	12,293.04	1,084.68	1,084.68	1,084.68	0.00
3. Electricity Production (GWh/	81,600.00	7,200.00	7,200.00	7,200.00	0.00
year) Electricity Production					
4 (GWh/year) (considering	73,684.48	6,501.57	6,501.57	6,501.57	0.00
power degradation)					
II Source (II = 1+2+3+4)	4,301,224.81	440,692.99	433,301.63	432,865.58	92,204.64
1. Net profit after tax	781,492.43	200,976.06	398,016.75	0.00	0.00
2. Depreciation	3,484,883.54	348,488.35	232,325.57		0.00
3 Remaining value of fixed assets	34,848.84	0.00	0.00	34,848.84	0.00
III. Usage (III = 1+2)	3,484,883.54	278,790.68	278,790.68	0.00	0.00
1. Equity	696,976.71	0.00	278,790.68	0.00	0.00
2. Repay the principal loan	2,787,906.83	278,790.68		0.00	0.00
Financial accumulation (III = I - II)	816,341.27	161,902.31	154,510.94	432,865.58	0.00
V Discounted financial accumulation	156,800.44	73,247.20	65,040.30	169,535.87	0.00
VI Accumulated discount financial accumulation		-77,775.73	-12,735.43	156,800.44	156,800.44
Discounted payback period		0.00	0.00	Paypack	Paypack

TABLE 5: COMMERCIAL LOANS

Loan value	2,787,906,830,737 VND
Annual interest rate (including fees)	8.25% per year
Non-commitment	0.00% per year
Guarantee fee	0.00% per year
Loan term	12,00 years
Grace period	2.00 years
Disbursement time	
Principal repayment period	10,00 years
Interest and fees during the construction period (IDC)	109,184,886,142 VND

Time		Loan commitment	Disbursement	Outstanding debt	Repay principal	Interest	Liabilities	Cash flow
	0	2,787,906,830,737					0	
XD1		1,951,534,781,516 836,372,049,221	836,372,049,221	836,372,049,221	0			0
XD2	6 12	975,767,390,758 975,767,390,758	767,390,758	1,812,139,439,979	0	0 34,479,437,729	0 34,479,437,729	-941,287,953,029
1	18	0 975,767,390,758	0	2,787,906,830,737	0	74,705,448,413	74,705,448,413	-901,061,942,345
	24	0	0	2,787,906,830,737	0	114,931,459,097	114,931,459,097	114,931,459,097
2	30	0	0	2,648,511,489,200	139,395,341,537	114,931,459,097	254,326,800,634	254,326,800,634
	36	0	0	2,509,116,147,663	139,395,341,537	109,184,886,142	248,580,227,679	248,580,227,679
3	42	0	0	2,369,720,806,126	139,395,341,537	103,438,313,187	242,833,654,724	242,833,654,724
	48	0	0	2,230,325,464,590	139,395,341,537	97,691,740,233	237,087,081,769	237,087,081,769
4	30		0	2,090,930,123,053	139,395,341,537	91,945,167,278	231,340,508,815	231,340,508,815
	36		0	1,951,534,781,516	139,395,341,537	86,198,594,323	225,593,935,860	225,593,935,860
5	42		0	1,812,139,439,979	139,395,341,537	80,452,021,368	219,847,362,905	219,847,362,905
	48		0	1,672,744,098,442	139,395,341,537	74,705,448,413	214,100,789,950	214,100,789,950
6	54			1,533,348,756,905	139,395,341,537	68,958,875,458	208,354,216,995	208,354,216,995
	60			1,393,953,415,368	139,395,341,537	63,212,302,503	202,607,644,040	202,607,644,040
7	66			1,254,558,073,832	139,395,341,537	57,465,729,549	196,861,071,085	196,861,071,085
	72			1,115,162,732,295	139,395,341,537	51,719,156,594	191,114,498,131	191,114,498,131
8	78			975,767,390,758	139,395,341,537	45,972,583,639	185,367,925,176	185,367,925,176
	84			836,372,049,221	139,395,341,537	40,226,010,684	179,621,352,221	179,621,352,221
9	90			696,976,707,684	139,395,341,537	34,479,437,729	173,874,779,266	173,874,779,266
	96			557,581,366,147	139,395,341,537	28,732,864,774	168,128,206,311	168,128,206,311
10	102			418,186,024,611	139,395,341,537	22,986,291,819	162,381,633,356	162,381,633,356
	108			278,790,683,074	139,395,341,537	17,239,718,865	156,635,060,401	156,635,060,401
11	114			139,395,341,537 0	139,395,341,537	11,493,145,910	150,888,487,447	150,888,487,447
	120				139,395,341,537	5,746,572,955	145,141,914,492	145,141,914,492
12	126							
	132							
13	138							
	144							

Time		Loan commitment	Disbursement	Outstanding debt	Repay principal	Interest	Liabilities	Cash flow
14	150							
	156							
15	162							
	168							
	Total		2,787,906,830,737		2,787,906,830,737	1,430,896,665,759	4,218,803,496,496	2,267,268,714,980