Stock Code:6873

HD Renewable Energy Co., Ltd. and Subsidiaries

Consolidated Financial Statements

With Independent Auditors' Report
For the Years Ended December 31, 2022 and 2021

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Representation Letter

The entities that are required to be included in the combined financial statements of HD Renewable Energy Co., Ltd. as of and for the year ended December 31, 2022 under the Criteria Governing the Preparation of Affiliation Reports, Consolidated Business Reports, and Consolidated Financial Statements of Affiliated Enterprises are the same as those included in the consolidated financial statements prepared in conformity with International Financial Reporting Standards No. 10, "Consolidated Financial Statements," as endorsed by the Financial Supervisory Commission of the Republic of China. In addition, the information required to be disclosed in the combined financial statements is included in the consolidated financial statements. Consequently, HD Renewable Energy Co., Ltd. and Subsidiaries do not prepare a separate set of combined financial statements.

Company name: HD Renewable Energy Co., Ltd.
Chairman: Yuan-Yi Xie
Date: March 2, 2023

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Independent Auditors' Report

To the Board of Directors of HD Renewable Energy Co., Ltd. :

Opinion

We have audited the consolidated financial statements of HD Renewable Energy Co., Ltd. (the "Company") and its subsidiaries ("the Group"), which comprise the consolidated balance sheets as of December 31, 2022 and 2021, the consolidated statements of comprehensive income, changes in equity and cash flows for the years then ended and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as of December 31, 2022 and 2021, and its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers and with the International Financial Reporting Standards ("IFRSs"), International Accounting Standards ("IASs"), Interpretations developed by the International Financial Reporting Interpretations Committee ("IFRIC") or the former Standing Interpretations Committee ("SIC") endorsed and issued into effect by the Financial Supervisory Commission ("FSC") of the Republic of China.

Basis for Opinion

We conducted our audits in accordance with the Regulations Governing Auditing and Attestation of Financial Statements by Certified Public Accountant and Standards on Auditing of the Republic of China. Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We are independent of the Group in accordance with the Norm of Professional Ethics for Certified Public Accountant of Republic of China, and we have fulfilled our other ethical responsibilities in accordance with these requirement. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis of our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. Based on our judgment, the key audit matters that should be disclosed in this report are as follows:

The revenue recognition from construction projects

Please refer to note 4(17) "Revenue recognition"for accounting policy on revenue recognition, note 5 for details on related accounting estimation and uncertainty of assumption, and note 6(21) "Revenues from contracts with customers" for relevant explanation.

Description of key audit matter:

The Group recognize its revenue by using the percentage of completion method. The completion level is based on the cost for each contract at year-end. The management will re-evaluate the cost if the total budget had significantly increased or decreased, and will recalculate the percentage of completion in accordance with the adjusted cost. The accuracy of the construction contract revenue may be affected by the completion level and appropriateness of the estimation of total budget cost. Thus, we considered the recognition of revenue as the key matters of our audit.

How the matter was addressed in our audit:

Our principal audit procedures included: Understanding and testing the internal control procedures for the operating revenue and receipt cycle to assess whether there are any defects and irregularities of internal control systems; reviewing material contracts to understand the specific terms and risks of each contract; comparing the actual construction costs and the estimated construction costs to evaluate rationality of the estimation method used; sampling relevant vouchers and supporting documentation of selected cases for confirming that the amount of inputs used to calculate the degree of completion of the project in the current period has been properly accounted for; to assess whether the revenue recognition policy is in compliance with the requirements of the statement; and to assess whether the Group's revenue recognition policy is in compliance with the related accounting standard and revenue information is properly disclosed.

Other Matter

The Company has prepared its parent company only financial statements as of and for the years ended December 31, 2022 and 2021, on which we have issued an unmodified opinion.

Responsibilities of Management and Those Charged with Governance for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with Regulations Governing the Preparation of Financial Reports by Securities Issuers and IFRs, IASs, IFRC, SIC endorsed and issued into effect by the Financial Supervisory Commission of the Republic of China, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Those charged with governance (including the Audit Committee) are responsible for overseeing the Group's financial reporting process.

Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the Standards on Auditing of the Republic of China will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with the Standards on Auditing of the Republic of China, we exercise professional judgment and professional skepticism throughout the audit. We also:

1. Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

2. Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.

3. Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

4. Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Group to cease to continue as a going concern.

5. Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

6. Obtain sufficient and appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements for the year ended December 31, 2022 and are therefore the key audit matters. We describe these matters in our auditors' report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The engagement partners on the audit resulting in this independent auditors' report are Chien-Hui Lu and Hai-Ning Huang.

KPMG

Taipei, Taiwan (Republic of China)
March 2, 2023

Notes to Readers

The accompanying consolidated financial statements are intended only to present the consolidated statement of financial position, financial performance and its cash flows in accordance with the accounting principles and practices generally accepted in the Republic of China and not those of any other jurisdictions. The standards, procedures and practices to audit such consolidated financial statements are those generally accepted and applied in the Republic of China.

The independent auditors' report and the accompanying consolidated financial statements are the English translation of the Chinese version prepared and used in the Republic of China. If there is any conflict between, or any difference in the interpretation of the English and Chinese language independent auditors' report and consolidated financial statements, the Chinese version shall prevail.

(English Translation of Consolidated Financial Statements and Report Originally Issued in Chinese)

HD RENEWABLE ENERGY CO., LTD. AND SUBSIDIARIES

Consolidated Balance Sheets

December 31, 2022 and 2021

(Expressed in Thousands of New Taiwan Dollars)

		December 31, 2022		December 31, 2021	
	Assets	**Amount**	**%**	**Amount**	**%**
	Current assets:				
1100	Cash and cash equivalents (note 6(1))	$ 1,964,028	32	823,017	26
1140	Current contract assets (notes 6(21) and 7)	636,983	11	720,894	23
1170	Notes and accounts receivable, net (notes 6(3))	35,931	1	94,247	3
1180	Accounts receivable due from related parties, net (notes 6(3) and 7)	16,296	-	23,904	1
1210	Other receivables due from related parties, net (note 7)	8,031	-	-	-
130X	Total inventories (note 6(4))	196,675	3	29,257	1
1401	Current consumable biological assets	1,823	-	-	-
1421	Prepayments to suppliers (note 7)	250,445	4	43,318	1
1470	Other current assets (notes 6(10) and 8)	1,278,291	21	678,561	22
		4,388,503	72	2,413,198	77
	Non-current assets:				
1517	Non-current financial assets at fair value through other comprehensive income (note 6(2))	35,000	1	-	-
1550	Investments in equity-accounted investees (notes 6(5), and 7)	529,757	9	227,341	7
1960	Non-current prepayments for investments (note 6(5))	-	-	20,000	1
1600	Property, plant and equipment (note 6(7) and 8)	692,583	11	270,071	8
1755	Right-of-use assets (notes 6(8), and 8)	66,792	1	24,298	1
1780	Intangible assets (note 6(9))	23,014	-	34,863	1
1840	Deferred tax assets (note 6(19))	64,510	1	22,998	1
1990	Other non-current assets (notes 6(10), 7 and 8)	300,708	5	137,290	4
		1,712,364	28	736,861	23
	Total assets	$ 6,100,867	100	3,150,059	100

		December 31, 2022		December 31, 2021	
	Liabilities and Equity	**Amount**	**%**	**Amount**	**%**
	Current liabilities:				
2100	Short-term borrowings (note 6(11))	$ 287,671	5	279,111	9
2119	Short-term notes and bills payable (note 6(12))	29,932	-	-	-
2130	Current contract liabilities (notes 6(21) and 7))	566,984	9	316,231	10
2151	Notes and accounts payable	583,409	10	509,616	16
2180	Accounts payable to related parties (note 7))	469,235	8	37,870	1
2201	Salaries and bonus payable (note 6(22))	114,603	2	39,723	1
2220	Other payables to related parties (note 7)	8,469	-	203	-
2230	Current tax liabilities	205,423	3	128,613	4
2280	Current lease liabilities (notes 6(14) and 7)	17,599	-	6,756	-
2399	Other current liabilities (note 6(15) and 7)	141,546	2	20,297	2
2322	Long-term borrowings, current portion (notes 6(13) and 8)	13,543	-	40,254	1
		2,438,414	39	1,378,674	44
	Non-Current liabilities:				
2540	Long-term borrowings (notes 6(13) and 8)	185,106	3	88,493	3
2580	Non-current lease liabilities (note 6(14))	45,303	1	17,843	-
2670	Other non-current liabilities (notes 6(15) and 7)	37,338	1	22,459	1
		267,747	5	128,795	4
	Total liabilities	2,706,161	44	1,507,469	48
	Equity (notes 6(16) and (17)):				
	Ordinary shares:				
3110	Ordinary share	850,000	14	700,000	22
3200	Capital surplus	1,745,474	29	660,619	21
	Retained earnings:				
3310	Legal reserve	61,041	1	44,560	1
3350	Unappropriated retained earnings	697,441	11	237,011	8
		758,482	12	281,571	9
	Total equity attributable to shareholder of the Company:	3,353,956	55	1,642,190	52
36XX	Non-controlling interests	40,750	1	400	-
	Total equity	3,394,706	56	1,642,590	52
	Total liabilities and equity	$ 6,100,867	100	3,150,059	100

See accompanying notes to consolidated financial statements.

(English Translation of Consolidated Financial Statements Originally Issued in Chinese)

HD RENEWABLE ENERGY CO., LTD. AND SUBSIDIARIES

Consolidated Statements of Comprehensive Income

For the years ended December 31, 2022 and 2021

(Expressed in Thousands of New Taiwan Dollars, Except for Earnings Per Common Share)

		2022		2021	
		Amount	%	Amount	%
4000	**Operating revenue** (notes 6(21) and 7)	$ 5,060,371	100	2,680,010	100
5000	**Operating costs** (notes 6(4), (22), 7 and 12)	3,718,799	73	2,264,114	85
	Gross profit	1,341,572	27	415,896	15
5910	Unrealized profit (loss) from sales	(195,038)	(4)	(39,890)	(1)
	Realized gross operating profit	1,146,534	23	376,006	14
6000	**Operating expenses** (notes 6(22), 7 and 12)**:**				
6100	Selling expenses	42,242	1	32,545	1
6200	Administrative expenses	243,511	5	115,366	5
6300	Research and development expenses	15,463	-	4,748	-
6450	Expected credit impairment loss (note 6(3))	-	-	647	-
	Total operating expenses	301,216	6	153,306	6
	Net operating income	845,318	17	222,700	8
	Non-operating income and expenses:				
7100	Interest income (notes 6(23) and 7))	2,640	-	288	-
7010	Other income (notes 6(24) and 7)	10,346	-	2,126	-
7020	Other gains and losses, net (notes 6(25))	(39,519)	(1)	(2,522)	-
7050	Finance costs (note 6(26))	(14,372)	-	(5,447)	-
7060	Share of profit (loss) of associates and joint ventures accounted for using equity method (note 6(5))	8,082	-	1,586	-
	Total non-operating income and expenses	(32,823)	(1)	(3,969)	-
	Profit before tax	812,495	16	218,731	8
7951	Less: Income tax expense (note 6(19))	164,343	3	52,250	2
	Profit for the year	648,152	13	166,481	6
8300	**Other comprehensive income**	-	-	-	-
	Total comprehensive income	**$ 648,152**	**13**	**166,481**	**6**
	Profit (loss), attributable to:				
	Owners of parent	$ 650,106	13	165,283	6
	Non-controlling interests	(1,954)	-	1,198	-
		$ 648,152	**13**	**166,481**	**6**
	Comprehensive income attributable to:				
	Owners of parent	$ 650,106	13	165,283	6
	Non-controlling interests	(1,954)	-	1,198	-
		$ 648,152	**13**	**166,481**	**6**
	Earnings per share (NT dollar) (note 6(20))				
	Basic earnings per share	**$**	**8.18**		**3.02**
	Diluted earnings per share	**$**	**7.99**		**2.99**

See accompanying notes to consolidated financial statements.

(English Translation of Consolidated Financial Statements Originally Issued in Chinese)

HD RENEWABLE ENERGY CO., LTD. AND SUBSIDIARIES

Consolidated Statements of Changes in Equity

For the years ended December 31, 2022 and 2021

(Expressed in Thousands of New Taiwan Dollars)

	Attributable to owners of parent							
			Retained earnings					
	Ordinary shares	Capital surplus	Legal reserve	Unappropriated retained earnings	Total	Total equity attributable to owners of parent company	Non-controlling interests	Total equity
Balance at January 1, 2021	$ 500,000	1,542	25,426	191,340	216,766	718,308	(798)	717,510
Profit for the year	-	-	-	165,283	165,283	165,283	1,198	166,481
Other comprehensive income for the year	-	-	-	-	-	-	-	-
Total comprehensive income for the year	-	-	-	165,283	165,283	165,283	1,198	166,481
Appropriation and distribution of retained earnings:								
Legal reserve appropriated	-	-	19,134	(19,134)	-	-	-	-
Cash dividends distributed to shareholder	-	-	-	(100,000)	(100,000)	(100,000)	-	(100,000)
Capital increase by cash and compensation costs recognized for reserve of employee subscription	180,000	585,577	-	-	-	765,577	-	765,577
Exercise of employee share options	20,000	73,500	-	-	-	93,500	-	93,500
Effect of long-term equity investment recognized in disproportionate shareholding	-	-	-	(478)	(478)	(478)	-	(478)
Balance at December 31, 2021	700,000	660,619	44,560	237,011	281,571	1,642,190	400	1,642,590
Profit (loss) for the year	-	-	-	650,106	650,106	650,106	(1,954)	648,152
Other comprehensive income for the year	-	-	-	-	-	-	-	-
Total comprehensive income	-	-	-	650,106	650,106	650,106	(1,954)	648,152
Appropriation and distribution of retained earnings:								
Legal reserve appropriated	-	-	16,481	(16,481)	-	-	-	-
Cash dividends distributed to shareholder	-	-	-	(170,000)	(170,000)	(170,000)	-	(170,000)
Capital increase by cash and compensation costs recognized for reserve of employee subscription	150,000	1,084,653	-	-	-	1,234,653	-	1,234,653
Effect of long-term equity investment recognized in disproportionate shareholding	-	202	-	(3,195)	(3,195)	(2,993)	2,264	(729)
Changes in non-controlling interests	-	-	-	-	-	-	40,040	40,040
Balance at December 31, 2022	**$ 850,000**	**1,745,474**	**61,041**	**697,441**	**758,482**	**3,353,956**	**40,750**	**3,394,706**

See accompanying notes to consolidated financial statements.

(English Translation of Consolidated Financial Statements Originally Issued in Chinese)

HD RENEWABLE ENERGY CO., LTD. AND SUBSIDIARIES

Consolidated Statements of Cash Flows

For the years ended December 31, 2022 and 2021

(Expressed in Thousands of New Taiwan Dollars)

	2022	2021
Cash flows from (used in) operating activities:		
Profit before tax	$ 812,495	218,731
Adjustments:		
Adjustments to reconcile profit (loss):		
Depreciation expense	35,750	24,268
Amortizations expense	3,547	1,917
Interest expense	14,372	5,447
Interest income	(2,640)	(288)
Impairment loss intangible assets	28,985	-
Share-based payments	4,653	11,077
Share of profit (loss) of equity-accounted subsidiaries,associates and joint ventures	(8,082)	(1,586)
Gains on disposals of property, plant and equipment	-	(9)
Loss allowance for write-down of inventories	392	-
Gains on disposals of investments	(1,837)	(1,326)
Gains on lease adjustments	(6)	-
Expected credit impairments loss	-	647
Unrealized losses from inter-company sale transactions	195,038	39,890
Adjustment for other non-cash-related losses, net	-	4,762
Changes in operating assets and liabilities:		
Notes and accounts receivable (including related parties)	112,553	(70,138)
Contract assets	83,911	(248,223)
Other receivables (including related parties)	(26,856)	-
Inventories	(167,810)	12,436
Prepayments to suppliers	(207,127)	-
Other operating assets	(464,212)	(303,648)
Contract liabilities	250,753	218,738
Notes and accounts receivable (including related parties)	547,570	(93,729)
Other payable to related parties	4,600	203
Other operating liabilities	166,777	19,584
Total adjustments	570,331	(379,978)
Cash inflow (outflow) generated from operations	1,382,826	(161,247)
Interest received	2,635	288
Dividends received	1,083	115
Interest paid	(14,152)	(5,491)
Income taxes paid	(130,161)	(21,752)
Net cash flows from (used in) operating activities	1,242,231	(188,087)

(Continued)

See accompanying notes to consolidated financial statements.

(English Translation of Consolidated Financial Statements Originally Issued in Chinese)

HD RENEWABLE ENERGY CO., LTD. AND SUBSIDIARIES

Consolidated Statements of Cash Flows (Continued)

For the years ended December 31, 2022 and 2021

(Expressed in Thousands of New Taiwan Dollars)

	2022	2021
Cash flows from (used in) investing activities:		
Acquisition of financial assets at fair value through other comprehensive income	(35,000)	-
Acquisition of equity-accounted investments	(709,903)	(70,300)
Proceeds from disposal of equity-accounted investments	175,771	-
The inward remittance of prepayments for investments	20,000	-
Net cash flow from acquisition of subsidiaries (excluding cash receipt)	(102,752)	-
Proceeds from disposal of subsidiaries (excluding cash of subsidiaries)	264,312	19,819
Refunds from capital reduction of equity-accounted investments	532	1,059
Acquisition of property, plant and equipment	(559,083)	(87,964)
Proceeds from disposals of property, plant and equipment	2,476	61
Increase in refundable deposits	(138,615)	(4,449)
Acquisition of intangible assets	(19,637)	(1,780)
Increase in other non-current assets	(9,850)	3,416
Restricted bank deposits increase	(103,520)	(69,730)
Net cash flows from (used in) investing activities	(1,215,269)	(209,868)
Cash flows from (used in) financing activities:		
Poceeds from short-term borrowings	1,771,515	624,427
Repayments of short-term borrowings	(1,765,395)	(406,611)
Increase in short-term notes and bills payable	29,712	-
Proceeds from long-term borrowings	115,836	180,151
Repayments of long-term borrowings	(45,934)	(217,245)
Decrease in guarantee deposits received	-	(20,000)
Decrease in other payables to related parties	(76,288)	-
Payments of lease liabilities	(15,346)	(8,684)
Cash dividends paid	(170,000)	(100,000)
Issuance of shares for cash capital increase	1,230,000	764,000
Exercise of employee share options	-	84,000
Change in non-controlling interests	39,949	-
Net cash inflows from financing activities	1,114,049	900,038
Increase in cash and cash equivalent	1,141,011	502,083
Cash and cash equivalents at beginning of period	823,017	320,934
Cash and cash equivalents at end of period	$ **1,964,028**	**823,017**

See accompanying notes to consolidated financial statements.

(English Translation of Consolidated Financial Statements Originally Issued in Chinese)

HD RENEWABLE ENERGY CO., LTD. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(Expressed in Thousands of New Taiwan Dollars, Unless Otherwise Specified)

1. Company history

HD Renewable Energy Co., Ltd. ("HD" or the "Company") was incorporated in May 16, 2016 under the approval of Ministry of Economic Affair, Republic of China (R.O.C). The address of the Company's registered office is F5, No. 35, Dexing West Road, Shilin District, Taipei City 111. The shares of the Company were first publicly issued through Taipei Exchange in R.O.C on November 3, 2021 and were approved for trading over the emerging stock board of the Center on December 28, 2021. The Company's application for the listing of its shares on the Taiwan Innovation Board has been examined and approved by the Taiwan Stock Exchange Corporation on December 12, 2022.

The main activities of the Company and its subsidiaries (together reforred to as the "Group") are the development, design, engineering and maintenance services of various solar power stations, asset management services, aquaculture management and intelligent energy services.

2. Approval date and procedures of the consolidated financial statements:

These consolidated financial statements were authorized for issue by the Board of Directors on March 2, 2023.

3. New standards, amendments and interpretations adopted:

(1) The impact of the International Financial Reporting Standards ("IFRSs") endorsed by the Financial Supervisory Commission, R.O.C. which have already been adopted.

The Group has initially adopted the following new amendments, which do not have a significant impact on its consolidated financial statements, from January 1, 2022:

- Amendments to IAS 16 "Property, Plant and Equipment－Proceeds before Intended Use"
- Amendments to IAS 37 "Onerous Contracts－Cost of Fulfilling a Contract"
- Annual Improvements to IFRS Standards 2018–2020
- Amendments to IFRS 3 "Reference to the Conceptual Framework"

(2) The impact of IFRS issued by the FSC but not yet effective

The Group assesses that the adoption of the following new amendments, effective for annual period beginning on January 1, 2023, would not have a significant impact on its consolidated financial statements:

- Amendments to IAS 1 "Disclosure of Accounting Policies"
- Amendments to IAS 8 "Definition of Accounting Estimates"
- Amendments to IAS 12 "Deferred Tax related to Assets and Liabilities arising from a Single Transaction"

(3) The impact of IFRS issued by IASB but not yet endorsed by the FSC

The Group does not expect the following new and amended standards, which have yet to be endorsed by the FSC, to have a significant impact on its consolidated financial statements:

- Amendments to IFRS 10 and IAS 28 “Sale or Contribution of Assets Between an Investor and Its Associate or Joint Venture”
- IFRS 17 “Insurance Contracts” and amendments to IFRS 17 “Insurance Contracts”
- Amendments to IAS 1 “Classification of Liabilities as Current or Non-current”
- Amendments to IAS 1 “Non-current Liabilities with Covenants”
- Amendments to IFRS 17 “Initial Application of IFRS 17 and IFRS 9 – Comparative Information”
- IFRS 16 “Requirements for Sale and Leaseback Transactions”

4. Summary of significant accounting policies:

The significant accounting policies applied in the preparation of these consolidated financial statements are summarized as below. Except for those specifically indicated, the significant accounting policies have been applied consistently to all periods presented in these consolidated financial statements.

(1) Statement of compliance

These consolidated financial statements have been prepared in accordance with the “Regulations Governing the Preparation of Financial Reports by Securities Issuers” (hereinafter referred to as “the Regulations”) and IFRSs, International Accounting Standards, IFRIC Interpretation, and SIC Interpretations endorsed and issued into effect by the FSC.

(2) Basis of preparation

A. Basis of measurement

The consolidated financial statements have been prepared on a historical cost basis.

B. Functional and presentation currency

The functional currency of each Group entity is determined based on the primary economic environment in which the entity operates. The consolidated financial statements are presented in New Taiwan Dollar (“ NTD”), which is the Group's functional currency. All financial information presented in NTD has been rounded to the nearest thousand.

(3) Basis of consolidation

A. Principles of preparation of the consolidated financial statements

The consolidated financial statements comprise the Company and subsidiaries. Subsidiaries are entities controlled by the Company. The Company ‘controls’ an entity when it is exposed to, or has rights to, variable returns from involvement with the entity and has the ability to affect those returns through power over the entity.

The financial statements of the subsidiaries are included in the consolidated financial statements from the date that control commences until the date that control ceases. Any intragroup transactions balances, and any unrealized income and expenses, are eliminated in preparing the consolidated financial statements. The Group attributes the profit or loss and each component of other comprehensive income to the shareholders of the Company and to the non-controlling interests, even if this results in the non-controlling interests having a deficit balance.

Subsidiaries' financial statements are adjusted to align the accounting policies with these of the Company.

Changes in the Group’s ownership interests in a subsidiary that do not result in a loss of control are accounted for as equity transactions. The difference between the adjustment of the non controlling interest and the fair value of the paid or received is recognized in equity and attributed to the shareholders of HD.

B. List of subsidiaries included in the consolidated financial statements

			Percentage of Ownership	
Invested Name	**Name of Subsidiary**	**Principal activity**	**December 31, 2022**	**December 31, 2021**
The Company	HB Renewable Technology Co., Ltd. (HB)	Energy technology service	100%	100%
The Company	He Shuo Agriculture Co., Ltd. (He Shuo)	Energy technology service	Note 13	100%
The Company	Daybreak Fishery Management Consultants Co., Ltd. (DFM)	Energy technology service	Note 6	60%
The Company	Dan Deng Green Energy Co., Ltd. (Dan Deng)	Energy technology service	100%	100%
The Company	Yunn Deng Green Energy Co., Ltd. (Yunn Deng)	Energy technology service	100%	100%
The Company	Fang Deng Green Energy Co., Ltd. (Fang Deng)	Energy technology service	Note 4	100%
The Company	Titan Asset Management Co., Ltd. (Titan Asset)	Energy technology service	100%	100%
The Company	You Deng Green Energy Co., Ltd. (You Deng)	Energy technology service	100%	100%
The Company	Wen Deng Green Energy Co., Ltd. (Wen Deng)	Energy technology service	100%	100%

			Percentage of Ownership	
Invested Name	**Name of Subsidiary**	**Principal activity**	**December 31, 2022**	**December 31, 2021**
The Company	Yun Deng Green Energy Co., Ltd. (Yun Deng)	Energy technology service	40% Note 12	100%
The Company	Yin Deng Green Energy Co., Ltd. (Yin Deng)	Energy technology service	100%	100%
The Company	Ri Chen Green Energy Co., Ltd. (Ri Chen)	Energy technology service	100%	100%
The Company	Ri Lu Green Energy Co., Ltd. (Ri Lu)	Energy technology service	100%	100%
The Company	Ri Wei Green Energy Co., Ltd. (Ri Wei)	Energy technology service	100%	100%
The Company	Ri Zhi Green Energy Co., Ltd. (Ri Zhi)	Energy technology service	100%	100%
The Company	Ru Jing Green Energy Co., Ltd. (Ru Jing)	Energy technology service	100%	100%
The Company	Ri Xi Green Energy Co., Ltd. (Ri Xi)	Energy technology service	100%	100%
The Company	Ri Yu Green Energy Co., Ltd. (Ri Yu)	Energy technology service	100%	100%
The Company	Ri Pu Green Energy Co., Ltd.(Ri Pu)	Energy technology service	100%	100%
The Company	Ri Dun Green Energy Co., Ltd. (Ri Dun)	Energy technology service	Note 3	Note 3
The Company	Ri Xun Green Energy Co., Ltd. (Ri Xun)	Energy technology service	100%	100%
The Company	Ri Fa Green Energy Co., Ltd. (Ri Fa)	Energy technology service	40% Note 8	100%
The Company	Star Exchange Co., Ltd. (Star Exchange)	Energy technology service	100%	100%
The Company	Shin De Co., Ltd. (Shin De)	Energy technology service	Note 13	100%
The Company	Xiang Heng Green Energy Co., Ltd. (Xiang Heng)	Energy technology service	100%	100%
The Company	Zhong Fang Green Energy Co., Ltd. (Zhong Fang)	Energy technology service	Note 4	100%
The Company	Da Fu Energy Co., Ltd. (Da Fu)	Energy technology service	Note 2	Note 2
The Company	Ren Hua Green Energy Co., Ltd. (Ren Hua)	Energy technology service	Note 4	100%
The Company	New Century Energy Co., Ltd. (New Century)	Energy technology service	100%	100%
The Company	Chang He Energy Co., Ltd. (Chang He)	Energy technology service	100%	100%

			Percentage of Ownership	
Invested Name	**Name of Subsidiary**	**Principal activity**	**December 31, 2022**	**December 31, 2021**
The Company	Star Energy Storage Solutions Co., Ltd. (ESS)	Energy technology service	80% Note 11	100% Note 1
The Company	Shin Yuan Energy Co., Ltd. (Shin Yuan)	Energy technology service	100%	100% Note 1
The Company	Xin Sheng Energy Develop Co., Ltd. (Xin Sheng)	Energy technology service	100%	100% Note 1
The Company	Aquastar Energy Co., Ltd. (Aquastar)	Energy technology service	10% Note 7	100% Note 1
The Company	Star Charger Co., Ltd. (Star Charger)	Energy technology service	100%	100% Note 1
The Company	Star Network Data Co., Ltd. (Star Network)	Energy technology service	49% Note 9	100% Note 1
The Company	Tian Fang FisheryTech Co., Ltd. (Tian Fang)	Energy technology service	100% Note 1	-
The Company	Tian Tai FisheryTech Co., Ltd. (Tian Tai)	Energy technology service	100% Note 1	-
The Company	Tian Jie FisheryTech Co., Ltd. (Tian Jie)	Energy technology service	100% Note 1	-
The Company	Tian Xi FisheryTech Co., Ltd. (Tian Xi)	Energy technology service	100% Note 1	-
The Company	Tian Hui FisheryTech Co., Ltd. (Tian Hui)	Energy technology service	100% Note 1	-
The Company	Tian Yi FisheryTech Co., Ltd. (Tian Yi)	Energy technology service	100% Note 1	-
The Company	Tian Cheng FisheryTech Co., Ltd. (Tian Cheng)	Energy technology service	100% Note 1	-
The Company	Tian Dong FisheryTech Co., Ltd. (Tian Dong)	Energy technology service	100% Note 1	-
The Company	Tian Chang FisheryTech Co., Ltd. (Tian Chang)	Energy technology service	100% Note 1	-
The Company	Tian Yong FisheryTech Co., Ltd. (Tian Yong)	Energy technology service	100% Note 1	-
The Company	Tian Hong FisheryTech Co., Ltd. (Tian Hong)	Energy technology service	100% Note 1	-
The Company	Tian Sheng FisheryTech Co., Ltd. (Tian Sheng)	Energy technology service	100% Note 1	-
The Company	Tian Yu Aquaculture Technology Co., Ltd. (Tian Yu)	Energy technology service	100% Note 1	-

			Percentage of Ownership	
Invested Name	**Name of Subsidiary**	**Principal activity**	**December 31, 2022**	**December 31, 2021**
The Company	Tian Hua FisheryTech Co., Ltd. (Tian Hua)	Energy technology service	100% Note 1	-
The Company	Star Energy Storage Co., Ltd. (Star Engery Storage) (formerly known as Hongyuan Technology Co., Ltd.)	Energy technology service	100% Note 1	-
The Company	Star Aquaculture Co., Ltd. (Star Aquaculture)	Aquaculture	90% Note 1 and 10	-
The Company	Hui Ju Energy Co., Ltd. (Hui Ju)	Energy technology service	99% Note 5	-
The Company	Daybreak FisheryTech Co., Ltd. (DFC)	Aquaculture	100% Note 6	-
The Company	Ying Fa Energy Co., Ltd. (Ying Fa)	Energy technology service	99% Note 1	-

Note 1: The Company established ESS, Shin Yuan, Aquastar, Star Charger and Star Network in 2021; acquired 100% of equity interest in Xin Sheng in 2021; and established Tian Fang, Tian Tai, Tian Jie, Tian Xi, Tian Hui, Tian Yi, Tian Cheng, Tian Dong, Tian Chang, Tian Yong,Tian Hong, Tian Sheng, Tian Yu, Tian Hua, Star Energy Storage, Star Aquaculture and Ying Fa in 2022.

Note 2: The Company disposed all of its equity interest in Da Fu in August 2021; therefore Da Fu has not been a consolidated entity of the Group since September 2021.

Note 3: The Company disposed all of its equity interest in Ri Dun in December 2021; therefore Ri Dun has not been a consolidated entity of the Group since January 2022.

Note 4: The Company disposed of Fang Deng, Zhong Fang and Ren Hua in March 2022; therefore Fang Deng, Zhong Fang and Ren Hua has not been consolidated entities of the Group since April 2022.

Note 5: The Company acquired 50% and 49% of equity interest in Huiju in May and June 2022, respectively. Huiju became a consolidated entity after the Company obtained more than half of the director seats in June 2022.

Note 6: In December 2021, The Group engaged in capital reduction due to spin-off its investment in DFM and proposed to establish DFC. The Company acquired the remaining 40% of equity interest of the two companies above from shareholders in June 2022. The registrations of capital reduction in the DFM and the spin-off of the DFC were completed on July 13, 2022. The Company disposed all of its equity interest in DFM in September 2022. DFM has not been a consolidated entity of The Group since October 2022.

Note 7: The Company subscribed for the cash capital increase of Aquastar in June 2022 not in proportion to its shareholding, resulting in a reduction of its shareholding from 100% to 10%; therefore Aquastar has not been a consolidated entity of the Group since July 2022.

Note 8: The Company subscribed for the cash capital increase of Ri Fa in August 2022 not in proportion to its shareholding, resulting in a reduction of its shareholding from 100% to 40%, and therefore Ri Fa has not been a consolidated entity of the Group since September 2022.

Note 9: The Company subscribed for the cash capital increase of Star Network in September 2022 not in proportion to its shareholding, resulting in a reduction of its shareholding from 100% to 49%; therefore Star Network has not been a consolidated entity of The Group since October 2022.

Note 10: The Company did not subscribe for the cash increase of Star Aquaculture in proportion to its shareholding in November 2022, resulting in a reduction of its shareholding from 100% to 90%.

Note 11: The Group did not subscribe for the cash increase of ESS in proportion to its shareholding in December 2022, resulting in a reduction of its shareholding from 100% to 80%.

Note 12: The Group subscribed for the cash capital increase of Yun Deng in September 2022 not in proportion to its shareholding, resulting in a reduction of its shareholding from 100% to 40%; therefore Yun Deng has not been a consolidated entity of the Group since January 2023.

Note 13: Since the Company disposed all of its equity interests in He Shuo and Shin De in December 2022, He Shuo and Shin De has not been consolidated entities of The Group since January 2023.

C. List of subsidiaries excluded in the consolidated financial statements: None

(4) Foreign currencies

Foreign currency transactions

Transactions in foreign currencies are translated into the respective functional currencies of Group entities at the exchange rates at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies at the reporting date are retranslated to the functional currency at the exchange rate at that date. The foreign currency gain or loss on monetary items is the difference between the amortized cost in the functional currency at the beginning of the year adjusted for the effective interest and payments during the period, and the amortized cost in foreign currency translated at the exchange rate at the reporting date. Non-monetary items denominated in foreign currencies that are measured at fair value are translated into the functional currencies using the exchange rate at the date that the fair value was determined. Non-monetary items denominated in foreign currencies that are measured based on historical cost are translated using the exchange rate at the date of the transaction. Exchange differences of monetary items are generally recognized in profit or loss, except for an investment in equity securities designated as at fair value through other comprehensive income, which are recognized in other comprehensive income.

(5) Classification of current and non-current assets and liabilities

The assets and liabilities relating to the project contract are classified as current or non-current on the basis of a business cycle (usually one to two years), with the remaining assets and liabilities divided by the following sub-criteria:

An asset is classified as current when any one of the following criteria is met; Assets are not classified as current are non-current assets.

A. It is expected to be realized, or intended to be sold or consumed, in the normal operating cycle;

B. It is held primarily for the purpose of trading;

C. It is expected to be realized within twelve months after the reporting date; or

D. The asset is cash or a cash equivalent unless the asset is restricted from being exchanged or used to settle a liability for at least twelve months after the reporting period.

A liability is classified as current under one of the following criteria, and all other liabilities are classified as non-current.

A. It is expected to be settled in its normal operating cycle;

B. It is held primarily for the purpose of trading;

C. It is expected to be realized within twelve months after the reporting period; or

D. The Group does not have an unconditional right to defer settlement of the liability for at least twelve months after the reporting period. Terms of a liability that could, at the option of the counterparty, result in its settlement by the issue equity instruments do not affect its classification.

(6) Cash and cash equivalents

Cash comprises cash on hand and demand deposits. Cash equivalents are short term, highly liquid investments that are readily convertible to known amounts of cash and are subject to an insignificant risk of changes in value. Time deposits which meet the above definition and are held for the purpose of meeting short-term cash commitments rather than for investment or other purposes should be recognized as cash equivalents.

(7) Financial instruments

Accounts receivable are initially recognized when they are originated. All other financial assets and financial liabilities are initially recognized when the Group becomes a party to the contractual provisions of the instrument.

A. Financial assets

All regular way purchases or sales of financial assets are recognized and derecognized on a trade date basis.

On initial recognition, a financial asset is recognized as financial assets measured at amortized cost. The Group changes its business model for managing financial assets, in which case all affected financial assets are reclassified on the first day of the first reporting period following the change in the business model.

(a) Financial assets measured at amortized cost

A financial asset is measured at amortized cost if it meets both of the following conditions and is not designated as at FVTPL:

i. It is held within a business model whose objective is to hold assets to collect contractual cash flows; and

ii. Its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

These assets are subsequently measured at amortized cost, which is the initial recognition amount deduct the cumulative amortization using the effective interest method and adjusted for any loss allowance. Interest income, foreign exchange gains and losses, and impairment loss, are recognized in profit or loss. Any gain or loss on derecognition is recognized in profit or loss.

(b) Impairment of financial assets

The Group recognizes loss allowances for expected credit losses on financial assets at amortized cost, including cash and cash equivalents, receivables, other receivables, refundable deposits and other financial assets, etc., and contract assets.

Loss allowance for accounts receivable and contract assets are always measured at an amount equal to lifetime ECL.

When determining whether the credit risk of a financial asset has increased significantly since initial recognition and when estimating ECL, the Group considers reasonable and supportable information that is relevant and available without undue cost or effort. This includes both quantitative and qualitative information and analysis based on the Group's historical experience and informed credit assessment as well as forward looking information.

The Group assumes that the credit risk on a financial asset has increased significantly if it is more than 180 days past due.

The Group considers a financial aset to be in default when the financial asset is more than 360 days past due or the debtor is unlikely to pay its credit obligations to the Group in full.

ECLs are probability-weighted estimate of credit losses over the expected life of financial assets. Credit losses are measured as the present value of all cash shortfalls, i.e the difference between the cash flows due to the Group in accordance with the contract and the cash flows that the Group expects to receive. ECL are discounted at the effective interest rate of the financial asset.

At each reporting date, the Group assesses whether financial assets carried at amortized cost is credit-impaired. A financial asset is 'credit-impaired' when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred. An evidence that a financial assets is credit-impaired includes the following observable data:

- Discount for significant financial difficulty of the borrower or issuer:
- a breach of contract such as a default or being more than 360 days past due;
- The lender of the borrower, for economic or contractual reasons relating to the borrower's financial difficulty, having granted to the borrower a concession that the lender would not otherwise consider;
- it is probable that the borrower will enter bankruptcy or other financial reorganization; or
- the disappearance of an active market for a security because of financial difficulties.

Loss allowances for financial assets measured at amortized cost are deducted from the gross carrying amount of assets.

The gross carrying amount of a financial asset is written off either partially or in full to the extent that there is no realistic prospect of recovery. For corporate customers, the Group individually makes an assessment with respect to the timing and amount of write off based on whether there is a reasonable expectation of recovery. The Group expects no significant recovery from the amount written off. However, financial assets that are written off could still be subject to enforcement activities in order to comply with the Group's procedures for recovery of amounts due.

(c) Derecognition of financial assets

The Group derecognizes a financial asset when the contractual rights to the cash flows from the financial asset expire, or it transfers the rights to receive the contractual cash flows in a transaction in which substantially all of the risks and rewards of ownership of the financial asset are transferred or in which the Group neither transfers nor retains substantially all of the risks and rewards of ownership and it does not retain control of the financial asset.

When the Group enters into transactions whereby it transfers assets but retains either all or substantially all of the risks and rewards of the assets, the transferred assets are not derecognized from statement of balance sheet.

B. Financial liabilities

(a) Financial liabilities

Financial liabilities are classified as measured at amortized cost or FVTPL. A financial liability is classified as at FVTPL if it is classified as held-for-trading, it is a derivative or it is designated as such on initial recognition. Financial liabilities at FVTPL are measured at fair value and net gains and losses, including any interest expense, are recognized in profit or loss.

Other financial liabilities are subsequently measured at amortized cost using the effective interest method. Interest expense and foreign exchange gains and losses are recognized in profit or loss. Any gain or loss on derecognition is also recognized in profit or loss.

(b) Derecognition of financial liabilities

The Group derecognizes a financial liability when its contractual obligations are discharged or canceled, or expire.

The difference between the carrying amount of a financial liability derecognized and the consideration paid (including any non-cash assets transferred or liabilities assumed) is recognized in profit or loss.

(c) Offsetting of financial assets and liabilities

Financial assets and financial liabilities are offset and the net amount presented in the statement of balance sheet when, and only when, the Group currently has a legally enforceable right to set off the amounts and it intends either to settle them on a net basis or to realize the asset and settle the liability simultaneously.

(8) Inventories

Inventories are measured at the lower of cost and net realizable value. The cost of inventories is calculated using of income weighted average method, and includes necessary Cost incurred in bringing them to their existing location and condition.

Net realizable value is the estimated the risk selling price in the ordinary course of business, less the estimated costs of completion and selling expenses.

The cost of inventories transferred from biological assets is its fair value less costs to sell at the date of harvest.

(9) Biological assets

Biological assets are measured at their fair value less cost to sell at the original recognition and subsequent financial reporting dates, except where fair value cannot be reliably measured. Cost to sell represents the incremental cost directly attributable to the disposal of assets, in addition to financial costs and income tax. Gains or losses arising from original recognition and subseqent changes in fair value less cost of sale of biological assets, shall be included in profit or loss in the current period in which they occur. Biological assets whose fair value cannot be reliably measured are measured at their cost less accumulated depreciation and accumulated impairment.

Biological assets are transferred to inventories at their fair value less cost to sell on the harvest date.

(10) Investment in associates

Associates are those entities in which the Group has significant influence, but not control or join control over their financial and operating policies.

Joint venture is a joint arrangement whereby The Group and other parties agreed to share the control of the arrangement, and have rights The Group net assets of the arrangement. Also, unanimous consent from the parties sharing control is required when making decisions for the relevant activities of the arrangement.

Investments in associates The Group ventures are accounted for using the equity method and are recognized initially at cost. The cost of the investment includes transaction costs. The carrying amount of the investment in associates and joint ventures includes goodwill identified on acquisition, net of any accumulated impairment losses.

The statements include the Group’s share of the profit or loss and other comprehensive income of those associates and joint ventures after adjustments The Group accounting policies with those of the Group, from the date on which significant influence commences until the date on which significant influence ceases. The Group recognizes any changes of its proportionate share in the investee within capital surplus, when an associate’s and joint venture’s equity changes due to reasons other than profit and loss or comprehensive income, which did not result in changes in actual controlling power.

Unrealized gains and losses resulting from transactions between The Group and an associate and joint ventures are recognized in the financial statement only to the extent of unrelated Group’s interests in the associate and join venture.

When the Group’s share of losses equals or exceeds its interests in an associate and joint venture, the carrying amount of the investment, including any long-term interests that form part thereof, is reduced to zero, and the recognition of further losses is discontinued except to the extent the Group has an obligation or has made payments on behalf of its associates and joint ventures.

(11) Property, plant and equipment

A. Recognition and measurement

Items of property, plant and equipment are measured at cost, less accumulated depreciation, and any accumulated impairment losses.

If significant parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items (major components) of property, plant and equipment.

Any gain or loss on disposal of an item of property, plant and equipment is recognized in profit or loss.

B. Subsequent expenditure

Subsequent expenditure is capitalized only if it is probable that future economic benefits associated with the expenditure will flow to the Group.

C. Depreciation

Depreciation is calculated on the cost of an asset, less its residual value and is recognized in profit or loss on a straight-line basis over the estimated useful lives of each component of an item of property, plant and equipment.

The estimated useful lives of property, plant and equipment for current and comparative periods are as follows:

(a) Machinery and equipment: 3~20 years

(b) Transportation equipment: 5~8 years

(c) Office equipment: 3~6 years

(d) Other equipment: 3~5 years.

Depreciation methods, useful lives and residual values are reviewed at each annual reporting date and adjusted if appropriate.

(12) Intangible assets

A. Research and development

Expenditure arising from research activities is recognized in profit or loss as incurred.

Development expenditure is capitalized only if the expenditure can be measured reliably, the product or process is technically and commercially feasible, future economic benefits are probable and the Group intends to, and has sufficient resources to, complete the development and to use or sell the asset. Otherwise, it is recognized in profit or loss as incurred. Subsequent to initial recognition, capitalized development expenditure is measured at cost, less accumulated amortization and any accumulated impairment losses.

Other intangible assets that are acquired by the Group and have finite useful lives are measured at cost less accumulated amortization and any accumulated impairment losses.

B. Other intangible assets

Other intangible assets that are acquired by the Group are measured at cost less accumulated amortization and any accumulated impairment losses.

C. Subsequent expenditure

Subsequent expenditure is capitalized only when it increases the future economic benefits embodied in the specific asset to which it relates. All other expenditure is recognized in profit or loss as incurred.

D. Amortization

The amortized amount of an intangible asset is the cost less its residual value.

Amortization is recognized in profit or loss on a straight-line basis over the estimated useful lives listed below from the date that they are available for use. The estimated useful lives for the current and comparative periods are as follows:

Software: 1 to 5 years

Power supply contract: 20 years

Amortization methods, useful lives and residual values are reviewed at each reporting date and adjusted if appropriate.

(13) Leases

At inception of a contract, the Group assesses whether a contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

A. As a lessee

The Group recognizes a right-of-use asset and a lease liability at the lease commencement date. The right-of-use asset is initially measured at cost, which comprises the initial amount of the lease liability adjusted for any lease payments made at, or before, the commencement date, plus any initial direct costs incurred and an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, less any lease incentives received.

The right-of-use asset is subsequently depreciated using the straight-line method from the commencement date to the earlier of the end of the useful life of the right-of-use asset or the end of the lease term. In addition, the right-of-use asset is periodically evaluated and reduced by impairment losses, if any, and adjusted for certain remeasurements of the lease liability.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the interest rate implicit in the lease or, if that rate cannot be reliably determined, the Group's incremental borrowing rate. Generally, the Group uses its incremental borrowing rate as the discount rate.

Lease payments included in the measurement of the lease liability comprise the following:

(a) fixed payments, including in-substance fixed payments;

(b) variable lease payments that depend on an index or a rate, initially measured using the index or rate as at the commencement date;

(c) amounts expected to be payable under a residual value guarantee; and

(d) payments for purchase or termination options that are reasonably certain to be exercised.

The lease liability is subsequently measured at amortized cost using the effective interest method. It is remeasured when:

(a) there is a change in future lease payments arising from the change in an index or rate; or

(b) there is a change in the Group's estimate of the amount expected to be payable under a residual value guarantee; or

(c) there is a change in the assessment regarding the purchase option or

(d) there is a change of its assessment on whether it will exercise an extension or termination option; or

(e) there is any lease modification

When the lease liability is remeasured, other than lease modifications, a corresponding adjustment is made to the carrying amount of the right-of-use asset, or in profit and loss if the carrying amount of the right-of-use asset has been reduced to zero.

When the lease liability is remeasured to reflect the partial or full termination of the lease for lease modifications that decrease the scope of the lease, the Group accounts for the remeasurement of the lease liability by decreasing the carrying amount of the right-of-use asset to reflect the partial or full termination of the lease, and recognize the difference in profit or loss for any gain or loss relating to the partial or full termination of the lease.

The Group has elected not to recognize leases for its dormitory and other, which qualifies as short-term asset leases and leases of low-value assets. The Group recognizes the lease payments associated with these leases as an expense on a straight-line basis over the lease term.

B. As a lessor

Lease income from operating lease is recognized in profit or loss on a straight-line basis over the lease term. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset leased to others and recognized as an expense on the straight-line basis over the lease term.

(14) Impairment of non-financial assets

At each reporting date, The Group reviews the carrying amounts of its non-financial assets (other than inventories, contract assets and deferred tax assets) to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated.

For impairment testing, assets are grouped together into the smallest group of assets that generates cash inflows from continuing use that are largely independent of the cash inflows from other assets or cash generating units (CGUs).

The recoverable amount of an asset or CGU is the greater of its value in use and its fair value less costs to sell.

An impairment loss is recognized if the carrying amount of an asset or CGU exceeds its recoverable amount.

Impairment losses are recognized in profit or loss. They are allocated to reduce the carrying amount of any goodwill allocated to the CGU and then to reduce the carring amounts of the other in the CGU on a pro rata basis.

For other assets, except for goodwill, an impairment loss is reversed only to the extent that the asset’s carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortization, if no impairment loss had been recognized.

(15) Provisions

A provision is recognized if, as a result of a past event the Group has a present obligation that can be estimated reliably, and it is probable that an outflow of economic benefits will be required to settle the obligation. Provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects the current market assessments of the time value of money and the risks specific to the liability. The unwinding of the discount is recognized as finance cost.

A provision for warranties is recognized when the underlying products or services are sold, based on historical warranty data and a weighting of all possible outcomes against their associated probabilities.

The Group is subject to decommissioning obligations related to certain items of property, plant and equipment. Such decommissioning obligations are primarily attributable to clean-up costs, including deconstruction, transportation, module recover and recover costs. The unwinding of the discount based on original discount rate is recognized in profit or loss as interest expense over the periods with corresponding increase in the carrying amounts of the accrued decommissioning costs. The carrying amount of the accruals at the end of the assets’ useful lives is the same as the estimated decommissioning costs.

(16) Employee benefits

A. Defined contribution plans

Obligations for contributions to the defined contribution plans are expensed as related services are provided.

B. Short-term employee benefits

Short-term employee benefit obligations are expensed as the related service is provided. A liability is recognized for the amount expected to be paid if the Group has a present legal or constructive obligation to pay this amount as a result of past service provided by the employee and the obligation can be estimated reliably.

(17) Revenue recognition

A. Revenue from contracts with customers

Revenue is measured based on the consideration to which the Group expects to be entitled in exchange for transferring goods or services to a customer. The Group recognizes revenue when it satisfies a performance obligation by transferring control of a good or a service to a customer. The accounting policies for the Group’s main types of revenue are explained below.

(a) Construction contracts

The Group enters into construction contracts to build solar power plants and site development. Because its customer gradually controls the asset as it is constructed, the Group recognizes revenue over time on the basis of the costs incurred to date as a proportion of the total estimated costs of the contract. The consideration promised in the contract includes fixed amounts. The customer pays the fixed amount based on a payment schedule. The Group recognizes revenue only to the extent that it is highly probable that a significant reversal in the amount of cumulative revenue recognized will not occur. If the Group has recognized revenue, but not issued a bill, then the entitlement to consideration is recognized as a contract asset. The contract asset is transferred to receivables when the entitlement to payment becomes unconditional.

If the Group cannot reasonably measure its progress towards complete satisfaction of the performance obligation in accordance with the construction contracts, revenue is recognize only to the extent of contract costs incurred that it is expected to be recovered.

A provision for onerous contracts is recognized when the Group expects the unavoidable costs of performing the obligations under a construction contract exceed the economic benefits expected to be received under the contract.

Estimates of revenues, costs or extent of progress toward completion are revised if circumstances change. Any resulting increases or decreases in estimated revenues or costs are reflected in profit or loss in the period in which the circumstances that give rise to the revision become known by management.

(b) Revenue from service rendered

The Group provides advisory and maintenance services. Revenue from providing services is recognized in the accounting period in which the services are rendered. For fixed-price contracts, revenue is recognized based on the actual service provided to the end of the reporting period as a proportion of the total services to be provided. The proportion of services provided is determined based on the rendered services to date as a proportion of the total estimated rendered services of the transaction. In cases of fixed price contracts, the customer pays the fixed amount based on a payment schedule.

(c) Sales revenue

Revenue is recognized when the control over a product has been transferred to the customer. The transfer of control refers to the product has been delivered to and accepted by the customer without remaining performance obligations from the Group. Delivery occurs when the product has been shipped to the specified location and the risk of loss over the product has been transferred to the customer, as well as when the product has been accepted by the customer according to the terms of sales contract, or when the Group has objective evidence that all criteria for acceptance have been satisfied.

(d) Revenue from power generation

Revenue from the sale of electricity is recognized after the transmission of electricity through the power grid and calculated at the rates agreed with Taiwan Power Company.

(e) Revenue from sales of power wheeling

Revenue from sales of power wheeling is recognized after the purchase of electricity is delivered to customers via the grid and is recognized as revenue at the net rate agreed between the electricity purchases and the sales made to customers.

(f) Financing components

The Group does not expect to have any contracts where the period between the transfer of the promised goods or services to the customer and payment by the customer exceeds one year, or effect of financing components is significant. As a consequence, the Group does not adjust any of the transaction prices for the time value of money.

B. Contract costs

(a) Incremental costs of obtaining a contract

The Group recognizes as an asset the incremental costs of obtaining a contract with a customer if the Group expects to recover those costs. The incremental costs of obtaining a contract are those costs that the Group incurs to obtain a contract with a customer that it would not have incurred if the contract had not been obtained. Costs to obtain a contract that would have been incurred, regardless of whether the contract was obtained, shall be recognized as an expense when incurred, unless those costs are explicitly chargeable to the customer regardless of whether the contract is obtained.

The Group applies the practical expedient to recognize the incremental costs of obtaining a contract as an expense when incurred if the amortization period of the asset that the entity otherwise would have recognized one year or less.

(b) Costs to fulfill a contract

If the costs incurred in fulfilling a contract with a customer are not within the scope of another Standard (for example, IAS 2 Inventories, IAS 16 Property, Plant and Equipment or IAS 38 Intangible Assets), the Group recognizes an asset from the costs incurred to fulfil a contract only if those costs meet all of the following criteria:

(i) the costs relate directly to a contract or to an anticipated contract that the Group can specifically identify;

(ii) the costs generate or enhance resources of the Group that will be used in satisfying (or in continuing to satisfy) performance obligations in the future; and

(iii) the costs are expected to be recovered.

General and administrative costs, costs of wasted materials, labor or other resources to fulfill the contract that were not reflected in the price of the contract, costs that relate to satisfied performance obligations (or partially satisfied performance obligations), and costs for which the Group cannot distinguish whether the costs relate to unsatisfied performance obligations or to satisfied performance obligations (or partially satisfied performance obligations), the Group recognizes these costs as expenses when incurred.

(18) Share-based payment

The remuneration cost of employee share-based payment arrangements is measured based on the fair value at the date on which they are granted. The remuneration cost is recognized, together with a corresponding increase in equity, over the periods in which the employees become unconditionally entitled to the awards. The amount of the compensation cost recognized as an expense is adjusted to reflect the number of awards whose related service and non-market performance conditions are expected to be met, such that the amount ultimately recognized as an expense is based on the number of awards that meet the related service and non-market performance conditions at the vesting date.

For share-based payment awards with non-vesting conditions, the fair value of the share-based payment at the grant date is measured to reflect such conditions, and there is no true-up for differences between expected and actual outcomes.

Grant date of a share-based payment award is the date which the Group and employees reach a consensus in the subscription price and number of shares.

The grant date of options for employees to subscribe new shares for a cash injection is the date when the Board of Directors approves the exercise price and the number of shares employees can subscribe.

(19) Income taxes

Income taxes comprise both current taxes and deferred taxes. Except for expenses related to business combinations or recognized directly in equity or other comprehensive income, all current and deferred taxes shall be recognized in profit or loss.

Current taxes comprise the expected tax payables or receivables on the taxable profits (losses) for the year and any adjustment to the tax payable or receivable in respect of previous years. The amount of current tax payables or receivables are the best estimate of the tax amount expected to be paid or received that reflects uncertainty related to income taxes. It is measured using tax rates enacted or substantively enacted at the reporting date.

Deferred taxes arise due to the temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and their respective tax bases.

Deferred taxes are measured at tax rates that are expected to be applied to temporary differences when they reserve, using tax rates enacted or substantively enacted at the reporting date.

Deferred tax assets and liabilities are offset if the following criteria are met:

A. the Group has a legally enforceable right to set off current tax assets against current tax liabilities; and

B. the deferred tax assets and the deferred tax liabilities relate to income taxes levied by the same taxation authority on either:

(a) the same taxable entity; or

(b) different taxable entities which intend to settle current tax assets and liabilities on a net basis, or to realize the assets and liabilities simultaneously, in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered.

Temporary differences between the carrying amount of assets and liabilities for financial reporting purposes and their respective tax bases shall be measured based on the tax rates that have been enacted or substantively enacted at the time of the asset or liability is recovered or settled, and be recognized directly in equity or other comprehensive income as tax expense.

(20) Earnings per share

Basic earnings per share is calculated as the profit attributable to ordinary shareholders of the Group divided by the weighted-average number of ordinary shares outstanding. Diluted earnings per share is calculated as the profit attributable to ordinary shareholders of the Group divided by the weighted average number of ordinary shares outstanding after adjustment for the effects of all potential dilutive ordinary shares. The calculation of diluted earning per share is based on the profit attributable to ordinary shareholders of the Group, divided by the weighted-average number of ordinary shares outstanding after adjustment for the effects of all diluted potential ordinary shares, such as employee stock option issued by the Group that have not yet been approved by the board of directors and can be settled through the issuance of share.

(21) Business combination

The consideration transferred in the acquisition is measured at fair value, as are identifiable net assets acquired. Goodwill is measured as the excess of the aggregate of the fair value of consideration transferred and the amount of any non-controlling interests in the acquiree over the net identifiable assets acquired and liabilities assumed. If the fair value of the net assets acquired is in excess of the aggregate consideration transferred and the amount of any non-controlling interests in the acquiree, after reassessing all of the assets acquired and all of the liabilities assumed being properly identified, the difference is recognized in profit or loss as a gain on bargain purchase.

Acquisition-related costs are expensed as incurred, except that the costs are related to the issue of debt or equity instruments.

Non-controlling interests in an acquiree that are present ownership interests and entitle their holders to a proportionate share of the entity’ s net assets in the event of liquidation are measured, on a caseby-case basis, at either fair value or the present ownership instruments’ proportionate share in the recognized amounts of the acquiree’ s net identifiable assets. All other components of noncontrolling interests shall be measured at their acquisition-date fair values, unless another measurement basis is required by TIFRSs.

In a business combination achieved in batches, the fair value of previously held equity interest in the acquiree is remeasured, on its acquisition date and the resulting gain or loss, if any, is recognized in profit or loss. If the acquirer may have recognized changes in the value of its equity interest in the acquiree in other comprehensive income. In prior reporting periods, the amount that was recognized in other comprehensive income shall be recognized on the same basis as would be required if the acquirer had disposed directly of the previously held equity interest.

If the initial accounting for a business combination is incomplete by the end of the reporting period in which the combination occurs, the provisional amounts for the items for which the accounting is incomplete are reported in financial statements. During the measurement period, the provisional amounts are retrospectively adjusted or additional assets or liabilities are recognized to reflect new information obtained about facts and circumstances that existed as of the acquisition date. The measurement period shall not exceed one year from the acquisition date.

(22) Operating segments

An operating segment is a component of the Group that engages in business activities from which it may earn revenues and incur expenses (including revenues and expenses relating to transactions with other components of the Group). Operating results of the operating segment are regularly reviewed by the Group's chief operating decision maker to make decisions about resources to be allocated to the segment and to assess its performance. Each operating segment consists of standalone financial information.

5. Significant accounting assumptions and judgments, and major sources of estimation uncertainty:

The preparation of the consolidated financial statements, in conformity with the Regulations and the TIFRSs requires management to make judgments, estimates and assumptions that affect the application of the accounting policies and reported amount of assets, liabilities, income and expenses. Actual results may differ from these estimations.

Information about critical judgments, estimates and assumptions in applying accounting policies that have the significant effects on the amounts recognized in the consolidated financial statements is includer in the folloeing notes:

The revenue recognition of construction projects

The profit or loss incurred is recognized based on construction stage of a contract completion measured based on the proportion of the contract cost incurred for work performed to date relative to the estimated total contract costs. The Group regularly review the reasonableness of their estimates and are affected by changes in the industrial environment and construction conditions, which may result in changes in the estimated total cost of completion, which in turn affects the amount recognized by the Group's revenue and The Group contractual assets and contractual liabilities at the end of the period. Changes in these estimates might affect the calculation of the percentage of completion and related profits from construction contracts.

The Group' s management continues to monitor the accounting estimates and assumptions. The management recognizes any changes in accounting estimates during the period and the impact of those changes in accounting estimates in the next period.

The Group's accounting policy and disclosure include financial and non-financial assets and liabilities measured by fair value. The Group determines fair value using the independent data sources which reflect the current market condition and confirming the data available are independent, reliable, in consistent with other sources and represent the exercisable price. The Group also periodically assesses the evaluation model, performs retrospective tests, and updates inputs with any other necessary fair value adjustment The Group evaluates model in order to ensure the reasonableness of the valuation.

The Group evaluates assets and liabilities using the observable market inputs. The different inputs of levels of fair value hierarchy in determination of fair value are as follows:

- Level 1: quoted prices (unadjusted) in active markets for identified assets or liabilities.
- Level 2: inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices).
- Level 3: inputs for the assets or liabilities that are not based on observable market data (unobservable inputs).

If there is any movement of financial instruments measured at fair value between Level 1, Level 2, and Level 3, the Group recognizes the movement at the reporting date. For the assumption used in fair value measurement, please refer to note 6(27) of the financial instruments.

6. Explanation of significant accounts:

(1) Cash and cash equivalents

	December 31, 2022	December 31, 2021
Cash on hand	$ 985	1,510
Demand deposits	1,962,677	809,883
Checking account deposits	103	11,388
Foreign currency deposits	263	236
	$ 1,964,028	**823,017**

Please refer to note 6(27) for the disclosure of credit risk and interest rate risk of the financial assets and liabilities of the financial instruments of the Group.

As of December 31, 2022 and 2021, no cash and cash equivalents were pledged with banks as collaterals.

(2) Financial assets at fair value other comprehensive income

	December 31, 2022	December 31, 2021
Equity investments at fair value through other comprehensive income:		
Unlisted common shares	**$ 35,000**	**-**

The purpose that the Group invests in the abovementioned equity securities is for long-term strategies, but rather for trading purpose. Therefore, those equity securities are designated as financial assets at FVTOCI.

The abovementioned investments in equity instruments designated at fair value through other comprehensive income were not pledged as collateral.

(3) Notes and accounts receivable, net (including related parties)

	December 31, 2022	December 31, 2021
Notes receivable	$ 14,490	350
Accounts receivable	22,088	94,544
Accounts receivable from related parties, net	16,296	23,904
Less: Loss allowance	(647)	(647)
	$ 52,227	**118,151**

The Group applies the simplified approach to provide for its loss allowance used for ECL, which permit the use of lifetime expected loss provision for its receivables. To measure the ECL, receivables have been grouped based on the shared credit risk characteristics and the days past due, as well as incorporated forward looking information, including macroeconomic and relevant industry information. The expected loss allowance is determined as follows:

	December 31, 2022		
	Gross carrying amount	**Weighted-average loss rate**	**Loss allowance provision**
Current	$ 40,015	0.00%	-
1 to 30 days past due	12,212	0.00%	-
	$ 52,227		-

	December 31, 2021		
	Gross carrying amount	**Weighted-average loss rate**	**Loss allowance provision**
Current	$ 88,236	0.00%	-
1 to 30 days past due	23,049	0.00%	-
31 to 60 days past due	6,627	0.00%	-
More than 180 days past due	239	0.00%	-
	$ 118,151		-

In addition, there was objective evidence indicating that, under reasonable expectation, some of the notes and accounts receivable would not be recovered in total; therefore the Group recognized a loss allowance of $647 thousand as of December 31, 2022 and 2021, respectively.

The movements in the allowance for notes and accounts receivable for the years ended December 31, 2022 and 2021 were as follows:

	For the years ended December 31,	
	2022	**2021**
Balance at January 1	$ 647	216
Amounts written off	-	(216)
Loss allowance	-	647
Balance at December 31	**$ 647**	**647**

As of December 31, 2022 and 2021 the notes and accounts receivable of the Group were not pledged as collateral.

(4) Inventories

	December 31, 2022	**December 31, 2021**
Module pending for construction	$ 85,497	-
Power cables pending for construction	56,373	-
Steel structure pending for construction	14,582	-
Raw materials	40,223	29,257
	$ 196,675	**29,257**

For the December 31, 2022 and 2021, the cost of inventory recognized as the cost of goods sold and expenses amounted to $3,718,799 thousand and $2,264,114 thousand, respectively. In addition, the write-down of inventories to net realizable value, which were also included in cost of good sold, amounted to $392 thousand and $0 thousand, for the years ended December 31, 2022 and 2021, respectively.

As of December 31, 2022 and 2021, the notes and accounts receivable of the Group were not pledged as collateral.

(5) Investments accounted for using equity method (including credit balance)

	December 31, 2022	**December 31, 2021**
Associates	$ 78,642	16,121
Joint ventures	699,934	265,001
Less: Unrealized gains on the-company transaction	(248,819)	(53,781)
	$ 529,757	**227,341**

A. Associates

Name of investor	Business Activity	Main businesses and products Place/ Company registered country	December 31, 2022 Amount	December 31, 2022 Percentage %	December 31, 2021 Amount	December 31, 2021 Percentage %
Ri Jie Green Energy Co., Ltd. (Ri Jie)	Energy technology service	Taiwan ROC	-	-	388	45
Ri Da Green Energy Co., Ltd. (Ri Da)	Energy technology service	Taiwan ROC	-	-	815	45
Ri Qing Green Energy Co., Ltd. (Ri Qing)	Energy technology service	Taiwan ROC	3,043	34	3,044	34
Ri Fa Green Energy Co., Ltd. (Ri Fa)	Energy technology service	Taiwan ROC	55,799	40	-	-
AcTek Energy Co., Ltd. (AcTek)	Energy technology service	Taiwan ROC	-	-	11,874	34
Yun Deng Green Energy Co., Ltd. (Yun Deng)	Energy technology service	Taiwan ROC	19,800	40	-	-
			$ 78,642		16,121	

The liquidations of Ri Jie and Ri Da were completed in August 2022, with the recovered investment amounting to $532 thousand and the remaining recognized as losses on disposals of investments amounting to $661 thousand, recognized in the statement of comprehensive income.

Ri Fa engaged in the cash capital increase in August 2022, and the Group invested $47,300 thousand, but the Group did not subscribe in proportion to its shareholding, resulting in the reduction of shareholding ratio from 100% to 40%, thereby losing control over Ri Fa. The shareholding previously held was deemed to be a disposal. The gain on disposal amounting to $60 thousand was recognized at fair value of that date. At the same time, the Group's 40% equity interest in Ri Fa was transferred to investment accounted for under equity method at a fair value for loss of control, amounting to $47,960 thousand. In November 2022, the Group increased its capital by $8,000 thousand.

Yun Deng engaged in the cash capital increase in December 2022, but the Group did not subscribe in proportion to its shareholding and make a disposal, which the price was $8,000 thousand, resulting in the reduction of shareholding ratio from 100% to 40%, thereby losing control over Yun Deng. The shareholding previously held was deemed to be a disposal. The gain on disposal amounting to $219 thousand was recognized at fair value of that date. At the same time, the Group's 40% equity interest in Yun Deng was transferred to investment accounted for under equity method at a fair value for loss of control, amounting to $19,854 thousand.

The Group acquired 34% of the shares in AcTek at $11,900 thousand December 31, 2021 and thereby gained significant influence over AcTek. The Group increased capital in AcTek by $56,100 thousand in August 2022 and disposed of its entire equity interest in AcTek in December 2022, The disposal price was $68,000 thousand and the gain on disposal was $591 thousand, which is recognized in the other comprehensive income.

For the December 31, 2021, the Group received a refund of $1,059 thousand of capital reduction refund from Ri Qing and a retained surplus of $(14) thousand offset due to changes in ownerships of associates, in addition to the transfer from prepayments for investments of $2,899 thousand upon completion of the registration procedures for shares of Ri Qing, Ri Jie and Ri Da.

The Group holds 34% to 45% of the voting rights in associates for the years ended December 31, 2022 and 2021. The remaining shares are concentrated within certain shareholders and the Group was not able to obtain more than half of the total number of director of these associates, and also not (able to obtain) more than half of the voting rights at a shareholders' meeting. Therefore, it is determined that the Group does not have de facto influence on these associates.

The Group's consolidated financial information for investments accounted for using equity method that are individually insignificant was as follows:

	2021	**2021**
Attributable to the Group:		
Profit (loss)	$ (817)	37

B. Joint ventures

Name of investor	**Business Activity**	**Main businesses and products Place/ Company registered country**	**December 31, 2022** Amount	**December 31, 2022** Percentage %	**December 31, 2021** Amount	**December 31, 2021** Percentage %
Ri Yun Green Co., Ltd. (Ri Yun)	Energy technology service	Taiwan ROC	-	-	63,911	40
Star Power Energy Corporation (Star Power)	Energy technology service	Taiwan ROC	261,000	20	201,090	20
Aquastar Energy Co., Ltd. (Aquastar)	Energy technology service	Taiwan ROC	59,951	10	-	-
Star Network Data Co., Ltd. (Star Network)	Energy technology service	Taiwan ROC	378,883	49	-	-
			$ 699,834		265,001	

Ri Yun was established according to the joint venture agreement with third parties in 2019. The main activity of Ri Yun is energy technology service. As the Company and the other parties have joint control over Ri Yun, this investment is accounted for using the equity method. The cash capital of Ri Yun increased by $8,400 thousand was contributed by the Group December 31, 2021.

The Group acquired the remaining 60% equity interest from the other shareholders of Ri Yun on June 17, 2022 at a total investment price of $96,600 thousand, resulting in an increase in the Company's shareholding ratio from 40% to 100%, and a change in ownership that offset retained earnings, amounting to $(748) thousand. The Group sold all of its shares of Ri Yun to the Company's related party, Aquqstar at a disposal price of $161,000 thousand and received gain on disposal of $1,247 thousand on June 29, 2022.

The Group acquired 49% of shares in Ankang Data Co., Ltd. (Ankang) in August 2022 at $107,800 thousand. Then, the The parties of joint venture of Ankang was involved in the cash capital increase of the Company's subsidiary, Star Network, and acquired 51% of shares in Star Network in September 2022. Due to operation strategy, the Cpmpany and the other parties of joint venture agreed to purchase all of the shares in Ankang by Star Network. The Group disposed of all its equity interest in Ankang to Star Network at the book value of $107,771 thousand.

Star Network issued new common share for cash in September 2022, and the Group invested $107,700 thousand. However, The Group did not subscribe in proportion to its shareholding, resulting in the reduction of its shareholding ratio from 100% to 49%, thereby losing control over Star Network. The shareholding previously held was deemed to be a disposal. The gain on disposal amounting to $14 thousand was recognized at fair value of that date. At the same time, the Group’s 49% shareholding in Star Network was transferred to investment accounted for under equity method at a fair value for loss of control, amounting to $107,787 thousand. In addition, Star Network issued shares amounting to $205,800 thousand and $65,303 thousand in October and November, 2022, respectively.

Ankang, a subsidiary of Star Network planned to collaborate with other companies on the construction of the data center. The planning concept was not in line with the expectations of the Group and other companies subsequently expect to contact others for partnership. Therefore, the refund of Group's capital increase in Star Network amounting to $374,003 thousand will be processed by Ankang. Ankang issue capital reduction refund to Star Network. Then, Star Network will issue capital reduction to return such amount to the Group.

Star Power is established according to the joint venture agreement with a third party in 2020, the Group and the other party have joint control. Accordingly, this investment is accounted for using the equity method. As of December 31, 2022 and 2021, the cash capital increases amounted to $52,000 thousand and $50,000 thousand, respectively.

As the Group did not subscribe in proportion to its shareholding for the cash capital increase of Star Power in June 2021, causing a reduction from 30% to 20%, and the retained earnings of $(464) thousand was offset as a result of the change in ownership.

The consolidated financial information of significant joint ventures were as follows:

The summary of financial information of Star Power:

	December 31, 2022	December 31, 2021
Current assets	$ 158,898	223,632
Non-current assets	1,221,430	841,876
Current liabilities	(50,348)	(60,060)
Non-current liabilities	(24,482)	-
Net assets	**$ 1,305,498**	**1,005,448**
Net assets, attributable to non-controlling interests	**$ 1,044,398**	**804,358**
Net assets attributable to the owner of the investee	**$ 261,100**	**201,090**

	For the years ended December 31,	
	2022	2021
Operating revenue	**$ 2,148**	**-**
Profit	$ 44,953	6,106
Other comprehensive income (loss)	-	-
Total comprehensive income	**$ 44,953**	**6,106**
Comprehensive income attributable to non-controlling interests	**$ 35,962**	**4,355**
Comprehensive income attributable to owner of the investee	**$ 8,991**	**1,751**
Share of net assets of joint venture as of January 1	$ 201,090	149,803
Individual Acquisition	52,000	50,000
Dividends received during the period	(981)	-
Adjustment to the net share value of the share option is recognized not in proportion to its shareholding	-	(464)
Comprehensive income attributable to the Group	8,991	1,751
Share of net assets of joint venture as of December 31	261,100	201,090
Carrying amounts of interests in joint venture as of December 31	**$ 261,100**	**201,090**

The Group' s financial information for investments accounted for using equity method that charges are individually insignificant was as follows:

	2022	2021
Attributable to the Group		
Loss	**$ (92)**	**(202)**

As of December 31, 2022 and 2021, the investments accounted for using equity method were not pledged as collateral.

C. Prepayments for investments

The Group paid $2,899 thousand to its corporate director, Titan Solar Co., Ltd. in 2019 for the acquisition of shares in Ri Qing, Ri Jie, Ri Da and completed the statutory transfer registration process in June 2021. In addition, the Group paid an investment of $20,000 thousand in the acquisition of Apollo Aquatic Product Co., Ltd. during 2020. After receiving the permission, the Group applied to the competent authority for the approval of the project whereas legal transfer registration may only be effected after, but the two parties have terminated their co-operation and the investment funds have been recovered in June 29, 2022. As of December 31, 2022 and 2021, the investment account for under prepayments for investments due to incompletion of registration were $0 thousand, and $20,000 thousand, respectively.

(6) Loss control or acquisition of subsidiaries

A. Acquisition of subsidiary

The Group acquired 100% of the shareholdings of NFC I and II Green C Ltd. (NFC) on January 2022, for $100 thousand.

In July 2022, the Group acquired 100% of equity interest in Ri Fu Green Energy Co., Ltd. (Ri Fu) at $100 thousand and increased capital of Ri Fu by $2,500 thousand in the same month.

For business purposes, the Group acquired a total of 99% equity interest in Huiju at a cash consideration of $5,100 thousand and $4,998 thousand in May and June 2022, respectively, and the remaining 60% equity interest in Ri Yun at a cash consideration of $96,600 thousand in June 2022.

The following table summarises the fair value of identifiable assets acquired on the above acquisition date and liabilities assumed recognized at the acquisition date:

Cash and cash equivalents	$	4,146
Notes and accounts receivable, net		46,628
Other receivables due from related parties		11,959
Other current assets		40,857
Property, plant and equipment		37,163
Intangible assets		1,106
Other non-current assets		121,574
Notes and accounts payable		(70)
Other payables to related parties		(80,955)
Short-term borrowings		(2,440)
Other current liabilities		(2,516)
Long-term notes payable (including current portion)		(7,482)
Non-controlling interests		(90)
	$	**169,880**

In addition, the Group acquired 40% of equity interests (Ri Dong Technology Fisheries Co., Ltd., which is a director of DFM, related party, and FIRSTERA INTERNATIONAL Co., Ltd. (Firstera), the supervisor) from the shareholders of DFM for $2,000 thousand in June 2022. Therefore increasing its shareholding from 60% to 100%. The resulting change in ownership causing an offset of retained earnings amounting to $(2,467) thousand. In September 2022, it increased its capital by $6,200 thousand.

In November 2022, the Group did not subscribe for the cash capital increase in Star Aquaculture in proportion of its shareholding. The Group invested $9,000 thousand, which reduced its shareholding from 100% to 90%, generating a change in ownership which resulted in the recognition of a capital surplus amounting to $95 thousand.

In December 2022, the Group did not subscribe for the cash capital increase in ESS. in proportion of its shareholding. The Group invested $159,900 thousand, which reduced its shareholding from 100% to 80%, generating a change in ownership which resulted in the recognition of a capital surplus amounting to $107 thousand.

B. Loss control of subsidiaries

The Group disposed of 100% equity interests in Reng Hua, Zhong Fang and Fang Deng, in March 2022, and 100% equity interests in DFM in September 2022 to Star Power, the related party, respectively. The total disposal prices amounting to $14,691 thousand and total gain on disposal amounting to $0 thousand.

The Group disposed of 100% equity interest in NFC in March 2022 and 100% equity interests in He Shuo and Shin De to non-related parties in December. The total disposal price amounting to $91,751 thousand and a total gain on disposal amounting to $367 thousand, which are recognized in statement of comprehensive income.

In June 2022, the Group did not subscribe for the cash capital increase of Aquastar in proportion to its shareholding, and the Group invested $59,900 thousand, resulting in its shareholding to decrease from 100% to 10%. The Group thus losing control over it. The shareholding previously held was deemed to be a disposal. The gain on disposal amounting to $0 thousand at fair value of $78 thousand. The resulting change in ownership causing an Recognition earnings amounting to $20 thousand.

In June 2022, all of the equity interests of Ri Yun were disposed of to its related party, Aquastar Energy, as explained in note 6(5).

The Group did not subscribe to Ri Fa' s cash capital increase proportional to its original shareholding in August 2022, resulting in a reduction of the shareholding ratio from 100% to 40%, which is deemed to be a disposal, please refer to note 6(5) for more details.

The Group did not subscribe to Star Network's cash capital increase in proportion to its original shareholding in September 2022, resulting in a reduction of the shareholding ratio from 100% to 49%, which is deemed to be a disposal. Please refer to note 6(5) for more details.

The Group did not subscribe for and dispose of the equity interest in Yun Deng in proportion to its shareholdings in December 2022, thereby reducing its shareholding from 100% to 40%. the Group lost control over Yun Deng,which is deemed to be a disposal. Please refer to note 6(5) for details.

The above gain on disposal is recognized under statement of comprehensive income.

The Group lost control on the above-mentioned subsidiaries, the carrying amounts of the assets and liabilities of the subsidiary disposed of by the Group were as follows:

Cash and cash equivalents	$	11,129
Other receivables due from related parties		11,959
Other current assets		5,506
Intangible assets		60
Property, plant and equipment		182,614
Right-of-use assets		3,692
Refundable deposits		12,130
Deferred income tax assets		1,000
Other non-current assets		117,025
Notes and Accounts payable to related parties		(42,482)
Other current liabilities		(3,853)
Current and non-current lease liabilities		(3,757)
Other non-current liabilities		(814)
	$	**294,209**

The Group disposed of 100% equity interest in Da Fu and Ri Dun to Star Power and Ji Tian Optoelectronics Co., Ltd. (Ji Tian Optoelectronics) in August and December 2021, respectively. The disposal prices were $18,000 thousand and $2,000 thousand, respectively. Gain on disposal are $1,263 thousand and $63 thousand respectively,and are recognized in. The above gain on disposal is recognized under statement of comprehensive income

(7) Property, plant and equipment

The cost, accumulated depreciation of the property, plant and equipment of the Group were as follows:

	Land	Buildings	Machinery and equipment	Transportation equipment	Office equipment	Other equipment	Construction in progress	Total
Costs:								
Balance at January 1, 2022	$ -	-	120,903	27,059	19,498	5,999	124,868	298,327
Additions	134,342	76,758	110,350	839	9,528	11,943	253,312	597,072
Acquisition through business combination	-	-	9,632	-	-	-	27,531	37,163
Disposal	-	-	-	(383)	-	(82)	(2,255)	(2,720)
Reclassification	212	-	56,009	-	18,333	(711)	(75,952)	(2,109)
Amount transferred out from subsidiaries of the Group	-	-	(43,377)	-	-	-	(139,792)	(183,169)
Balance at December 31, 2022	$ 134,554	76,758	253,517	27,515	47,359	17,149	187,712	744,564
Balance at January 1, 2021	$ -	-	89,183	23,232	9,342	4,177	90,387	216,321
Additions	-	-	612	3,888	10,156	1,822	74,105	90,583
Disposal	-	-	-	(61)	-	-	-	(61)
Reclassification	-	-	31,108	-	-	-	(35,870)	(4,762)
Amount transferred out from subsidiaries of the Group	-	-	-	-	-	-	(3,754)	(3,754)
Balance at December 31, 2021	$ -	-	120,903	27,059	19,498	5,999	124,868	298,327
Depreciation:								
Balance at January 1, 2022	$ -	-	11,712	7,857	5,961	2,726	-	28,256
Depreciation for the year	-	847	9,892	5,366	5,423	2,996	-	24,524
Disposal	-	-	-	(162)	-	(82)	-	(244)
Amount transferred out from subsidiaries of the Group	-	-	(555)	-	-	-	-	(555)
Balance at December 31, 2022	-	847	21,049	13,061	11,384	5,640	-	51,981
Balance at January 1, 2021	$ -	-	5,453	3,236	2,860	1,266	-	12,815
Depreciation for the year	-	-	6,259	4,630	3,101	1,460	-	15,450
Disposal	-	-	-	(9)	-	-	-	(9)
Balance at December 31, 2021	$ -	-	11,712	7,857	5,961	2,726	-	28,256
Carrying amounts:								
Balance at December 31, 2022	$ 134,554	75,911	232,468	14,454	35,975	11,509	187,712	692,583
Balance at December 31, 2021	$ -	-	109,191	19,202	13,537	3,273	124,868	270,071
Balance at January 1, 2021	$ -	-	83,730	19,996	6,482	2,911	90,387	203,506

$90 thousand out of depreciation for the year ended December 31, 2022 has been transferred into biological assets.

The Company entered into a contract in March 2022 to acquire an office in Taichung for the Group's operational development and reported to the Board of Directors in May 2022. The purchase price of land and buildings were $35,420 thousand and $68,370 thousand, respectively (before tax), the registration of ownership procedure was completed in June 2022 and the above amounts were paid in full in June 2022.

The Group acquired a parcel of land with a cost of $9,762 thousand in Hualien on June 30, 2022. Because of current legal restrictions, this land cannot be registered under the Group and was registered under the name of individuals. In order to protect the Group's rights to this land, the Group had held the ownership certificate and signed a deed of trust with these individuals, under which they are obliged to surrender their rights to the Group when required. Please refer to part J of note 7(2) for further explanation.

The purchase contract in July 2022 to purchase of part of the land in Xinsheng section of Cigu district, Tainan City was signed by the Company in July 2022 for a total price of $44,482 thousand for the future development and construction of the project. The ownership registration procedure was completed in July 2022. The above amount has been paid in full in July 2022.

The purchase of Penghu office was signed by the Company in August 2022 with the purchase prices of land and buildings amounting to $44,890 thousand and $8,295 thousand (before tax), respectively, for use as the Penghu business development office, the purchase were paid in full.

As of December 31, 2022 and 2021, the property, plant, and equipment were pledged as collateral. Please refer to note 8.

(8) Right-of-use assets

The Group leases many assets such as land, buildings and vehicles. Costs and accumulated depreciation movement about leases for which the Group as a lessee is presented below:

		Land	Buildings and Construction	Transportation equipment	Software platform	Total
Right-of-use assets, cost:						
Balance at January 1, 2022	$	7,975	20,693	5,142	-	33,810
Additions		6,557	30,112	10,784	10,332	57,785
Disposal		-	(1,119)	-	-	(1,119)
Amount transferred out from subsidiaries of the Group		(4,080)	-	-	-	(4,080)
Balance at December 31, 2022	**$**	**10,452**	**49,686**	**15,926**	**10,332**	**86,396**
Balance at January 1, 2021	$	-	16,202	5,361	-	21,563
Additions		7,975	10,452	987	-	19,414
Disposal		-	(5,961)	(1,206)	-	(7,167)
Balance at December 31, 2021	**$**	**7,975**	**20,693**	**5,142**	**-**	**33,810**

Depreciation:						
Balance at January 1, 2022	$	410	5,801	3,301	-	9,512
Depreciation for the year		676	5,927	2,901	1,722	11,226
Disposal		-	(746)	-	-	(746)
Amount transferred out from subsidiaries of the Group		(388)	-	-	-	(388)
Balance at December 31, 2022	$	**698**	**10,982**	**6,202**	**1,722**	**19,604**
Balance at January 1, 2021	$	-	5,098	2,763	-	7,861
Depreciation for the year		410	6,664	1,744	-	8,818
Disposal		-	(5,961)	(1,206)	-	(7,167)
Balance at December 31, 2021	$	**410**	**5,801**	**3,301**	**-**	**9,512**
Carrying amounts:						
Balance at December 31, 2022	$	**9,754**	**38,704**	**9,724**	**8,610**	**66,792**
Balance at December 31, 2021	$	**7,565**	**14,892**	**1,841**	**-**	**24,298**
Balance at January 1, 2021	$	**-**	**11,104**	**2,598**	**-**	**13,702**

As of December 31, 2022 and 2021, there was no right-of-use assets pledged as collateral.

(9) Intangible assets

The cost, amortization, revaluation increments and impairment of the intangible assets of the Group for the years ended December 31, 2022 and 2021 were as follows:

		Computer software	Power supply contract	Total
Cost:				
Balance at January 1, 2022	$	8,339	28,985	37,324
Additions		19,637	-	19,637
Amount transferred out from subsidiaries of the Group		(49)	(60)	(109)
Acquisition through business combination		-	1,106	1,106
Balance at December 31, 2022	$	**27,927**	**30,031**	**57,958**
Balance at January 1, 2021	$	6,669	28,985	35,654
Additions		1,780	-	1,780
Decrease		(110)	-	(110)
Balance at December 31, 2021	$	**8,339**	**28,985**	**37,324**

	Computer software	Power supply contract	Total
Amortization:			
Balance at January 1, 2022	$ 2,461	-	2,461
Amortization	3,547	-	3,547
Impairment loss	-	28,985	28,985
Amount transferred out from subsidiaries of the Group	(49)	-	(49)
Balance at December 31, 2022	**$ 5,959**	**28,985**	**34,944**
Balance at January 1, 2021	$ 654	-	654
Amortization	1,917	-	1,917
Decrease	(110)	-	(110)
Balance at December 31, 2021	**$ 2,461**	**-**	**2,461**
Carrying amounts:			
Balance at December 31, 2022	**$ 21,968**	**1,046**	**23,014**
Balance at December 31, 2021	**$ 5,878**	**28,985**	**34,863**
Balance at January 1, 2021	**$ 6,015**	**28,985**	**35,000**

The power supply contract of $28,985 thousand, an intangible asset arising from the acquisition of Yuan Chuang Green Energy Co., Ltd. (renamed to Xiang Heng Green Energy Co., Ltd.) in March 2020, was mainly attributable to the fact that the company own the right to a fishery and electricity symbiosis plant. Although its electricity preparation permit has been renewed, the Group assessed the plant construction would not be completed in time, loss of impairment is therefore recognized in full.

As of December 31, 2022 and 2021, the intangible assets of the Group were not pledged as collateral.

(10) Other current assets and other non-current assets

	December 31, 2022	December 31, 2021
Prepayments for projects	$ 1,029,928	509,067
Restricted deposits－noncurrent (Note 8)	285,638	182,113
Refundable deposits	177,456	50,971
Prepaid software development fees	19,027	-
Prepayment for equipment and land purchases	16,781	15,281
Input tax and offset against future tax payable	11,913	34,574
Other	38,256	23,845
	1,578,999	815,851
Less: classified as other current assets	(1,278,291)	(678,561)
Other non-current assets	**$ 300,708**	**137,290**

(11) Short-term borrowings

		December 31, 2022	December 31, 2021
Unsecured bank borrowings	$	185,000	222,611
Secured bank loans		81,230	56,500
Borrowings of letters of credit		21,441	-
	$	**287,671**	**279,111**
Range of interest rates at the year end		**2.2%~2.6%**	**1.6%~1.9%**

The short term secured bank borrowings as of December 31, 2022 and 2021 are small and medium enterprise credit guarantee fund of Taiwan pledged as loans for materials purchases.

Please refer to note 6(27) for the disclosure of interest risk and liquidity risk.

(12) Short-term notes and bills payable

	December 31, 2022			
	Guarantee or acceptance institution	**Range of Interest rate (%)**		**Amount**
Commercial paper payable	Mega International Commercial Bank	2.01%	$	30,000
Less: discount				(68)
			$	**29,932**

The Group's short-term notes payables mentioned above were not pledged as collateral .

(13) Long-term borrowings

	Loan period		December 31, 2022	December 31, 2021
Secured bank loans	2018.12~ 2042.06	$	150,939	99,552
Unsecured bank loans	2018.12~ 2042.06		47,710	29,195
			198,649	128,747
Less: current portion			(13,543)	(40,254)
		$	**185,106**	**88,493**
Range of interest rates at the year end			**2.18%~2.58%**	**1.95%~2.22%**

Please refer to note 6(27) for the disclosure of liquidity risk and interest risk. Refer to Note 8 for assets pledged as collateral to secure the aforementioned long-term borrowings.

(14) Lease liabilities

The carrying amounts of the Group's lease liabilities were as follows:

	December 31, 2022	December 31, 2021
Current	$ 17,599	6,756
Non-current	$ 45,303	17,843

For the maturity analysis, please refer to Note 6(27).

The amounts of leases recognized in profit or loss were as follows:

	For the years ended December 31,	
	2022	2021
Interest expense on lease liabilities	$ 773	556
Expenses relating to short-term leases	$ 20,894	18,134

The amounts of leases recognized in the statement of cash flows for the Group was as follows:

	For the years ended December 31,	
	2022	2021
Total cash outflow for leases	$ 37,013	27,374

A. Real estate and transportation equipment leases

The Group leases houses and buildings as office premises and leases transportation equipment for terms typically run for one to three years for for the years ended December 31, 2022 and 2021, and the Group leases land as power generation site for the years ended December 31, 2022 and 2021 for a term of 20 years.

B. Other leases

The Group's leases on dormitory and other leases are with contract terms of 1 year or less. These leases qualify as short-term leases and low value asset leases. The Group has elected not to recognize the right of use assets and lease liabilities for these leases.

(15) Other current liabilities and other non-current liabilities

	December 31, 2022	December 31, 2021
Payable on machinery and equipment	$ 39,898	2,614
Labor fees payable	38,987	3,674
Long-term notes payable (including current portion)	7,241	-
Warranty provisions	28,405	20,657
Provision for decommissioning, restoration and rehabilitation costs	3,501	2,521
Other	60,852	13,290
Less: classified as other-current liabilities	(141,546)	(20,297)
	$ 37,338	**22,459**

Provision for warranty liabilities is recognized for future maintenance costs of project that may arise in the event of a future event based on their historical experience and less anticipated future risks.

Provision for decommissioning, restoration and rehabilitation costs is intended to provide for the recovery cost of the power station modules as estimated in accordance with the Regulations for the Management of Setting up Renewable Energy Power Generation Equipment by the Bureau of Energy, Ministry of Economic Affairs. These amounts are based on the scale of the power station and are recognized as a provision for liabilities based on the present value of the estimated decommissioning costs.

(16) Capital and other equity

A. Common stock

As of December 31, 2022 and 2021, the Company's total authorized shares of common stock amounting to $2,000,000 thousand and $1,000,000 thousand with a par value of $10 per share. Out of these shares, 85,000 thousand shares and 70,000 thousand shares, respectively, were issued and outstanding, while $100,000 thousand was reserved for employee share option certificates.

After the resolution of the Board of Director, the Company issued 15,000 thousand new shares through cash capital increase on March 28, 2022 at a price of $82 per share. The Company has adopted the share capital increase date of May 16, 2022 and has completed the registration of the change. In addition, the Company is required to recognize the remuneration cost of cash capital increase to retain the shares for employee subscription. Please note 6(17) for details.

The Company has issued new shares amounting to 150,000 thousand for the initial listing of the Company on the Taiwan Innovation Board on December 28, 2022 pursuant to a resolution of the Board of Directors with a par value of $10 per share. The Company adopted book building and public underwriting price and issued at a premium of $110 per share on February 22, 2023. The Company adopted March 2, 2023 as base date for cash capital increase.

The Board of Directors' meeting resolved to issue 16,000 thousand shares and 2,000 thousand shares on August 31, 2021 and October 15, 2021, respectively, for cash capital increase at a price of $42 and $46 per share. The Company has adopted the cash capital increase date of September 30, 2021 and November 24, 2021 and has completed the registration of the change. In addition, the Company is required to recognize the remuneration cost of cash capital increase to retain the shares for employee subscription. Please refer to note 6(17) for details.

For the December 31, 2021, the exercise of employee share option issued by the Company amounting to $84,000 thousand in total was converted into 2,000 thousand shares of common stock at $42 per share. The related registration procedures were completed during the year. All the proceeds from issuing shares were collected. In addition, the Company is required to recognize the remuneration cost of cash capital increase to retain the shares for employee subscription. Please refer to note 6(17) for details.

Reconciliation of shares outstanding for year ended December 31, 2022 and 2021 were as follows:

	Ordinary share	
	For the years ended December 31,	
	2022	**2021**
Balance at January 1	70,000	50,000
Issuance of shares for cash	15,000	18,000
Exercise of employee share options	-	2,000
Balance at December 31	**85,000**	**70,000**

B. Capital surplus

The components of capital surplus were as follows:

	December 31, 2022	**December 31, 2021**
Share capital	$ 1,745,272	660,619
The effect of long-term equity investment is not recognized in proportion to the shareholding	202	-
	$ 1,745,474	**660,619**

According to the R.O.C. Company Act, capital surplus can only be used to offset a deficit, and only the realized capital surplus can be used to increase the common stock or be distributed as cash dividends. The aforementioned realized capital surplus includes capital surplus resulting from premium on issuance of capital stock and earnings from donated assets received. According to the Regulations Governing the Offering and Issuance of Securities by Securities Issuers, capital increases by transferring capital surplus in excess of par value should not exceed 10% of the total common stock outstanding.

C. Retained earnings

In accordance with the Company's articles, if there are earnings at year end, 10 percent should be set aside as legal reserve (unless the amount in the legal reserve is already equal to or greater than the total paid-in capital). The remaining portion will be combined with earnings from prior years, and the Board of Directors can propose distribution plan to be approved by the shareholders' meeting.

The Company is in a growth phase. Based on capital expenditure, business expansion needs, and financial planning for sustainable development, the Company's dividend policy will allocate retained earnings to shareholders through stock and cash dividends in accordance with the Company's future capital expenditure budget and capital requirements. The stock dividends shall be distributed not lower than 10% to the shareholders from distributable earnings. The cash dividend ratio of such dividends shall not be less than 10% of the total dividend of the shareholders. In the event that the Company has a material investment plan and is unable to obtain other funds, the Board Directors may, upon the proposal of the Board and the resolution of the Shareholders in general meeting, not to issue cash dividends.

(a) Legal reserve

When a Company incurs no loss, it may, pursuant to a resolution by a shareholders' meeting, distribute its legal reserve by issuing new shares or by distributing cash, and only the portion of legal reserve which exceeds 25% of capital may be distributed.

(b) Earnings distribution

The appropriation of earnings for the years ended December 31, 2021 and 2020 passed the resolution of general meeting of shareholders on June 30, 2022 and August 31, 2021, respectively. The amounts of dividends distributed to shareholders were as follows:

	For the years ended December 31,			
	2021		2020	
	Earnings distribution	**Price per share (NTD)**	**Earnings distribution**	**Price per share (NTD)**
Legal reserve	$ 16,481		19,134	
Cash dividends paid	170,000	2.00	100,000	2.00
	$ 186,481		**119,134**	

The aforementioned earnings distributions did not differ from those resoluted by shareholder's general meeting in the financial statements in 2021 and 2020. The related information can be accessed from Market Observation Post System website.

Information on the approval of Board of Directors and shareholders for the Company's appropriations of earnings are available at the Market Observation Post System website.

D. Non-controlling interests

	For the years ended December 31, 2022	2021
Balance at January 1	$ 400	(798)
Equity attributable to non-controlling interests:		
Net profit (loss)	(1,954)	1,198
Acquisition through business combination	91	-
Non-controlling interests cash capital increase	41,949	-
The effect of not subscribing in proportion to the shareholding	2,264	-
Purchase of share equity held by the non-controlling interests	(2,000)	-
Balance at December 31	**$ 40,750**	**400**

(17) Share based payment

A. Employee stock options

The circumstances in which the Company issued employee share option certificates December 31, 2021 are as follows:

Categories and type	Grant date	The expected life of the option (years)	Vesting period	Units Granted (thousands of units)	Exercise price per share (NTD)
Employee stock options for 2021	2021.7.1	2021.07.1~2021.09.29	vest immrdiately	2,000	42.00

For the employee stock option plan for compensation, the estimated fair value of the options granted at $4.75 per option at the date of grant using the Black Scholes option pricing model. The remuneration cost amounting to $9,500 thousand was recognized. Weighted-average assumptions were as follows:

Fair value of common shares	$42.28
Expected price volatility	60.41%
The risk-free rate	0.12%
The expected life (years)	0.23 year

The employee options issued by the Company have been fully subscribed for as of December 31, 2021.

The Company also passed the resolution of shareholders' general meeting on June 29, 2020 to award 2,550,000 employee stock option, an unit of employee stock option is entitled to subscribe one common share of the Company. However, on June 30, 2021, the aforesaid employee share option certificates and share options policy were abolished by a resolution of the Board.

B. Cash injection reserved for employees

The Company issued 15,000 thousand shares on March 28, 2022 and 16,000 thousand shares on August 31, 2021, respectively, after passing resolution of the Board of Directors for cash capital increase; and in accordance with article 267 of R.O.C. Company Act, reserve 10%, which consist of 1,500 thousand and 1,600 thousand shares, respectively, and employees of the Company are entitled to priority in subscription. The number of shares gave up for subscription or under subscribed by employees should authorize the Chairman to contact a specific person to fully subscribe the shares at issue price.

For the December 31, 2022 and 2021, the Company recognized new shares from cash capital increase, 922 thousand shares and 332 thousand shares of these new shares issued for cash capital increase were reserved for employee subscription pursuant to article 267 of the ROC Company Act, the fair value of awarded equity interest on the grant date shall be measured in accordance with the provisions of the IFRS 2"Share-Based Payment" at $5.05 and $4.75. The remuneration costs of $4,653 thousand and $1,577 thousand were recognized at the grant date for the year ended December 31, 2022 and 2021.

The Company adopted the Black Scholes option pricing model to evaluate the fair value of the share-based payments at the grant date. The assumptions adopted in this valuation model were as follows:

	Cash injection reserved for employees	
	For the years ended December 31,	
	2022	2021
Fair value at the grant date	5.05	4.75
Share price at the grant date	83.90	42.28
Number of options granted	922 thousand shares (note)	332 thousand shares (note)
Exercise price	82	42
The risk-free rate (%)	0.40 %	0.12 %

Note: Employees have declared a total of 578 thousand shares and 1,268 thousand shares to be wavied prior to the grant date.

C. Employee restricted stock option

A resolution passed on June 29, 2020, the Company's shareholders' meeting resoluted a resolution to issue 450 thousand new shares of employee restricted shares with a par value of $10 per share, amounting to total of $4,500 thousand for a valid term of one year. Grants are limited to full-time employees of the company who meet certain conditions. However, as of June 30, 2021, there was no actual issuance due to non-compliance with certain conditions and was automatically abolished after expiry date has passed.

(18) Employee benefits

The Group allocates 6% of each employee's monthly wages to the labor pension personal account at the Bureau of Labor Insurance in accordance with the provisions of the Labor Pension Act. Under these defined contribution plan, the Group allocates a fixed amount to the Bureau of Labor Insurance without additional legal or constructive obligations.

The pension costs incurred from the contributions to the Bureau of the Labor Insurance amounted to $6,257 thousand and $5,063 thousand for the years ended December 31, 2022 and 2021, respectively.

(19) Income taxes

A. Income tax expenses

The components of income tax expense (benefit) in the years 2022 and 2021 as follows:

	For the years ended December 31,	
	2022	**2021**
Current tax expense		
Current period	$ 208,747	67,937
Tax on undistributed earnings	-	3,610
Adjustment for prior years	(1,892)	(1,111)
	206,855	70,436
Deferred tax expense (benefit)		
Temporary differences	(42,512)	(18,186)
	$ 164,343	**52,250**

There were no income tax expense recognized directly in equity and other comprehensive income for the year ended December 31, 2022 and 2021.

Reconciliation of income tax and profit before tax for 2022 and 2021 is as follows:

	For the years ended December 31, 2022	2021
Profit before income tax	$ 812,495	218,731
Income tax of net profit before tax calculated at the prescribed tax rate	162,499	43,746
The Income tax effect of Permanent difference	4,666	6,005
Tax on undistributed earnings	-	3,610
Adjustment for prior years	(1,892)	(1,111)
Changes in unrecognized deferred income tax losses credit	(931)	-
Income tax expense	**$ 164,342**	**52,250**

B. Recognized deferred tax assets

Changes in the amount of deferred tax assets for 2022 and 2021 were as follows:

	January 1, 2021	Recognized in profit or loss	Recognized in other comprehensive income	December 31, 2021	Amount transferred out from subsidiaries of the Group	Recognized in profit or loss	Recognized in other comprehensive income	December 31, 2022
Unrealized profit from sales	$ 3,379	7,733	-	11,112	-	40,882	-	51,994
Unused tax losses carryforwards	-	7,755	-	7,755	(1,000)	-	-	6,755
Other	1,433	2,698	-	4,131	-	1,630	-	5,761
	$ 4,812	18,186	-	22,998	(1,000)	42,512	-	64,510

C. Unrecognized deferred tax assets

Deferred tax assets have not been recognized in respect of the following items.

	December 31, 2022	December 31, 2021
Unused tax losses carryforwards	**$ -**	**3,010**

The ROC Income Tax Act allows tax losses, as assessed by the tax authorities, to offset taxable income over current year for local tax reporting purposes.

As of December 31, 2022, the unused loss carryforwards and related expiration years of the Group were as follows:

Year of loss	Unused tax losses	Expiry date
2022 (estimated)	**$ 2,079**	2032

D. Assessment of tax

The Group's tax returns for the years through 2020 were assessed by the National Taxation Bureau of R.O.C..

(20) Earnings Per Share

	For the years ended December 31,	
	2022	**2021**
Basic earnings per share:		
Net profit attributable to ordinary shareholders of the Company	$ **650,106**	**165,283**
Weighted-average number of ordinary shares (in thousands)	**79,452**	**54,800**
Basic earnings per share (in dollars)	$ **8.18**	**3.02**
Diluted earnings per share:		
Net profit attributable to ordinary shareholders of the Company	$ **650,106**	**165,283**
Weighted-average number of ordinary shares (in thousands)	79,452	54,800
Add: effect of employee remuneration paid in stock	1,933	511
	81,385	**55,311**
Diluted earnings per share (in dollars)	$ **7.99**	**2.99**

(21) Revenue from contracts with customers

A. Revenue from main Market Region:

	For the years ended December 31,	
	2022	**2021**
Taiwan	**5,060,371**	**2,680,010**

B. Major products/service lines:

	For the years ended December 31,	
	2022	**2021**
Construction revenue	4,850,552	2,488,844
Service revenue	181,765	141,980
Sales revenue	84	27,918
Power electric revenue	27,970	21,268
	5,060,371	**2,680,010**
Timing of revenue recognition:		
Revenue transferred at a point in time	142,749	125,782
Revenue recognition over time	4,917,622	2,554,228
	5,060,371	**2,680,010**

C. Contract balances:

		December 31, 2022	December 31, 2021	January 1, 2021
Contract assets construction and equipment	$	636,983	720,894	472,671
Contract liabilities construction and equipment	$	566,984	316,231	97,493

The contract liabilities primarily relate to the advance consideration received from customers for construction contracts before the construction begins, for which revenue is recognized progressively during the constrction period.

As of January 1, 2022 included the contract liability balance at the beginning of the period were $316,231 thousand and the amount of revenue recognized was $208,377 thousand.

As of January 1, 2021 included the contract liability balance at the beginning of the period were $97,493 thousand and the amount of revenue recognized December 31, 2021 was $23,679 thousand, respectively.

The contract assets were mainly recognized revenue of work but not yet paid up at the reporting date. The contract asset is transferred to receivables when the entitlement to payment becomes unconditional.

The relevant for details on accounts and notes receivable and its impairment, please refer to note 6(3).

The major change in the balance of contract assets and contract liabilities is the difference between the time frame in the performance obligation to be satisfied by transferring ownership to the customer and the payment to be received. For the years ended December 31, 2022 and 2021, there is no significant changes.

The Group entered into a sales contract with TPK Touch Solutions Inc. for the energy storage Canbinet, PCs and energy storage management systems on December 2, 2022. The total price amounting to $2,752,108 thousand (before tax). As of December 31, 2022, 17.3% of the contract price has been received in advance at $476,115 thousand according to the contract.

D. The transaction price allocated to the outstanding performance obligations

On December 31, 2022 and 2021, the aggregate transaction price of the allocated to remaining performance obligations was $4,923,512 thousand and $3,143,499 thousand, respectively. The revenue is recognized progressively based on the progress towards complete satisfaction of contract and is expected to be completed in the next one to three years.

All consideration from contracts with customers is included in the transaction price presented above.

(22) Remuneration to employees, directors and supervisors

In accordance with the Articles of incorporation, the Company should contribute 5% to 10% of the profit as employee compensation and less than 3% as directors' remuneration when there is profit for the year. However, if the Company has accumulated deficits, the profit should be reserved to offset the deficit. Employees of subsidiaries may also be entitled to the employee remuneration of the Company, which can be settled in the form of cash or stock.

The Company estimated its remuneration to employees amounting to $71,481 thousand and $11,980 thousand and directors' and supervisors' remuneration amounting to $8,395 thousand and $2,800 thousand for the years ended December 31, 2022 and 2021, respectively. The estimated amounts mentioned above are calculated based on the profit before tax, excluding the remuneration to employees, directors and supervisors of each period, multiplied by the percentage of the remuneration to employees and directors, as specified in the Company's article. These remunerations were expensed under operating costs or operating expenses during 2022 and 2021. If there are any subsequent adjustments to the actual remuneration amounts after the annual shareholders' meeting, the adjustment will be regarded as changes in accounting estimates and will be reflected in profit or loss in the following year.

For the December 31, 2021, the remunerations to employees and directors amounted to $11,980 thousand and $2,800 thousand, respectively. The aforementioned remuneration was no difference between the actual amounts and the amounts accrued. The related information is available on the Market Observation Post System website.

(23) Interest income

	For the years ended December 31,	
	2021	**2021**
Interest income from bank deposits	$ 2,170	237
Other interest income	470	51
	$ 2,640	**288**

(24) Other Income

	For the years ended December 31,	
	2021	**2021**
Net gain from settlement of acquisition of power plant (Note 7)	$ 6,399	-
Recovery of write off accounts	3,000	333
Rent income	-	1,576
Scraps income	-	70
Other income	947	147
	$ 10,346	**2,126**

(25) Other gains and losses

	For the years ended December 31,	
	2021	**2021**
Losses on disposals of Intangible assets (Note 6(9))	$ (28,985)	-
Foreign exchange losses	(12,167)	(7)
Gain on disposal of investments	1,837	1,326
Gain on disposal of Intangible assets	-	9
Miscellaneous disbursements	(204)	(3,850)
	$ (39,519)	**(2,522)**

(26) Finance Costs

	For the years ended December 31,	
	2021	**2021**
Interest expense on bank loans	$ 12,196	4,837
Interest expense on lease liabilities	773	556
Other	1,403	54
	$ 14,372	**5,447**

(27) Financial instruments

A. Credit risk

(a) Exposure to credit risk

The carrying amount of financial assets represent the maximum amount exposed to credit risk.

(b) Concentration of credit risk

The Group's potential credit risk is derived primarily from cash in bank, cash equivalents, restricted bank deposit and trade receivables. Also, the Group deposits cash and restricted bank deposit in good credit financial institutions. The Group manages credit risk exposure related to each financial institution and believes that there is no significant concentration of credit risk on cash and restricted bank deposits.

The Group's potential credit risk is derived primarily from trade receivables. The major customers of the Group are centralized in renewable energy power generation industry. To reduce the credit risk of the accounts receivable, the Group has adopted a policy assessing the financial status of the customers and the possibility of collection of receivables on a regular basis. The Group also deal only with reputable parties and, where necessary, obtain collateral to mitigate the risk of financial losses arising from default.

(c) Credit risk of receivables

For credit risk exposure of accounts receivable, please refer to note 6(3).

All of financial assets excluding the above-mentioned accounts receivable are considered to be low risk, and thus the impairment provision recognized during the period was limited to 12 months expected losses. (Please refer to Note 4(7) for details on the Group determines whether credit risk is to be low risk). The loss allowance provision was determined as follows, Please refer to note 6(3) for details:

B. Liquidity risk

The following table shows the contractual maturities of financial liabilities

	Carrying value	Contractual Cash flows	Within a year	Over 1 years
Balance at December 31, 2022				
Non-derivative financial liabilities				
Short-term borrowings	$ 287,671	289,248	289,248	-
Short-term notes payables	29,932	30,000	30,000	-
Notes and Accounts payable (including related parties)	1,052,644	1,052,644	1,052,644	-
Salary and bonus payable	114,603	114,603	114,603	-
Other payables (including related parties)	8,469	8,469	8,469	-
Lease liabilities－current and non-current	62,902	67,558	18,968	48,590
Long-term borrowings (including current portion)	198,649	235,069	18,181	216,888
	$ 1,754,870	**1,797,591**	**1,532,113**	**265,478**
Balance at December 31, 2021				
Non-derivative financial liabilities				
Short-term borrowings	$ 279,111	280,139	280,139	-
Notes and Accounts payable (including related parties)	547,486	547,486	547,486	-
Salary and bonus payable	39,723	39,723	39,723	-
Other payables (including related parties)	203	203	203	-
Lease liabilities－current and non-current	24,599	26,723	7,201	19,522
Long-term borrowings (including current portion)	128,747	141,500	42,561	98,939
	$ 1,019,869	**1,035,774**	**917,313**	**118,461**

C. Interest rate risk

The Group's interest risk arises from the Group's short term and long-term borrowings that bear floating interest rates. The changes in effective rate along with the fluctuation of the interest rate influence the Group' future cash flow due to changes in effective interest rate of short term and long-term borrowings. The following sensitivity analysis is based on the risk exposure. Regarding liabilities with variable interest rates, the analysis is based on the assumption that the amount of liabilities outstanding at the reporting date was outstanding throughout the year.

The Group's short term and long-term borrowings that bear floating interest rates. If the interest rate increases or decreases by 0.25% the Group's net income will decrease/increase by $1,216 thousand and $1,020 thousand for the years ended December 31, 2022 and 2021, respectively, assuming all other variable factors remain constant.

D. Fair value of financial instruments

(a) Fair value hierarchy

The Group's carrying amount and the fair value of financial assets and liabilities (including information for fair value hierarchy, but excluding financial instruments whose fair values approximate the carrying amounts, and lease liabilities), are as follows:

	December 31, 2022				
	Carrying value	Fair value			
		Level 1	Level 2	Level 3	Total
Financial assets measured at amortized cost					
Cash and cash equivalents	$ 1,964,028	-	-	-	-
Notes and accounts receivable (including related parties)	52,227	-	-	-	-
Other receivables－related parties	8,031	-	-	-	-
Refundable deposits	177,456	-	-	-	-
Restricted (current and non-current) deposits	285,638	-	-	-	-
	$ 2,487,380	**-**	**-**	**-**	**-**
Non-current financial assets at FVOCI	**$ 35,000**	**-**	**-**	**35,000**	**35,000**

	December 31, 2022				
	Carrying value	Fair value			
		Level 1	Level 2	Level 3	Total
Financial liabilities measured at amortized cost					
Short-term borrowings	$ 287,671	-	-	-	-
Short-term notes payables	29,932	-	-	-	-
Notes and Accounts payable (including related parties)	1,052,644	-	-	-	-
Salary and bonus payable	114,603	-	-	-	-
Other payables (including related parties)	8,469	-	-	-	-
Lease liabilities－current and non-current	62,902	-	-	-	-
Long-term borrowings (including current portion)	198,649	-	-	-	-
	$ 1,754,870	**-**	**-**	**-**	**-**

	December 31, 2021				
	Carrying value	Fair value			
		Level 1	Level 2	Level 3	Total
Financial assets measured at amortized cost					
Cash and cash equivalents	$ 823,017	-	-	-	-
Notes and accounts receivable (including related parties)	118,151	-	-	-	-
Refundable deposits	50,971	-	-	-	-
Restricted (current and non-current) deposits	182,113	-	-	-	-
	$ 1,174,252	**-**	**-**	**-**	**-**
Financial liabilities measured at amortized cost					
Short-term borrowings	$ 279,111	-	-	-	-
Notes and Accounts payable (including related parties)	547,486	-	-	-	-
Salary and bonus payable	39,723	-	-	-	-
Other payables (including related parties)	203	-	-	-	-
Lease liabilities－current and non-current	24,599	-	-	-	-
Long-term borrowings (including current portion)	128,747	-	-	-	-
	$ 1,019,869	**-**	**-**	**-**	**-**

(b) Valuation technique of financial instruments not measured at fair value

The Group's valuation techniques and assumptions used for financial instruments not measured at fair value are as follows:

Fair value measurement for financial assets and liabilities measured at amortized cost based on the latest quoted price and agreed upon price if these prices are available in active markets. However, if no quoted prices are available, the discounted cash flows are used to estimate fair values. The fair value is determined by using valuation techniques and calculated as the discounting value of the estimated cash flows.

The fair values of refundable deposits are based on carrying amount as there is no fixed maturity.

(c) The reconciliation of Level 3 fair values

	For the years ended December 31,	
	2022	**2021**
Financial assets at fair value through other comprehensive income－equity investments without an active market		
Beginning at January 1	$ -	-
Purchas	35,000	-
Balance at December 31	**$ 35,000**	**-**

(d) Quantified information on significant unobservable inputs (Level 3) used in fair value measurement

The Group’s financial instruments that use Level 3 inputs to measure fair value is financial assets at FVOCI – equity investments.

Most of the fair value measurements categorized within Level 3 use the single and significant unobservable input. Equity investments without an active market contains multiple significant unobservable inputs. The significant unobservable inputs of equity investments without an active market are individually independent, and there is no correlation between them.

Quantified information regarding significant unobservable inputs are as follows:

Item	Valuation technique	Significant unobservable inputs	Interrelationship between significant unobservable inputs and fair value measurement
Financial assets at fair value through profit or loss – equity investments without an active market	the P/B Method	· The P/B ratio of the interbank companies is 4.8 times that of December 31, 2022 · The liquidity discount of December 31, 2022 is 20	· The higher the price-book percentage, the higher the fair value

There was no transfer between the different levels of fair value hierarchy for the years ended December 31, 2022 and 2021.

(28) Financial risk management

A. Overview

The Group has exposures to the following risks from its financial instruments:

(a) Credit risk

(b) Liquidity risk

(c) Market risk

The following likewise discusses the Group's exposure information, objectives, policies and processes for measuring and managing the above mentioned risks. For more disclosures about the quantitative effects of these risks exposures, please refer to the respective notes in the accompanying consolidated financial statements.

B. Structure of risk management

The Group's finance management department provides business services for the overall internal department, coordinating and coordinating access to financial market operations, monitors and manages the financial risks associated with the operations by analyzing the internal risk report on risk based on the degree and extent of the risk.

C. Credit risk

The credit risk of the Group is mainly due to cash and cash equivalents and receivables, these financial instruments arising from operating activities, as explained in the Group financial statements note 6(27).

D. Liquidity risk

There is no liquidity risk of being unable to raise capital to settle contract obligations since the Group has sufficient capital and working capital to fulfill the contract obligations.

E. Market risk

Market risk is the risk that changes in market prices, such as foreign exchange rates, interest rates and equity prices will affect The Group's income or the value of its holdings of financial instruments. The objective of market risk management is to manage and control market risk exposures within acceptable parameters while optimizing the return. The Group’s bank deposit, long and short-term loans bear floating interest and are financial assets and liabilities. The fluctuation in the market interest rate will affect effective rate of bank deposits, long-term and short-term bank borrowings and then influence The Group’s future cash flow.

(29) Capital management

Through clear understanding and managing of significant changes in external environment, related industry characteristics, and corporate growth plan, the Group manages its capital structure to ensure it has sufficient financial resources to sustain proper liquidity, to invest in capital expenditures, to repay debts and to distribute dividends in accordance to its plan. The management pursues the most suitable capital structure by monitoring and maintaining proper financial ratios as below. The Group enhance the returns of its shareholders through achieving an optimized debt-to-equity ratio from time to time.

	December 31, 2022	**December 31, 2021**
Total liabilities	2,706,161	1,507,469
Total equity	3,394,706	1,642,590
Interest bearing liabilities	516,252	407,858
Debt to equity ratio	80 %	92 %
Interest bearing debt to equity ratio	15 %	25 %

For the year ended December 31, 2022, the Group had increased its capital by cash in premium and causing a reduction in its liability to equity ratio, and interest bearing debt to equity ratio and increase in total loability and total equity.

(30) Non-cash Transaction of Financing Activities

	Short-term borrowings	Short-term notes and in payable	Long-term borrowings (including current portion)	Other payables (includimg related parties)	Lease liabilities	Total liabilities from financing activities
Balance on January 1, 2022	$ 279,111	-	128,747	-	24,599	432,457
Cash flows	6,120	29,712	69,902	(76,288)	(15,346)	14,100
Acquisition through business combination	2,440	-	-	76,288	-	78,728
Amount transferred out from subsidiaries of the Group	-	-	-	-	(3,757)	(3,757)
Non-Cash changes:						
Net Increase	-	-	-	-	57,406	57,406
Interest expense	-	220	-	-	-	220
Balance on December 31, 2022	**$ 287,671**	**29,932**	**198,649**	**-**	**62,902**	**579,154**

	Short-term borrowings	Long-term borrowings (including current portion)	Guarantee deposits	Lease liabilities	Total liabilities from financing activities
Balance on January 1, 2021	$ 61,295	165,841	20,000	13,869	261,005
Cash flows	217,816	(37,094)	(20,000)	(8,684)	152,038
Non-Cash changes:					
New leases	-	-	-	19,414	19,414
Balance on December 31, 2021	**$ 279,111**	**128,747**	**-**	**24,599**	**432,457**

7. Related-party transactions:

(1) Names and relationship with the Group

Name of related parties	Relationship with the Group
Star Power Energy Corporation (Star Power)	Joint venture of the Group
Aquastar Energy Co., Ltd. (Aquastar)	Joint venture of the Group (note 9)
Star Network Data Co., Ltd. (Star Network)	Joint venture of the Group (note 9)
Daytime Solar Energy Co., Ltd. (Daytime)	Subsidiary of Star Power (since August 2021)
Motech Power Alpha Co., Ltd. (MPA)	Subsidiary of Star Power
Sunny Go Solar Co., Ltd. (Sunny Go)	Subsidiary of Star Power (since August 2021)

Da Fu Energy Co., Ltd. (Da Fu)	Subsidiary of Star Power (note 4)
Fang Deng Green Energy Co., Ltd. (Fang Deng)	Subsidiary of Star Power (note 6)
Zhong Fang Green Energy Co., Ltd. (Zhong Fang)	Subsidiary of Star Power (note 6)
Ren Hua Green Energy Co., Ltd. (Renhua)	Subsidiary of Star Power (note 6)
Daybreak Fishery Management Consultants Co., Ltd. (DFM)	Subsidiary of Star Power (note 14)
Ri Yun Green Energy Co., Ltd. (Ri Yun)	Subsidiary of Star Fresh Power (note 1)
AcTek Energy Co., Ltd. (AcTek)	Associate of the Group (Note 3)
Ri Fa Green Energy Co., Ltd. (Ri Fa)	Associate of the Group (Note 13)
Yun Deng Green Energy Co., Ltd. (Yun Deng)	Associate of the Group (Note 13)
Titan Solar Co., Ltd. (Titan Solar)	Corporate director of the Group
Hong Din electric engineering CO., LTD. (Hong Din)	Same Chairman with the Group (Note 7)
Feng Yuan Co., Ltd. (Feng Yuan)	Same Chairman with the Group
Liang Yu Technology Co., Ltd. (Liang Yu)	Substantive related party of the Group (Note 2)
AcBel Polytech Inc. (AcBel)	Substantive related party of the Group (Note 3)
AcSacca Solar Energy Co., Ltd. (AcSacca)	Substantive related party of the Group (Note 3)
Kang Yang New Energy Co., Ltd. (Kang Yang New)	Substantive related party of the Group (Note 3)
Solarflex trading CO., LTD (Solarflex)	Substantive related party of the Group (Note 5)
Ding Li Power Technology Co., Ltd. (Ding Li)	Substantive related party of the Group (Note 5)
Ding Li Alloy Co., Ltd. (Ding Li Alloy)	Substantive related party of the Group (Note 5)
GreenRock Energy Co., Ltd. (GreenRock)	Substantive related party of the Group (Note 8)
Ri Dong Technology Fisheries Co., Ltd. (Ri Dong)	Substantive related party of the Group (Note 10)
Firstera International Co., Ltd. (Firstera)	Substantive related party of the Group (Note 11)
Tuo Neng Engineering Technology Co., Ltd. (Tuo Neng)	Substantive related party of the Group (Note 12)
Gigastorage Corporation (Gigastorage)	Substantive related party of the Group (Note 13)

Note 1: The Group sold all of its shares in Ri Yun to Aquastar in June 2022.

Note 2: The directors of the Group who invested in Liang Yu resigned in May 2021 and Liang Yu were therefore removed from The Group as a related party since June 2021.

Note 3: The Group invested in and served as a director of AcTek in April 2021 and resigned as a director since March 2022. AcBel is the parent company of AcTek, AcSacca and KangYang New, respectively. Therefore, since March 18, 2022, AcBel, AcSacca and Kang Yang New has been disassociated from the Group as related parties. the Group sold all of its shares in AcTek in December 2022; therefore, AcTek has been not a related party of the Group since December 2022

Note 4: The Group sold all of its shares in Da Fu to Star Power in August 2021.

Note 5: Ding Li, Ding Li Alloy and Solarflex are all associates of investees of Titan Solar.

Note 6: The Group sold all of its shares in Fang Deng, Zhong Fang and Ren Hua to Star Power in March 2022, please refer to note 6(6) for details.

Note 7: Hong Din completed the change of registration and the change of chairman in April 2021, and has been removed from the Group as a related party since April 2021.

Note 8: GreenRock was a director of Hui Ju, a subsidiary of the Group acquired in June 2022 and GreenRock resigned as a director of Hui Ju in November 2022. GreenRock has been removed from the Group as a related party since November 2022.

Note 9: Aquastar and Star Network were originally subsidiaries of the Group. In June and September 2022, respectively, their shareholding ratio decreased to 10% and 49%, respectively and became joint ventures, of the Group as a result of disproportionate subscription of shares in capital increase.

Note 10: Ri Dong is a director of DFM. The Group sold DFM to Star Power on September 30, 2022, therefore, Ri Dong is no longer a related party of the Group.

Note 11: Firstera was originally a director of DFM. The Group sold DFM to Star Power on September 30, 2022, therefore, Firstera is no longer a related party of the Group.

Note 12: Lee Yong Qing has been the Vice President of The Group and the Chairman of Tuo Neng since May 1, 2020. The Group has been a related party of the Group since that date. The Chairman of the Group was changed to Li Xin Kuan on July 27, 2020 and Li Xin Kuan has been the manager of the Group since April 1, 2021. Since December 1, 2021, the Chairman of the Group has been changed to Zhang Jing Ci; therefore, Tuo Neng is no longer a related party of the Group.

Note 13: In August and December 2022, The Group had not participated in the capital increase of its subsidiaries, Ri Fa and Yun Deng in proportion to its shareholding respectively; therefore, its shareholding ratio of Ri Fa and Yun Deng were both reduced to 40% and become the Group’s affiliated enterprises. In addition, Gigastorage is the parent company of Ri Fa and is therefore a related party of the Group.

Note 14: The Group disposed all of its shares in DFM to Star Power in September 2022 and it became a subsidiary of Star Power.

(2) The Group's significant related party transactions and balances were as follows:

A. Operating revenue and receivables from related parties

	Operating revenue	
	For the years ended December 31,	
	2022	2021
Subsidiaries of the Joint venture		
Ri Yun	$ 1,278,843	-
Da Fu	1,182,628	49,376
Zhong Fang	542,891	-
Fang Deng	540,928	-
Ren Hua	507,986	-
MPA	26,266	1,039,575
Others	4,982	6,496
Associates	198,419	91,710
Joint ventures	57,647	8,275
Other related parties	699	7,112
	$ 4,341,289	**1,202,544**

	Receivables from related parties	
	December 31, 2022	December 31, 2021
Subsidiaries of the Joint venture		
Ri Yun	$ 12,212	-
MPA	3,066	494
Others	1,018	-
Associates	-	23,048
Other related parties	-	362
	$ 16,296	**23,904**

	Construction receivable (contract assets)	
	December 31, 2022	December 31, 2021
Subsidiaries of the Joint venture		
Da Fu	$ 184,808	-
Fang Deng	79,988	-
Zhong Fang	77,974	-
MPA	-	489,910
Others	123,888	-
Associates	-	39,028
Joint ventures	2,737	-
	$ 469,395	**528,938**

	Advances of construction (account for as contract liabilities)	
	December 31, 2022	December 31, 2021
Subsidiaries of the Joint venture		
Da Fu	$ -	197,025
Other related parties		
Gigastorage	37,874	-
Titan Solar	-	28,047
Joint ventures	-	10,580
	$ 37,874	**235,652**

The pricing and payment terms for sales to related parties and contractual constructions undertaken for the related parties by the Group was negotiated between both parties, and not materially different from these with third parties.

B. Purchase, cost of engineering and payable to related parties

	Purchase for the period	
	For the years ended December 31,	
	2022	2021
Other related parties		
Gigastorage	$ 476,323	-
Ding Li	-	58,031
Others	-	3,186
	$ 476,323	**61,217**

	Cost of services and engineering	
	For the years ended December 31,	
	2022	2021
Other related parties	$	
TuoNeng	-	161,474
Others	-	1,036
	$ -	162,510

	Payables to Related Parties	
	December 31, 2022	December 31, 2021
Other related parties		
Gigastorage	$ 469,235	-
Ding Li	-	37,870
	$ 469,235	37,870

The pricing and payment terms for purchases of the equipment and part from related parties to and outsoucirng construction contracts to the related parties for the construction projects are negotiated between both parties and the payment period is pursuant to contract terms. There is no material difference from these with third parties.

C. Prepayments

	December 31, 2022	December 31, 2021
Other related parties	$ -	3,369

D. Property transactions

	Prepayments for equipment	
	December 31, 2022	December 31, 2021
Other related parties	$ -	14,609

The purchase of machine equipment from Titan Solar amounting to $58,653 thousand (tax excluded). As of , the amount of payables of the Group arising from the above transactions was $39,576 thousand (classified as other current liabilities). The sales revenue and related expenses arising from the prior acquisition of parallel power generation as required by the contract should be settled to the Group. Accordingly, this resulted in other income of $6,399 thousand and receivables of $6,719 thousand (classified as other receivables related party).

The sale of transportation equipment by the Group to Tuo Neng was sold at $61 thousand and gain on disposal of an asset amounting to $9 thousand was recognized.

The Group disposed of 100% equity interests in Ren Hua , Zhong Fang and Fang Deng to Star Power in March 2022, at a disposal price of $951 thousand, $935 thousand and $8,346 thousand, respectively.

The Group acquired 40% of equity interests from DFM's shareholders (Ri Dong which is a director of DFM, and Firstera is the supervisor of DFM) of DFM for $2,000 thousand in June 2022.

The Group sold all of its equity interests in Ri Yun to Aquastar, at a disposal price of $161,000 thousand and received gain on disposal of $1,247 thousand on June 29, 2022.

The Group acquired 49% of equity interest in An Kang in August 2022 at $107,800 thousand. Then, the partner of joint venture of An Kang involved in the cash capital increase of Star Network and acquired 51% of equity interest in September 2022. Due to operation strategy, the Company and partner of joint venture of An Kang both agreed to purchase 100% equity interest in An Kang by Star Network. The Group disposed 100% of its shares in An Kang to Star Network at the book value of $107,772 thousand.

The Group disposed 100% of its shares in DFM to Star Power in September 2022 at a disposal price of $4,459 thousand and a gain on disposal amounting to $0 thousand.

The Group disposed 100% of its shares in Da Fu to Star Power in August 2021 at a disposal price of $18,000 thousand and a gain on disposal amounting to $1,263 thousand, which is recognized in the statement of comprehensive income.

E. Loans to related parties

The details on loans to and from the related party account due to the working capital requirements of the related party are as follows (classified as other accounts receivable - related parties):

	For the years ended December 31, 2022			
Name of related party	**Highest balance of financing to other parties (Note)**	**Ending Balance of of actual usage amount**	**Interest income**	**Interests receivable**
Subsidiaries of the Joint venture	57,500	-	-	-
Associates	20,000	1,000	-	5
	$ 77,500	**1,000**	**-**	**5**

	For the years ended December 31, 2021			
Name of related party	**Highest balance of financing to other parties (Note)**	**Ending Balance of of actual usage amount**	**Interest income**	**Interests receivable**
Joint ventures	20,000	-	26	-
Other related parties	5,000	-	-	-
	$ **25,000**	**-**	**26**	**-**

Note: The highest ending balance approved by the Board of Directors.

The details on the capital loans to the Group from related party due to the acquisition of subsidiary, Hui Ju through merger are as follows:

	2022			
Name of related party	**Highest balance of financing to other parties**	**Balance at December 31, 2022**	**Interest expense**	**Interest payables**
Other related parties	$ **76,288**	**-**	**-**	**-**

F. Guarantee

The performance guarantee and the joint guarantees applied by the Group to National Property Administration, Ministry of Finance for the development of Da Fu for the years ended December 31, 2022 and 2021 were both $82,100, the balance of the endorsement guarantee on December 31, 2022 and 2021 were $0 thousand and $82,100 thousand, respectively.

In July 2022, Star Charger applied for a loan amounting to $128,200 thousand from the bank for purchasing equipments of charging stations. The Group provided an endorsement guarantee.

G. Refundable deposits

As of December 31, 2022 and 2021, the bid bond paid to other related parties by the Company due to construction project were both $2,400 thousand and classified as refundable deposits.

H. Various advances

The current liabilities generated from unsettled receipts under custody between related parties as of December 31, 2022 and 2021 were as follows:

Other receivable due from related party

Name of related party	**December 31, 2022**	**December 31, 2021**
Subsidiary of the Joint venture	$ **307**	**-**

Other payables due from related party:

Name of related party	December 31, 2022	December 31, 2021
Subsidiary of the Joint venture	$ 3,528	-
Other related parties	-	53
	$ 3,528	**53**

I. Various expenses

(a) Rental expenses

The Group entered into office lease contracts with other related parties in May 2021 for the term from May 1, 2021 to July 31, 2025 at an annual rent of $1,800 thousand, payable on a monthly basis. Depreciation charges recognized for the years ended December 31, 2022 and 2021 were $1,638 thousand and $1,092 thousand and interest expenses amounting to $111 thousand and $93 thousand, respectively. The balance of the right to use assets as of December 31, 2022 and 2021 were $4,232 thousand and $5,870 thousand, respectively. The balances of the lease liabilities were $4,309 thousand and $5,913 thousand, respectively. All payables arising from the above transactions were $150 thousand as of December 31, 2022 and 2021 (classified as other payables to related party).

(b) Other expenses

The total prices of the misc products purchased from the other related parties are $103 thousand and $136 thousand as of December 31, 2022 and 2021, respectively.

J. Land borrowing other's name for land registration

The Group's subsidiary, Ri Xun developed and implemented the solar power system project sites in 2021. It intends to purchase the agricultural land in the zhongxin bu section of Fenglin Town, Hualien County, for a total price amounting to $9,762 thousand, which is not directly held by Ri Xun due to statutory restrictions. Consequently, a contract of borrowing other name was signed with the chairman of The Group, Xie Yuanyi, who acquired the above agricultural land from a third party on the Group's behalf and registered the land title in his name until the date when Ri Xun engaged in a disposal of or request to transfer such land title and the registration of title transfer was completed.

According to the contract mentioned above, the land title certificate shall be kept by Ri Xun and it is agreed that Ri Xun is the actual owner of the land, and Ri Xun is to be financed byauthorized Xie Yuanyi to finance from the bank in respect of the land. Then, the repayment of the interest and principal of the such loan should be repaid to the bank by Ri Xun through Xie Yuanyi in installments. The balance of outstanding bank loans as of amounted to $4,791 thousand, which is accounted for as other payables to related party.

K. Power contract

The Group entered into a contract with MPA in August 2022 to purchase electricity for a period of three years. The Group expects to purchase 80% of power production capacity from MPA's solar power site with 100% of power wheeling ratio. The electricity charges are paid at the agreed base rate for the sale of electricity (the base price of profit distribution) and at the rate agreed by the Group for selling electricity to consumers, if that exceeds or falls below the base price of profit distribution, the profit shall be distributed at the percentage stipulated in the contract.

The cost of electricity purchases for the year ended was $17,863 thousand and the revenue from the sales of power wheeling was recognized as income at its net value. As of , the balances of payable to related party arising from such transactions amounted to $0.

(3) Key management personnel compensation

Key management personnel compensation are as follows:

	For the years ended December 31,	
	2021	**2021**
Short-term employee benefits	$ 23,170	19,656
Post-employment benefits	434	524
	$ 23,604	**20,180**

8. Assets Pledged as security:

The carrying amounts of pledged assets were as follows:

Pledged assets	Pledged to secure	December 31, 2022	December 31, 2021
Restricted time deposits (note)	long-term borrowings and engineering guarantee	$ 285,638	182,113
Machinery and Equipment	Collateral for long term bank loans	109,770	95,871
Land	Collateral for long term bank loans	80,310	-
Buildings and Construction	Collateral for long term bank loans	75,826	-
Total		**$ 551,544**	**277,984**

Note: account for as other financial assets current and other noncurrent financial assets.

9. Commitments and contingencies:

(1) As of December 31, 2022 and 2021, the Group provided performance guarantee and warranty guarantee totaling $388,944 thousand and $210,852 thousand, respectively, for purposes of undertaking solar power generation system project.

(2) For the endorsement guarantee provided by the Group to its subsidiaries and associates, please refer to detailed notes 7 and 13(1) 2. The details on guarantees and endorsements for other parties.

(3) Please refer to note 6(21) for the contracts of outstanding major contractual works that have been entered into by the Group.

(4) To build of the energy storage project, the Group entered into the contracts of the acquisition of energy storage cabinets, PCs and energy management systems for electrical and civil engineering works for the construction of power grids and high voltage energy storage systems with two manufacturers. The total price is $4,109,456 thousand (untaxed). As of December 31, 2022, $60,625 thousand has been paid and are accounted for as construction in progress.

(5) The Group procured solar photovoltaic system equipment, wire chase hangers, booster station supports, and commissioned solar photovoltaic system steel structures, solar photovoltaic modules installation and reinforcement works from LEADERTECH GLOBAL CO., LTD. (Leadertech). During 2022, Leadertech requested payment of the construction work and late penalty from the Group, amounting to $19,363 thousand and statutory interests. The Group claimed that due to serious hidden cracks and scratches on modules in the field during its construction period, the Group had the right to delay the penalty request as stipulated in the contract and the right to claim damages for module damages to offset defense, and that the matter was currently handled by a lawyer. The Group assesses that the above events will not have a material impact on the Group’s operations.

(6) For the construction of the Energy Storage complex in Liuying, Tainan, the Group entered into a contract with a manufacturer for the purchase and testing of battery storage cabinets on January 13, 2023, with the total contract price amounting to RMB57,356 thousand and NTD32,445 thousand, respectively.

10. Losses Due to Major Disasters: None.

11. Subsequent Events:

In January 2023, the Group entered into a contract with a supplier for the purchase of the booster station equipment for the construction of floating energy storages at Chenggong, Taitung and Shuishang,Chiayi with a total contract price of $280,600 thousand (untaxed).

12. Other:

A summary of employee benefits, depreciation, and amortization, by function, is as follows:

By functional / By item	For the years ended December 31, 2022			For the years ended December 31, 2021		
	Cost of good sold	**Operating expenses**	**Total**	**Cost of good sold**	**Operating expenses**	**Total**
Employee benefits						
Salary	62,645	167,046	229,691	49,572	85,033	134,605
Labor and health insurance	3,582	8,605	12,187	4,454	5,344	9,798
Pension	2,290	4,440	6,730	2,297	2,766	5,063
Other employee benefits expense	2,614	5,466	8,080	2,712	3,172	5,884
Depreciation	19,120	16,540	35,660	13,581	10,687	24,268
Amortization	1,227	2,320	3,547	1,165	752	1,917

Note: $90 thousand out of depreciation for the year ended December 31, 2022 has been transferred to biological assets.

13. Other disclosures:

(1) Information on significant transactions:

The following is the information on significant transactions required by the "Regulations Governing the Preparation of Financial Reports by Securities Issuers" for the Group:

A. Loans to other parties: Please refer to Table 1.

B. Guarantees endorsements provided: Please refer to Table 2.

C. Marketable securities held (excluding investment in subsidiaries, associates and joint ventures): Please refer to Table 3.

D. Marketable securities acquired or disposed of at cost or prices of at least NT$300 million or 20% of the capital stock: None.

E. Acquisition of individual real estate properties at costs of at least NT$300 million or 20% of the capital stockr: None.

F. Disposal of individual real estate properties at costs of at least NT$300 million or 20% of the capital stock: None.

G. Total purchases from or sales to related parties of at least NT$300 million or 20% of the capital stock: Please refer to Table 4.

H. Receivables from related parties with amounts exceeding the lower of NT$100 million or 20% of the capital stock: None.

I. Trading in derivative instruments: None.

J. The business relationships between the parent and the subsidiaries and significant transactions between them: None

(2) Information on investees: Please refer to Table 5.

(3) Information on investment in mainland China: None

(4) Major shareholders:

Shareholding Shareholder's Name	Shares	Percentage
Titan Solar	11,326,144	13.32 %
Fubon Financial Holding Venture Capital Co., Ltd.	7,441,177	8.75 %
Yuan Ruyi Co., Ltd.	7,177,448	8.44 %
Hong Cheng Investment Co., Ltd.	5,888,792	6.93 %
Zheng Shen Chi	4,473,214	5.26 %

Note: A. Information about the substantial shareholders of this form is provided by the Taiwan Depository & Clearing Corporation on the last business day of each quarter. It calculated the total number of shares held by shareholders owing ordinary shares and special shares have been delivered without physical media (including treasury shares) more than 5%. As to the difference of the basis of the calculation, the number of shares recorded in the Company's financial reports and shares not physically registered as delivered by the Company may vary.

B. The above information, in the case of a shareholder's delivery of shares to a trust, is disclosed by the individual sub-account of the principal who opened the trust in favor of the trustee. As to the declaration of the shareholders' shareholding of an insider in excess of 10% by virtue of the Securities Trading Act, the shareholding of the shareholders includes the addition of the shares of the shareholders in trust and the shareholder have right in the decision regarding the use of these kind of trust properties, and so on. For information on the declaration of the equity interest of the insider, please refer to the Public Information Observatory.

14. Segment information:

(1) General Information

The Group mainly engaged in the development of solar power generation systems, engineering construction and maintenances, and is a single industry segment. The segment financial information can be found in the consolidated financial statements. For sales (From external customers) and segment profit and loss, please refer to the consolidated statements of comprehensive income. For segment assets and liabilities, please see the consolidated balance sheets.

(2) Products and services information

Please refer to note 6(21) on information regarding products and services year ended and 2021.

(3) Geographic information

In presenting information on the basis of geography, segment revenue is based on the geographical location of customers, and segment assets are based on the geographical location of the assets.

A. Please refer to note 6(21) for the revenues from external customers for the years ended December 31, 2022 and 2021.

B. Non-current assets:

	December 31, 2022	December 31, 2021
Taiwan	$ 782,389	329,232

Non-current assets included property, plant and equipment, right of use assets and intangible asset, not including financial instruments and deferred tax assets.

(4) Information about major customers

Sales to individual customers representing greater than 10% of net sale of the Group were as follows:

	For the years ended December 31,	
	2022	2021
Ri Yun	$ 1,278,843	7,025
Da Fu	1,182,628	49,376
Zhong Fang	542,891	-
Fang Deng	540,928	-
Ren Hua	507,986	-
MPA	26,266	1,039,575
Customer A	-	743,502
Customer B	553,633	364,484
Customer C	-	277,096
	$ 4,633,175	2,481,058

HD Renewable Energy Co., Ltd. and Subsidiaries

Loans to other parties

For the year ended December 31, 2022

Table 1 (In Thousands of New Taiwan Dollars)

Number	Name of lender	Name of borrower	Account name	Related party	Highest balance of financing to other parties during the period	Ending balance	Actual usage amount during the period	Range of interest rates during the period	Purposes of fund financing for the borrower (Note 2)	Transaction amount for business between two parties	Reasons for short-term financing	Loss allowance	Collateral		Individual funding loan limits (Note 1)	Maximum limit of fund financing
													Item	Value		
0	HD	Ri Zhi	Other receivables - related parties	Yes	5,000	-	-	2.366%-2.867%	2	-	Operating capital	-	None	-	335,396	1,341,582
0	HD	Xiang Heng	Other receivables - related parties	Yes	20,000	2,000	-	2.366%-2.867%	2	-	Operating capital	-	None	-	335,396	1,341,582
0	HD	Fang Deng	Other receivables - related parties	Yes	10,000	-	-	2.366%-2.867%	2	-	Operating capital	-	None	-	335,396	1,341,582
0	HD	Ri Yun	Other receivables - related parties	Yes	20,000	-	-	2.366%-2.867%	2	-	Operating capital	-	None	-	335,396	1,341,582
0	HD	HB	Other receivables - related parties	Yes	2,000	-	-	2.366%-2.867%	2	-	Operating capital	-	None	-	335,396	1,341,582
0	HD	Ru Jing	Other receivables - related parties	Yes	1,000	-	-	2.366%-2.867%	2	-	Operating capital	-	None	-	335,396	1,341,582
0	HD	Ri Lu	Other receivables - related parties	Yes	2,000	-	-	2.366%-2.867%	2	-	Operating capital	-	None	-	335,396	1,341,582
0	HD	Wen Deng	Other receivables - related parties	Yes	20,000	10,000	1,000	2.366%-2.867%	2	-	Operating capital	-	None	-	335,396	1,341,582
0	HD	Yunn Deng	Other receivables - related parties	Yes	20,000	-	-	2.366%-2.867%	2	-	Operating capital	-	None	-	335,396	1,341,582
0	HD	He Shuo	Other receivables - related parties	Yes	1,000	-	-	2.366%-2.867%	2	-	Operating capital	-	None	-	335,396	1,341,582
0	HD	DFM	Other receivables - related parties	Yes	23,500	-	-	2.366%-2.867%	2	-	Operating capital	-	None	-	335,396	1,341,582
0	HD	Yun Deng	Other receivables - related parties	Yes	20,000	3,000	1,000	2.366%-2.867%	2	-	Operating capital	-	None	-	335,396	1,341,582
0	HD	Dan Deng	Other receivables - related parties	Yes	1,000	-	-	2.366%-2.867%	2	-	Operating capital	-	None	-	335,396	1,341,582
0	HD	Zhong Fang	Other receivables - related parties	Yes	2,000	-	-	2.366%-2.867%	2	-	Operating capital	-	None	-	335,396	1,341,582
0	HD	Ren Hua	Other receivables - related parties	Yes	2,000	-	-	2.366%-2.867%	2	-	Operating capital	-	None	-	335,396	1,341,582

Number	Name of lender	Name of borrower	Account name	Related party	Highest balance of financing to other parties during the period	Ending balance	Actual usage amount during the period	Range of interest rates during the period	Purposes of fund financing for the borrower (Note 2)	Transaction amount for business between two parties	Reasons for short-term financing	Loss allowance	Collateral		Individual funding loan limits (Note 1)	Maximum limit of fund financing
													Item	Value		
0	HD	New Century	Other receivables - related parties	Yes	2,000	-	-	2.366%-2.867%	2	-	Operating capital	-	None	-	335,396	1,341,582
0	HD	Star Exchange	Other receivables - related parties	Yes	10,000	-	-	2.366%-2.867%	2	-	Operating capital	-	None	-	335,396	1,341,582
0	HD	Ri Xun	Other receivables - related parties	Yes	5,000	-	-	2.366%-2.867%	2	-	Operating capital	-	None	-	335,396	1,341,582
0	HD	Shin De	Other receivables - related parties	Yes	10,000	10,000	-	2.366%-2.867%	2	-	Operating capital	-	None	-	335,396	1,341,582
0	HD	Star Charger	Other receivables - related parties	Yes	3,000	-	-	2.366%-2.867%	2	-	Operating capital	-	None	-	335,396	1,341,582
0	HD	Xin Sheng	Other receivables - related parties	Yes	2,000	-	-	2.366%-2.867%	2	-	Operating capital	-	None	-	335,396	1,341,582
	HD	DFC	Other receivables - related parties	Yes	7,500	-	-	2.366%-2.867%	2	-	Operating capital	-	None	-	335,396	1,341,582

Note 1: The total amount of the capital loan shall not exceed 40% of the net value of HD Renewable Technology Co., Ltd. Individual loans and limits are as follows:

(1) For the company's loan of fund to those having business transactions, the amount of each fund financing shall not exceed the amount of business transaction.

(2) For the companies necessary for short-term financing, the individual loan is limited to 10% of the net worth of the company.

Note 2: The nature of financing purposes: 1.Represents entities with business transaction with the Counpany. 2.Represents where an inter-company or inter firm short-term financing facility is necessary.

Note 3: All inter-company transactions among the Group and its subsidiaries have been written off in the consolidated financial statements.

HD Renewable Energy Co., Ltd. and Subsidiaries
Guarantees endorsements provided
For the year ended December 31, 2022

Table 2 (In Thousands of New Taiwan Dollars)

No.	Name of guarantor	Counter-party of guarantee and endorsement		Limitation on amount of guarantees and endorsements for a specific enterprise (Note)	Highest balance for guarantees and endorsements during the period	Balance of guarantees and endorsements as of reporting date	Actual usage amount during the period	Property pledged for guarantees and endorsements (Amount)	Ratio of accumulated amounts of guarantees and endorsements to net worth of the latest financial statements	Maximum amount for guarantees and endorsements	Parent company endorsements/ guarantees to third parties on behalf of subsidiary	Subsidiary endorsements/ guarantees to third parties on behalf of parent company	Endorsements/ guarantees to third parties on behalf of companies in Mainland China
		Name	Relationship with the Company										
0	HD	Star Charger	Subsidiaries	1,676,978	128,200	128,200	-	-	3.82 %	3,353,956	Y	N	N
0	HD	Da Fu	Subsidiary of the Joint venture	1,676,978	82,100	-	-	-	- %	3,353,956	N	N	Y

Note : The total amount of the endorsement/guarantees by the Company shall not exceed HD's net worth as stated in its lastest financial statements, and the amount of each endorsement/guarantee to a company shall not exceed 50% of HD’s net worth in the latest financial statements. In the case of the endorsement/guarantee was for the HD’s 100% directly or indirectly owned subsidiaries, total amount of endorsement/guarantee shall not exceed 50% of the net worth of HD.

HD Renewable Energy Co., Ltd. and Subsidiaries

Marketable securities held (excluding investment in subsidiaries, associates and joint ventures)

December 31, 2022

Table 3 (In Thousands of New Taiwan Dollars)

Name of holder	Category and name of security	Relationship with the Company	Account title	Ending balance				Highest Percentage of ownership (%) during the year	Note
				Shares/Units (thousands)	Carrying value	Percentage of ownership (%)	Fair value		
HD	BESEYE CLOUD SECURITY CO., LTD.	-	Noncurrent financial assets at fair value through other comprehensive income	3,500	35,000	14.40 %	35,000	14.40 %	

HD Renewable Energy Co., Ltd. and Subsidiaries

Related-party transactions for purchases and sales with amounts exceeding the lower than NT$300 million or 20% of the capital stock

For the year ended December 31, 2022

Table 4 (In Thousands of New Taiwan Dollars)

Name of company	Related party	Nature of relationship	Transaction details				Transactions with terms different from others		Notes/Accounts receivable (payable)		Note
			Purchase /Sale	Amount	Percentage of total purchases/ sales	Payment terms	Unit price	Payment terms	Ending balance	Percentage of total notes/accounts receivable (payable)	
HD	Ri Yun	the subsidiary of joint venture of the company	Operating revenue	(1,278,843)	(25)%	Note 1	-	Note 1	12,212	42%	
HD	Da Fu	the subsidiary of joint venture of the company	Operating revenue	(1,182,628)	(23)%	Note 1	-	Note 1	-	-%	
HD	Zhong Fang	the subsidiary of joint venture of the company	Operating revenue	(542,891)	(11)%	Note 1	-	Note 1	-	-%	
HD	Fang Deng	the subsidiary of joint venture of the company	Operating revenue	(540,928)	(11)%	Note 1	-	Note 1	-	-%	
HD	Ren Hua	the subsidiary of joint venture of the company	Operating revenue	(507,986)	(10)%	Note 1	-	Note 1	-	-%	
HD	Gigastorage	Substantive related party of the company	Purchase	476,233	15 %	Note 1	-	Note 1	(469,235)	(45)%	

Note 1: The sales conditions of the products above are based on the product type, market price competition and other trading conditions, and the selling price are agreed by both parties. The payment period is also in accordance with the contract.

Note 2: A one-way representation is made only in respect of companies that recognize revenue and assets.

Note 3: All inter-company transactions among HD and its subsidiaries have been eliminated in the consolidated financial statements.

HD Renewable Energy Co., Ltd. and Subsidiaries

Information on Investees(Excluding Information on Investee in Mainland China)

For the year ended December 31, 2022

Table 5

(In Thousands of New Taiwan Dollars/other currencies)

Name of investor	Name of investee	Location	Main businesses and products	Original investment amount		Balance as of December 31, 2022			Highest Percentage of Ownership during the year	Net income (losses) of investee	Share of profits/ losses of investee	Note
				December 31, 2022	December 31, 2021	Shares (thousands)	Percentage of Ownership	Carrying value				
The Company	You Deng	Taiwan	Energy technology Service	400	400	40	100.00 %	283	100.00 %	1	1	Subsidiaries
The Company	Ri Zhi	Taiwan	Energy technology Service	8,000	600	800	100.00 %	7,632	100.00 %	(147)	(147)	Subsidiaries
The Company	Ri Wei	Taiwan	Energy technology Service	10,000	10,000	1,000	100.00 %	4,978	100.00 %	81	81	Subsidiaries
The Company	HB	Taiwan	Energy technology Service	30,000	23,000	3,000	100.00 %	36,537	100.00 %	18,735	18,735	Subsidiaries
The Company	Xiang Heng	Taiwan	Energy technology Service	67,125	55,125	3,900	100.00 %	36,190	100.00 %	(207)	(29,192)	Subsidiaries
The Company	Fang Deng	Taiwan	Energy technology Service	-	8,500	-	-	-	100.00 %	(15)	(15)	Note 1
The Company	Ri Yu	Taiwan	Energy technology Service	5,300	310	530	100.00 %	5,149	100.00 %	(13)	(13)	Subsidiaries
The Company	Ri Xi	Taiwan	Energy technology Service	400	400	40	100.00 %	286	100.00 %	-	-	Subsidiaries
The Company	Ru Jing	Taiwan	Energy technology Service	2,000	2,000	200	100.00 %	1,553	100.00 %	1	1	Subsidiaries
The Company	Ri Lu	Taiwan	Energy technology Service	2,500	2,500	250	100.00 %	1,880	100.00 %	221	221	Subsidiaries
The Company	Ri Pu	Taiwan	Energy technology Service	400	400	40	100.00 %	281	100.00 %	-	-	Subsidiaries
The Company	Wen Deng	Taiwan	Energy technology Service	50,000	8,000	5,000	100.00 %	49,473	100.00 %	(423)	(423)	Subsidiaries
The Company	Yunn Deng	Taiwan	Energy technology Service	15,000	12,000	1,500	100.00 %	14,220	100.00 %	(232)	(232)	Subsidiaries
The Company	Titan Asset	Taiwan	Energy technology Service	100	100	10	100.00 %	15	100.00 %	(1)	(1)	Subsidiaries
The Company	He Shuo	Taiwan	Energy technology Service	-	30,000	-	-	-	100.00 %	(56)	(56)	Note 9
The Company	DFM	Taiwan	Energy technology Service	-	3,000	-	-	-	100.00 %	(2,139)	(1,273)	Note 7
The Company	Yin Deng	Taiwan	Energy technology Service	100	100	10	100.00 %	41	100.00 %	-	-	Subsidiaries
The Company	Dan Deng	Taiwan	Energy technology Service	1,500	1,500	150	100.00 %	(257)	100.00 %	(18)	(18)	Subsidiaries
The Company	Ri Chen	Taiwan	Energy technology Service	600	600	60	100.00 %	397	100.00 %	-	-	Subsidiaries
The Company	Zhong Fang	Taiwan	Energy technology Service	-	1,000	-	-	-	100.00 %	(14)	(14)	Note 1
The Company	Ren Hua	Taiwan	Energy technology Service	-	1,000	-	-	-	100.00 %	(14)	(14)	Note 1
The Company	New Century	Taiwan	Energy technology Service	10,000	200	-	100.00 %	9,797	100.00 %	(163)	(163)	Subsidiaries
The Company	Chang He	Taiwan	Energy technology Service	5,100	5,100	510	100.00 %	(3,074)	100.00 %	(1,323)	(1,323)	Subsidiaries
The Company	Star Exchange	Taiwan	Energy technology Service	20,000	1,000	2,000	100.00 %	20,829	100.00 %	1,324	1,324	Subsidiaries
The Company	Ri Xun	Taiwan	Energy technology Service	5,400	5,400	540	100.00 %	5,065	100.00 %	(233)	(233)	Subsidiaries

Name of investor	Name of investee	Location	Main businesses and products	Original investment amount		Balance as of December 31, 2022			Highest Percentage of Ownership during the year	Net income (losses) of investee	Share of profits/ losses of investee	Note
				December 31, 2022	December 31, 2021	Shares (thousands)	Percentage of Ownership	Carrying value				
The Company	Shin De	Taiwan	Energy technology Service	-	5,000	-	-	-	100.00 %	(196)	(196)	Note 10
The Company	ESS	Taiwan	Energy technology Service	160,000	100	16,000	80.00 %	155,538	100.00 %	(5,555)	(4,546)	Subsidiaries
The Company	Shin Yuan	Taiwan	Energy technology Service	100	100	10	100.00 %	59	100.00 %	(18)	(18)	Subsidiaries
The Company	Xin Sheng	Taiwan	Energy technology Service	2,000	60	200	100.00 %	890	100.00 %	(151)	(151)	Subsidiaries
The Company	Ri Fu	Taiwan	Energy technology Service	2,600	-	260	100.00 %	2,574	100.00 %	(34)	(26)	Subsidiaries
The Company	DFC	Taiwan	Energy technology Service	600	-	60	100.00 %	397	100.00 %	(203)	(203)	Subsidiaries
The Company	Star Charger	Taiwan	Energy technology Service	10,000	100	1,000	100.00 %	8,791	100.00 %	(978)	(978)	Subsidiaries
The Company	NFC	Taiwan	Energy technology Service	-	-	-	-	-	100.00 %	(9)	(9)	Note 1
The Company	Tian Hua	Taiwan	Energy technology Service	100	-	10	100.00 %	73	100.00 %	(27)	(27)	Subsidiaries
The Company	Tian Fang	Taiwan	Energy technology Service	100	-	10	100.00 %	74	100.00 %	(26)	(26)	Subsidiaries
The Company	Tian Tai	Taiwan	Energy technology Service	100	-	10	100.00 %	74	100.00 %	(26)	(26)	Subsidiaries
The Company	Tian Jie	Taiwan	Energy technology Service	100	-	10	100.00 %	74	100.00 %	(26)	(26)	Subsidiaries
The Company	Tian Xi	Taiwan	Energy technology Service	100	-	10	100.00 %	74	100.00 %	(26)	(26)	Subsidiaries
The Company	Tian Hui	Taiwan	Energy technology Service	100	-	10	100.00 %	74	100.00 %	(26)	(26)	Subsidiaries
The Company	Tian Yi	Taiwan	Energy technology Service	100	-	10	100.00 %	73	100.00 %	(27)	(27)	Subsidiaries
The Company	Tian Cheng	Taiwan	Energy technology Service	100	-	10	100.00 %	74	100.00 %	(26)	(26)	Subsidiaries
The Company	Tian Dong	Taiwan	Energy technology Service	100	-	10	100.00 %	74	100.00 %	(26)	(26)	Subsidiaries
The Company	Tian Chang	Taiwan	Energy technology Service	100	-	10	100.00 %	73	100.00 %	(27)	(27)	Subsidiaries
The Company	Tian Yu	Taiwan	Energy technology Service	100	-	10	100.00 %	74	100.00 %	(26)	(26)	Subsidiaries
The Company	Tian Yong	Taiwan	Energy technology Service	100	-	10	100.00 %	74	100.00 %	(26)	(26)	Subsidiaries
The Company	Tian Hong	Taiwan	Energy technology Service	100	-	10	100.00 %	73	100.00 %	(27)	(27)	Subsidiaries
The Company	Tian Sheng	Taiwan	Energy technology Service	100	-	10	100.00 %	74	100.00 %	(26)	(26)	Subsidiaries
The Company	SES	Taiwan	Energy technology Service	1,020	-	102	100.00 %	986	100.00 %	(34)	(34)	Subsidiaries
The Company	Star Aquaculture	Taiwan	Fisheries and aquaculture	9,000	-	900	90.00 %	7,562	100.00 %	(1,533)	(1,533)	Subsidiaries
The Company	Hui Ju	Taiwan	Energy technology Service	102,960	-	10,296	99.00 %	101,543	99.00 %	(2,242)	(1,417)	Subsidiaries
The Company	Ying Fa	Taiwan	Energy technology Service	990	-	99	99.00 %	869	99.00 %	(123)	(121)	Subsidiaries
				524,595	177,595			471,516	- %	3,921	(22,354)	

Name of investor	Name of investee	Location	Main businesses and products	Original investment amount		Balance as of December 31, 2022			Highest Percentage of Ownership during the year	Net income (losses) of investee	Share of profits/ losses of investee	Note
				December 31, 2022	December 31, 2021	Shares (thousands)	Percentage of Ownership	Carrying value				
The Company	Ri Jie	Taiwan	Energy technology Service	-	450	-	-	-	45.00 %	(11)	(5)	Associates
The Company	Ri Da	Taiwan	Energy technology Service	-	900	-	-	-	45.00 %	(11)	(5)	Associates
The Company	Ri Qing	Taiwan	Energy technology Service	2,914	2,914	291	34.44 %	3,043	34.44 %	294	101	Associates
The Company	Ri Fa	Taiwan	Energy technology Service	56,000	700	5,600	40.00 %	55,799	100.00 %	(463)	(223)	Note 4
The Company	AcTek	Taiwan	Energy technology Service	-	11,900	-	-	-	34.00 %	(1,663)	(565)	Note 11
Xiang Heng	AcTek	Taiwan	Energy technology Service	-	-	-	-	-	1.00 %	(1,663)	-	Note 11
The Company	Yun Deng	Taiwan	Energy technology Service	20,000	400	2,000	40.00 %	19,800	100.00 %	(224)	(143)	Note 8
				78,914	17,264			78,642	- %	(3,741)	(840)	
The Company	Ri Yun	Taiwan	Energy technology Service	-	64,400	-	-	-	100.00 %	(23)	(10)	Note 2
The Company	Star Power	Taiwan	Energy technology Service	252,000	200,000	25,200	20.00 %	49,982	20.00 %	44,953	8,991	Joint ventures
The Company	Star Network	Taiwan	Energy technology Service	378,903	100	37,890	49.00 %	378,883	100.00 %	(27)	(21)	Note 5
The Company	Aquastar	Taiwan	Energy technology Service	60,000	100	6,000	10.00 %	22,250	100.00 %	(480)	(55)	Note 3
The Company	An Kang	Taiwan	Energy technology Service	-	-	-	-	-	100.00 %	(59)	(29)	Note 6
				690,903	264,600			451,115		44,364	8,876	

Note 1: The Company disposed all its equity interest of Fang Deng, Ren Hua, NFC and Zhong Fang, in March 2022. Please refer to note 6(6) for details.
Note 2: The Company disposed its shareholding of 40% shares of its subsidiary, Ri Yun in June 2022. Please refer to note 6(5) for details.
Note 3: Aquastar was originally a subsidiary of the Company. In June 2022, Aqustar issued cash capital increase. Thus, the Company's shareholding ratio decreased to 10% as a result of the Company failing to subscribe in Aqustar capital increases in proportion original its shareholding.
Note 4: Ri Fa was originally a subsidiary of the Company. In August 2022, Ri Fa issued cash capital increase. Thus, the Company's shareholding ratio decreased to 40% as a result of the Company failing to subscribe in its capital increases in proportion to its shareholding.
Note 5: Star Network was originally a subsidiary of the Company. In September 2022, Star Network issued cash capital increase. Thus, the Company's shareholding ratio decreased to 49% as a result of the Company failing to subscribe in its capital increases in proportion to its shareholding.
Note 6: A joint venture company acquired by An Kang in August 2022 disposed of all of its equity interest in An Kang to Star Network in September 2022. Please refer to note 6(5) for details.
Note 7: The Company sold 100% of its shares DFM in September 2022. Please refer to note 6(6) for details.
Note 8: Yun Deng was originally a subsidiary of the Company. In December 2022, Yun Deng issued cash capital increase. Thus, the Company's shareholding ratio decreased to 40% as a result of the Company failing to subscribe in its capital increases in proportion to its shareholding as well as having sold 800 thousand shares in Yun Deng.
Note 9: The Company sold 100% of its shares, He Shuo in December 2022. Please refer to note 6(6) for details.
Note 10: The Company sold 100% of its shares, Shin De in December 2022. Please refer to note 6(6) for details.
Note 11: The Company and Xiang Heng sold 35% of their shares, AcTek in December 2022. Please refer to note 6(5) for details.
Note 12: All inter-company transactions among HD and its subsidiaries have been eliminated in the consolidated financial statements.