

**THAI SOLAR ENERGY PUBLIC COMPANY LIMITED**

**CONSOLIDATED AND SEPARATE FINANCIAL STATEMENTS**

**31 DECEMBER 2019**

## **Independent Auditor's Report**

To the shareholders and the Board of Directors of Thai Solar Energy Public Company Limited

### **My opinion**

In my opinion, the consolidated financial statements of Thai Solar Energy Public Company Limited (the Company) and its subsidiaries (the Group) and the separate financial statements of the Company present fairly, in all material respects, the consolidated and separate financial position of the Group and of the Company as at 31 December 2019, and the consolidated and separate financial performance and the consolidated and separate cash flows for the year then ended in accordance with Thai Financial Reporting Standards (TFRSs).

### **What I have audited**

The consolidated financial statements and the separate financial statements comprise:

- the consolidated and separate statements of financial position as at 31 December 2019;
- the consolidated and separate statements of comprehensive income for the year then ended;
- the consolidated and separate statements of changes in equity for the year then ended;
- the consolidated and separate statements of cash flows for the year then ended; and
- the notes to the consolidated and separate financial statements, which include a summary of significant accounting policies.

### **Basis for opinion**

I conducted my audit in accordance with Thai Standards on Auditing (TSAs). My responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the consolidated and separate financial statements section of my report. I am independent of the Group and the Company in accordance with the Federation of Accounting Professions under the Royal Patronage of his Majesty the King's Code of Ethics for Professional Accountants together with the ethical requirements that are relevant to my audit of the consolidated and separate financial statements, and I have fulfilled my other ethical responsibilities in accordance with these requirements. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

### **Key audit matters**

Key audit matters are those matters that, in my professional judgment, were of most significance in my audit of the consolidated and separate financial statements of the current period. I determine one key audit matter : Business Combinations. The matter was addressed in the context of my audit of the consolidated and separate financial statements as a whole, and in forming my opinion thereon, and I do not provide a separate opinion on the matter.

Key audit matter	How my audit addressed the key audit matter
<p><b><i>Business combinations</i></b></p> <p>Refer to note 13 and note 31 to the financial statements related to investment in subsidiaries and business combinations. During 2019, the Group acquired investments in three companies which operate in ground-mounting solar power plants. The total purchase consideration paid was Baht 786.97 million. The Group's management assessed that the acquisition of these investments qualified as a business combination by applying the definition in TFRS 3 (revised 2018) - Business Combinations.</p> <p>The management engaged independent valuer to prepare the purchase price allocation to evaluate fair value of net assets acquired.</p> <p>I focused on this area because the amounts of these transactions are significant. In addition, the valuation method was complex and involved management's judgement on input and assumptions in the valuation model as well as discount rates applied</p>	<p>My audit procedures included the followings;</p> <ul style="list-style-type: none"> <li>• I assessed the management's consideration whether the investments should be accounted for as a business combination under TFRS 3.</li> <li>• I evaluated the valuer's competency, independence and objectivity. I assessed the appropriateness of the identifiable assets acquired and the liabilities assumed at the acquisition date.</li> <li>• In testing the fair valuation method, I engaged an auditor expert to review the appropriateness and reasonableness of the methodology used in the valuation, the estimation of the discount rate and discount factor, and the model's logic and calculations, comparing with market practice in a comparable industry.</li> <li>• I evaluated the reasonableness of key assumptions applied in purchase price allocation by comparing with relative contracts, the subsidiaries' historical data and market data in the comparable industry.</li> </ul> <p>From the above procedures performed, I found that the acquisition of investments was a business combination in accordance with TFRS 3 and the assumptions applied in purchase price allocation were reasonable. I evaluated the accounting treatment and the disclosures made in note to financial statements, I did not note any significant issue.</p>

### **Other information**

The directors are responsible for the other information. The other information comprises the information included in the annual report but does not include the consolidated and separate financial statements and my auditor's report thereon. The annual report is expected to be made available to me after the date of this auditor's report.

My opinion on the consolidated and separate financial statements does not cover the other information and I will not express any form of assurance conclusion thereon.

In connection with my audit of the consolidated and separate financial statements, my responsibility is to read the other information identified above when it becomes available and, in doing so, consider whether the other information is materially inconsistent with the consolidated and separate financial statements or my knowledge obtained in the audit, or otherwise appears to be materially misstated.

When I read the annual report, if I conclude that there is a material misstatement therein, I am required to communicate the matter to the audit committee.

### **Responsibilities of the directors for the consolidated and separate financial statements**

The directors are responsible for the preparation and fair presentation of the consolidated and separate financial statements in accordance with TFRSs, and for such internal control as the directors determine is necessary to enable the preparation of consolidated and separate financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated and separate financial statements, the directors are responsible for assessing the Group and the Company'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 the directors either intend to liquidate the Group and the Company or to cease operations, or has no realistic alternative but to do so.

The audit committee assists the directors in discharging their responsibilities for overseeing the Group and the Company's financial reporting process.

### **Auditor's responsibilities for the audit of the consolidated and separate financial statements**

My objectives are to obtain reasonable assurance about whether the consolidated and separate 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 my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with TSAs 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 and separate financial statements.

As part of an audit in accordance with TSAs, I exercise professional judgment and maintain professional scepticism throughout the audit. I also:

- Identify and assess the risks of material misstatement of the consolidated and separate 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 my 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.
- 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 and the Company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.
- Conclude on the appropriateness of the directors' 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 and the Company's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the consolidated and separate financial statements or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my auditor's report. However, future events or conditions may cause the Group and the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated and separate financial statements, including the disclosures, and whether the consolidated and separate financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient 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. I am responsible for the direction, supervision and performance of the group audit. I remain solely responsible for my audit opinion.

I communicate with the audit committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

I also provide the audit committee with a statement that I 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 my independence, and where applicable, related safeguards.

From the matters communicated with the audit committee, I determine those matters that were of most significance in the audit of the consolidated and separate financial statements of the current period and are therefore the key audit matters. I describe these matters in my auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, I determine that a matter should not be communicated in my report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

PricewaterhouseCoopers ABAS Ltd.

**Kajornkiet Aroonpirodkul**  
Certified Public Accountant (Thailand) No. 3445  
Bangkok  
27 February 2020

**Thai Solar Energy Public Company Limited**  
**Statement of Financial Position**  
**As at 31 December 2019**

	Notes	Consolidated		Separate	
		financial statements		financial statements	
		2019	2018	2019	2018
		Baht	Baht	Baht	Baht
<b>Assets</b>					
<b>Current assets</b>					
Cash and cash equivalents	8	643,594,118	561,020,761	43,843,636	209,557,883
Short-term restricted bank deposits	9	18,864,046	74,399,234	14,912,759	11,602,676
Short-term investments	10	221,114,307	459,753	221,114,307	459,753
Trade and other receivables	11	430,399,966	478,067,350	263,930,877	258,869,056
Short-term loans to subsidiaries	32.3	-	-	701,000,825	335,287,932
Current portion of long-term loans to subsidiaries	32.4	-	-	61,600,000	-
Inventories		24,028,968	14,452,830	-	-
Refundable Value Added Tax		273,156,145	181,178,565	-	-
Other current assets	12	30,316,921	152,581,949	14,582,520	11,977,634
<b>Total current assets</b>		<b>1,641,474,471</b>	<b>1,462,160,442</b>	<b>1,320,984,924</b>	<b>827,754,934</b>
<b>Non-current assets</b>					
Long-term restricted bank deposits	9	34,239,939	12,008,535	12,365,952	1,050,000
Long-term loans to subsidiaries	32.4	-	-	5,004,151,459	4,333,468,428
Receivables from disposal of investments	32.2	-	-	1,383,683,149	1,383,683,149
Investments in subsidiaries	13.2	-	-	1,199,149,897	1,198,749,905
Investments in joint ventures	13.1	1,840,054,520	1,787,086,887	350,000,130	350,000,130
Investment properties	14	103,857,149	89,977,885	89,977,885	89,977,885
Property, plant and equipment	15	7,549,859,170	6,928,083,195	273,737,922	280,233,690
Goodwill	16	17,112,763	17,726,430	-	-
Intangible assets	17	4,669,898,201	4,376,580,242	7,057,176	7,679,330
Deferred tax assets	18	1,623,005	2,409,825	-	-
Other non-current assets		11,871,739	13,201,756	7,339,848	2,652,339
<b>Total non-current assets</b>		<b>14,228,516,486</b>	<b>13,227,074,755</b>	<b>8,327,463,418</b>	<b>7,647,494,856</b>
<b>Total assets</b>		<b>15,869,990,957</b>	<b>14,689,235,197</b>	<b>9,648,448,342</b>	<b>8,475,249,790</b>

Director \_\_\_\_\_ Director \_\_\_\_\_

The accompanying notes are an integral of these consolidated and separate financial statements.

**Thai Solar Energy Public Company Limited**  
**Statement of Financial Position (Cont'd)**  
**As at 31 December 2019**

	Notes	Consolidated financial statements		Separate financial statements	
		2019 Baht	2018 Baht	2019 Baht	2018 Baht
<b>Liabilities and equity</b>					
<b>Current liabilities</b>					
Short-term borrowings from financial institutions	20.1	98,470,171	98,794,277	98,470,171	98,794,277
Construction and other payables	19	199,267,433	278,445,782	45,968,588	42,593,513
Current portion of right in power purchase agreement payables		2,056,215	-	-	-
Current portion of finance lease liabilities	20.2	7,195,003	2,619,884	2,720,032	2,619,884
Current portion of long-term borrowings	20.3	737,755,685	437,241,304	272,894,555	175,888,656
Short-term loan from subsidiary	32.5	-	-	22,500,000	22,500,000
Current portion of debentures	20.5	949,800,983	2,048,530,153	949,800,983	2,048,530,153
Income tax payable		4,404,066	1,349,856	-	-
Other current liabilities		26,403,034	15,484,548	5,292,403	966,918
<b>Total current liabilities</b>		<b>2,025,352,590</b>	<b>2,882,465,804</b>	<b>1,397,646,732</b>	<b>2,391,893,401</b>
<b>Non-current liabilities</b>					
Right in power purchase agreement payables		73,328,549	-	-	-
Finance lease liabilities	20.2	13,280,673	7,979,672	5,259,640	7,979,672
Long-term borrowings from financial institutions	20.3	5,736,434,390	5,922,634,037	2,291,060,602	2,062,779,803
Debentures	20.5	2,345,024,775	949,065,843	2,345,024,775	949,065,843
Employee benefit obligations	21	13,521,825	8,606,509	13,521,825	8,606,509
Provision for decommissioning costs		2,584,824	2,454,578	2,584,824	2,454,578
Deferred tax liabilities	18	28,066,973	1,335,446	3,111,610	1,266,952
Other non-current liabilities		72,000	72,000	72,000	72,000
<b>Total non-current liabilities</b>		<b>8,212,314,009</b>	<b>6,892,148,085</b>	<b>4,660,635,276</b>	<b>3,032,225,357</b>
<b>Total liabilities</b>		<b>10,237,666,599</b>	<b>9,774,613,889</b>	<b>6,058,282,008</b>	<b>5,424,118,758</b>
<b>Equity</b>					
Share capital					
Authorised share capital					
Ordinary shares 2,477,474,454 shares of par Baht 1 each (2018: 2,450,250,000 shares of par Baht 1 each)	22	2,477,474,454	2,450,250,000	2,477,474,454	2,450,250,000
Issued and paid-up share capital					
Ordinary shares 2,117,716,281 shares of paid-up Baht 1 each (2018: 1,905,749,580 shares of paid-up Baht 1 each)	22	2,117,716,281	1,905,749,580	2,117,716,281	1,905,749,580
Premium on ordinary shares	22	1,045,504,325	727,554,273	1,045,504,325	727,554,273
Retained earnings					
Appropriated-legal reserve	23	81,303,726	63,972,012	67,603,094	50,894,012
Unappropriated retained earnings		2,856,783,618	2,207,230,671	359,342,634	366,933,167
Other components of equity		(473,307,381)	(134,119,095)	-	-
Equity attributable to owners of the parent		5,628,000,569	4,770,387,441	3,590,166,334	3,051,131,032
Non-controlling interests		4,323,789	144,233,867	-	-
<b>Total equity</b>		<b>5,632,324,358</b>	<b>4,914,621,308</b>	<b>3,590,166,334</b>	<b>3,051,131,032</b>
<b>Total liabilities and equity</b>		<b>15,869,990,957</b>	<b>14,689,235,197</b>	<b>9,648,448,342</b>	<b>8,475,249,790</b>

The accompanying notes are an integral of these consolidated and separate financial statements.

**Thai Solar Energy Public Company Limited**  
**Statement of Comprehensive Income**  
**For the year ended 31 December 2019**

	Notes	Consolidated		Separate	
		financial statements		financial statements	
		2019	2018	2019	2018
		Baht	Baht	Baht	Baht
Revenue from sales		1,235,447,207	496,417,874	2,280	1,242,355
Subsidy for adders		68,702,780	22,339,621	-	1,499,520
Management service fee income		44,741,114	42,610,585	94,735,249	74,351,127
Cost of sales and services		(911,358,079)	(435,172,853)	(74,633,921)	(88,386,181)
<b>Gross profit (loss)</b>		<b>437,533,022</b>	<b>126,195,227</b>	<b>20,103,608</b>	<b>(11,293,179)</b>
Dividends income		56	53	618,380,107	586,572,101
Other income	24	92,716,644	156,191,219	9,753,504	69,461,144
Administrative expenses		(233,345,785)	(206,642,688)	(136,551,349)	(138,886,509)
(Loss) gain on exchange rate		(5,414,481)	(47,475)	(194,165,264)	(65,893,001)
Other expenses	15	-	(296,000,000)	-	(296,000,000)
Finance costs	26	(147,191,521)	(123,240,033)	(198,870,291)	(260,140,885)
Share of profit from joint ventures		659,517,685	610,188,427	-	-
<b>Profit (loss) before income tax</b>		<b>803,815,620</b>	<b>266,644,730</b>	<b>118,650,315</b>	<b>(116,180,329)</b>
Income tax	27	(5,073,121)	(83,576,890)	(1,832,206)	(74,440,259)
<b>Profit (loss) for the year</b>		<b>798,742,499</b>	<b>183,067,840</b>	<b>116,818,109</b>	<b>(190,620,588)</b>
<b>Other comprehensive income (loss) for the year:</b>					
Items that will not be reclassified to profit or loss					
Remeasurements of post-employment benefit obligations	21	(2,873,219)	-	(2,873,219)	-
Income tax on the above item	21	(12,452)	-	(12,452)	-
Items that will be reclassified subsequently to profit or loss:					
Currency translation differences		(328,656,642)	(4,177,321)	-	-
<b>Total comprehensive income (loss) for the year</b>		<b>467,200,186</b>	<b>178,890,519</b>	<b>113,932,438</b>	<b>(190,620,588)</b>
<b>Profit (loss) attributable to:</b>					
Owners of the parent		774,584,221	173,954,320	116,818,109	(190,620,588)
Non-controlling interests		24,158,278	9,113,520	-	-
		<b>798,742,499</b>	<b>183,067,840</b>	<b>116,818,109</b>	<b>(190,620,588)</b>
<b>Total comprehensive income (loss) attributable to:</b>					
Owners of the parent		443,033,716	169,656,984	113,932,438	(190,620,588)
Non-controlling interests		24,166,470	9,233,535	-	-
		<b>467,200,186</b>	<b>178,890,519</b>	<b>113,932,438</b>	<b>(190,620,588)</b>
<b>Earnings (loss) per share</b>					
Basic earnings (loss) per share	29	0.40	0.09	0.06	(0.10)

The accompanying notes are an integral of these consolidated and separate financial statements.

Thai Solar Energy Public Company Limited  
Statement of Changes in Equity  
For the year ended 31 December 2019

Consolidated financial statements									
Attributable to owners of the parent									
Notes	Issued and paid-up share capital Baht	Premium on ordinary share capital Baht	Retained earnings		Other components of equity		Total owners of the parent Baht	Non-controlling interests Baht	Total Baht
			Appropriated - legal reserve Baht	Unappropriated Baht	Changes in parent's ownership interest in subsidiary Baht	Translation of financial statements Baht			
<b>Opening balance at 1 January 2018</b>	1,815,000,000	727,554,273	62,894,012	2,135,195,319	-	(122,052,836)	4,618,590,768	162,151,409	4,780,742,177
<b>Change in equity for the year</b>									
Additional investment in subsidiaries by purchasing shares from non-controlling interests	-	-	-	-	(7,768,923)	-	(7,768,923)	(27,151,077)	(34,920,000)
Appropriation of legal reserve	23	-	1,078,000	(1,078,000)	-	-	-	-	-
Share dividends	22	90,749,580	-	(90,749,580)	-	-	-	-	-
Cash dividends	30	-	-	(10,091,388)	-	-	(10,091,388)	-	(10,091,388)
Total comprehensive income for the year		-	-	173,954,320	-	(4,297,336)	169,656,984	9,233,535	178,890,519
<b>Closing balance at 31 December 2018</b>	<u>1,905,749,580</u>	<u>727,554,273</u>	<u>63,972,012</u>	<u>2,207,230,671</u>	<u>(7,768,923)</u>	<u>(126,350,172)</u>	<u>4,770,387,441</u>	<u>144,233,867</u>	<u>4,914,621,308</u>
<b>Opening balance at 1 January 2019</b>	1,905,749,580	727,554,273	63,972,012	2,207,230,671	(7,768,923)	(126,350,172)	4,770,387,441	144,233,867	4,914,621,308
<b>Change in equity for the year</b>									
Additional investment in subsidiaries by purchasing shares from non-controlling interests	13.2	-	-	-	(10,523,452)	-	(10,523,452)	(164,076,548)	(174,600,000)
Appropriation of legal reserve	23	-	17,331,714	(17,331,714)	-	-	-	-	-
Issuance of ordinary shares	22	211,966,701	317,950,052	-	-	-	529,916,753	-	529,916,753
Cash dividends	30	-	-	(104,813,889)	-	-	(104,813,889)	-	(104,813,889)
Total comprehensive income for the year		-	-	771,698,550	-	(328,664,834)	443,033,716	24,166,470	467,200,186
<b>Closing balance at 31 December 2019</b>	<u>2,117,716,281</u>	<u>1,045,504,325</u>	<u>81,303,726</u>	<u>2,856,783,618</u>	<u>(18,292,375)</u>	<u>(455,015,006)</u>	<u>5,628,000,569</u>	<u>4,323,789</u>	<u>5,632,324,358</u>

The accompanying notes are an integral of these consolidated and separate financial statements.

**Thai Solar Energy Public Company Limited**  
**Statement of Changes in Equity (Cont'd)**  
**For the year ended 31 December 2019**

	Notes	Separate financial statements				Total Baht
		Issued and paid-up share capital Baht	Premium on ordinary share capital Baht	Retained earnings		
				Appropriated - legal reserve Baht	Unappropriated Baht	
<b>Opening balance at 1 January 2018</b>		1,815,000,000	727,554,273	50,894,012	658,394,723	3,251,843,008
<b>Change in equity for the year</b>						
Share dividends	22	90,749,580	-	-	(90,749,580)	-
Cash dividends	30	-	-	-	(10,091,388)	(10,091,388)
Total comprehensive loss for the year		-	-	-	(190,620,588)	(190,620,588)
<b>Closing balance at 31 December 2018</b>		<u>1,905,749,580</u>	<u>727,554,273</u>	<u>50,894,012</u>	<u>366,933,167</u>	<u>3,051,131,032</u>
<b>Opening balance at 1 January 2019</b>		1,905,749,580	727,554,273	50,894,012	366,933,167	3,051,131,032
<b>Change in equity for the year</b>						
Appropriation of legal reserve	23	-	-	16,709,082	(16,709,082)	-
Issuance of ordinary shares	22	211,966,701	317,950,052	-	-	529,916,753
Cash dividends	30	-	-	-	(104,813,889)	(104,813,889)
Total comprehensive income for the year		-	-	-	113,932,438	113,932,438
<b>Closing balance at 31 December 2019</b>		<u>2,117,716,281</u>	<u>1,045,504,325</u>	<u>67,603,094</u>	<u>359,342,634</u>	<u>3,590,166,334</u>

The accompanying notes are an integral of these consolidated and separate financial statements.

**Thai Solar Energy Public Company Limited**
**Statement of Cash Flows**
**For the year ended 31 December 2019**

	Notes	Consolidated		Separate	
		financial statements		financial statements	
		2019	2018	2019	2018
		Baht	Baht	Baht	Baht
<b>Cash flows from operating activities</b>					
Profit (loss) before income tax		803,815,620	266,644,730	118,650,315	(116,180,329)
Adjustments for:					
Depreciation	14, 15	298,300,124	145,968,764	8,722,027	26,131,299
Amortisation	17	43,154,725	11,073,552	2,144,434	1,111,493
Share of profit from investments in joint ventures	13.1	(659,517,685)	(610,188,427)	-	-
Provision for employee benefits obligations	21	5,959,136	2,652,204	5,959,136	2,652,204
Unrealised (gain) loss on exchange		(4,493,831)	(2,024,288)	183,834,020	(73,463,351)
Fair value gain on trading securities	10	(497,803)	-	(497,803)	-
Gain on disposal of trading securities		(974,492)	(1,349,250)	(974,492)	(1,349,250)
Loss (reversal) from impairment of assets	15	13,079,191	296,000,000	(577,706)	296,000,000
Loss (gain) from disposal/write-off equipment		548,712	37,848	(21,887)	(18,515)
Loss from write-off withholding tax		16,467	17,528	-	-
Dividends income		(56)	(53)	(618,380,107)	(586,572,101)
Interest income	24	(1,756,685)	(23,090,909)	(6,463,021)	(24,495,479)
Other income		-	(1,578,280)	-	(3,030,593)
Finance cost	26	147,191,521	123,240,033	198,870,290	260,140,885
Gain on bargain purchase of subsidiaries	31	(56,004,450)	-	-	-
Loss on impairment of goodwill	16	971,663	-	-	-
		589,792,157	207,403,452	(108,734,794)	(219,073,737)
<b>Changes in operating assets and liabilities</b>					
Trade and other receivables		101,708,164	(393,228,292)	9,521,134	(10,822,156)
Inventories		(9,576,138)	(14,452,830)	-	-
Value added tax refundable		43,782,264	(67,167,834)	-	241,228
Derivatives assets		-	81,781,462	-	81,781,462
Other current assets		5,444,854	(57,076,636)	65,722	(324,323)
Other non-current assets		3,938,719	13,923,480	(4,695,979)	1,259,199
Other payables		(38,365,921)	35,085,118	2,069,083	315,560
Other current liabilities		3,594,680	773,786	4,325,485	283,267
Employee benefit payments	21	(3,917,039)	(121,452)	(3,917,039)	(121,452)
Cash flows from (used in) operating activities		696,401,740	(193,079,746)	(101,366,388)	(146,460,952)
<u>Add</u> Income tax received		-	1,546,610	-	1,546,610
<u>Less</u> Income tax paid		(3,324,445)	(12,787,837)	(2,670,607)	(2,279,665)
Cash flows from (used in) operating activities		693,077,295	(204,320,973)	(104,036,995)	(147,194,007)

The accompanying notes are an integral of these consolidated and separate financial statements.

**Thai Solar Energy Public Company Limited**
**Statement of Cash Flows (Cont'd)**
**For the year ended 31 December 2019**

	Notes	Consolidated		Separate	
		financial statements		financial statements	
		2019	2018	2019	2018
		Baht	Baht	Baht	Baht
<b>Cash flows from investing activities</b>					
Acquisition of subsidiaries, net of cash acquired		(745,028,449)	(45,909,210)	(399,992)	(488,700,475)
Proceeds from disposals of investment in subsidiaries		-	-	-	424,249,995
Increase in restricted bank deposits		33,319,048	(5,603,737)	(14,626,035)	(2,742,524)
Purchase of short-term investments	10	(995,390,807)	(510,971,859)	(995,390,807)	(510,971,859)
Proceeds from disposals of short-term investments		776,208,548	605,934,630	776,208,548	605,934,630
Short-term loans made to subsidiaries	32.3	-	-	(488,000,000)	(663,484,810)
Short-term loan repayments received from subsidiaries	32.3	-	-	67,287,107	380,741,723
Long-term loans made to subsidiaries	32.4	-	-	(1,018,162,498)	(563,736,515)
Long-term loan repayments received from subsidiaries	32.4	-	-	161,816,773	704,565,291
Purchase of property, plant and equipment		(434,438,142)	(2,255,191,134)	(3,987,216)	(6,927,944)
Proceeds from disposals of equipment		417,540	10,118,121	274,547	262,615
Purchase of intangible asset		(2,089,002)	(46,566,950)	(2,088,845)	(3,121,581)
Interest received		1,768,982	34,960,193	7,644,226	35,815,425
Dividends received		599,830,104	670,222,116	599,830,104	570,822,098
Net cash (used in) from investing activities		(765,402,178)	(1,543,007,830)	(909,594,088)	482,706,069
<b>Cash flows from financing activities</b>					
Proceeds from issuance of ordinary shares	22	529,916,753	-	529,916,753	-
Proceeds from short-term loans from financial institutions, net of financial service fee	20.1	145,923,140	85,986,004	145,923,140	85,986,004
Repayment to short-term loans from financial institutions	20.1	(150,000,000)	(2,250,000,000)	(150,000,000)	(2,250,000,000)
Repayment to finance lease liabilities	20.2	(6,757,229)	(2,973,324)	(2,973,324)	(2,973,324)
Proceeds from long-term borrowings, net of financial service fee	20.3	901,534,752	4,617,387,743	546,458,031	2,237,654,703
Repayment to long-term borrowings	20.3	(942,089,215)	(240,296,891)	(203,166,050)	-
Proceeds from issuance of debentures	20.5	2,344,712,500	-	2,344,712,500	-
Repayment to debentures	20.5	(2,050,000,000)	-	(2,050,000,000)	-
Purchase shares in subsidiary from non-controlling interests	13.2	(174,600,000)	(34,920,000)	-	-
Cash dividends payment		(104,813,889)	(10,181,324)	(104,813,889)	(10,181,324)
Interest expenses and financial service fee		(273,414,891)	(218,601,959)	(206,109,931)	(220,489,723)
Net cash from (used in) financing activities		220,411,921	1,946,400,249	849,947,230	(160,003,664)

The accompanying notes are an integral of these consolidated and separate financial statements.

**Thai Solar Energy Public Company Limited**

**Statement of Cash Flows (Cont'd)**

**For the year ended 31 December 2019**

	Consolidated		Separate	
	financial statements		financial statements	
	2019	2018	2019	2018
	Baht	Baht	Baht	Baht
<b>Net increase (decrease) in cash and cash equivalents</b>	148,087,038	199,071,446	(163,683,853)	175,508,398
Cash and cash equivalents at beginning of the year	561,020,761	424,752,306	209,557,883	32,023,034
Exchange loss (gain) on cash and cash equivalents	2,358,054	1,084,230	(2,030,394)	2,026,451
Effect of exchange rate changes on translation of financial statements	(67,871,735)	(63,887,221)	-	-
<b>Cash and cash equivalents at end of the year</b>	<b>643,594,118</b>	<b>561,020,761</b>	<b>43,843,636</b>	<b>209,557,883</b>

**Non-cash transactions**

Significant non-cash transactions are as follows:

Payable arising from purchase of investment in subsidiary	37,059,807	-	249,995	249,995
Payable arising from construction and purchase of equipment	6,993,242	119,907,294	-	2,086,003
Receivables from disposal of investments	-	-	1,383,683,149	1,383,683,149
Share dividends	-	90,749,580	-	90,749,580

The accompanying notes are an integral of these consolidated and separate financial statements.

## **1 General information**

Thai Solar Energy Public Company Limited (“the Company”) is a Public Company Limited which is incorporated and domiciled in Thailand. The Company is listed on the Stock Exchange of Thailand. Its parent company is P.M. Energy Company Limited (incorporated in Thailand) (“Parent Company”). The address of the Company’s registered office is as follows:

725 Metropolis Building, 19<sup>th</sup> Floor, Sukhumvit Rd., Klongton Nua, Wattana, Bangkok.

For reporting purposes, the Company, its subsidiaries and Joint Venture are referred to as the Group.

The principal business operations of the Group are generation and distribution of electricity from solar power and biomass to government and private sector.

These consolidated and separate financial statements have been approved for issue by the Board of Directors on 27 February 2020.

## **2 Accounting policies**

The principal accounting policies applied in the preparation of these consolidated and separate financial statements are set out below:

### **2.1 Basis of preparation**

The consolidated and separate financial statements have been prepared in accordance with Thai Financial Reporting Standards (“TFRS”) and other financial reporting requirements issued under the Securities and Exchange Act.

The consolidated and separate financial statements have been prepared under the historical cost convention except trading investments as disclosed in accounting policy.

The preparation of financial statements in conformity with TFRS requires management to use certain critical accounting estimates and to exercise its judgement in applying the Group’s accounting policies. The areas involving a higher degree of judgement or complexity, or areas that are more likely to be materially adjusted due to changes in estimates and assumptions are disclosed in Note 5.

An English version of the consolidated and separate financial statements have been prepared from the statutory financial statements that are in the Thai language. In the event of a conflict or a difference in interpretation between the two languages, the Thai language statutory financial statements shall prevail.

**2 Accounting policies (Cont'd)**

**2.2 New and amended financial reporting standards that are relevant to the Group**

**2.2.1 The Group has applied the following standard and amendments for the first time for their annual reporting commencing 1 January 2019**

**a) Thai Financial Reporting Standard no.15 (TFRS 15), Revenue from contracts with customers**

The standard provides principle and approach of revenue recognition under five-step process. The underlying principle is that the Group will recognise revenue to depict the transfer of goods or services to customers at an amount that the entity expects to be entitled to in exchange for those goods or services. It replaces the principles of transferring the significant risks and rewards of ownership of the goods or services to the buyer in accordance with TAS 11, Construction contracts, TAS 18, Revenue and related interpretations.

Management has assessed the effects of applying the new standard and considered that the above revised standards do not have significant impact on the Group.

**b) Thai Accounting Standard no.28 (revised 2018), Investments in associates and joint ventures**

The amendment clarifies that the election by venture capital organisations, mutual funds, unit trusts and similar entities to measure investments in associates or joint venture at fair value through profit or loss should be made separately for each associate or joint venture at initial recognition.

**c) Thai Accounting Standard no.40 (revised 2018), Investment property**

The amendment clarifies that transfers to, or from, investment property can only be made if there has been a change in use that is supported by evidence. A change in use occurs when the property meets, or ceases to meet, the definition of investment property. A change in intention alone is not sufficient to support a transfer.

**d) Thai Financial Reporting Interpretation no.22 (TFRIC 22), Foreign currency transactions and advance consideration**

TFRIC 22 clarifies how to determine the date of transaction for the exchange rate to be used on initial recognition of a related asset, expense or income where an entity pays or receives consideration in advance for foreign currency-denominated contracts.

## 2 Accounting policies (Cont'd)

### 2.2 New and amended financial reporting standards that are relevant to the Group (Cont'd)

#### 2.2.2 New and amended financial reporting standards that are effective for accounting period beginning or after 1 January 2020

Certain new and amended financial reporting standards have been issued that are not mandatory for current period end 31 December 2019 reporting period and have not been early adopted by the Group.

##### a) Financial instruments

The new financial standards relate to financial instruments are:

TAS 32	Financial instruments: Presentation
TFRS 7	Financial Instruments: Disclosures
TFRS 9	Financial Instruments
TFRIC 16	Hedges of a Net Investment in a Foreign Operation
TFRIC 19	Extinguishing Financial Liabilities with Equity Instruments

These new standards address the classification, measurement, derecognition of financial assets and financial liabilities, impairment of financial assets, hedge accounting, and presentation and disclosure of financial instruments.

On 1 January 2020, the Company will apply the new financial reporting standards on financial instruments in its financial statements by applying modified retrospective.

The Group's management is currently assessing the impact of initial adoption of this standard.

##### b) TFRS 16, Leases

Where the Group is a lessee, TFRS 16, Leases will result in almost all leases being recognised on the balance sheet as the distinction between operating and finance leases is removed. A right-of-use asset and a lease liability will be recognised, with exception on short-term and low-value leases.

On 1 January 2020, the Group will apply TFRS 16, Leases and adjust cumulative impact to opening retained earnings (modified retrospective approach).

From the preliminary impact assessment, the management expect that the Group will be affected by significant lease liabilities on office building space, motor vehicles and rooftop space, previously classified as operating leases under TAS 17, Leases.

The Group's management is currently assessing the impact of initial adoption of this standard.

##### c) Other new/amended standards

The new and amended financial reporting standards that will have significant impact on the Group are:

TAS 12	Income tax
TAS 19	Employee benefits
TAS 23	Borrowing cost
TAS 28	Investments in associates and joint venture
TFRS 3	Business combinations
TFRS 9	Financial instruments
TFRS 11	Joint arrangements
TFRIC 23	Uncertainty over income tax treatments

Amendment to TAS 12, Income tax - clarified that the income tax consequences of dividends of financial instruments classified as equity should be recognised according to where the past transactions or events that generated distributable profits were recognised.

Amendment to TAS 19, Employee benefits (plan amendment, curtailment or settlement) - clarified accounting for defined benefit plan amendments, curtailments and settlements that the updated assumptions on the date of change are applied to determine current service cost and net interest for the remainder of the reporting period after the plan amendment, curtailment or settlement.

**2 Accounting policies (Cont'd)**

**2.2.2 New and amended financial reporting standards that are effective for accounting period beginning or after 1 January 2020 (Cont'd)**

**c) Other new/amended standards (Cont'd)**

Amendment to TAS 23, Borrowing costs - clarified that if a specific borrowing remains outstanding after the related qualifying asset is ready for its intended use or sale, it becomes part of general borrowings.

Amendment to TAS 28, Investments in associates and joint venture (long-term interests in associates and joint venture) - clarified the accounting for long-term interests in an associate or joint venture, which is in substance form part of the net investment in the associate or joint venture, but to which equity accounting is not applied. Entities must account for such interests under TFRS 9, Financial instruments before applying the loss allocation and impairment requirements in TAS 28, Investments in associates and joint venture.

Amendment to TFRS 3, Business combinations - clarified that obtaining control of a business that is a joint operation is a business combination achieved in stages. The previously held interest is therefore re-measured.

Amendment to TFRS 9, Financial instruments (prepayment features with negative compensation) - enabling entities to measure certain prepayable financial assets with negative compensation at amortised cost instead of fair value through profit or loss. These assets include some loan and debt securities. To qualify for amortised cost measurement, the negative compensation must be 'reasonable compensation for early termination of the contract' and the asset must be held within a 'held to collect' business model.

Amendment to TFRS 11, Joint arrangements - clarified that the party obtaining joint control of a business that is a joint operation should not remeasure its previously held interest in the joint operation.

TFRIC 23, Uncertainty over income tax treatments - explained how to recognise and measure deferred and current income tax assets and liabilities where there is uncertainty over a tax treatment. In particular, it discusses:

- that the Group should assume a tax authority will examine the uncertain tax treatments and have full knowledge of all related information, ie that detection risk should be ignored.
- that the Group should reflect the effect of the uncertainty in its income tax accounting when it is not probable that the tax authorities will accept the treatment.
- That the judgements and estimates made must be reassessed whenever circumstances have changed or there is new information that affects the judgements.

**2 Accounting policies (Cont'd)**

**2.3 Principles of consolidation and equity accounting**

a) Subsidiaries

Subsidiaries are all entities over which the Group has control. The Group controls an entity when the Group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Subsidiaries are consolidated from the date on which control is transferred to the Group until the date that control ceases.

In the separate financial statements, investments in subsidiaries are accounted for using cost method.

b) Associates

Associates are all entities over which the Group has significant influence but not control or joint control. Investments in associates are accounted for using the equity method of accounting.

In the separate financial statements, investments in associates are accounted for using cost method.

c) Joint arrangements

Investments in joint arrangements are classified as either joint operations or joint venture depending on the contractual rights and obligations of each investor, rather than the legal structure of the joint arrangements.

List of joint ventures are disclosed in note 13.1.

Joint venture

A joint venture is a joint arrangement whereby the Group has rights to the net assets of the arrangement. Interests in joint venture are accounted for using the equity method.

In the separate financial statements, investments in joint venture are accounted for using cost method.

d) Equity method

The investment is initially recognised at cost which is consideration paid and directly attributable costs.

The Group's subsequently recognises shares of its associates and joint venture's profits or losses and other comprehensive income in the profit or loss and other comprehensive income, respectively. The subsequent cumulative movements are adjusted against the carrying amount of the investment.

When the Group's share of losses in associates and joint venture equals or exceeds its interest in the associates and joint venture, the Group does not recognise further losses, unless it has incurred obligations or made payments on behalf of the associates and joint venture.

e) Changes in ownership interests

The Group treats transactions with non-controlling interests that do not result in a loss of control as transactions with equity owners of the Group. A difference between the amount of the adjustment to non-controlling interests to reflect their relative interest in the subsidiary and any consideration paid or received is recognised within equity.

If the ownership interest in associates and joint venture is reduced but significant influence and joint control is retained, only a proportionate share of the amounts previously recognised in other comprehensive income is reclassified to profit or loss where appropriate. Profit or loss from reduce of the ownership interest in associates and joint venture is recognise in profit or loss.

When the Group losses control, joint control or significant influence over investments, any retained interest in the investment is remeasured to its fair value, with the change in carrying amount recognised in profit or loss. The fair value becomes the initial carrying amount of the retained interest which is reclassified to investment in an associate, or a joint venture or a financial asset accordingly.

f) Intercompany transactions on consolidation

Intra-group transactions, balances and unrealised gains on transactions are eliminated. Unrealised gains on transactions between the Group and its associates and joint venture are eliminated to the extent of the Group's interest in the associates and joint venture. Unrealised losses are also eliminated in the same manner unless the transaction provides evidence of an impairment of the asset transferred.

## **2 Accounting policies (Cont'd)**

### **2.4 Business combination**

The Group applies the acquisition method to account for business combinations with an exception on business combination under common control. The consideration transferred for the acquisition of a subsidiary comprises:

- fair value of the assets transferred
- liabilities incurred to the former owners of the acquiree
- equity interests issued by the Group

Identifiable assets and liabilities acquired and contingent liabilities assumed in a business combination are measured initially at their fair values at the acquisition date.

On an acquisition-by-acquisition basis, the Group initially recognises any non-controlling interest in the acquiree either at fair value or at the non-controlling interest's proportionate share of the acquiree's net assets.

The excess of the consideration transferred, the amount of any non-controlling interest recognised and the acquisition-date fair value of any previous equity interest in the acquiree (for business combination achieved in stages) over the fair value of the identifiable net assets acquired is recorded as goodwill. In the case of a bargain purchase, the difference is recognised directly in profit or loss.

Acquisition-related cost

Acquisition-related cost are recognised as expenses.

Changes in fair value of contingent consideration paid/received

Subsequent changes to the fair value of the contingent consideration that is an asset or liability is recognised in profit or loss. Contingent consideration that is classified as equity is not re-measured.

### **2.5 Foreign currency translation**

#### **a) Functional and presentation currency**

The financial statements are presented in Thai Baht, which is the Company's and the Group's functional and presentation currency.

#### **b) Transactions and balances**

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions.

Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the profit or loss.

Any exchange component of gains and losses on a non-monetary item that recognised in profit or loss, or other comprehensive income is recognised following the recognition of a gain or loss on the non-monetary item.

#### **c) Group companies**

The operational results and financial position of the Group's entities (none of which has the currency of a hyper-inflationary economy) that have a different functional currency from the Group's presentation currency are translated into the presentation currency as follows:

- Assets and liabilities are translated at the closing rate at the date of respective statement of financial position;
- Income and expenses for are translated at average exchange rates; and
- All resulting exchange differences are recognised in other comprehensive income.

**2 Accounting policies (Cont'd)**

**2.6 Cash and cash equivalents**

In the statements of cash flows, cash and cash equivalents includes cash on hand, deposits held at call, short-term highly liquid investments with maturities of three months or less from acquisition date

**2.7 Restricted bank deposits**

Restricted bank deposits mean all types of bank deposits that are under condition of withdrawal process for specific purpose according to financial agreement and loan facilities agreement with financial institution which provide credit to the Group.

**2.8 Trade accounts receivable**

Trade receivables are amounts due from customers for goods sold or service performed in the ordinary course of business.

Trade receivables are recognised initially at the amount of consideration that is unconditionally unless they contain significant financing components, when they are recognised at its present value. The Group presented trade receivables at cost less allowance for doubtful accounts.

**2.9 Inventories**

Inventories are stated at the lower of cost or net realisable value .

Cost of inventories is determined by the weighted average method. Cost of raw materials comprise all purchase cost and costs directly attributable to the acquisition of the inventory less all attributable discounts, direct labour and other direct costs.

**2.10 Investments in debt and equity securities**

Investments other than investments in subsidiaries, associates and joint venture are initially recognised at fair value of consideration paid plus direct transaction cost.

Trading and available-for-sale investments

Trading investments and available-for-sale investments are subsequently measured at fair value. The unrealised gains and losses of trading investments are recognised in profit or loss. The unrealised gains and losses of available for sale investments are recognised in other comprehensive income and are subsequently reclassified to profit or loss when the investment is disposed.

Held-to-maturity investments

Held-to-maturity investments are carried at amortised cost using the effective interest method less impairment.

Disposal of investments

On a disposal of an investment, the difference between the net disposal proceeds and the carrying amount (including cumulative changes in fair value recognised in equity) is recognised to the profit or loss. When the Group disposes an investment partially, the carrying amount of the disposed part is determined by the weighted average method.

## **2 Accounting policies (Cont'd)**

### **2.11 Investment property**

Investment properties of the Group are lands and condominium which are held for capital appreciation and are not occupied by the Group.

Investment property is measured initially at cost, including directly attributable costs and borrowing costs.

After initial recognition, investment property is carried at cost less any accumulated depreciation and any accumulated impairment losses.

Land is not depreciated. Depreciation on condominium is calculated by using straight-line method over 20 years.

Subsequent expenditure is capitalised to the asset's carrying amount only when it is probable that future economic benefits associated with the expenditure will flow to the Group and the cost of the item can be measured reliably. All other repairs and maintenance costs are expensed when incurred. When part of an investment property is replaced, the carrying amount of the replaced part is derecognised.

### **2.12 Property, plant and equipment**

All other property, plant and equipment are stated at historical cost less accumulated depreciation and impairment losses. Historical cost includes expenditure that is directly attributable to the acquisition of the items.

Subsequent costs are included in the asset's carrying amount, only when it is probable that future economic benefits associated with the item will flow to the Group. capitalised where there is future economic benefits. The carrying amount of the replaced part is derecognised.

All other repairs and maintenance are charged to profit or loss when incurred.

Land is not depreciated. Depreciation on other assets is calculated using the straight-line method to allocate their cost to their residual values over their estimated useful lives, as follows:

Land improvement	15 years 4 months - 25 years
Power plants	15 years 4 months - 25 years
Office buildings	25 years
Tools and equipment	5 - 10 years
Office equipment	3 - 5 years
Vehicles	5 years

The assets' residual values and useful life are reviewed, and adjusted if appropriate, at the end of each reporting period.

Gains or losses on disposals are determined by comparing the proceeds with the carrying amount and are recognised in profit or loss.

### **2.13 Goodwill**

Goodwill is tested for impairment annually, or more frequently if events or changes in circumstances indicate that it might be impaired and is carried at cost less accumulated impairment losses.

For the purpose of impairment testing, goodwill is allocated to cash-generating units or groups of cash-generating units that are expected to benefit from the business combination in which the goodwill arose. The units or groups of units are identified at the lowest level at which goodwill is monitored for internal management purposes.

**2 Accounting policies (Cont'd)**

**2.14 Intangible assets**

**2.14.1 Computer software**

Acquired computer software is capitalised on the basis of the costs incurred to acquire and bring to use the specific software. These costs are amortised over their estimated useful life of 5 years.

**2.14.2 Right in Power Purchase Agreement**

Right in Power Purchasing Agreements ("PPAs") comprise of PPA for renewable energy (Biomass project) which the Group signed with Provincial Electricity Authority (PEA) and PPA for generating electricity from solar farm as specified in certification for power distribution granted by Ministry of Economy, Trade and Industry, Japan (METI Certificate). The Group acquired those PPAs from acquisition of subsidiaries. PPAs were amortised by using the straight-line method to allocate their cost to their residual values over their Power Purchase Agreement. Amortisation starts when the Group start their commercial operation.

**2.14.3 Right in use of land**

Land for the location of The Electricity Generating Authority of Thailand Installed on the ground for government agencies and agricultural cooperatives that is a joint project between a subsidiary with a cooperative in Thailand. A subsidiary agreed to transfer the ownership in this plot of land to that cooperative by the end of the project. The Group remain the right to use such land over the agreement period. Right in use of land was amortised using straight-line method over the contractual period of 25 years.

**2.15 Impairment of assets**

Assets that have an indefinite useful life are tested annually for impairment, or more frequently if events or changes in circumstances indicate that it might be impaired. Assets that are subject to amortisation are reviewed for impairment whenever there is an indication of impairment. An impairment loss is recognised for the amount by which the carrying amount of the assets exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs of disposal and value in use.

Where the reasons for previously recognised impairments no longer exist, the impairment losses on the assets concerned other than goodwill is reversed.

**2.16 Leases**

Leases - where the Group is the lessee

Payments made under operating leases (net of any incentives received from the lessor) are charged to profit or loss on a straight-line basis over the period of the lease.

At the inception of finance lease, the lower of the fair value of the leased property or the present value of the minimum lease payments is capitalised. Each lease payment is allocated between the liability and finance charges to achieve a constant rate on the liabilities balance outstanding. The corresponding rental obligations is presented net of finance charges. Finance cost is charged to profit or loss over the lease period.

## **2 Accounting policies (Cont'd)**

### **2.17 Borrowings**

Borrowings are recognised initially at the fair value, net of directly attributable transaction costs incurred. Borrowings are subsequently stated at amortised cost.

Fees paid on the establishment of loan facilities are recognised as transaction costs of the loan to the extent that it will be drawn down. The fee is deferred until the drawn down occurs and included in effective interest calculation. However, if it is probable that facility will not be drawn down, that portion of the fee paid is recognised as a prepayment and amortised over the period of related facility.

Borrowings are removed from the statement of financial position when the obligation specified in the contract is discharged, cancelled, or expired. The difference between the carrying amount of a financial liability that has been extinguished or transferred to another party and the consideration paid, including any non-cash assets transferred or liabilities assumed, is recognised in profit or loss as finance costs.

Borrowings are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability for at least 12 months after the reporting date.

### **2.18 Borrowing costs**

General and specific borrowing costs directly attributable to the acquisition, construction or production of qualifying assets (assets that take times to get ready for its intended use or sale) are added to the cost of those assets less investment income earned from those specific borrowings. The capitalisation of borrowing costs is ceased when substantially all the activities necessary to prepare the qualifying asset for its intended use or sale are complete.

Other borrowing costs are expensed in the period in which they are incurred.

### **2.19 Current and deferred income taxes**

The tax expense for the period comprises current and deferred tax. Tax is recognised in profit or loss, except to the extent that it relates to items recognised in other comprehensive income or directly in equity.

#### **Current tax**

The current income tax is calculated on the basis of the tax laws enacted or substantively enacted at the end of the reporting period. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation. It establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities.

#### **Deferred income tax**

Deferred income tax is recognised on temporary differences arising from differences between the tax base of assets and liabilities and their carrying amounts in the financial statements. However, deferred income tax is not recognised for temporary differences arise from:

- initial recognition of an asset or liability in a transaction other than a business combination that affects neither accounting nor taxable profit or loss is not recognised
- investments in subsidiaries, associates and joint arrangements where the timing of the reversal of the temporary difference is controlled by the Group and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred income tax is measured using tax rates of the period in which temporary difference is expected to be reversed, based on tax rates and laws that have been enacted or substantially enacted by the end of the reporting period.

Deferred tax assets are recognised only to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilised.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets and liabilities and when the deferred tax balances relate to the same taxation authority. Current tax assets and tax liabilities are offset where the entity has a legally enforceable right to offset and intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously.

**2 Accounting policies (Cont'd)**

**2.20 Employee benefits**

**2.20.1 Short-term employee benefits**

Liabilities for short-term employee benefits such as wages, salaries, paid annual leave and paid sick leave, bonuses, and medical care that are expected to be settled wholly within 12 months after the end of the period are recognised in respect of employees' service up to the end of the reporting period. They are measured at the amount expected to be paid.

**2.20.2 Defined contribution plan**

The Group operates a provident fund, being a defined contribution plan. The assets of which are held in a separate trustee - administered fund. The provident fund is funded by payments from employees and by the Company. Contributions to the provident fund are charged to the statement of comprehensive income in the period to which the contributions relate.

**2.20.3 Defined benefit plans**

A defined benefit plan is a retirement plan that is not a defined contribution plan. Typically defined benefit plans define an amount of retirement benefit that an employee will receive on retirement, usually dependent on one or more factors such as age, years of service and compensation. The liability recognised in the statement of financial position in respect of defined benefit retirement plans is the present value of the defined benefit obligation at the end of the reporting period less the fair value of plan assets. The defined benefit obligation is calculated annually by independent actuaries using the projected unit credit method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using market yield of government bonds that are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating to the terms of the related retirement liability. Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to equity in other comprehensive income in the period in which they arise. They are included in retained earnings in the statements of changes in equity / presented as a separate item in statements of changes in equity.

Past-service costs are recognised immediately in profit or loss.

**2.20.4 Termination benefits**

The Group recognises termination benefits at the earlier of (a) when the Group can no longer withdraw the offer of those benefits; and (b) when the entity recognises costs for the related restructuring. Benefits due more than 12 months are discounted to their present value.

**2.21 Provisions**

Provisions are recognised when the Group has a present legal or constructive obligation as a result of past events; it is probable that an outflow of resources will be required to settle the obligation; and the amount has been reliably estimated.

Provisions are measured at the present value of the expenditures expected to be required to settle the obligation. The increase in the provision due to passage of time is recognised as interest expense.

**2.22 Government grants**

Grants from the government are recognised at their fair value where there is a reasonable assurance that the grant will be received and the Group will comply with attached conditions.

Government grants relating to the sales of electricity generated from solar power is recognised as profit or loss systematically throughout the period. Moreover, the Group recognised expenses related to cost which is compensated.

**2 Accounting policies (Cont'd)**

**2.23 Share capital**

Ordinary shares are classified as equity.

Incremental costs directly attributable to the issue of new shares or options (net of tax) are shown as a deduction in equity.

**2.24 Revenue recognition**

Revenue comprises the fair value of the consideration received or receivable for the sale of goods and service in the ordinary course of the Company's activities. Revenue including electricity tariff adders, net of fuel adjustment (Ft) and the Provincial Electricity Authority's operating charges, are the invoiced value, excluding valued added tax of electricity supplied, and after eliminating sales within the Group. Revenue from sales of goods is recognised when the collectability of goods provided is high probable.

Management service income is recognised when service is completed.

Interest income is recognised using the effective interest method.

Dividend income is recognised when the right to receive payment is established.

**2.25 Dividend distribution**

Dividend distributed to the Company's shareholders is recognised as a liability when interim dividends are approved by the Board of Directors, and when the annual dividends are approved by the shareholders.

**2.26 Segment reporting**

Operating segment are reported in a manner consistent with the internal reporting provided to the chief operating decision-maker. The chief operating decision-maker, who is responsible for allocating resource and assessing performance of the operating segments, has been identified as the Chief Executive Officer and the Executive Committee that make strategic decision.

**3 Reclassification**

Comparative figures have been reclassified to conform with changes in presentation in the current period.

Summary impact to statement of comprehensive income for the year ended 31 December 2018 is as follows:

	<b>Consolidated financial statements</b>		
	<b>Previously present Baht</b>	<b>Reclassification Baht</b>	<b>Restatement Baht</b>
Administrative expenses	(206,690,163)	47,475	(206,642,688)
(Loss) gain on exchange rate	-	(47,475)	(47,475)
	<b>Separate financial statements</b>		
	<b>Previously present Baht</b>	<b>Reclassification Baht</b>	<b>Restatement Baht</b>
Administrative expenses	(204,779,510)	65,893,001	(138,886,509)
(Loss) gain on exchange rate	-	(65,893,001)	(65,893,001)

## **4 Financial risk management**

### **4.1 Financial risk factors**

The Group exposes to a variety of financial risks: market risk (currency risk, fair value risk and price risk), credit risk and liquidity risk. The Group's overall risk management programme focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on the Group's financial performance. The board of directors provides written principles for overall risk management which is carried out by a central treasury department (the Group treasury), including identification, evaluation and hedge of financial risks in close co-operation with operating units.

#### **4.1.1 Foreign exchange risk**

As the Group generates and distributes electricity from solar power, the Group has entered into Power Plant construction agreement with supplier in foreign countries. The Group is exposed to foreign exchange risk arising from various currency exposures, primarily with respect to US Dollar and Japanese Yen, in terms of foreign exchange risk arises from future commercial transactions, recognition of assets and liabilities and net investments in foreign operations. However, the Group does not hedge foreign exchange risk as investments and borrowings were made in the same currency with future cash inflow.

The Company has granted loans denominated in Japanese Yen to its subsidiaries which expose the Company to a currency translation risk.

#### **4.1.2 Interest rate risk**

Interest rate risk of company occurs from credit facilities of commercial bank which is floating rate. Credit terms and interest rates depend on each borrower's creditability that cause the Company exposing to cash flow risk from interest rate.

#### **4.1.3 Major customer reliance risk**

The Group relies on Provincial Electricity Authority (PEA) and Metropolitan Electricity Authority (MEA) who purchase of all electricity generated in specific quantities at specific price based on each specific period according to Power Purchase Agreement, in accordance with Ministry of Energy's policy to encourage production and usage of renewable energy. As a result, agreement termination may significantly impact the Group's operations.

#### **4.1.4 Risk from generated electricity lower than estimation**

The electricity volume generated from solar power plants might be affected by climate change and natural disaster, forming as a risk of production volume is lower than estimation. In consequence, it may impact to revenue and operating results of the Group as well as other electricity generators in this industry.

#### **4.1.5 Debt settlement ability risk**

According to credit facilities conditions with commercial bank, the Group has to comply with financial covenants stated in the agreement such as to maintain Debt-to-Equity ratio and maintain Debt service coverage ratio. If the Group cannot maintain those financial covenants, the Group might be called up for immediate debt settlement.

### **4.2 Fair value**

See disclosure of fair value of trading investments, investment property and fair value of borrowing in notes 10, 14 and 20 respectively.

## **5 Critical estimates and judgements**

Estimates and judgements are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

### Useful life of property plant and equipment

Management has estimated useful lives and residual value of property plant and equipment. The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at the end of each reporting period and their carrying values are written-down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount or it will write off technically obsolete or assets that have been abandoned or sold.

### Estimated impairment of assets

The Group tests whether asset has suffered any impairment, in accordance with the accounting policy stated in Note 2.15. The recoverable amounts of cash-generating units have been determined based on fair value less costs to sell which was determined with reference to market prices for equivalent assets.

### Consolidation of entities with less than 50% ownership

Management consider that the Group has de facto control over Bangsawan Green Co.,Ltd even though it has less than 50% of the voting rights. The Group is the major shareholder of Bangsawan Green Co.,Ltd with a 49% equity interest, while all other shareholders individually own less than 51% of its equity shares. There is no history of other shareholders forming a group to exercise their votes collectively.

## **6 Capital management**

The Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern, so that they can continue to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital.

In order to maintain or adjust the capital structure, the Group may adjust the amounts of dividends paid to shareholders, return capital to shareholders, issue new shares, or sell assets to reduce debt.

## **7 Operating segments**

The principal business operations of the Group are generation and distribution of electricity from solar power and biomass and operating its business in Thailand and in Japan. Segment information is presented in respect of the Group's geography segments which are domestic and international. The two segments presented were classified and reviewed by authorised persons which are Chief Executive Officer and the Executive Committee.

The following information is used by authorised persons to evaluate operation of each segment.

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7 Operating segments (Cont'd)

Financial information by geography segment

	For the year ended 31 December (Million Baht)									
	Domestic		International		Total		Elimination		Total	
	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
Revenue from operations	1,095.94	501.52	305.58	93.56	1,401.52	595.08	(52.63)	(33.76)	1,348.89	561.32
Other income	86.03	70.68	12.34	89.01	98.37	159.69	(5.65)	(3.51)	92.72	156.18
Dividends income	618.38	586.57	-	-	618.38	586.57	(618.38)	(586.57)	-	-
Cost of operations	(708.47)	(397.86)	(202.06)	(64.44)	(910.53)	(462.30)	(0.83)	12.52	(911.36)	(449.78)
Operating profit	1,091.88	760.91	115.86	118.13	1,207.74	879.04	(677.49)	(611.32)	530.25	267.72
Selling and administrative expenses	(228.40)	(443.28)	(58.19)	(51.84)	(286.59)	(495.12)	53.24	7.09	(233.35)	(488.03)
Profit (loss) before finance cost and taxes	863.48	317.63	57.67	66.29	921.15	383.92	(624.25)	(604.23)	296.90	(220.31)
Finance costs	(315.68)	(317.40)	(45.37)	(18.76)	(361.05)	(336.16)	213.86	212.92	(147.19)	(123.24)
(Loss) gain from exchange rate	(148.52)	(95.37)	(0.11)	-	(148.63)	(95.37)	143.22	95.37	(5.41)	-
Share of profit from investments in joint ventures	659.52	610.19	-	-	659.52	610.19	-	-	659.52	610.19
Operating results before taxes	1,058.80	515.05	12.19	47.53	1,070.99	562.58	(267.17)	(295.94)	803.82	266.64
Income tax	(3.72)	(73.93)	(1.35)	(9.64)	(5.07)	(83.57)	-	-	(5.07)	(83.57)
<b>Net profit (loss)</b>	<b>1,055.08</b>	<b>441.12</b>	<b>10.84</b>	<b>37.89</b>	<b>1,065.92</b>	<b>479.01</b>	<b>(267.17)</b>	<b>(295.94)</b>	<b>798.75</b>	<b>183.07</b>
<b>Timing of revenue recognition</b>										
At a point in time									1,304.15	518.76
Over time									44.74	42.56
<b>Total revenue</b>									<b>1,348.89</b>	<b>561.32</b>
<b>Total assets</b>									<b>15,869.99</b>	<b>14,689.24</b>
<b>Total liabilities</b>									<b>10,237.67</b>	<b>9,774.61</b>

**8 Cash and cash equivalents**

	Consolidated financial statements		Separate financial statements	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Cash on hand	1,870,000	2,077,931	25,000	60,000
Cash at bank	641,724,118	558,942,830	43,818,636	209,497,883
	<u>643,594,118</u>	<u>561,020,761</u>	<u>43,843,636</u>	<u>209,557,883</u>

The average effective interest rate on short-term bank deposits was 0.329% per annum (2018: 0.375%).

**9 Restricted bank deposits**

Short-term restricted bank deposits comprise saving deposits specially for repayment of debenture's principals and interest, pledged saving deposits and pledged deposits in current accounts of subsidiaries and the transfer of claims in the deposit accounts to the lender according to the specified expenditure conditions to secure the credit facilities.

The long-term restricted bank deposits consist of the pledged saving bank deposits of the Company to guarantee its electricity consumption, the pledged saving bank deposits of the subsidiaries for the specific purpose specified in the credit facility agreement and a fixed deposit of the Company pledged to the lender to guarantee the credit.

**10 Short-term investments**

The movements in short-term investments during the year are as follows:

	Consolidated and separate financial statements		
	Trading Baht	Held-to-maturity due within 1 year Baht	Total Baht
At 1 January 2018	30,389,235	40,664,038	71,053,273
Additions	510,851,113	120,746	510,971,859
Disposals	(541,240,348)	(63,345,031)	(604,585,379)
Transfer - in	-	23,020,000	23,020,000
At 31 December 2018	-	459,753	459,753
Additions	995,386,239	4,568	995,390,807
Disposals	(775,234,056)	-	(775,234,056)
Re-measuring of investments	497,803	-	497,803
At 31 December 2019	<u>220,649,986</u>	<u>464,321</u>	<u>221,114,307</u>

At 31 December 2019, the fair value of short-term investment are as follows:

	Consolidated and separate financial statements	
	Trading Baht	Held-to-maturity due within 1 year Baht
Investment in securities	<u>220,649,986</u>	<u>464,321</u>

The fair value of investments are based on bid price in liquidity market as at financial statement date. The fair values are within level 2 of the fair value hierarchy.

**11 Trade and other receivables**

Trade and other receivables as at 31 December 2019 and 2018 comprise the following:

	Consolidated financial statements		Separate financial statements	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Trade receivables	237,261,772	168,206,169	-	56,518
<u>Less</u> Provision for impairment of trade receivables	-	-	-	-
Total trade receivables, net	<u>237,261,772</u>	<u>168,206,169</u>	<u>-</u>	<u>56,518</u>
Amounts due from and advances to related parties (Note 32.2)	4,053,761	3,860,725	99,069,193	93,031,887
Prepaid expenses	24,818,977	31,725,556	1,160,482	1,259,912
Dividends receivable (Note 32.2)	153,300,027	134,750,024	153,300,027	134,750,024
Other receivables	10,667,959	138,769,231	10,160,660	29,277,829
Advance payment	297,470	755,645	240,515	492,886
Total other receivables	193,138,194	309,861,181	263,930,877	258,812,538
<u>Less</u> Provision for impairment of other receivables	-	-	-	-
Total other receivables, net	<u>193,138,194</u>	<u>309,861,181</u>	<u>263,930,877</u>	<u>258,812,538</u>
Total trade and other receivables	<u>430,399,966</u>	<u>478,067,350</u>	<u>263,930,877</u>	<u>258,869,056</u>

All outstanding trade receivable are not yet due.

**12 Other current assets**

	Consolidated financial statements		Separate financial statements	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Withholding tax deducted at sources	13,745,352	11,310,857	13,736,840	11,066,233
Input VAT undue	16,283,911	140,513,997	654,640	211,345
Others	287,658	757,095	191,040	700,056
	<u>30,316,921</u>	<u>152,581,949</u>	<u>14,582,520</u>	<u>11,977,634</u>

13 Investments in subsidiaries and investments in joint ventures

13.1 Investments in joint ventures

Movement in investments in joint ventures

	Consolidated financial statements Baht	Separate financial statements Baht
<b>For the year ended 31 December 2019</b>		
Opening net book amount	1,787,086,887	350,000,130
Share of profit	659,517,685	-
Dividends received	(606,550,052)	-
Closing net book amount	<u>1,840,054,520</u>	<u>350,000,130</u>

Details of joint ventures in 2019 and 2018 are as follows:

	Business	Country of incorporation	% Ownership		Measurement method
			2019	2018	
<b>Joint venture directly held by the Company</b>					
Thai Solar Renewable Co., Ltd.	Investment holding	Thailand	60	60	Equity
<b>Joint venture held by Thai Solar Renewable Co., Ltd.</b>					
Siam Solar Energy 1 Co., Ltd.*	Generation and distribution of electricity	Thailand	60	60	Equity

\* The Company directly holds one share and the remaining shares are held by Thai Solar Renewable Company Limited.

Thai Solar Renewable Co., Ltd. is investment holding company and Siam Solar Energy 1 Co., Ltd. engages in the generation and distribution of electricity from solar energy. These companies are private companies and their shares are not traded. These companies were joint venture held by the Company and Global Power Synergy Public Company Limited.

**Summarised financial information for joint ventures**

Financial statements of Siam Solar Energy 1 Co., Ltd., subsidiary of Thai Solar Renewable Co., Ltd., was included in the consolidated financial statements of Thai Solar Renewable Co., Ltd.

13 Investments in subsidiaries and investments in joint ventures (Cont'd)

13.1 Investments in joint ventures (Cont'd)

Set out below are the summarised consolidated financial statements for Thai Solar Renewable Co., Ltd.

**Summarised statement of financial positions**

	<b>Consolidated financial statements of Thai Solar Renewable Co., Ltd. As at 31 December</b>	
	<b>2019 Baht</b>	<b>2018 Baht</b>
<b>Current</b>		
Cash and cash equivalents	1,473,351	1,553,598
Other current assets (excluding cash)	617,286,173	595,092,763
Total current assets	<u>618,759,524</u>	<u>596,646,361</u>
Current financial liabilities (excluding trade payables)	(321,750,000)	(321,750,000)
Other current liabilities (including trade payables)	(304,104,265)	(265,893,085)
Total current liabilities	<u>(625,854,265)</u>	<u>(587,643,085)</u>
Total current net assets	<u>(7,094,741)</u>	<u>9,003,276</u>
<b>Non-current</b>		
Assets	4,798,663,173	5,016,204,510
Financial liabilities	(1,861,540,574)	(2,183,290,574)
Total non-current net assets	<u>2,937,122,599</u>	<u>2,832,913,936</u>
<b>Net assets</b>	<u><u>2,930,027,858</u></u>	<u><u>2,841,917,212</u></u>

**Summarised statement of comprehensive income**

	<b>Consolidated financial statements of Thai Solar Renewable Co., Ltd. For the year ended 31 December</b>	
	<b>2019 Baht</b>	<b>2018 Baht</b>
Revenue from sales	513,383,500	485,947,325
Subsidy for adders	1,028,311,564	994,678,516
Cost of sales	(312,025,608)	(297,952,787)
<b>Gross profit</b>	1,229,669,456	1,182,673,054
Other income	4,582,965	7,130,872
Administrative expenses	(30,098,682)	(46,533,713)
Finance costs	(104,205,283)	(124,892,644)
<b>Profit before income tax expense</b>	1,099,948,456	1,018,377,569
Income tax	(752,315)	(1,396,858)
<b>Profit from continuing operations after income tax</b>	<u>1,099,196,141</u>	<u>1,016,980,711</u>

The information above reflects the amounts presented in the financial statements of the joint venture (and not the Group's share of those amounts). Under equity method (Note 2.3), the Group recognised profit or loss of the joint venture in Statement of Comprehensive Income within "Share of profit from investments in joint venture" according to the Group's interest in the joint venture.

### 13 Investments in subsidiaries and investments in joint ventures (Cont'd)

#### 13.1 Investments in joint ventures (Cont'd)

##### Reconciliation of summarised financial information

Reconciliation of the summarised financial information presented to the carrying amount of its interest in joint ventures.

	<b>Thai Solar Renewable Co., Ltd.</b>	
	<b>As at 31 December</b>	
	<b>2019</b>	<b>2018</b>
	<b>Baht</b>	<b>Baht</b>
<b>Summarised financial information</b>		
<b>Closing net assets</b>	2,930,027,858	2,841,917,212
<b>Reconciliation:</b>		
The difference from restructuring business under common control	136,913,097	136,730,717
Non-controlling interests	(183,422)	(169,784)
<b>Closing net assets after reconciliation</b>	3,066,757,533	2,978,478,145
Interest in joint ventures (60%)	1,840,054,520	1,787,086,887
<b>Carrying value</b>	1,840,054,520	1,787,086,887

As at 31 December 2019, Thai Solar Renewable Company Limited has pledged share certificates of Siam Solar Energy 1 Company Limited, amounting to Baht 1,080 million (2018: Baht 1,080 million) as collateral for its subsidiary's credit facilities granted by a commercial bank. In addition, Siam Solar Energy 1 Company Limited has mortgaged land with construction thereon and machinery with a total net book value of Baht 4,754.92 million (2018: Baht 4,974.74 million) and pledged bank deposits amounting to Baht 360 million (2018: Baht 360 million) as collateral for credit facilities granted by a commercial bank.

The Company has pledged all share certificates of the investment in the joint venture with the lender as the collateral for the credit facilities which the joint venture is granted from the commercial bank.

#### 13.2 Investments in subsidiaries

Details of investments as at 31 December 2019 and 2018 are as follows:

	Business	Country of incorporation	Proportion of ordinary shares directly held by parent (%)		Proportion of shares held by non-controlling interests (%)	
			2019	2018	2019	2018
<b>Subsidiaries directly held by the Company</b>						
TSE Rooftop Co., Ltd.	Investment	Thailand	100	100	-	-
Solar Visible Co., Ltd.	Provision of maintenance service for power plants	Thailand	100	100	-	-
TSE Overseas Group Co., Ltd.	Investment	Thailand	100	100	-	-
World Solar Co., Ltd.	Production and distribution of electricity	Thailand	100	100	-	-
Thai Community Energy Co., Ltd.	Production and distribution of electricity	Thailand	100	100	-	-

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**13 Investments in subsidiaries and investments in joint ventures (Cont'd)**

**13.2 Investments in subsidiaries (Cont'd)**

Details of investments as at 31 December 2019 and 2018 are as follows: (Cont'd)

	Business	Country of incorporation	Proportion of ordinary shares directly held by parent (%)		Proportion of shares held by non-controlling interests (%)	
			2019	2018	2019	2018
<b>Subsidiaries held by TSE Rooftop Co., Ltd.</b>						
Green Rooftop Co., Ltd.	Production and distribution of electricity	Thailand	100	100	-	-
North Rooftop Co., Ltd.	Production and distribution of electricity	Thailand	100	100	-	-
Lucky Solar Co., Ltd.	Production and distribution of electricity	Thailand	100	100	-	-
Champ Energy Co., Ltd.	Production and distribution of electricity	Thailand	100	100	-	-
Roof Energy Co., Ltd.	Production and distribution of electricity	Thailand	100	100	-	-
<b>Subsidiaries held by Solar Visible Co., Ltd.</b>						
Solar Community Co., Ltd.	Production and distribution of electricity	Thailand	100	100	-	-
Infinity Solar Co., Ltd.	Production and distribution of electricity	Thailand	100	100	-	-
BS Bangsai Solar Co., Ltd.	Production and distribution of electricity	Thailand	100	-	-	-
BS Solar Energy Co., Ltd.	Production and distribution of electricity	Thailand	100	-	-	-
Siam Solar Power Plc.	Production and distribution of electricity	Thailand	100	-	-	-
<b>Subsidiaries held by Thai Community Energy Co., Ltd.</b>						
Sun Future Co., Ltd.	Production and distribution of electricity	Thailand	100	100	-	-
The Solar Earth Co., Ltd.	Production and distribution of electricity	Thailand	100	100	-	-
Clean Renewable Co., Ltd.	Production and distribution of electricity	Thailand	100	100	-	-
Bangsawan Green Co., Ltd.	Production and distribution of electricity	Thailand	49	49	51	51
Oscar Save The World Co., Ltd.	Production and distribution of electricity	Thailand	100	75	-	25
<b>Subsidiary held by Siam Solar Power Plc.</b>						
Siam Waste Power Co., Ltd.	Production and distribution of electricity	Thailand	100	-	-	-
<b>Subsidiaries held by TSE Overseas Group Co., Ltd.</b>						
TSE Group International. Pte. Ltd.	Investment	Singapore	100	100	-	-
Solar Assets Pte. Ltd.	Investment	Singapore	100	100	-	-
Onikoube Solar Power Pte. Ltd.	Investment	Singapore	100	100	-	-
<b>Subsidiaries held by TSE Group International. Pte. Ltd.</b>						
Eco Solar Aizu GK	Production and distribution of electricity	Japan	97	97	3	3
Ishikawa Hanamizuki 1 GK	Production and distribution of electricity	Japan	97	97	3	3
<b>Subsidiaries held by Solar Assets Pte. Ltd.</b>						
Ibaraki Ushiku 1 GK	Land lease	Japan	100	100	-	-
Ibaraki Ushiku 2 GK	Land lease	Japan	100	100	-	-
<b>Subsidiaries held by Onikoube Solar Power Pte. Ltd.</b>						
PurpleSol GK	Production and distribution of electricity	Japan	100	100	-	-

13 Investments in subsidiaries and investments in joint ventures (Cont'd)

13.2 Investments in subsidiaries (Cont'd)

Movements of investments in subsidiaries during the year are as follow:

	<b>Separate financial statements Baht</b>
For the year ended 31 December 2019	
Opening net book amount	1,198,749,905
Acquisitions	399,992
Closing net book amount	<u>1,199,149,897</u>

**Movements of investments in subsidiaries**

**Additional investment under Thai Solar Energy Plc.**

On 9 August 2019, the Company paid for additional called-up capital of World Solar Co., Ltd. For 100,000 shares at Baht 4 each amounting to Baht 0.40 million.

**Additional investment under Solar Visible Co., Ltd.**

On 7 March 2019, the Group acquired 820,000 ordinary shares representing 100% interests in BS Bangsai Solar Company Limited, which operates a ground-mounting solar power plant with the production capacity of 5 MW for a consideration of Baht 131.20 million. The acquisition is considered as an acquisition of business. Details of the acquisition are disclosed in Note 31.

On 19 August 2019, the Group acquired 630,000 ordinary shares representing 100% interests in BS Solar Energy Company Limited, which operates a ground-mounting solar power plant with the production capacity of 5 MW for a consideration of Baht 73.71 million. The acquisition is considered as an acquisition of business. Details of the acquisition are disclosed in Note 31.

On 15 November 2019, the Group acquired 300,000,000 ordinary shares representing 100% interests in Siam Solar Power Public Company Limited, which operates a ground-mounting solar power plant with the production capacity of 8 MW and its subsidiary for a consideration of Baht 582.06 million. The acquisition is considered as an acquisition of business. Details of the acquisition are disclosed in Note 31.

**Additional investment under Thai Community Energy Co., Ltd.**

On 9 July 2019, the Group acquired 1,455,000 ordinary shares of Oscar Save The World Co., Ltd. from Thainakorn Parawood Co., Ltd. at Baht 120 per share totaling Baht 174.60 million, resulting in an increase in the investment proportion of the Group in that subsidiary from 75% to 100%. Loss from change in holding interest amounting to Baht 10.52 million was recognised directly in equity attributed to the owners of parent in the consolidated financial statements.

**Change in investment under TSE Overseas Group Co., Ltd.**

**Investment in TSE Group International Pte. Ltd.**

On 1 October 2019, TSE Group International Pte. Ltd. has reduced its shares capital amounting to Japanese Yen 324 million from Japanese Yen 2,845.77 million to Japanese Yen 2,521.77 million and has returned the capital reduction to shareholders.

**Investment in Ishikawa Hanamizuki 1 GK**

During 2019, the Group reduced investments in Ishikawa Hanamizuki 1 GK totaling of Japanese Yen 450 million.

14 Investment property

	Consolidated financial statements		Separate financial statements	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
<b>As at 1 January</b>				
Cost	110,193,203	108,614,923	110,193,203	108,614,923
<u>Less</u> Provision for impairment	<u>(20,215,318)</u>	<u>(20,215,318)</u>	<u>(20,215,318)</u>	<u>(20,215,318)</u>
Net book amount	<u>89,977,885</u>	<u>88,399,605</u>	<u>89,977,885</u>	<u>88,399,605</u>
Fair value	<u>124,420,100</u>	<u>112,493,525</u>	<u>124,420,100</u>	<u>112,493,525</u>
<b>For the year ended 31 December</b>				
Opening net book amount	89,977,885	88,399,605	89,977,885	88,399,605
Acquisition of a subsidiary (Note 31)	14,000,000	-	-	-
Additions	-	1,578,280	-	1,578,280
Depreciation	<u>(120,736)</u>	<u>-</u>	<u>-</u>	<u>-</u>
Closing net book amount	<u>103,857,149</u>	<u>89,977,885</u>	<u>89,977,885</u>	<u>89,977,885</u>
<b>As at 31 December</b>				
Cost	124,193,203	110,193,203	110,193,203	110,193,203
<u>Less</u> Accumulated depreciation	<u>(120,736)</u>	<u>-</u>	<u>-</u>	<u>-</u>
<u>Less</u> Provision for impairment	<u>(20,215,318)</u>	<u>(20,215,318)</u>	<u>(20,215,318)</u>	<u>(20,215,318)</u>
Net book amount	<u>103,857,149</u>	<u>89,977,885</u>	<u>89,977,885</u>	<u>89,977,885</u>
Fair value	<u>138,420,100</u>	<u>124,420,100</u>	<u>124,420,100</u>	<u>124,420,100</u>

The fair value of investment properties is based on property valuation using market comparison approach. The fair values are within level 2 of the fair value hierarchy.

Amounts recognised in profit and loss that are related to investment property are as follows:

	Consolidated and Separate financial statements	
	2019 Baht	2018 Baht
Rental income	418,500	418,500
Direct operating expense relating to rental income	6,612	6,612
Operating expense not relating to rental income	9,355	9,577

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15 Property, plant and equipment

	Consolidated financial statements								
	Land Baht	Land improvement Baht	Power plants Baht	Office buildings Baht	Tools and equipment Baht	Office equipment Baht	Vehicles Baht	Asset under construction Baht	Total Baht
<b>At 31 December 2018</b>									
Cost	563,852,962	3,141,059	2,139,096,614	11,206,916	13,319,317	10,405,613	39,796,007	2,899,194,727	5,680,013,215
<u>Less</u> Accumulated depreciation	-	(484,444)	(263,533,863)	(1,743,803)	(3,054,582)	(6,990,307)	(1,189,807)	-	(276,996,806)
<u>Less</u> Provision for impairment	-	(882,014)	(245,318,953)	(3,159,461)	(242,100)	(109,564)	(204,486)	-	(249,916,578)
<b>Net book amount</b>	<b>563,852,962</b>	<b>1,774,601</b>	<b>1,630,243,798</b>	<b>6,303,652</b>	<b>10,022,635</b>	<b>3,305,742</b>	<b>38,401,714</b>	<b>2,899,194,727</b>	<b>5,153,099,831</b>
<b>Year ended 31 December 2018</b>									
Opening net book amount	563,852,962	1,774,601	1,630,243,798	6,303,652	10,022,635	3,305,742	38,401,714	2,899,194,727	5,153,099,831
Exchange differences	5,017,022	-	7,627,681	-	-	64	-	19,990,700	32,635,467
Acquisition of subsidiaries	23,196,315	7,540,000	77,660,000	-	-	-	-	-	108,396,315
Additions	17,367,078	178,674	9,136,691	111,159	969,161	2,814,187	13,364,486	2,136,597,367	2,180,538,803
Disposals/write-off, net	-	-	(9,685,535)	-	-	(470,434)	-	-	(10,155,969)
Transfer-in (out)	-	47,336,150	2,351,878,007	18,765,158	5,677,570	3,614,636	13,701,477	(2,535,435,486)	(94,462,488)
Depreciation charge	-	(1,005,757)	(128,230,827)	(3,767,902)	(2,121,573)	(2,260,216)	(8,582,489)	-	(145,968,764)
Impairment charge	-	(1,021,094)	(291,254,193)	(3,620,918)	(26,749)	(74,698)	(2,348)	-	(296,000,000)
Closing net book amount	<b>609,433,377</b>	<b>54,802,574</b>	<b>3,647,375,622</b>	<b>17,791,149</b>	<b>14,521,044</b>	<b>6,929,281</b>	<b>56,882,840</b>	<b>2,520,347,308</b>	<b>6,928,083,195</b>
<b>At 31 December 2018</b>									
Cost	609,433,377	58,195,883	4,574,328,943	30,083,233	19,966,047	14,872,170	66,861,970	2,520,347,308	7,894,088,931
<u>Less</u> Accumulated depreciation	-	(1,490,201)	(390,380,175)	(5,511,705)	(5,176,154)	(7,758,627)	(9,772,296)	-	(420,089,158)
<u>Less</u> Provision for impairment	-	(1,903,108)	(536,573,146)	(6,780,379)	(268,849)	(184,262)	(206,834)	-	(545,916,578)
<b>Net book amount</b>	<b>609,433,377</b>	<b>54,802,574</b>	<b>3,647,375,622</b>	<b>17,791,149</b>	<b>14,521,044</b>	<b>6,929,281</b>	<b>56,882,840</b>	<b>2,520,347,308</b>	<b>6,928,083,195</b>

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15 Property, plant and equipment (Cont'd)

	Consolidated financial statements								
	Land Baht	Land improvement Baht	Power plants Baht	Office buildings Baht	Tools and equipment Baht	Office equipment Baht	Vehicles Baht	Asset under construction Baht	Total Baht
<b>Year ended 31 December 2019</b>									
Opening net book amount	609,433,377	54,802,574	3,647,375,622	17,791,149	14,521,044	6,929,281	56,882,840	2,520,347,308	6,928,083,195
Exchange differences	(25,972,728)	-	(180,043,684)	-	-	(13,799)	-	(35,656,099)	(241,686,310)
Acquisition of subsidiaries (Note 31)	163,000,000	27,732,999	638,609,155	-	117,062	2,426,834	3,168,000	25,950	835,080,000
Additions	9,476,156	2,532,759	27,279,116	-	5,029,853	2,609,453	16,638,017	294,458,295	358,023,649
Disposals/write-off, net	-	-	(17,416,533)	-	(3,108)	(403,549)	(559,595)	-	(18,382,785)
Transfer-in (out)	-	(1,349,686)	1,903,509,970	1,354,583	10,800	149,760	-	(1,903,675,427)	-
Depreciation charge	-	(4,792,480)	(269,951,014)	(4,172,029)	(3,355,155)	(2,525,400)	(13,383,310)	-	(298,179,388)
(Impairment charge) reversal of impairment	-	-	(13,492,208)	-	145,127	61,056	206,834	-	(13,079,191)
Closing net book amount	<u>755,936,805</u>	<u>78,926,166</u>	<u>5,735,870,424</u>	<u>14,973,703</u>	<u>16,465,623</u>	<u>9,233,636</u>	<u>62,952,786</u>	<u>875,500,027</u>	<u>7,549,859,170</u>
<b>At 31 December 2019</b>									
Cost	755,936,805	87,111,955	6,946,266,967	31,437,816	25,099,132	19,269,824	85,068,987	875,500,027	8,825,691,513
<u>Less</u> Accumulated depreciation	-	(6,282,681)	(660,331,189)	(9,683,734)	(8,509,787)	(9,912,982)	(22,116,201)	-	(716,836,574)
<u>Less</u> Provision for impairment	-	(1,903,108)	(550,065,354)	(6,780,379)	(123,722)	(123,206)	-	-	(558,995,769)
<b>Net book amount</b>	<u>755,936,805</u>	<u>78,926,166</u>	<u>5,735,870,424</u>	<u>14,973,703</u>	<u>16,465,623</u>	<u>9,233,636</u>	<u>62,952,786</u>	<u>875,500,027</u>	<u>7,549,859,170</u>

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15 Property, plant and equipment (Cont'd)

	Separate financial statements								Total Baht
	Land Baht	Land improvement Baht	Power plants Baht	Office buildings Baht	Tools and equipment Baht	Office equipment Baht	Vehicles Baht	Asset under construction Baht	
<b>At 31 December 2018</b>									
Cost	37,552,064	3,141,059	872,007,952	11,206,916	2,594,244	8,188,508	23,467,522	32,247,877	990,406,142
Less Accumulated depreciation	-	(484,444)	(135,606,769)	(1,743,803)	(1,607,611)	(5,421,734)	(820,573)	-	(145,684,934)
Less Provision for impairment	-	(882,014)	(245,318,953)	(3,159,461)	(242,100)	(109,564)	(204,486)	-	(249,916,578)
<b>Net book amount</b>	<b>37,552,064</b>	<b>1,774,601</b>	<b>491,082,230</b>	<b>6,303,652</b>	<b>744,533</b>	<b>2,657,210</b>	<b>22,442,463</b>	<b>32,247,877</b>	<b>594,804,630</b>
<b>Year ended 31 December 2018</b>									
Opening net book amount	37,552,064	1,774,601	491,082,230	6,303,652	744,533	2,657,210	22,442,463	32,247,877	594,804,630
Additions	-	-	-	111,159	22,300	1,855,113	-	5,815,887	7,804,459
Disposals - net	-	-	-	-	-	(244,100)	-	-	(244,100)
Transfer-in (out)	-	-	15,440,387	18,765,158	-	3,614,636	-	(37,820,181)	-
Depreciation charge	-	(60,423)	(17,574,610)	(3,767,902)	(288,378)	(1,876,338)	(2,563,648)	-	(26,131,299)
Impairment charge	-	(1,021,094)	(291,254,193)	(3,620,918)	(26,749)	(74,698)	(2,348)	-	(296,000,000)
<b>Closing net book amount</b>	<b>37,552,064</b>	<b>693,084</b>	<b>197,693,814</b>	<b>17,791,149</b>	<b>451,706</b>	<b>5,931,823</b>	<b>19,876,467</b>	<b>243,583</b>	<b>280,233,690</b>
<b>At 31 December 2018</b>									
Cost	37,552,064	3,141,059	887,448,339	30,083,233	2,616,544	12,227,812	23,467,522	243,583	996,780,156
Less Accumulated depreciation	-	(544,867)	(153,181,379)	(5,511,705)	(1,895,989)	(6,111,727)	(3,384,221)	-	(170,629,888)
Less Provision for impairment	-	(1,903,108)	(536,573,146)	(6,780,379)	(268,849)	(184,262)	(206,834)	-	(545,916,578)
<b>Net book amount</b>	<b>37,552,064</b>	<b>693,084</b>	<b>197,693,814</b>	<b>17,791,149</b>	<b>451,706</b>	<b>5,931,823</b>	<b>19,876,467</b>	<b>243,583</b>	<b>280,233,690</b>
<b>Year ended 31 December 2019</b>									
Opening net book amount	37,552,064	693,084	197,693,814	17,791,149	451,706	5,931,823	19,876,467	243,583	280,233,690
Additions	-	-	665,000	-	-	1,213,413	-	22,800	1,901,213
Disposals - net	-	-	-	-	-	(252,660)	-	-	(252,660)
Transfer-in (out)	-	-	-	105,583	10,800	-	-	(116,383)	-
Depreciation charge	-	-	(25,164)	(3,785,109)	(381,485)	(1,814,182)	(2,716,087)	-	(8,722,027)
Reversal of impairment	-	-	164,689	-	145,127	61,056	206,834	-	577,706
<b>Closing net book amount</b>	<b>37,552,064</b>	<b>693,084</b>	<b>198,498,339</b>	<b>14,111,623</b>	<b>226,148</b>	<b>5,139,450</b>	<b>17,367,214</b>	<b>150,000</b>	<b>273,737,922</b>
<b>At 31 December 2019</b>									
Cost	37,552,064	3,141,059	888,113,339	30,188,816	2,627,344	12,846,631	23,467,522	150,000	998,086,774
Less Accumulated depreciation	-	(544,867)	(153,206,543)	(9,296,814)	(2,277,474)	(7,583,975)	(6,100,308)	-	(179,009,980)
Less Provision for impairment	-	(1,903,108)	(536,408,457)	(6,780,379)	(123,722)	(123,206)	-	-	(545,338,872)
<b>Net book amount</b>	<b>37,552,064</b>	<b>693,084</b>	<b>198,498,339</b>	<b>14,111,623</b>	<b>226,148</b>	<b>5,139,450</b>	<b>17,367,214</b>	<b>150,000</b>	<b>273,737,922</b>

**15 Property, plant and equipment (Cont'd)**

Borrowing costs incurring from the borrowings for the construction of the power plants during the year were capitalised and included as "Additions" for Baht 20.34 million (2018: Baht 75.95 million). The Group used the capitalisation rates of 3.01% to 4.58% per annum (2018: 1.25% to 6.07% per annum) to calculate the borrowing costs for the capitalisation. The capitalisation rate are the actual rate of the borrowings which were used for the construction, and the interest rate differential between borrowing costs that would incur if the company borrowed in its functional currency and actual borrowing costs incurred on foreign currency borrowing.

Depreciation expense has been recognised in the statement of comprehensive income as follows;

	<b>Consolidated financial statements</b>		<b>Separate financial statements</b>	
	<b>2019 Baht million</b>	<b>2018 Baht million</b>	<b>2019 Baht million</b>	<b>2018 Baht million</b>
Cost of sales and services	278.10	131.36	0.41	17.92
Administrative expense	20.08	14.61	8.32	8.21
	<b>298.18</b>	<b>145.97</b>	<b>8.73</b>	<b>26.13</b>

In 2019, the company recognised the provision for impairment on obsolete solar panels amounting to Baht 13.66 million.

Leased assets included above, where the Group is a lessee under finance leases, comprise vehicles:

	<b>Consolidated financial statements</b>		<b>Separate financial statements</b>	
	<b>2019 Baht</b>	<b>2018 Baht</b>	<b>2019 Baht</b>	<b>2018 Baht</b>
Cost of assets under the finance lease	39,381,976	22,760,759	22,760,759	22,760,759
<u>Less Accumulated depreciation</u>	<u>(7,311,313)</u>	<u>(2,885,886)</u>	<u>(5,393,548)</u>	<u>(2,885,886)</u>
Net book amount	<b>32,070,663</b>	<b>19,874,873</b>	<b>17,367,211</b>	<b>19,874,873</b>

**Capital commitments**

Capital commitments exist as at the date of the statement of financial position but not included in the financial statements are as follows:

	<b>Currency</b>	<b>Consolidated financial statements</b>		<b>Separate financial statements</b>	
		<b>2019</b>	<b>2018</b>	<b>2019</b>	<b>2018</b>
Power plants	BHT	-	64,400,000	-	64,400,000
Power plants	USD	400	400	-	-
Power plants	JPY	-	201,500,000	-	-
Machinery	EUR	-	-	-	-

The subsidiaries have pledged assets with the net book value amounting to Baht 4,783 million (2018: Baht 5,522 million) as collaterals for credit facilities which they received from the commercial bank.

16 Goodwill

	Consolidated financial statements	
	2019 Baht	2018 Baht
<b>As 1 January</b>		
Cost	17,726,430	-
<u>Less</u> Provision for impairment	-	-
Net book amount	<u>17,726,430</u>	<u>-</u>
<b>For the year ended 31 December</b>		
Opening net book amount	17,726,430	-
Acquisition of subsidiary (Note 31)	357,996	17,726,430
Impairment charge	<u>(971,663)</u>	<u>-</u>
Closing net book amount	<u>17,112,763</u>	<u>17,726,430</u>
<b>At 31 December</b>		
Cost	18,084,426	17,726,430
<u>Less</u> Provision for impairment	<u>(971,663)</u>	<u>-</u>
Net book amount	<u>17,112,763</u>	<u>17,726,430</u>

The Group has reduced the carrying amount of goodwill to the amount that is recoverable by recognising the loss from impairment of goodwill. Such losses are included in cost of sales and services in profit or loss.

The recoverable amount of a CGU is determined based on value-in-use calculations. These calculations use pre-tax cash flow projections based on financial budgets approved by management covering a contractual period of power purchase agreement. The growth rate does not exceed the long-term average growth rate for the business in which the CGU operates.

The key assumptions used for value-in-use calculations are as follows:

Gross margin <sup>1</sup>	50.38 - 69.79 %
Growth rate <sup>2</sup>	(0.38) - (0.50) %
Discount rate <sup>3</sup>	7.00 - 9.00 %

<sup>1</sup> Budgeted gross margin.

<sup>2</sup> Weighted average growth rates used to extrapolate cash flows for the budget period.

<sup>3</sup> Pre-tax discount rates applied to the cash flow projections.

Management determined budgeted gross margin based on past performance. The weighted average growth rates used are consistent with the forecasts throughout contractual period of power purchase agreement. The discount rates used are pre-tax and reflect specific risks relating to the relevant segments.

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17 Intangible assets

	Consolidated financial statements					Total Baht
	Software Baht	Power purchase agreement Baht	Right to use - land Baht	Right to use- transmission line Baht	Works in progress Baht	
<b>As at 31 January 2018</b>						
Cost	3,466,671	4,099,516,270	9,144,026	15,690,883	4,101,500	4,131,919,350
Less accumulated amortisation	(1,937,072)	-	(347,325)	-	-	(2,284,397)
<b>Net book amount</b>	<b>1,529,599</b>	<b>4,099,516,270</b>	<b>8,796,701</b>	<b>15,690,883</b>	<b>4,101,500</b>	<b>4,129,634,953</b>
<b>Year ended 31 December 2018</b>						
Opening net book amount	1,529,599	4,099,516,270	8,796,701	15,690,883	4,101,500	4,129,634,953
Exchange differences	-	40,566,161	-	-	-	40,566,161
Acquisition of a subsidiary	-	31,000,000	-	-	-	31,000,000
Additions	806,090	181,226,617	-	2,021,852	2,398,121	186,452,680
Transfer - in (out)	4,677,500	-	-	-	(4,677,500)	-
Amortisation charge	(1,117,659)	(9,276,290)	(365,761)	(313,842)	-	(11,073,552)
<b>Closing net book amount</b>	<b>5,895,530</b>	<b>4,343,032,758</b>	<b>8,430,940</b>	<b>17,398,893</b>	<b>1,822,121</b>	<b>4,376,580,242</b>
<b>As at 31 December 2018</b>						
Cost	8,950,261	4,352,309,048	9,144,026	17,712,735	1,822,121	4,389,938,191
Accumulated amortisation	(3,054,731)	(9,276,290)	(713,086)	(313,842)	-	(13,357,949)
<b>Net book amount</b>	<b>5,895,530</b>	<b>4,343,032,758</b>	<b>8,430,940</b>	<b>17,398,893</b>	<b>1,822,121</b>	<b>4,376,580,242</b>
<b>Year ended 31 December 2019</b>						
Opening net book amount	5,895,530	4,343,032,758	8,430,940	17,398,893	1,822,121	4,376,580,242
Exchange differences	-	(211,906,604)	-	-	-	(211,906,604)
Acquisition of subsidiaries (Note 31)	744,075	358,204,298	-	-	-	358,948,373
Additions	790,780	187,908,635	-	-	731,500	189,430,915
Transfer - in (out)	1,822,121	-	-	-	(1,822,121)	-
Amortisation charge	(2,215,445)	(39,441,378)	(365,761)	(1,132,141)	-	(43,154,725)
<b>Closing net book amount</b>	<b>7,037,061</b>	<b>4,637,797,709</b>	<b>8,065,179</b>	<b>16,266,752</b>	<b>731,500</b>	<b>4,669,898,201</b>
<b>As at 31 December 2019</b>						
Cost	12,307,237	4,686,515,377	9,144,026	17,712,735	731,500	4,726,410,875
Less accumulated amortisation	(5,270,176)	(48,717,668)	(1,078,847)	(1,445,983)	-	(56,512,674)
<b>Net book amount</b>	<b>7,037,061</b>	<b>4,637,797,709</b>	<b>8,065,179</b>	<b>16,266,752</b>	<b>731,500</b>	<b>4,669,898,201</b>

17 Intangible assets (Cont'd)

	Separate financial statements		
	Computer software Baht	Works in progress Baht	Total Baht
<b>As at 31 January 2018</b>			
Cost	3,436,711	4,101,500	7,538,211
<u>Less</u> Accumulated amortisation	<u>(1,911,598)</u>	<u>-</u>	<u>(1,911,598)</u>
Net book amount	<u>1,525,113</u>	<u>4,101,500</u>	<u>5,626,613</u>
<b>Year ended 31 December 2018</b>			
Opening net book amount	1,525,113	4,101,500	5,626,613
Additions	766,090	2,398,121	3,164,211
Transfer-in (out)	4,677,500	(4,677,500)	-
Amortisation charge	<u>(1,111,494)</u>	<u>-</u>	<u>(1,111,494)</u>
Closing net book amount	<u>5,857,209</u>	<u>1,822,121</u>	<u>7,679,330</u>
<b>As at 31 December 2018</b>			
Cost	8,880,301	1,822,121	10,702,422
Accumulated amortisation	<u>(3,023,092)</u>	<u>-</u>	<u>(3,023,092)</u>
Net book amount	<u>5,857,209</u>	<u>1,822,121</u>	<u>7,679,330</u>
<b>Year ended 31 December 2019</b>			
Opening net book amount	5,857,209	1,822,121	7,679,330
Additions	790,780	731,500	1,522,280
Transfer-in (out)	1,822,121	(1,822,121)	-
Amortisation charge	<u>(2,144,434)</u>	<u>-</u>	<u>(2,144,434)</u>
Closing net book amount	<u>6,325,676</u>	<u>731,500</u>	<u>7,057,176</u>
<b>As at 31 December 2019</b>			
Cost	11,493,202	731,500	12,224,702
<u>Less</u> Accumulated amortisation	<u>(5,167,526)</u>	<u>-</u>	<u>(5,167,526)</u>
Net book amount	<u>6,325,676</u>	<u>731,500</u>	<u>7,057,176</u>

Borrowing costs incurring from the borrowings specifically for developing the power plant projects to its intended use were capitalised and included as "Additions" for Baht 187.91 million (2018: Baht 181.23 million). The Group used the capitalisation rates of 3.01% to 4.58% per annum (2018: 3.42% to 6.07% per annum) to calculate the borrowing costs for the capitalisation. The capitalisation rate are the actual rate of the borrowings which were used for the construction, and the interest rate differential between borrowing costs that would incur if the company borrowed in its functional currency and actual borrowing costs incurred on foreign currency borrowing.

Amortisation expense has been recognised in the statement of comprehensive income as follows;

	Consolidated financial statements		Separate financial statements	
	2019 Baht million	2018 Baht million	2019 Baht million	2018 Baht million
Cost of sales and services	40.94	9.96	-	-
Administrative expense	2.22	1.11	2.14	1.11
	<u>43.16</u>	<u>11.07</u>	<u>2.14</u>	<u>1.11</u>

18 Deferred income taxes

The analysis of deferred income tax assets and liabilities is as follows:

	Consolidated financial statements		Separate financial statements	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
<b>Deferred income tax assets:</b>				
Deferred income tax asset to be settled within 12 months	-	-	-	-
Deferred income tax asset to be settled after more than 12 months	39,328,779	11,080,917	-	1,721,301
	<u>39,328,779</u>	<u>11,080,917</u>	<u>-</u>	<u>1,721,301</u>
<b>Deferred income tax liabilities:</b>				
Deferred income tax liabilities to be settled within 12 month	(1,309,420)	(1,504,410)	(1,309,420)	(1,504,410)
Deferred income tax liabilities to be settled after more than 12 month	(64,463,327)	(8,502,128)	(1,802,190)	(1,483,843)
	<u>(65,772,747)</u>	<u>(10,006,538)</u>	<u>(3,111,610)</u>	<u>(2,988,253)</u>
<b>Deferred income taxes - net</b>	<u>(26,443,968)</u>	<u>1,074,379</u>	<u>(3,111,610)</u>	<u>(1,266,952)</u>

The gross movement and the deferred income tax account are as follows:

	Consolidated financial statements		Separate financial statements	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
As at 1 January	1,074,379	73,702,662	(1,266,952)	73,173,307
Acquisition of subsidiaries (Note 31)	(25,692,896)	-	-	-
Charged/(credited) to profit or loss	(1,785,395)	(73,457,736)	(1,832,206)	(74,440,259)
Charged/(credited) directly to equity	(12,452)	831,035	(12,452)	-
Exchange differences	(27,604)	(1,582)	-	-
As at 31 December	<u>(26,443,968)</u>	<u>1,074,379</u>	<u>(3,111,610)</u>	<u>(1,266,952)</u>

18 Deferred income taxes (Cont'd)

The movements in deferred income tax assets and liabilities during the year are as follows:

	Consolidated financial statements			
	Tax losses Baht	Retirement benefits Baht	Others Baht	Total Baht
<b>Deferred income tax assets</b>				
As at 1 January 2019	125,376	1,721,301	9,234,240	11,080,917
Acquisition of subsidiaries (Note 31)	-	-	29,922,871	29,922,871
Charged/(credited) to profit or loss	-	(1,708,849)	92,995	(1,615,854)
Charged/(credited) directly to equity	-	(12,452)	-	(12,452)
Exchange differences	(7,336)	-	(39,367)	(46,703)
As at 31 December 2019	118,040	-	39,210,739	39,328,779
As at 1 January 2018	76,313,867	1,215,152	2,080,144	79,609,163
Charged/(credited) to profit or loss	(76,187,070)	506,149	938,316	(74,742,605)
Charged/(credited) directly to equity	-	-	6,214,693	6,214,693
Exchange differences	(1,421)	-	1,087	(334)
As at 31 December 2018	125,376	1,721,301	9,234,240	11,080,917
<b>Consolidated financial statements</b>				
	Deferred debt issuance Baht	Depreciation expense of Power plant Baht	Other Baht	Total Baht
<b>Deferred income tax liabilities</b>				
As at 1 January 2019	(5,261,479)	(5,582,682)	837,623	(10,006,538)
Acquisition of subsidiaries (Note 31)	-	-	(55,615,767)	(55,615,767)
Charged/(credited) to profit or loss	1,360,707	(2,065,472)	535,224	(169,541)
Exchange differences	126,733	337,694	(445,328)	19,099
As at 31 December 2019	(3,774,039)	(7,310,460)	(54,688,248)	(65,772,747)
As at 1 January 2018	(4,355,712)	(6,875,768)	5,324,979	(5,906,501)
Charged/(credited) to profit or loss	(51,154)	(327,307)	1,663,330	1,284,869
Charged/(credited) directly to equity	-	-	(5,383,658)	(5,383,658)
Exchange differences	(854,613)	1,620,393	(767,028)	(1,248)
As at 31 December 2018	(5,261,479)	(5,582,682)	837,623	(10,006,538)

18 Deferred income taxes (Cont'd)

The movements in deferred income tax assets and liabilities during the year are as follows: (Cont'd)

	Separate financial statements		
	Tax losses Baht	Retirement benefits Baht	Total Baht
<b>Deferred income tax assets</b>			
As at 1 January 2019	-	1,721,301	1,721,301
Charged/(credited) to profit or loss	-	(1,708,849)	(1,708,849)
Charged/(credited) directly to equity	-	(12,452)	(12,452)
As at 31 December 2019	-	-	-
As at 1 January 2018	76,313,867	1,215,152	77,529,019
Charged/(credited) to profit or loss	(76,313,867)	506,149	(75,807,718)
As at 31 December 2018	-	1,721,301	1,721,301
<b>Deferred income tax liabilities</b>			
As at 1 January 2019	(2,988,253)	-	(2,988,253)
Charged/(credited) to profit or loss	1,217,457	(1,340,814)	(123,357)
As at 31 December 2019	(1,770,796)	(1,340,814)	(3,111,610)
As at 1 January 2018	(4,355,712)	-	(4,355,712)
Charged/(credited) to profit or loss	1,367,459	-	1,367,459
As at 31 December 2018	(2,988,253)	-	(2,988,253)

Presentation in the statements of financial position is as follows:

As at 31 December	Consolidated financial statements		Separate financial statements	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Deferred income tax assets	1,623,005	2,409,825	-	-
Deferred income tax liabilities	(28,066,973)	(1,335,446)	(3,111,610)	(1,266,952)
Deferred income tax, net	(26,443,968)	1,074,379	(3,111,610)	(1,266,952)

Deferred income tax assets and liabilities are offset when the income taxes related to the same fiscal authority. Deferred tax assets and deferred tax liabilities in the consolidated financial position are presented at net amount of assets and liabilities incurred in each entity.

Deferred income tax assets are recognised for tax loss carry forwards only to the extent that realisation of the related tax benefit through the future taxable profits is probable. The Group did not recognise deferred income tax assets of Baht 135.28 million (2018: Baht 175.41 million) in respect of losses carry forward amounting to Baht 676.40 million (2018: Baht 877 million).

**18 Deferred income taxes (Cont'd)**

A summary of the tax losses carried forward and the expiry dates are set out below:

Expiry year	Consolidated financial statements Baht	Separate financial statements Baht
2020	88,754,589	76,722,994
2021	63,660,295	53,390,602
2022	219,557,411	210,429,201
2023	304,429,519	291,765,982
	<u>676,401,814</u>	<u>632,308,779</u>

**19 Construction and other payables**

	Consolidated financial statements		Separate financial statements	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Amounts due to related parties (Note 32.2)	-	667,187	-	-
Construction payables and retention guarantee	6,993,242	119,949,922	7,500	2,086,003
Other payables	72,557,019	55,966,786	5,957,523	4,907,315
Payables from acquisition of investments	37,059,807	-	249,995	249,995
Accrued expenses	82,657,365	101,861,887	39,753,570	35,350,200
	<u>199,267,433</u>	<u>278,445,782</u>	<u>45,968,588</u>	<u>42,593,513</u>

**20 Borrowings**

**20.1 Short-term borrowings from financial institutions**

	Consolidated and Separate financial statements	
	2019 Baht	2018 Baht
Short-term borrowings from financial institutions	98,470,171	98,794,277

Movements in short-term borrowings from financial institutions during 2019 and 2018 are analysed as follows:

	Consolidated and separate financial statements	
	2019 Baht	2018 Baht
Opening amount as at 1 January	98,794,277	2,233,047,945
Cash inflows (outflows):		
Additions	150,000,000	100,000,000
Financial service fee	-	(11,250,000)
Discount on notes payable	(4,076,860)	(2,763,996)
Repayment of borrowings	(150,000,000)	(2,250,000,000)
Non-cash changes:		
Amortisation of financial service fee	-	28,202,055
Amortisation of discount on notes payable	3,752,754	1,558,273
Closing amount as at 31 December	<u>98,470,171</u>	<u>98,794,277</u>

20 Borrowings (Cont'd)

20.2 Finance lease liabilities

The present value of finance lease liabilities is as follows:

	Consolidated financial statements		Separate financial statements	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Not later than 1 year	7,195,003	2,619,884	2,720,032	2,619,884
Later than 1 year but not later than 5 years	13,280,673	7,979,672	5,259,640	7,979,672
	<u>20,475,676</u>	<u>10,599,556</u>	<u>7,979,672</u>	<u>10,599,556</u>

The movements in finance lease can be analysed as follows:

	Consolidated financial statements		
	Finance lease payables	Deferred interest	Finance lease liabilities
At 1 January 2018	14,371,066	(1,248,087)	13,122,979
Cash outflows:			
Repayment	(2,973,324)	-	(2,973,324)
Non-cash changes:			
Amortised deferred interest	-	449,901	449,901
At 31 December 2018	<u>11,397,742</u>	<u>(798,186)</u>	<u>10,599,556</u>
At 1 January 2019	11,397,742	(798,186)	10,599,556
Cash outflows:			
Repayment	(6,757,229)	-	(6,757,229)
Non-cash changes:			
Addition	16,876,782	(670,514)	16,206,268
Amortised deferred interest	-	427,081	427,081
At 31 December 2019	<u>21,517,295</u>	<u>(1,041,619)</u>	<u>20,475,676</u>
	Separate financial statements		
	Finance lease payables	Deferred interest	Finance lease liabilities
At 1 January 2018	14,371,066	(1,248,087)	13,122,979
Cash outflows:			
Repayment	(2,973,324)	-	(2,973,324)
Non-cash changes:			
Amortised deferred interest	-	449,901	449,901
At 31 December 2018	<u>11,397,742</u>	<u>(798,186)</u>	<u>10,599,556</u>
At 1 January 2019	11,397,742	(798,186)	10,599,556
Cash outflows:			
Repayment	(2,973,324)	-	(2,973,324)
Non-cash changes:			
Amortised deferred interest	-	353,440	353,440
At 31 December 2019	<u>8,424,418</u>	<u>(444,746)</u>	<u>7,979,672</u>

20 Borrowings (Cont'd)

20.3 Long-term borrowings from financial institutions

	Consolidated financial statements		Separate financial statements	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Current portion of long-term borrowings	737,755,685	437,241,304	272,894,555	175,888,656
Long-term borrowings payable between 1 to 5 years	3,453,869,298	3,482,748,527	2,240,180,868	175,888,656
Long-term borrowings payable more than 5 years	2,282,565,092	2,439,885,510	50,879,734	1,886,891,147
	<u>6,474,190,075</u>	<u>6,359,875,341</u>	<u>2,563,955,157</u>	<u>2,238,668,459</u>

The long-term borrowings from financial institutions are secured by the pledge and the assignment of rights over the Group's bank deposits, certain shares held by the subsidiaries and the joint venture's shares held by the Company, pledge of the Company's shares that held by P.M. Energy Company Limited, shares of subsidiaries, and the right to receive dividends from subsidiaries and joint venture.

The loan agreements contain covenants imposed on the Group as specified in the agreements, related to such matters as dividend payment, reduction of share capital, merger or consolidation with any other entities.

Movements in long-term borrowings from financial institutions during 2019 and 2018 are analysed as follows:

	Consolidated financial statements		Separate financial statements	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Opening amount as at 1 January	6,359,875,341	1,903,287,857	2,238,668,459	-
Cash inflows (outflows):				
Additions	909,770,842	4,644,151,500	548,192,531	2,250,000,000
Financial service fee	(9,519,560)	(26,763,757)	(1,734,500)	(12,345,297)
Repayment of borrowings	(942,089,214)	(240,296,891)	(203,166,050)	-
Non-cash changes:				
Acquisition of subsidiaries (Note 31)	270,157,262	58,689,870	-	-
Amortisation of financial service fee	28,118,005	7,359,988	5,495,536	1,013,756
Foreign currency translation differences	(142,122,600)	13,446,774	(23,500,819)	-
Closing amount as at 31 December	<u>6,474,190,075</u>	<u>6,359,875,341</u>	<u>2,563,955,157</u>	<u>2,238,668,459</u>

The contractual interest rates of the long-term borrowings at the statement of financial position date are as follows :

	Consolidated financial statements	
	2019 %	2018 %
Long-term loans for the construction of solar power plants	MLR - 0.50 MLR - 1.50 MLR - 1.95 TIBOR + 3.00 TIBOR + 2.00 TIBOR + 1.22	MLR - 1.5 - - TIBOR + 3.00 TIBOR + 2.00 TIBOR + 1.22
Long-term loans for the construction of biomass power plants	Six months fixed deposit rate + 3.35	4.75

20 Borrowings (Cont'd)

20.4 Borrowing Facilities

The Group and the Company have the following undrawn committed borrowing facilities:

	Currency	Consolidated financial statements		Separate financial statements	
		2019 Baht	2018 Baht	2019 Baht	2018 Baht
Floating rate					
Expiring beyond one year	Baht Thousand	178,874	448,926	400	200,000
Floating rate					
Expiring beyond one year	Yen Thousand	601,115	390,000	601,115	-
Fixed rate					
Expiring beyond one year	Baht Thousand	4,966	7,241	-	-

20.5 Debentures

	Consolidated and Separate financial statements	
	2019 Baht	2018 Baht
Current portion of debentures	949,800,983	2,048,530,153
Debentures payable between 1 to 5 years	2,345,024,775	949,065,843
	<u>3,294,825,758</u>	<u>2,997,595,996</u>

Movements in debentures during 2019 and 2018 are analysed as follows:

	Consolidated and Separate financial statements	
	2019 Baht	2018 Baht
Opening amount as at 1 January	2,997,595,996	2,995,173,493
Cash inflows (outflows):		
Issuance of debentures	2,350,000,000	-
Maturing of debentures	(2,050,000,000)	-
Deferred issuance cost	(5,287,500)	-
Non-cash changes:		
Amortisation of issuance cost	2,517,262	2,422,503
Closing amount as at 31 December	<u>3,294,825,758</u>	<u>2,997,595,996</u>

As at 31 December 2019, outstanding debentures comprise name-registered certificate of unsubordinated and unsecured debentures totaling 2,350,000 units and 950,000 units with the fixed interest of 4.50% per annum, with the interest payable every 3 and 6 months, respectively. Debentures have the face value of Baht 1,000. The debentures amounting to Baht 2,350 million and Baht 950 million will be redeemed on 22 October 2022 and 5 April 2020, respectively.

20 Borrowings (Cont'd)

20.6 Fair value

The carrying amounts and fair values of certain long-term borrowings are as follows:

	Consolidated financial statements			
	Carrying amounts		Fair value	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Long-term borrowings	5,736,434,390	6,359,875,341	6,277,087,595	6,230,409,722
Debentures	3,294,825,757	2,997,595,996	3,313,923,268	2,999,409,190
	Separate financial statements			
	Carrying amounts		Fair value	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Long-term borrowings	2,563,955,157	2,238,668,459	2,574,542,377	2,167,492,686
Debentures	3,294,825,758	2,997,595,996	3,313,923,268	2,999,409,190

The fair value of current borrowings equals their carrying amount, as the impact of discounting is not significant.

The fair values of non-current borrowings are based on discounted cash flows using a discount rate based upon the borrowing rates of 1.88% to 5.64% (2018: 1.87% to 6.15%) and are within level 2 of the fair value hierarchy.

20.7 Interest rates

The effective interest rates at the statement of financial position date were as follows:

	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Borrowings from financial institutions	1.88% - 5.64%	1.87% - 6.15%	3.17% - 5.64%	3.05%
Finance lease liabilities	3.76% - 6.44%	3.76%	3.76%	3.76%
Debentures	4.58%	4.29% - 4.58%	4.58%	4.29% - 4.58%

21 Employee benefit obligations

	Consolidated and Separate financial statements	
	2019 Baht	2018 Baht
Statement of financial position:		
Retirement benefits		
Liability in the statement of financial position	13,521,825	8,606,509
Profit or loss charge included in operating profit for:		
Retirement benefits	5,959,136	2,652,204
Remeasurement for:		
Retirement benefits	2,873,219	-

The movement in the defined benefit obligation over the year is as follows:

	Consolidated and Separate financial statements	
	2019 Baht	2018 Baht
<b>At 1 January</b>	8,606,509	6,075,757
Current service cost	2,511,169	2,486,936
Past service cost	3,213,871	-
Interest expense	234,096	165,268
Remeasurements:		
Loss from change in financial assumptions	2,873,219	-
Payment from plan:		
Benefit payment	(3,917,039)	(121,452)
<b>At 31 December</b>	13,521,825	8,606,509

The principal actuarial assumptions used were as follows:

	Consolidated and Separate financial statements	
	2019	2018
Discount rate	1.65%	2.72%
Salary growth rate	4.00%	3.00% - 4.00%

The sensitivity analyses of significant actuarial assumptions in pension liability calculations.

	Impact on defined benefit obligation					
	Change in assumption		Increase in assumption		Decrease in assumption	
	2019	2018	2019	2018	2019	2018
Discount rate	1%	1%	Decrease by 11.53%	Decrease by 10.80%	Increase by 13.68%	Increase by 12.54%
Salary growth rate	1%	1%	Increase by 13.21%	Increase by 13.33%	Decrease by 11.39%	Decrease by 11.63%

The above sensitivity analyses are based on a change in an assumption while holding all other assumptions constant. In practice, this is unlikely to occur, and changes in some of the assumptions may be correlated. When calculating the sensitivity of the defined benefit obligation to significant actuarial assumptions the same method (present value of the defined benefit obligation calculated with the projected unit credit method at the end of the reporting period) has been applied as when calculating the pension liability recognised within the statement of financial position.

The methods and types of assumptions used in preparing the sensitivity analysis did not change compared to the previous year.

**21 Employee benefit obligations (Cont'd)**

Through its defined benefit retirement plans, the Group is exposed to a number of risks, the most significant of which are detailed below:

Changes in bond yields	A decrease in Government bond yields will increase plan liabilities.
Inflation risk	Some of the Group pension obligations are linked to inflation, and higher inflation will lead to higher liabilities.

The weighted average duration of the defined benefit obligation is 26.15 years.

Expected maturity analysis of undiscounted retirement:

As at 31 December 2019

	Consolidated and Separate financial statements				Total Baht
	Less than a year Baht	Between 1-2 years Baht	Between 2-5 years Baht	Over 5 years Baht	
Retirement benefits	-	117,079	1,029,252	223,284,445	224,430,776

**22 Share capital and premium on share capital**

	Consolidated and Separate financial statements				Total Baht
	Number of shares Shares	Issued and paid Shares	Issued and paid up Baht	Share premium Baht	
At 1 January 2018	2,359,500,000	1,815,000,000	1,815,000,000	727,554,273	2,542,554,273
Capital reduction	(544,500,000)	-	-	-	-
Register new ordinary shares	635,250,000	-	-	-	-
Share dividends	-	90,749,580	90,749,580	-	90,749,580
At 31 December 2018	2,450,250,000	1,905,749,580	1,905,749,580	727,554,273	2,633,303,853
Capital reduction	(1,116,225,294)	-	-	-	-
Register new ordinary shares	1,143,449,748	-	-	-	-
Exercise of TSR	-	211,966,701	211,966,701	317,950,052	529,916,753
At 31 December 2019	2,477,474,454	2,117,716,281	2,117,716,281	1,045,504,325	3,163,220,606

On 20 April 2018, the shareholders at the Annual General Meeting of Shareholders passed a resolution to reduce 544,500,000 ordinary shares and to increase the authorised and registered 635,250,000 new ordinary shares with a par value of Baht 1 each. The shareholders also approved share dividends in respect of operating results of 2017 distributed to the shareholders at the ratio of 20 ordinary shares: 1 dividend share with the total amount of Baht 90.75 million.

On 22 April 2019, the Annual General Meeting for 2019 approved a reduction of registered capital by reducing 544,500,420 unissued and non-offering shares and approved the issuance of 571,724,874 new ordinary shares at par value of Baht 1 each for General Mandate purpose.

On 8 July 2019, the Board of Directors' Meeting approved a reduction of registered capital by reducing 571,724,874 unissued and non-offering shares and approved the issuance of 571,724,874 new ordinary shares at par value of Baht 1 each by allocation of up to 381,149,916 newly issued shares for the purpose of reserving to accommodate the exercise of TSR (Transferable Subscription Rights) allocated to the existing shareholders as a proportion of their respective shareholdings (Right Offering) without consideration, and allocation of up to 190,574,958 newly issued shares under a General Mandate.

On 22 October 2019, The Company issued ordinary shares and registered capital from the exercise of TSR totalling 211,966,701 shares at par value of Baht 1 per share. The newly issued shares were exercised at Baht 2.50 per share, totalling Baht 529.92 million.

As at 31 December 2019, the total authorised number of ordinary shares is 2,477,474,454 shares (2018: 2,450,250,000 shares) with a par value of Baht 1 each (2018: Baht 1 each). 2,117,716,281 shares are issued and fully paid (2018: 1,905,749,580 shares).

**Thai Solar Energy Public Company Limited**  
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**23 Legal reserve**

	Consolidated financial statements		Separate financial statements	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
At 1 January	63,972,012	62,894,012	50,894,012	50,894,012
Appropriation during the year	17,331,714	1,078,000	16,709,082	-
At 31 December	81,303,726	63,972,012	67,603,094	50,894,012

Under the Public Limited Company Act., B.E. 2535, the Company is required to set aside as a legal reserve at least 5% of its net profit after accumulated deficit brought forward (if any) until the reserve is not less than 10% of the registered capital. The legal reserve is non-distributable.

**24 Other income**

	Consolidated financial statements		Separate financial statements	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Rental income	974,799	962,014	974,799	962,014
Service income	-	1,591,580	-	1,591,580
Gain on disposal of assets	21,886	18,515	21,887	18,515
Interest income	1,756,685	23,090,909	6,463,021	24,495,479
Realised gain on disposal of trading securities	1,472,295	1,349,250	1,472,296	1,349,250
Compensation for cancellation of share purchase agreement	-	38,000,000	-	38,000,000
Insurance claims	12,055,207	65,669,217	-	-
Gain on bargain purchase (Note 31)	56,004,450	-	-	-
Other income	20,431,322	25,509,734	821,501	3,044,306
	92,716,644	156,191,219	9,753,504	69,461,144

**25 Expenses by nature**

The following expenditure items, classified by nature, have been charged in arriving at the operating profit:

	Consolidated financial statements		Separate financial statements	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Salary, wages and employees' benefits	149,811,557	139,061,637	127,969,732	116,784,030
Depreciation (Note 14,15)	298,300,124	145,968,764	8,722,027	26,131,299
Amortisation (Note 17)	43,154,725	11,073,552	2,144,434	1,111,493
Impairment loss	13,079,191	296,000,000	-	296,000,000
Loss from disposals	288,358	-	-	-
Professional fees	136,496,042	97,675,990	25,127,095	36,800,546
Operation and maintenance of power plants	26,575,317	14,196,444	120	375,402
Allowance for bad debt	2,624,520	-	-	-

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**26 Finance costs**

	Consolidated financial statements		Separate financial statements	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Interest on borrowing from financial institutions	150,489,971	80,363,882	214,298,313	228,502,571
Financial service fees	20,202,368	42,876,151	8,072,796	31,638,314
Others	(23,500,818)	-	(23,500,818)	-
	<u>147,191,521</u>	<u>123,240,033</u>	<u>198,870,291</u>	<u>260,140,885</u>

**27 Income tax**

	Consolidated financial statements		Separate financial statements	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Current tax on profits for the year	3,114,945	3,618,329	-	-
Deferred tax (Note 18)	1,785,395	73,457,736	1,832,206	74,440,259
Adjustments in respect of prior year	172,781	6,500,825	-	-
	<u>5,073,121</u>	<u>83,576,890</u>	<u>1,832,206</u>	<u>74,440,259</u>

The tax on the Group's profit before tax differs from the theoretical amount that would arise using the basic tax rate as follows:

	Consolidated financial statements		Separate financial statements	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Profit (loss) before tax	803,815,620	266,644,730	118,650,314	(116,180,329)
Tax calculated at a tax rate of 20% (2018: 20%)	160,763,124	53,328,946	23,730,063	(23,236,066)
Tax effect of:				
Foreign tax rate difference	(1,244,335)	(6,096,144)	-	-
Joint venture's results reported net of tax	(131,903,537)	(122,037,685)	-	-
Tax exemption for income under BOI	(51,358,005)	(11,299,288)	-	-
Income subject to tax	24,116,157	27,152,630	22,324,668	20,017,086
Income not subject to tax	(115,552)	(11)	(123,791,563)	(117,314,420)
Expenses not deductible for tax purpose	8,709,627	66,127,315	3,154,361	64,350,602
Expense deducted at greater amount	(8,939,732)	(6,637,074)	(7,515,615)	(5,035,118)
Tax losses for which no deferred income tax asset was recognised	82,642,581	68,318,456	82,100,086	61,217,916
Utilisation of previously unrecognised tax losses	(9,270,320)	(64,447)	-	-
Deferred tax expense relating to the origination and reversal of temporary differences	1,785,395	73,457,736	1,832,206	74,440,259
Unrealised (loss) gain from intercompany transactions	(70,285,063)	(65,174,369)	-	-
Adjustment in respect of prior periods	172,781	6,500,825	-	-
Tax charge	<u>5,073,121</u>	<u>83,576,890</u>	<u>1,832,206</u>	<u>74,440,259</u>

**28 Promotional privileges**

The Group is granted with 33 certificates of promotional privileges from the Board of Investment for the production of electricity generated from solar power and biomass, the privilege include an exemption of import duty on imported machinery, an exemption for corporate income tax for a period of 8 years from the date the promoted operation commenced generating revenue (the commercial operation date).

The Group's operating revenue from sales and subsidy for adders as per the statements of comprehensive income for the years ended 31 December 2019 and 2018 wholly derive from promoted operations in Thailand. Details of operating segments are disclosed in Note 7.

**29 Earnings (loss) per share**

Basic earnings (loss) per share is calculated by dividing the net profit (loss) attributable to ordinary shareholders of the Company by the weighted average number of ordinary shares in issue during the year. The number of ordinary shares used in the calculations of earnings per share for the year ended 31 December 2018 are adjusted as if the shares dividends had been distributed at the beginning of 2018.

	<b>Consolidated financial statements</b>		<b>Separate financial statements</b>	
	<b>2019</b>	<b>2018</b>	<b>2019</b>	<b>2018</b>
Net profit (loss) attributable to ordinary shareholders of the company (Baht)	774,584,221	173,954,320	116,818,109	(190,620,588)
Weighted average number of ordinary shares outstanding (Shares)	1,950,465,843	1,905,749,580	1,950,465,843	1,905,749,580
Basic earnings (loss) per share (Baht per share)	0.40	0.09	0.06	(0.10)

Outstanding TSR has expired during 2019. Therefore, there are no potential dilutive ordinary shares during 2019 and 2018.

**30 Dividends**

**2019**

On 22 April 2019, the Annual General Meeting of Shareholders approved a dividend payment in respect of operating results for the year 2018 to shareholders at Baht 0.055 per share, totaling Baht 105 million. The dividends were paid on 21 May 2019.

**2018**

On 20 April 2018, the Annual General Meeting of Shareholders approved a dividend payment in respect of operating results for the year 2017 to shareholders in forms of shares dividend at the ratio of 20 ordinary shares: 1 dividend share, totaling Baht 90.75 million and cash dividend at Baht 0.00556 per share, totaling 10.09 million. Total dividends were amounting to Baht 100.54 million. The dividends were paid on 18 May 2018.

**31 Business combination**

On 7 March 2019, the Group purchased 100 % of interests in BS Bangsai Solar Company Limited, totaling 820,000 shares, for a total consideration of Baht 131.20 million to acquire a business of a ground-mounting solar power plant with the production capacity of 5 MW. The acquisition is considered as an acquisition of business.

The following table summarises the consideration paid for BS Bangsai Solar Company Limited, and the amounts of the assets acquired and liabilities assumed recognised on acquisition date.

	<b>As at acquisition date Baht</b>
<b>Consideration</b>	
Cash	131,200,000
<b>Total consideration</b>	<u>131,200,000</u>
<b>Recognised amounts of identifiable assets acquired and liabilities assumed</b>	<b>Baht</b>
Cash and cash equivalents	67,947
Short-term investments	10,089
Trade receivables	7,204,213
Short-term loans to subsidiaries	82,730
Other current assets	9,630,940
Power Purchase Agreement	128,724,751
Property, plant and equipment	208,900,000
Other non-current assets	842,270
Construction and other payables	(41,314,078)
Right in power purchase agreement payables	(28,143,589)
Long-term borrowings from financial institutions	(140,264,473)
Other current liabilities	(4,457,995)
Deferred tax liabilities	(4,399,888)
Total identifiable net assets	136,882,917
Gain on bargain purchase	(5,682,917)
Total	<u>131,200,000</u>

Expenses related to the acquisition of subsidiary amounting to Baht 372,480 are recognised as administrative expenses in the consolidated financial statements for the year ended 31 December 2019.

The revenue included in the consolidated statement of comprehensive income from 7 March 2019 to 31 December 2019 contributed by BS Bangsai Solar Company Limited was Baht 37 million. BS Bangsai Solar Company Limited also contributed profit of Baht 7 million during the same period.

**31 Business combination (Cont'd)**

On 19 August 2019, the Group purchased 100 % of interests in BS Solar Energy Company Limited, totaling 630,000 shares, for a total consideration of Baht 73.71 million to acquire a business of a ground-mounting solar power plant with the production capacity of 5 MW. The acquisition is considered as an acquisition of business.

The following table summarises the consideration paid for BS Solar Energy Company Limited, and the amounts of the assets acquired and liabilities assumed recognised on acquisition date.

<b>Consideration</b>	<b>As at acquisition date Baht</b>
Cash	73,710,000
<b>Total consideration</b>	<b>73,710,000</b>
<b>Recognised amounts of identifiable assets acquired and liabilities assumed</b>	<b>Baht</b>
Cash and cash equivalents	24,360
Trade receivables	6,261,339
Other current assets	6,132,754
Power Purchase Agreement	66,479,547
Property, plant and equipment	190,800,000
Other non-current assets	1,613,142
Construction and other payables	(14,160,001)
Right in power purchase agreement payables	(50,058,262)
Long-term borrowings from financial institutions	(129,892,789)
Other current liabilities	(409,621)
Deferred tax liabilities	(3,438,465)
Total identifiable net assets	73,352,004
Goodwill (Note 16)	357,996
Total	<b>73,710,000</b>

Expenses related to the acquisition of subsidiary amounting to Baht 123,024 are recognised as administrative expenses in the consolidated financial statements for the year ended 31 December 2019.

The revenue included in the consolidated statement of comprehensive income from 19 August 2019 to 31 December 2019 contributed by BS Solar Energy Company Limited was Baht 14 million. BS Solar Energy Company Limited also contributed profit of Baht 7 million during the same period.

On 15 November 2019, the Group purchased 100 % of interests in Siam Solar Power Public Company Limited, totaling 300,000,000 shares, for a total consideration of Baht 582.06 million to acquire a business of a ground-mounting solar power plant with the production capacity of 8 MW and its subsidiary. The acquisition is considered as an acquisition of business.

**31 Business combination (Cont'd)**

The following table summarises the consideration paid for Siam Solar Power Public Company, and the amounts of the assets acquired and liabilities assumed recognised on acquisition date.

<b>Consideration</b>	<b>As at acquisition date Baht</b>
Cash	545,000,000
Payables from acquisition of investments	37,059,807
<b>Total consideration</b>	<b>582,059,807</b>
<b>Recognised amounts of identifiable assets acquired and liabilities assumed</b>	<b>Baht</b>
Cash and cash equivalents	4,789,244
Short-term restricted bank deposits	15,263
Trade receivables	12,893,771
Other receivables	23,145,274
Other current assets	512,135
Power Purchase Agreement	163,000,000
Investment property	14,000,000
Property, plant and equipment	435,380,000
Intangible Assets	744,075
Other non-current assets	52,000
Construction and other payables	(1,682,634)
Finance lease liabilities	(157,056)
Other current liabilities	(2,456,189)
Deferred tax liabilities	(17,854,543)
Total identifiable net assets	632,381,340
Gain on bargain purchase	(50,321,533)
<b>Total</b>	<b>582,059,807</b>

Expenses related to the acquisition of subsidiary amounting to Baht 746,872 are recognised as administrative expenses in the consolidated financial statements for the year ended 31 December 2019.

The revenue included in the consolidated statement of comprehensive income from 15 November 2019 to 31 December 2019 contributed by Siam Solar Power Public Company Limited was Baht 21 million. Siam Solar Power Public Company Limited also contributed profit of Baht 14 million during the same period.

**32 Related party transactions**

Enterprises and individuals that directly, or indirectly through one or more intermediaries, control, or are controlled by, or are under common control with, the company, including holding companies, subsidiaries and fellow subsidiaries are related parties of the company. Associates and individuals owning, directly or indirectly, an interest in the voting power of the company that gives them significant influence over the enterprise, key management personnel, including directors and officers of the company and close members of the family of these individuals and companies associated with these individuals also constitute related parties.

In considering each possible related-party relationship, attention is directed to the substance of the relationship, and not merely the legal form.

The Company is controlled by P.M. Energy Company Limited (incorporated in Thailand) which owns 37% of the Company's shares. The remaining 63% of the shares are held by Wave Entertainment (Public) Company Limited, Sino-Thai Engineering & Construction Public Company Limited and individual shareholders. The significant investments in subsidiaries, and joint venture are set out in Note 13.

32 Related party transactions (Cont'd)

The following material transactions were carried out with related parties:

32.1 Sales of goods and services

For the year ended 31 December	Consolidated financial statements		Separate financial statements	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
<b>Subsidiaries</b>				
Management service income	-	-	48,314,135	30,060,541
Operation and maintenance income	-	-	1,680,000	1,680,000
Dividends income	-	-	11,829,999	12,921,999
	-	-	61,824,134	44,662,540
<b>Joint venture</b>				
Management service income	44,741,114	42,610,585	44,741,114	42,610,585
Rental income	453,600	453,600	453,600	453,600
Other income	-	1,531,637	-	1,531,637
Dividends income	-	53	606,550,052	573,650,102
	45,194,714	44,595,875	651,744,766	618,245,924
<b>Related parties</b>				
Rental income	-	69,472	-	69,472
Service income	-	46,315	-	46,315
Other income	-	10,205	-	10,205
	-	125,992	-	125,992

32.1 Outstanding balances arising from sales/purchases of goods/services

Amounts due from and advances to related parties (Note 11)	Consolidated financial statements		Separate financial statements	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
<b>Amounts due from and advances to related parties (Note 11)</b>				
Subsidiaries	-	-	95,015,432	89,171,162
Joint venture	4,053,761	3,860,725	4,053,761	3,860,725
	4,053,761	3,860,725	99,069,193	93,031,887
<b>Dividends receivable (Note 11)</b>				
Joint venture	153,300,027	134,750,024	153,300,027	134,750,024
	153,300,027	134,750,024	153,300,027	134,750,024
<b>Receivables from disposal of investments</b>				
Subsidiaries	-	-	1,383,683,149	1,383,683,149
	-	-	1,383,683,149	1,383,683,149

32 Related party transactions (Cont'd)

32.2 Outstanding balances arising from sales/purchases of goods/services

Receivables from disposal of investments were made from the Group's restructuring.

	Consolidated financial statements		Separate financial statements	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
<b>Amounts due to related parties (Note 19)</b>				
Related parties	-	667,187	-	-
	<u>-</u>	<u>667,187</u>	<u>-</u>	<u>-</u>
<b>Payables from acquisition of investments</b>				
Subsidiaries	-	-	249,995	249,995
	<u>-</u>	<u>-</u>	<u>249,995</u>	<u>249,995</u>

32.3 Short-term loans to subsidiaries

For the year ended 31 December	Separate financial statements	
	2019 Baht	2018 Baht
Short-term loans to subsidiaries	701,000,825	335,287,932

Movements in loans to subsidiaries are analysed as follows:

	Separate financial statements	
	2019 Baht	2018 Baht
Opening net book amount	335,287,932	2,276,372,707
Additions	488,000,000	663,484,810
Repayment received	(67,287,107)	(380,741,723)
Transferred to long-term loan (Note 32.4)	(55,000,000)	(2,226,045,802)
Foreign currency translation differences	-	2,217,940
Closing net book amount	<u>701,000,825</u>	<u>335,287,932</u>

Loans to subsidiaries are non-bearing interest promissory notes denominated in Thai Baht with maturity within December 2020.

32.4 Long-term loans to subsidiaries

For the year ended 31 December	Separate financial statements	
	2019 Baht	2018 Baht
Current portion of long-term loans to subsidiaries	61,600,000	-
Long-term loans to subsidiaries	5,004,151,459	4,333,468,428
	<u>5,065,751,459</u>	<u>4,333,468,428</u>

32 Related party transactions (Cont'd)

32.4 Long-term loans to subsidiaries (Cont'd)

Movements in loans to subsidiaries are analysed as follows:

	Separate financial statements	
	2019 Baht	2018 Baht
Opening net book amount	4,333,468,428	2,232,305,697
Additions	1,018,162,498	563,736,515
Repayment received	(161,816,773)	(704,565,291)
Transferred from short-term loan (Note 32.3)	55,000,000	2,226,045,802
Transferred to equity	-	(52,781,017)
Foreign currency translation differences	(179,062,694)	68,726,722
Closing net book amount	<u>5,065,751,459</u>	<u>4,333,468,428</u>

Long-term loans to subsidiaries are in form of loan agreements, denominated in Japanese Yen and Thai Baht with no interest. The agreements are due for repayment at call and the other agreement has maturity within June 2021.

Long-term loans to the other subsidiaries are in form of loan agreements denominated in Thai Baht with interest of 4.3% and 6% and have maturity within September 2026 and due for repayment at call after 3 years, respectively.

The management do not have intention to call these loans within next 12 months. Therefore, these loans were classified as long-term loans.

32.5 Short-term loan from subsidiary

	Separate financial statements	
	2019 Baht	2018 Baht
Short-term loan from subsidiary	<u>22,500,000</u>	<u>22,500,000</u>

Short-term loan from subsidiary is in form of a promissory note with no interest and due for repayment within September 2020.

32.6 Key management compensation

For the year ended 31 December	Consolidated financial statements		Separate financial statements	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Short-term employee benefits	40,090,999	43,181,211	24,527,887	22,085,600
Post-employment benefits	1,389,182	1,254,474	1,389,182	1,254,475
	<u>41,480,181</u>	<u>44,435,685</u>	<u>25,917,069</u>	<u>23,340,075</u>

### 33 Commitments and contingencies

#### 33.1 Power purchase agreements

##### Domestic

As at 31 December 2019, the Group has 33 power purchase agreements with the Provincial Electricity Authority (“PEA”) and the Metropolitan Electricity Authority (“MEA”) (2018: 30 agreements). Currently, the Group has commenced the production and distribution of electricity under 33 power purchase agreements which are summarised as follows:

The electricity generated system	Company	Number of agreements	Production capacity MW	Electricity rate (Baht/kilowatt-hour)	The term of the agreements
Renewable energy	Company	1	4.5	Peak period amounting to Baht 4.21 and off-peak period amounting to Baht 2.63 for the quantity which do not exceed the capacity factor and peak period amounting to Baht 4.22 and off-peak period amounting to Baht 2.36 for the quantity which exceed the capacity factor and the Company had also been granted an adder amounting to Baht 8 granted for a period of 10 years commencing from commercial operation date (COD).	The agreements are for a period of 5 years and will be automatically renewed every 5 years until the contract termination.
Solar farm	Joint venture	10	80	Peak period amounting to Baht 4.21 and off-peak period amounting to Baht 2.63 for the quantity which do not exceed the capacity factor and peak period amounting to Baht 4.22 and off-peak period amounting to Baht 2.36 for the quantity which exceed the capacity factor and the Company had also been granted an adder amounting to Baht 6.50 granted for a period of 10 years commencing from commercial operation date (COD).	The agreements are for a period of 5 years and will be automatically renewed every 5 years until the contract termination.
Solar rooftops	Subsidiaries	14	14	Feed-in Tariff system (FIT) amounting to Baht 6.16.	The agreements are for a period of 25 years commencing from commercial operation date (COD).
Solar farm	Subsidiary	3	8	Feed-in Tariff system (FIT) amounting to Baht 5.66.	The agreements are for a period of 25 years commencing from commercial operation date (COD).
Biomass energy	Subsidiary	1	4.6	Feed-in Tariff system (FIT) amounting to Baht 4.24 and Feed-in Tariff system (FIT) Premium amounting to Baht 0.3 granted for a period of 8 years commencing from commercial operation date (COD).	The agreements are for a period of 20 years commencing from commercial operation date (COD).
Biomass energy	Subsidiary	2	17.6	Feed-in Tariff system (FIT) amounting to Baht 4.24 and Feed-in Tariff system (FIT) Premium amounting to Baht 0.3 granted for a period of 8 years commencing from commercial operation date (COD).	The agreements are for a period of 15 years 4 months commencing from commercial operation date (COD).
Solar farm	Subsidiary	1	5	Feed-in Tariff system (FIT) amounting to Baht 4.12.	The agreements are for a period of 2 5 years commencing from commercial operation date (COD).
Solar farm	Subsidiary	1	8	Peak period amounting to Baht 4.18 and off-peak period amounting to Baht 2.60 for the quantity which do not exceed the capacity factor and peak period amounting to Baht 4.22 and off-peak period amounting to Baht 2.36 for the quantity which exceed the capacity factor and the Company had also been granted an adder amounting to Baht 8 granted for a period of 10 years commencing from commercial operation date (COD).	The agreements are for a period of 1 years and will be automatically renewed every 1 years until the contract termination.

##### Overseas

As at 31 December 2019, subsidiaries operating in Japan have 7 power purchase agreements (2018: 6 agreements) with the power purchasing agencies, of which the power plants have already commenced generating and distributing the electricity. In addition, subsidiaries have another 1 power purchase agreement and right to develop for the power purchase agreement (2018: 2 agreements) for the projects which have not yet commenced generating and distributing the electricity. The agreements are summarised as follows:

	The electricity generated system	Company	Number of agreements	Production capacity MW	Electricity rate (Baht/kilowatt-hour)	The term of the agreements
Production and distribution of electricity	Solar	Subsidiary	7	21.74	Feed-in Tariff system (FIT) amounting to Yen 32 - 36.	The agreements are for a period of 20 years starting from commercial operation date (COD).
Under development and construction	Solar	Subsidiary	1	154.98	Feed-in Tariff system (FIT) amounting to Yen 32 - 36.	The agreement has maturity within B.C. 2040 starting from commercial operation date (COD).

**33 Commitments and contingencies (Cont'd)**

**33.2 Operating lease commitments - where the Group is the lessee**

The Company and its subsidiaries have entered into several lease agreements in respect of the lease of office building space, motor vehicles, equipment and the lease of rooftop space and other building space in order to install solar cells. The terms of the agreements are generally between 3 and 26 years.

As at 31 December 2019 and 2018, future minimum lease payments required under these operating lease contracts were as follows:

	Consolidated financial statements		Separate financial statements	
	2019 Baht	2018 Baht	2019 Baht	2018 Baht
Not later than 1 year	16,312,010	20,088,646	7,233,668	12,086,704
Later than 1 year but not later than 5 years	41,876,683	43,486,307	3,600,435	10,069,239
Later than 5 years	148,651,330	137,247,452	-	-
	<u>206,840,023</u>	<u>200,822,405</u>	<u>10,834,103</u>	<u>22,155,943</u>

In addition, under agreements of leasing rooftop spaces and other building spaces, subsidiaries have commitments to pay rent at the higher of a percentage of sales and the minimum amounts specified in the agreements.

**33.3 Contracts and other commitments**

- a) A joint venture has commitments in respect of a management service agreement with the other venture amounting to Baht 6 million per annum for a period of 10 years from May 2013, with the service fee to increase on an annual basis at the rate specified in the agreement. The fees for the year ended 31 December 2019 amounting to Baht 4 million (2018: Baht 4 million) (in proportionate of the Company's interest in the joint venture) were recognised as expenses.
- b) A joint venture has commitments in respect of the operation and maintenance agreements of seven power plants with a company, amounting to Baht 9 million per annum for the period of 10 years from the commercial operation date. The fees for the year ended 31 December 2019 amounting to approximately Baht 5 million (2018: Baht 5 million) (in proportionate of the Company's interest in the joint venture) were recognised as expenses.
- c) A joint venture has commitments in respect of the operation and maintenance agreements of three power plants with a company, amounting to Baht 8 million per annum for the period of 5 years from June 2017. The fees for the year ended 31 December 2019 amounting to Baht 5 million per annum (2018: Baht 5 million) (in proportionate of the Company's interest in the joint venture) were recognised as expenses.
- d) A subsidiary has commitments in respect of the operation and maintenance agreements of two power plants with a company, amounting to Baht 44 million per annum for the period of 5 years from the commercial operation date. The fees for the year ended 31 December 2019 amounting to Baht 44 million (2018: Baht 15 million) were recognised as expenses.
- e) A subsidiary has commitments in respect of the operation and maintenance agreements of one power plants with a company, amounting to Baht 18 million per annum for the period of 5 years from the commercial operation date. The fees for the year ended 31 December 2019 amounting to Baht 18 million (2018: Baht 20 million) were recognised as expenses.

**33.4 Guarantees**

As at 31 December 2019, there were outstanding bank guarantees of approximately Baht 6 million (2018: Baht 8 million) issued by banks on behalf of the Company and its subsidiaries in respect of certain performance bonds as required in the normal course of business.