



Annual Registration Statement / Annual Report

Form 56-1 One Report

(Structured Data Report)

THAI ENERGY STORAGE TECHNOLOGY PUBLIC COMPANY LIMITED

Fiscal Year End 31 March 2023



Table of Contents

	Page
Business Operations and Performance	
Group Structure and Operations	1
Risk Management	4
Sustainable Development	7
Corporate Governance	
Corporate Governance Policy	11
Corporate Governance Structure and Significant Information Regarding the Board of Directors, Subcommittees, Management, Employee and Other Information	12
Performance Report on Corporate Governance	23

Group Structure and Operations

Group Structure and Operations

Business Overview and Policies (1.1)

Company Information (1.1.5)

Company Name : THAI ENERGY STORAGE TECHNOLOGY PUBLIC COMPANY LIMITED

Symbol : 3K-BAT

Address : 387 Moo 4, Sukhumvit Rd., Phraek Sa Sub-district, Mueang Samut
Prakan District

Province : Samut Prakarn

Postcode : 10280

Business : Manufacture and distribute various types of battery including
1) Automotive Batteries 2) Motorcycle Batteries 3) Electric
Forklift Batteries 4) Golf Cart Batteries 5) EB Batteries 6)
Lighting Batteries

Registration Number : 0107563000312

Telephone : 0-2709-3535

Fax (if applicable) : 0-2393-2509 / 0-2709-4965

Website : www.3k-battery.com

Email : wirachai.bunchuchuen.ku@3k-battery.com

Total Shares Sold (shares)

Common Stock : 78,400,000

Preferred Stock : 0

Business Operations (1.2)

Revenue Structure (1.2.1)

By Product Line or Business Grouping*

	2021	2022	2023
Total (Thousand baht)	5,398,101.38	5,540,353.16	5,249,284.93
Automotive Batteries (Thousand baht)	5,200,315.57	5,340,701.86	5,080,756.48
Motorcycle Batteries (Thousand baht)	151,333.78	165,535.35	95,071.93
Other Sales (Thousand baht)	46,452.03	34,115.95	73,456.52

	2021	2022	2023
Total (%)	100.00	100.00	100.00
Automotive Batteries (%)	96.34	96.40	96.79
Motorcycle Batteries (%)	2.80	2.99	1.81
Other Sales (%)	0.86	0.62	1.40

By Geographical Area or Market*

	2021	2022	2023
Total (Thousand baht)	5,398,101.38	5,540,353.16	5,249,284.93
Domestic (Thousand baht)	2,306,407.30	2,321,679.43	2,424,910.08
International (Thousand baht)	3,091,694.08	3,218,673.73	2,824,374.85

	2021	2022	2023
Total (%)	100.00	100.00	100.00
Domestic (%)	42.73	41.90	46.20
International (%)	57.27	58.10	53.80

*Excluding the profit margins in the associated companies

Information on Products and Services (1.2.2)

Product/Service Information and Business Innovation Development (1.2.2.1)

Research and Development (R&D) Policy : Yes

(Unit : Thousand baht)	2021	2022	2023
R&D expenses in the past 3 years	210,599.48	496,795.40	856,657.78

Risk Management

Risk Management

Risk Factors (2.2)

Risk that might affect the company's business, including environmental, social and corporate governance issues (2.2.1)

Changes in Consumer Behavior and Technology Risk Factor

Risk Management Measures: Yes

Related Risk Topics

Strategic Risk

- Behavior or needs of customers / consumers
- Changes in technologies

Operational Risk

- Shortage or fluctuation in pricing of raw materials or productive resources

Market Risk Factors

Risk Management Measures: Yes

Related Risk Topics

Strategic Risk

- Reliance on large customers or few customers

Operational Risk

- Product obsolescence
- Loss or damage from non-compliance of partners or counterparties

Financial Management Risk Factor

Risk Management Measures: Yes

Related Risk Topics

Financial Risk

- Default on payment or exchange of goods
- Fluctuation in exchange rates, interest rates, or the inflation rate

Risks from the safety management of the environment

Risk Management Measures: Yes

Related Risk Topics

Operational Risk

- Safety, occupational health, and working environment
- Impact on the environment

Risks from information technology systems

Risk Management Measures: Yes

Related Risk Topics

Operational Risk

- Information security and cyber-attack

Risks from Having Major Shareholders Influencing Operations and Free Float

Risk Management Measures: Yes

Related Risk Topics

Compliance Risk

- Corporate Governance

Risk to Securities Holder (2.2.2)

None

Risk Management Measures: No

Related Risk Topics

- Return from investment of securities holder

Risk to Securities Holder from Investing in Foreign Securities (Applicable to only foreign companies) (2.2.3)

None

Risk Management Measures: No

Related Risk Topics

- Investment risk

Sustainable Development

Sustainable Development

Sustainability Management Policy and Targets (3.1)

Sustainability Management Policy and Targets

Corporate Sustainability Policy : No

Environmental Aspect (3.3)

Policy and Guideline on Environmental Aspect (3.3.1)

Environmental Policy and Practice : Yes

Company environmental guideline : Electricity Management, Fuel Management, Renewable/Clean Energy Management, Water Management, Waste Management, Greenhouse Gas and Climate Change Management

Results with Respect to the Environmental Aspect (3.3.2)

Energy management

• Fuel consumption

	2021	2022	2023
Diesel (Litre)	35,000.00	38,600.00	31,400.00
Gasoline (Litre)	11,600.00	11,200.00	8,801.00
Natural gas (Standard cubic feet)	2,564,412.00	2,572,125.00	2,362,120.00

• Electricity consumption

	2021	2022	2023
Amount of electricity purchased (kWh)	43,845,000.00	43,605,000.00	42,557,000.00

Water management

• Water consumption

	2021	2022	2023
Water consumption (cubic meters)	207,640.00	235,360.00	221,333.00

Waste management

• Waste from operations

	2021	2022	2023
Non-hazardous waste (kg)	168,904.87	311,243.20	307,604.15
Hazardous waste (kg)	6,615,388.38	6,806,241.83	5,516,332.43
Total (kg)	6,784,293.25	7,117,485.03	5,823,936.58

Greenhouse gas management

• Greenhouse gas emissions

	2021	2022	2023
GHG emission target	N/A	N/A	3,276,190.00
Scope 1 (Tons of carbon dioxide equivalents)	N/A	3,343,060.00	2,965,610.00
Scope 2 (Tons of carbon dioxide equivalents)	N/A	N/A	N/A
Scope 3 (Tons of carbon dioxide equivalents)	N/A	N/A	N/A
Total (Tons of carbon dioxide equivalents)	N/A	3,343,060.00	2,965,610.00

• Verification of greenhouse gas emissions over the past year

Third-party verification : No

Social Aspect (3.4)

Policy and Guideline on Social Aspect (3.4.1)

Human Rights Policy : No

Company human right guideline : Employee Rights, Non-discrimination

Results with Respect to the Social Aspect (3.4.2)

Information about employees

• Total number of employees

	2021	2022	2023
Number of male employees (persons)	1,122	1,126	952
Number of female employees (persons)	376	371	338
Total (persons)	1,498	1,497	1,290

• Employee remuneration

	2021	2022	2023
Employee remuneration (baht)	694,534,954.06	691,780,082.25	624,003,153.95

• Employee development and training

	2021	2022	2023
Average training hours of employees (hour / person / year)	3	2	2

• Health, safety and work environment

	2021	2022	2023
Number of employee work injuries leading to employee absence (times)	3	3	1

• Significant labor dispute

	2021	2022	2023
Significant labor dispute	No	No	No

Corporate Governance Policy

Corporate Governance Policy

Overview of the Corporate Governance Policy and Guideline (6.1)

Corporate Governance Policy

Corporate Governance Policy : Yes

Policy and Guideline Related to the Board of Directors (6.1.1)

Policy and guideline related to the board of directors

Company policy and guideline : Nomination of Directors, Compensation, Independence of the Board of Directors, Board Performance Evaluation, Corporate Governance of Subsidiaries and Associated Companies

Code of Conduct (6.2)

Establishing a Code of Conduct

Establishing a Code of Conduct

Code of Conduct : Yes

Policy and Guideline related to the Code of Conduct

Company policy and guideline : Preventing of Conflicts of Interest, Preventing the Misuse of Inside Information, Anti-corruption, Whistleblowing

Corporate Governance Structure
and Significant Information Regarding
the Board of Directors, Subcommittees,
Management,
Employee and Other Information

Corporate Governance Structure and Significant Information Regarding the Board of Directors, Subcommittees, Management, Employee and Other Information

Board of Directors (7.2)

Composition of the board of directors (7.2.1)

	Number of persons	Percentage (%)
Total number of directors	8	100.00
Number of male directors	8	100.00
Number of female directors	0	0.00
Number of executive directors	1	12.50
Number of non-executive directors	7	87.50
Number of independent directors	3	37.50

Information on the board of directors and persons with authority to control the company (7.2.2)

List of directors

General information	Position	Date position was assumed	Experience and expertise
1. Mr. MASATO YOSHIDA Gender: Male Age: 62 years old Highest level of education: Doctoral degree Major: Engineering Thai nationality: No Residing in Thailand: No	Chairman of the board (Non-executive) Director type: Original director	1 Dec 2021	Corporate Social Responsibility, Sustainability, Corporate Management, Engineering, Governance/ Compliance

2.	Mr. AKIHIKO EMORI Gender: Male Age: 55 years old Highest level of education: Doctoral degree Major: Engineering Thai nationality: No Residing in Thailand: Yes	Vice Chairman (Executive) Director type: Re-elected as director	1 Dec 2021	Sustainability, Corporate Management, Engineering, Risk Management, Budgeting, Governance/ Compliance, Corporate Social Responsibility
3.	Mr. SUCHAT CHANLAWONG Gender: Male Age: 76 years old Highest level of education: Master's degree Major: Engineering Thai nationality: Yes Residing in Thailand: Yes	Director (Non-executive, Independent director) Director type: Re-elected as director	1 Oct 2020	Engineering, Internal Control, Governance/ Compliance, Risk Management
4.	Mr. NONTAPHON NIMSOMBOON Gender: Male Age: 79 years old Highest level of education: Doctoral degree Major: Accounting Thai nationality: Yes Residing in Thailand: Yes	Director (Non-executive, Independent director) Director type: Re-elected as director	1 Oct 2020	Accounting, Risk Management, Internal Control, Governance/ Compliance, Sustainability, Corporate Social Responsibility
5.	Mr. APICHAJ CHVAJARERNPUN Gender: Male Age: 74 years old Highest level of education: Master's degree Major: Engineering Thai nationality: Yes Residing in Thailand: Yes	Director (Non-executive, Independent director) Director type: Original director	1 Oct 2020	Corporate Social Responsibility, Sustainability, Engineering, Risk Management, Internal Control, Governance/ Compliance

6.	Mr. MASAKATSU SUZUKI Gender: Male Age: 59 years old Highest level of education: Bachelor's degree Major: Engineering Thai nationality: No Residing in Thailand: No	Director (Non-executive) Director type: Original director	1 Oct 2020	Corporate Social Responsibility, Sustainability, Corporate Management, Engineering, Governance/ Compliance
7.	Mr. YOSHITAKA NIBE Gender: Male Age: 55 years old Highest level of education: Bachelor's degree Major: Management Thai nationality: No Residing in Thailand: No	Director (Non-executive) Director type: Original director	1 Dec 2021	Commerce, Corporate Social Responsibility, Sustainability, Governance/ Compliance
8.	Mr. TAMOTSU SAKATA Gender: Male Age: 55 years old Highest level of education: Bachelor's degree Major: Accounting Thai nationality: No Residing in Thailand: No	Director (Non-executive) Director type: Original director	1 Dec 2021	Accounting, Corporate Social Responsibility, Sustainability, Governance/ Compliance

List of directors who resigned/vacated their position during the year

General information	Position	Tenure	Replacement Director
1. Mr. TAKAHIRO TOMIYAMA Gender: Male Age: 51 years old Highest level of education: Bachelor's degree Major: Engineering Thai nationality: No Residing in Thailand: No	Director (Executive)	Date position was assumed: 1 Oct 2020 Date directorship ended: 1 Jan 2023	No replacement director

Other Information pertaining to committees

The Chairman is an independent director : No

The Chairman and the manager are the same person : No

The Chairman and the manager are members of the same family : No

The company appoints at least one independent director to determine the agenda
of the Board of Directors' meetings : No

Sub-committees (7.3)

Information about sub-committees (7.3.2)

Audit Committee

List of audit committee members

General information	Position	Date position was assumed	Experience and expertise
1. Mr. NONTAPHON NIMSOMBOON [1] Gender: Male Age: 79 years old Highest level of education: Doctoral degree Major: Accounting Thai nationality: Yes Residing in Thailand: Yes	Chairman of the audit committee (Non-executive, Independent director) Director type: Re-elected as director	1 Oct 2020	Accounting, Risk Management, Internal Control, Governance/ Compliance, Sustainability, Corporate Social Responsibility
2. Mr. SUCHAT CHANLAWONG Gender: Male Age: 76 years old Highest level of education: Master's degree Major: Engineering Thai nationality: Yes Residing in Thailand: Yes	Audit committee (Non-executive, Independent director) Director type: Re-elected as director	1 Oct 2020	Engineering, Internal Control, Governance/ Compliance, Risk Management
3. Mr. APICHAJ CHVAJARERNPUN Gender: Male Age: 74 years old Highest level of education: Master's degree Major: Engineering Thai nationality: Yes Residing in Thailand: Yes	Audit committee (Non-executive, Independent director) Director type: Original director	1 Oct 2020	Corporate Social Responsibility, Sustainability, Engineering, Risk Management, Internal Control, Governance/ Compliance

[1] A director with the accounting expertise needed to review financial statements

Other sub-committees

Roles of Sub-committees

Sub-committees responsible for risk management : None

Sub-committees responsible for nomination : None

Sub-committees responsible for remuneration : None

Sub-committees responsible for corporate governance : None

Sub-committees responsible for corporate sustainability development : None

Executives (7.4)

List and positions of the executive (7.4.1)

The four highest-ranking executives

General information	Position	Date position was assumed	Experience and expertise
1. Mr. AKIHIKO EMORI Gender: Male Age: 55 years old Highest level of education: Doctoral degree Major: Engineering	CHIEF EXECUTIVE OFFICER	1 Dec 2021	Sustainability, Corporate Management, Engineering, Risk Management, Budgeting, Governance/ Compliance, Corporate Social Responsibility
2. Mr. Masamichi Saito Gender: Male Age: 61 years old Highest level of education: Master's degree Major: Law	Administrative Officer	6 Feb 2023	Law, Corporate Social Responsibility, Sustainability, Governance/ Compliance
3. Mr. Tsutomu Hirooka Gender: Male Age: 53 years old Highest level of education: Below a bachelor's degree Major: Technical	Business Development Officer	1 Aug 2012	Finance, Corporate Social Responsibility, Sustainability, Governance/ Compliance
4. Mr. Wirachai Bunchuchuen [1] Gender: Male Age: 54 years old Highest level of education: Master's degree Major: Accounting	General Manager Accounting and Finance	1 Oct 2010	Accounting, Finance, Corporate Social Responsibility, Risk Management, Governance/ Compliance, Budgeting, Sustainability
5. Mr. Chakkapan Sangkaew Gender: Male Age: 50 years old Highest level of education: Master's degree Major: Business Administration	General Manager Production and Maintenance	1 Oct 2020	Engineering, Budgeting, Risk Management, Sustainability, Corporate Social Responsibility

6.	Mr. Chayaphol Asavavallop	General Manager-	1 Oct 2020
	Gender: Male	Quality Assurance/	
	Age: 55 years old	Safety and	
	Highest level of education: Bachelor's degree	Environment	
	Major: Engineering		

[1] Highest responsibility in accounting and finance

[2] Directly responsible for financial account supervision

Remuneration policy for executives (7.4.2 – 7.4.3)

Remuneration policy for executives

Remuneration policy for executives : No

Remuneration

	2021	2022	2023
Total executive remuneration (baht)	57,288,305.39	56,826,061.37	52,380,995.00

Other forms of remuneration

Employee Stock Ownership Plan (ESOP) : No

Employee Joint Investment Program (EJIP) : No

Employees (7.5)

Information about company employees

Employees

Number of male employees (persons)	: 952
Number of female employees (persons)	: 338
Total (persons)	: 1,290

Employee Remuneration

Total employee remuneration	: 624,003,153.95
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Provident fund

Total number of employees (persons)	: 1,290
Number of employees contributing to the PVD (persons)	: 758
Percentage of employees who are members (%)	: 58.76

Other Significant Information (7.6)

Other significant information

Assigned persons

- Person assigned to take direct responsibility for accounting oversight

General information	Email	Telephone
1. Ms. Prissana Sakulthanayong	prissana.sakulthanayong.wk@3k-battery.com	027093535

- Company secretary

General information	Email	Telephone
1. Mr. Wirachai Bunchuchuen	wirachai.bunchuchuen.ku@3k-battery.com	027093535

- Head of internal audit

General information	Email	Telephone
1. Ms. Kittiphan Suksawasdi	kittiphan.suksawasdi.ad@3k-battery.com	

- Head of compliance unit

General information	Email	Telephone
1. Mr. Masamichi Saito	masamichi.saito.dw@3k-battery.com	

• Head of investor relations

General information	Email	Telephone
1. Mr. Wirachai Bunchuchuen	wirachai.bunchuchuen.ku@3kbattery.com	027093535

Company's auditor

Company	Names and general information of auditors	Audit fee (baht)	Other non-audit fees (baht)
1. EY OFFICE LIMITED	1. Ms. Wilai Sunthornwanee Email: - Telephone: -	2,500,000.00	-

Performance Report on Corporate Governance

Performance Report on Corporate Governance

Summary of Director Performance (8.1)

Selection, development, and evaluation of duty performance of the Board of Directors (8.1.1)

List of new directors appointed in the past year

• List of continuing directors (full term of directorship and being re-appointed as a director)

General information	Position	Date position was assumed	Experience and expertise
1. Mr. AKIHIKO EMORI Gender: Male Age: 55 years old Highest level of education: Doctoral degree Major: Engineering Thai nationality: No Residing in Thailand: Yes	Vice Chairman (Executive) Director type: Re-elected as director	Date position was assumed: 1 Dec 2021	Sustainability, Corporate Management, Engineering, Risk Management, Budgeting, Governance/ Compliance, Corporate Social Responsibility
2. Mr. SUCHAT CHANLAWONG Gender: Male Age: 76 years old Highest level of education: Master's degree Major: Engineering Thai nationality: Yes Residing in Thailand: Yes	Director (Non-executive, Independent director) Director type: Re-elected as director	Date position was assumed: 1 Oct 2020	Engineering, Internal Control, Governance/ Compliance, Risk Management
3. Mr. NONTAPHON NIMSOMBOON Gender: Male Age: 79 years old Highest level of education: Doctoral degree Major: Accounting Thai nationality: Yes Residing in Thailand: Yes	Director (Non-executive, Independent director) Director type: Re-elected as director	Date position was assumed: 1 Oct 2020	Accounting, Risk Management, Internal Control, Governance/ Compliance, Sustainability, Corporate Social Responsibility

Development of directors over the past year

List of directors	Position	Participated in director development program
Mr. MASATO YOSHIDA	Chairman of the board	Non-participating
Mr. AKIHIKO EMORI	Vice Chairman	Non-participating
Mr. SUCHAT CHANLAWONG	Director	Non-participating
Mr. NONTAPHON NIMSOMBOON	Director	Non-participating
Mr. APICHAJ CHVAJARERNPUN	Director	Non-participating
Mr. MASAKATSU SUZUKI	Director	Non-participating
Mr. YOSHITAKA NIBE	Director	Non-participating
Mr. TAMOTSU SAKATA	Director	Non-participating
Mr. TAKAHIRO TOMIYAMA	Director	Non-participating

Directors' performance assessment

Method used to evaluate directors' performance : Whole-board-of-directors assessment

Meeting attendance and remuneration to each Board member (8.1.2)

Meeting attendance of the board of directors

Number of board meetings (times) : 6

Date of AGM meeting : 21 Jul 2022

EGM meeting : No

List of directors	Termination date	Number of Board Meeting	AGM meetings	EGM meetings
1. Mr. MASATO YOSHIDA (Chairman of the board)	-	6/6	Participating	Did not hold the meeting

2.	Mr. AKIHIKO EMORI (Vice Chairman)	-	6/6	Participating	Did not hold the meeting
3.	Mr. SUCHAT CHANLAWONG (Director)	-	6/6	Participating	Did not hold the meeting
4.	Mr. NONTAPHON NIMSOMBOON (Director)	-	6/6	Participating	Did not hold the meeting
5.	Mr. APICHAJ CHVAJARERNPUN (Director)	-	6/6	Participating	Did not hold the meeting
6.	Mr. MASAKATSU SUZUKI (Director)	-	6/6	Participating	Did not hold the meeting
7.	Mr. YOSHITAKA NIBE (Director)	-	4/6	Participating	Did not hold the meeting
8.	Mr. TAMOTSU SAKATA (Director)	-	6/6	Participating	Did not hold the meeting
9.	Mr. TAKAHIRO TOMIYAMA (Director)	1 Jan 2023	4/5	Participating	Did not hold the meeting

Remuneration for company directors

	List of directors	Termination date	Meeting allowance (baht)	Other monetary remuneration (baht)	Other non- monetary
1.	Mr. MASATO YOSHIDA (Chairman of the board)	-	0.00	0.00	No
2.	Mr. AKIHIKO EMORI (Vice Chairman)	-	0.00	0.00	No
3.	Mr. SUCHAT CHANLAWONG (Director)	-	418,000.00	418,000.00	No
4.	Mr. NONTAPHON NIMSOMBOON (Director)	-	450,000.00	450,000.00	No
5.	Mr. APICHAJ CHVAJARERNPUN (Director)	-	418,000.00	418,000.00	No
6.	Mr. MASAKATSU SUZUKI (Director)	-	0.00	0.00	No
7.	Mr. YOSHITAKA NIBE (Director)	-	0.00	0.00	No
8.	Mr. TAMOTSU SAKATA (Director)	-	0.00	0.00	No
9.	Mr. TAKAHIRO TOMIYAMA (Director)	1 Jan 2023	0.00	0.00	No

Report on the Audit Committee's Performance for the Past Year (8.2)

Report on the audit committee's performance for the past year

Meeting attendance of audit committee

Number of Audit committee meetings (times) : 4

List of directors		Termination date	Number of the audit committee meeting
1.	Mr. NONTAPHON NIMSOMBOON (Chairman of the audit committee)	-	4/4
2.	Mr. SUCHAT CHANLAWONG (Audit committee)	-	4/4
3.	Mr. APICHAJ CHVAJARERNPUN (Audit committee)	-	4/4